

International Journal of Entrepreneurship (IJE)



Entrepreneurial Traits and Career Options of Pharmacy Undergraduates in the University of Port-Harcourt, Rivers State, Nigeria.

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Abstract

Purpose: The study aims to explore the level of entrepreneurial traits and Career options of Pharmacy undergraduates of the University of Port Harcourt and to determine the relationship between entrepreneurial traits and Career options.

Methodology: The research design adopted for the study is the correlational study design. Quantitative data was collected using structured questionnaires on a sample population of Two hundred and thirteen pharmacy undergraduates selected by Stratified random sampling. Collected data were analyzed using descriptive statistics such as frequencies, percentages, weighted averages, mean of weighted averages (MWA) and Spearman rank correlation was used as inferential statistics to determine the strength of the relationship between the independent and the dependent variables.

Results: The level of entrepreneurial traits of the students was found to be 4 (MWA = 3.6) while majority (28%) of the respondents chose Community pharmacy as their desired area of career, others chose public health and regulatory pharmacy (14.5%), Hospital pharmacy (15%), Industrial pharmacy (18%), Academic pharmacy (6%), other areas in pharmacy (3.5%), other areas outside Pharmacy (4.5%) and 10% were undecided. The study also showed that a positive and significant relationship exist between entrepreneurial traits and community pharmacy as well as Industrial pharmacy with a correlation coefficient of +0.823 and +0.791 respectively at p-value <0.05. A correlation coefficient +0.610, +0.561 and +0.571 at p-value <0.05 was obtained for Academic and research pharmacy, public health and regulatory pharmacy and Hospital pharmacy respectively. Other areas outside pharmacy and those that were undecided had a weak correlation of +0.421 and +0.431 respectively at p-value <0.05, with other areas in pharmacy having the weakest correlation coefficient of +0.321 at p-value <0.05. The study concluded that the level of entrepreneurial traits of the students was high, and majority possessed desire to have a career in community pharmacy, also a positive and significant relationship exist between Entrepreneurial traits and Career paths in community and Industrial pharmacy practice.

Recommendation: Entrepreneurship education should be incorporated into pharmacy undergraduate curriculum to further strengthen or enhance students' entrepreneurship skills upon graduation.

Keywords: *Entrepreneurship, Entrepreneurial traits, Career options, Pharmacy undergraduates*

INTRODUCTION

Entrepreneurship is undoubtedly the fulcrum upon which any thriving economy rests as it boosts the economy propelling it towards achieving developmental strides. For the economic growth of any country to gain traction, there must be a considerable level of entrepreneurial development as this correlate well with economic growth. It is widely acknowledged that entrepreneurship is an important force in shaping the changes that take place in the economic environment (Herrington & Kew, 2009). Curran and Stanworth (1989) defined Entrepreneurship as the creation of a new economic entity centered on a novel product or service or at the very least on which differs significantly from products or services offered elsewhere in the market. Entrepreneurship involves the study of sources of opportunities; the processes of discovery, evaluation, and the exploitation of opportunities; and the set of individuals who discover, evaluate, and exploit them. (Shane & Venkataraman, 2000). Schumpeter (1934) defined entrepreneurship in terms of five types of events: introduction of new goods or new quality of goods, introduction of new methods of production, opening of a new market, utilization of new sources of supply, and carrying out new organizational forms. From these definitions, it can therefore be inferred that entrepreneurship is the mobilization of financial and human resources towards the creation of new ventures after scanning the business environment to identify opportunities therein that could be harnessed towards creating novel values for the purpose of wealth creation.

Certain personality traits are associated with successful entrepreneurs; these abilities, pattern of reasoning and characteristics that are associated with successful entrepreneurs are referred to as entrepreneurial traits. Entrepreneurship and economic development are linked with innate personality traits of individuals (Deakins, 1996). Some pertinent personality traits have been shown to be prerequisite characteristics for entrepreneurship (Utsch & Rauch, 2000). Koh (1996) identified these personality traits which are pre-requisites for successful entrepreneurship as internal locus of control, strong need for achievement, moderate level of risk taking, innovativeness, high levels of self-confidence and high levels of tolerance to ambiguity. These traits as enumerated by Koh (1996) is not exhaustive as management scholars have come up with a wide range of traits analyzed in different studies. The scope of this research, however, shall limit entrepreneurial traits to internal locus of control, innovativeness, proactiveness, risk taking propensity, autonomy, and achievement motivation.

Innovation is a key component of the pharmaceutical industry and biomedical research (Stinchcomb, 2010). Innovation is described as “the development and implementation of new ideas by people who over time engage in transactions with others within an institutional context” (Van de Ven, 1986). Innovativeness represents a disposition to engage in new ideas and create new things that are different from the existing practice (Wiklund & Shepard, 2005; Lumpkin & Dess, 1996). Innovation is not all about inventions alone, it takes into reckoning the recognition of opportunities that may exist to make changes in existing products, processes or services all aimed at creating new values. Peter Drucker (1985) opined that “Systematic innovation therefore consists in the purposeful and organized search for changes, and in the systematic analysis of the opportunities such changes might offer for economic or social innovation”. Rogers (1995) defined innovation as an idea, practice, or object that is perceived as new by an individual or other unit of adoption. He conjectured that this element of newness is central to the concept of innovation. This “newness” may be expressed in terms of knowledge, persuasion, or a decision to adopt (Rogers, 1995). Innovativeness is obviously an essential component of entrepreneurship and diverse definitions have been made by different scholars in the field of entrepreneurship and management but a recurring decimal to all these

definitions is that it ultimately leads to the creation of new sources of raw materials, new methods of production, new products, new markets, or new forms of organization. In the pharmaceutical sector, innovations in diverse forms are rife, but product and service innovations are sine qua non for significant success in the industry. Product innovation involves the renewal of established offers in established markets (Moore, 2004). This apparently means the reintroduction of reengineered, repackaged, redesigned products with improved qualities and greater values into established markets to meet evolving needs. This is incremental product innovation. However, radical innovation involves the introduction of entirely new products to the market in response to identifiable needs in the market. Service innovation means changing the way of serving customers to create greater value for them and deliver more revenue to one's organization. In pharmacy practice, this is evident in provision of cognitive pharmaceutical services, which is defined as the use of specialized knowledge by the pharmacist or health professional for the purpose of promoting effective and safe drug therapy (Cipolle et al., 1998).

Locus of control is considered as one of the core personality traits in entrepreneurial activities (Venkatapathy, 1984). Locus of control is a personality construct that is defined as perceived control over the events in one's life. It is described as the ability perceived by an individual to control events in his/her life (Begley & Boyd, 1987). Internal locus of control makes an individual to make conscious efforts to control and influence his environment, is self-motivated to achieve, more inclined to take calculated risks, innovative and makes decisions that could determine his successes and failures independently hence take responsibility for his actions. Successful entrepreneurs are characterized by internal locus of control; therefore, entrepreneurs believe that the outcome of a business venture will be influenced by their own efforts. People with a higher internal locus of control are more likely to exercise entrepreneurial behaviors and have a higher need for achievement compared to those with a lower internal locus of control (Diaz & Rodriguez, 2003).

Risk taking involves decision making and taking of actions whose future outcomes can not be predetermined from the beginning hence are characterized by uncertainties that could lead to losses. Risk taking propensity represents an individual's orientation towards taking chances in a decision-making scenario (Sexton & Bowman, 1983). Brockhaus (1980) defined risk taking propensity as the "perceived probability of receiving the rewards associated with success of a proposed situation, which is required by an individual before he/she will subject himself/herself to the consequences associated with failure, the alternative situation providing less rewards as well as less severe consequences than the proposed situation". Frese et al. (2002) defined risk taking as an attitude that involves taking bold actions by venturing into the unknown and committing significant resources to ventures in uncertain environments. Risk taking propensity is one of the key traits required for success for entrepreneurial venturing.

Autonomy is the exercise of discretion to make decisions independently by business owners or individuals who understand that the consequences of these decisions may impact either positively or negatively on the fortunes of their business. Marco (2016) defined entrepreneurial autonomy as the decision rights exercised by business owner/founder regarding what work is done, when it is done, and how it is done. Van Gelderen and Jansen (2006) studied the motives for autonomy and in their research identified proximal motive and distal motives for autonomy. They asserted that proximal motive for autonomy is associated with task characteristics and that the source of motivation is in the work itself, while distal motive is to avoid a boss or restriction, to act in a self-endorsed and self-congruent manner. Distal motive is often present in those wishing to venture into enterprise startups. Autonomy is the launch pad for new venture

creation, encourages innovation, and enhances the effectiveness and competitiveness of organizations. Hence autonomy is an important trait in achieving success in Entrepreneurship.

Need for achievement has been identified by McClelland, in the 1960s as the major force that drives excellence in accomplishment of targets, mastering of skills, and attaining challenging goals. McClelland opined that need for achievement is required for successful entrepreneurship. Chell (2008) identified some characteristics of high achievers. They strive to achieve challenging targets that are not beyond their capabilities. This goal acts as a stimulus for a painstaking disposition with a view to accomplishments and satisfaction. They avoid what they perceive to be very easy or very difficult task and they dislike succeeding by chance. However, McClelland has been criticized that his empirical research did not directly connect need for achievement (NAch) with the decision to own and manage a business (Brockhaus, 1982).

Proactiveness is another important entrepreneurial trait and is the tendency to anticipate an act or future trends rather than reacting to events after they unfold. Pro-activeness suggests a forward-looking perspective characteristic of the marketplace leader that has the foresight to act in anticipation of future demand and shape the environment (Lumpkin & Dess, 2001). Pro-activeness refers to how a firm relates to market opportunities in the process of new entry. It does so by seizing initiative and acting opportunistically in order to shape the environment (Lumpkin & Dess, 1996). Lieberman & Montgomery (1988) emphasized that proactiveness confers first mover advantage that can be explored as a strategy to seize market opportunities.

Pharmacy as a profession is as old as the humanity. The profession evolved as cave men used different kinds of natural products found in their environment for the treatment of all kinds of ailments as they wandered about in their natural environment. Pharmacy has however developed to an organized and reputable profession that deals with the science or practice of the preparation and dispensing of medicinal drugs. The scope of the profession has been greatly broadened in the last two decades and the philosophy of practice rests squarely on pharmaceutical care where emphasis is no longer placed on the production, distribution and dispensing of drugs but rather on the safe and effective use and control of medicinal products with the aim of curing, vaccinating or alleviating symptoms of diseases. Pharmacy profession is no doubt one of the strongholds of modern healthcare practice.

Pharmacy profession today has developed into a mix of different practice areas where career paths are developed. Career is conceptually defined as an embodiment of individual knowledge and skills in the form of an occupation, a kind of specialization in a specific topic, the accumulation of experience through time and a web of occupational interrelations (Redman & Wilkinson, 2006). Career decision process could be a well-structured journey within the framework of an overall plan whereas it could also take a relatively haphazard course of action, due to which a blind career choice emerges (Akoğlan Kozak & Dalkıranoglu, 2013).

There are various career options available to pharmacists, however for the purpose of this study, these five settings will be reviewed.

- a) Community pharmacy practice
- b) Hospital pharmacy practice
- c) Industry pharmacy practice
- d) Academic pharmacy practice
- e) Public health and regulatory pharmacy practice

Community pharmacy practice is the most visible aspect of pharmacy practice because they are sited at very accessible parts of communities. Community pharmacists are in direct contact with the populace where they use their wealth of knowledge in pharmaceutical sciences to educate, compound, counsel and dispense medications to the teeming public. These they do with care, accuracy and within their legal framework. In other words, they are responsible for controlling, dispensing, and distributing of medicines to the general populace, according to legal and ethical guidelines. They are involved in maintaining and improving people's health by providing advice and information as well as supplying prescription medicines. They also deliver medication therapy management services, disease screening services and disease state management services among others.

These involves the provision of health checks, for instance in routine check of blood pressure, blood sugar level and management of chronic disease state, e.g., hypertension, diabetes. It is an important branch of pharmacy profession and must be under the supervision of a legally registered and certified pharmacist. There is a positive and significant relationship between entrepreneurial orientation and the delivery of medication therapy management services by community pharmacists (Alagala, Bagbi & Mgbahurike, 2022). Various entrepreneurial traits, which include Risk-taking propensity, internal locus of control, innovativeness, Proactiveness, Autonomy, Need for achievement; are essential in establishing a successful community practice. The paradigm shift from the traditional product-oriented practice to the patient-oriented practice has been encouraged by innovativeness and proactiveness of community pharmacists, as well as in other career settings.

Hospital pharmacy is the branch of pharmacy in the hospital that is responsible for the procurement, storage, preservation, packaging, sterilization, compounding, preparation, dispensing or distribution of medicines to patients. It involves the provision of medicines, information and advice to in-patients and out-patients, as well as to other health care service providers within clinical settings. Hospital pharmacists have the role of ensuring the appropriate purchase of medicines, establishing safe systems to store and supply medicines, decision making on formularies, budgetary planning. Hospital pharmacy is about ensuring that medicines are available and are used safely and effectively by informed patients and professionals both within the environs of a hospital and beyond.

Industrial pharmacy is the branch of pharmacy that deals with the research, development, production, quality assurance and control, packaging, sales and marketing of pharmaceutical products. Research and development is the scientific exploration of the mechanism progressing to the discovery and development of agents which impact specific disease mechanism. Innovation is an essential component of the pharmaceutical industry and biomedical research. The practice of industrial pharmacy from the entrepreneurial perspective requires a great deal of entrepreneurial orientation.

Academic pharmacy is a branch of pharmacy that involves the education, training, assessment and development of pharmacy students, pre-registration trainees, pharmacists, and other healthcare professionals. It also deals with conducting research in the various science-based areas of pharmaceutical sciences. There is a nexus between the research component of academic pharmacy practice and industrial pharmacy practice. The outcome of research in academic practice could be harnessed by industrial pharmacy practice to meet the health care needs of patients and create wealth.

Health is the state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (WHO, 1948). Health is a resource for everyday life, not the objective of living; it is a positive concept, emphasizing social and personal resources as well

as physical capabilities (WHO, 1984). Public health and regulatory pharmacy is a field devoted to the promotion and maintenance of well-being. It is a multi-disciplinary aspect that is often focused on prevention rather than treatment.

Public health and regulatory pharmacy practice involves; Providing population-based care, Developing disease prevention and control programs (including medication safety programs) in their institutions and communities, developing health-education policies and programs within their institutions that address the needs of patients, other health care professionals, community leaders, and the public, collaborating with state and local authorities, including local and state health departments and boards of health, to address local and regional health care needs (including environmental hazard and emergency preparedness programs), Advocating for sound legislation, regulations, and public policy regarding disease prevention and management, Engaging in population-based research and initiating campaigns to disseminate new knowledge (American Society of Health-System Pharmacists, 2004).

Simply put, it is that area of pharmacy that is saddled with the following:

- Prevention of epidemics and the spread of disease
- Protection against environmental hazards
- Responds to disasters and assists communities in recovery
- Promotes healthy behaviour
- Assures the quality and accessibility of health services
- Enforce laws and regulations
- Inform, educate and empower people
- Develop policies and plans

Based on the above definition and description, entrepreneurship is nonexistent in the context of public health and regulatory pharmacy practice. Within the context of professional pharmacy practice, entrepreneurship is traditionally associated with the establishment of Community pharmacy and industrial pharmacy because they are characterized by venture creation. Entrepreneurship in pharmacy practice is more visible in community pharmacy because it requires strong entrepreneurial intention bearing in mind the personality, knowledge and skill required in establishing a business venture. The possession of excellent clinical skills alone may not automatically translate to success in community pharmacy practice. The possession of basic entrepreneurial personality traits which include innovativeness, problem solving skills, perseverance, competitive aggressiveness, internal locus of control, proactiveness and propensity for risk taking are essential for a thriving community pharmacy practice.

Redman and Wilkinson (2006) gave a conceptual definition of career as an embodiment of individual knowledge and skills in the form of an occupation, a kind of specialization in a specific topic, the accumulation of experience through time and a web of occupational interrelations. Decisions about career choices could be made from a systematic well thought out plan taking several factors into consideration. However, some career choices could be made blindly or accidentally occasioned by circumstances or constraints. Pharmacists are more inclined to choosing career paths that are most suitable to their personality traits. It is therefore imperative to evaluate the personality traits of pharmacy undergraduates to establish any possible correlation with their envisaged career paths upon graduation from the pharmacy school.

The curriculum designed for the training of undergraduate pharmacy students place so much premium on the development of professional competence in clinical settings to deliver quality pharmaceutical care with little effort being made to enrich the curriculum with entrepreneurship education and hands-on experience in business management. Report of National Bureau of Statistics, issued on 15th March, 2021, shows that youth unemployment has been on the increase in Nigeria and the economy is not expanding either to encourage production thus creating employment for the teeming youths. Entrepreneurial education is thus one of the surest ways to address this unemployment problem in Nigeria which is gradually assuming an epidemic dimension.

Aim and Objectives

The aim of this study is to determine if any relationship exists between entrepreneurial traits and the anticipated career choices of pharmacy undergraduates of the University of Port Harcourt.

The specific objective of the study includes

- To identify level of entrepreneurial traits of pharmacy undergraduates in University of Port- Harcourt.
- To determine Career options of pharmacy undergraduates in University of Port- Harcourt.
- To determine the relationship between Entrepreneurial traits and Career options of pharmacy undergraduates in University of Port- Harcourt.

MATERIALS AND METHODS

The study adopted the correlational research design using the stratified sampling technique. Stratified sampling technique was adopted to obtain data from the different levels of students in the faculty of pharmaceutical sciences, University of Port Harcourt. The population of interest consist of 300, 400 and 500 level undergraduates of the Faculty of Pharmaceutical sciences, University of Port-Harcourt, Nigeria. The 300-level class is made up of 221 students, while the 400 and 500 level classes are made up of 132 and 102 students respectively. This gives a total of four hundred and fifty-five (455) students is the sampling frame of pharmacy undergraduate respondents used for the study. The selection was made on the basis (or assumption) that these set of students after having done their industrial trainings (i.e., the mandatory training where students gain practical experience under licensed preceptors in different practice setting) and having spent minimum of three sessions and taken considerable number of courses in different departments within pharmacy school would have a deeper knowledge of pharmacy practice areas. Against this background 100 and 200 level students were excluded from the study. From this population of four hundred and fifty-five (455) students, a sample size of two hundred and thirteen (213) was determined using the Taro Yamene formula for sample size determination. A well-structured questionnaire was designed to obtain relevant primary data relating to the variables of the study from the respondents. The research instrument which is a well-structured questionnaire has three sections. **Section 'A'** of the questionnaire consist of questions with respect to demographic data such as sex of respondent, age bracket, religion, ethnicity, marital status, entrepreneurial experience.

Section 'B' consists of questions on the criterion variable of the study- Career path the respondents would take after graduation. The career options include community pharmacy, industrial pharmacy, hospital pharmacy, academics, public health, and regulatory pharmacy, i don't know (undecided), areas in pharmacy other than the afore mentioned and areas outside

pharmacy. **Section ‘C’** is designed to generate data relating to the predictor variable of the study which is level of Entrepreneurial traits possessed by the respondents. Innovativeness was measured through eight items adapted from the Jackson Personality Inventory Manual (JPI) as utilized by Mueller and Thomas (2001); Need for Achievement was measured using six-item from the shortened Work Preference inventory (WPI-10) ; Internal Locus of Control was measured using Mueller and Thomas’s (2001) modified version of Rotter’s (1996) IE Scale consisting of ten item; Proactiveness was measured using a ten-item instrument based on the shortened version of Proactive personality scale by Bateman and Crant (1993); Risk taking propensity was measured using a reduced version of the Risk Orientation Questionnaire (ROQ) (Rohrman, 2005). Autonomy was measured using Autonomy scale by Van gelderen and Paul Jansen (2006). The items are measured using a five-point Likert scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”)

The data generated from the study were sorted, organized, and analyzed using both descriptive and inferential statistics. Spearman’s rank correlation coefficient was used to determine the strength of the relationship between the independent variable (Entrepreneurial traits) and the dependent variable (Career options) of the study. The observed variables which were measured in quantitative (ordinal) scale made the data suitable for suitable correlation using the Spearman’s rank correlation.

RESULTS AND ANALYSIS

A total of two hundred and thirteen (213) questionnaires were distributed. Two hundred and five (205) were filled and returned representing 96% return rate but two hundred were used as five (5) were wrongly filled and unacceptable.

Table 1: Gender distribution of respondents

Gender	Frequency	Percentage
Male	72	36
Female	128	64
Total	200	100

From the table 1, 36% (72) of the respondents were males while 64% (128) were females.

Table 2: Age distribution of respondents

Age Range	Frequency	Percentage
14-17	0	0
18-21	32	16
22-25	123	61.5
26-29	32	16
≥30	7	3.5
Total	200	100

From the table above, 0% (0) of the respondents were between the ages of 14-17 years while 16% (32), 61.5% (123), 16% (32) and 3.5% (7) were between the ages of 18-21 years, 22-25 years, 26-29 years and ≥ 30 years respectively.

Table 3: Religion of respondents

Religion	Frequency	Percentage
Christianity	200	100
Islam	0	0
Traditional	0	0
Others	0	0
Total	200	100

From the table 3, 100% (200) were Christians while 0% were Muslims and traditionalists.

Table 4: Ethnicity of respondents

Ethnicity	Frequency	Percentage
Igbo	86	43
Yoruba	12	6
Hausa	3	1.5
Other (Nigerian)	98	49
Non-Nigerian	1	0.5
Total	200	100

From the table above, 86 (43%) were Igbo, 12 (6%) were Yoruba, 3 (1.5%) were Hausa, 98 (49%) were from other ethnic groups in Nigeria and 1 (0.5%) was a non- Nigerian.

Table 5: Marital status of respondents

Marital Status	Frequency	Percentage
Single	197	98.5
Married	3	1.5
Divorced	0	0
Total	200	100

From the table above, 197 (98.5%) were Single, 3 (1.5%) were married and 0% was divorced.

Table 6: Level of study of respondents

Level Of Study	Frequency	Percentage
300	48	24
400	92	46
500	60	30
Total	200	100

From the table above, 48 (24%) of respondents were in 300 level, 92 (46%) were in 400 level and 60 (30%) were in 500 level.

Table 7: The level of entrepreneurial traits of pharmacy undergraduates

Entrepreneurial traits	Very Low	Low	Moderate	High	Very High	Total	Weighted Average
	1	2	3	4	5		
Innovativeness	22 (11%)	26 (13%)	49 (24.5%)	65 (32.5%)	38 (19%)	200 (100%)	3.355
Achievement motivation	14 (7%)	27 (13.5%)	43 (21.5%)	52 (26%)	64 (32%)	200 (100%)	3.625
Internal locus of control	43 (21.5%)	42 (21%)	52 (26%)	39 (19.5%)	24 (12%)	200 (100%)	2.795
Proactiveness	4 (2%)	6 (3%)	32 (16%)	78 (39%)	80 (40%)	200 (100%)	4.12
Risk taking propensity	9 (4.5%)	18 (9%)	42 (21%)	77 (38.5%)	54 (27%)	200 (100%)	3.745
Autonomy	5 (2.5%)	9 (4.5%)	35 (17.5%)	66 (33%)	85 (42.5%)	200 (100%)	4.085
Mean of weighted averages (mwa)							3.621

From the Table above, Innovativeness had a Weighted average (WA) of 3.355 while Achievement motivation, Internal locus of control, Proactiveness, Risk taking Propensity and Autonomy had a Weighted average (WA) of 3.625, 2.795, 4.12, 3.745, 4.08 respectively. The mean of the weighted average was 3.621.

Table 8: Career options of pharmacy undergraduates

Career Option	Frequency	Percentage
Public Health and Regulatory Pharmacy	29	14.5
Hospital Pharmacy	30	15
Industrial Pharmacy	36	18
Academic and Research Pharmacy	12	6
Community Pharmacy	56	28
Undecided	21	10.5
Other areas in Pharmacy	7	3.5
Other areas outside Pharmacy	9	4.5
Total	200	100

From table 8, 29 (14.5%) chose public health and regulatory pharmacy, 30 (15%) chose Hospital pharmacy, 36 (18%) chose Industrial pharmacy, 12 (6%) chose Academic and research pharmacy, 56 (28%) chose Community pharmacy, 21 (10.5%) were undecided, 7 (3.5%) chose other areas in pharmacy and 9 (4.5%) chose other areas outside Pharmacy.

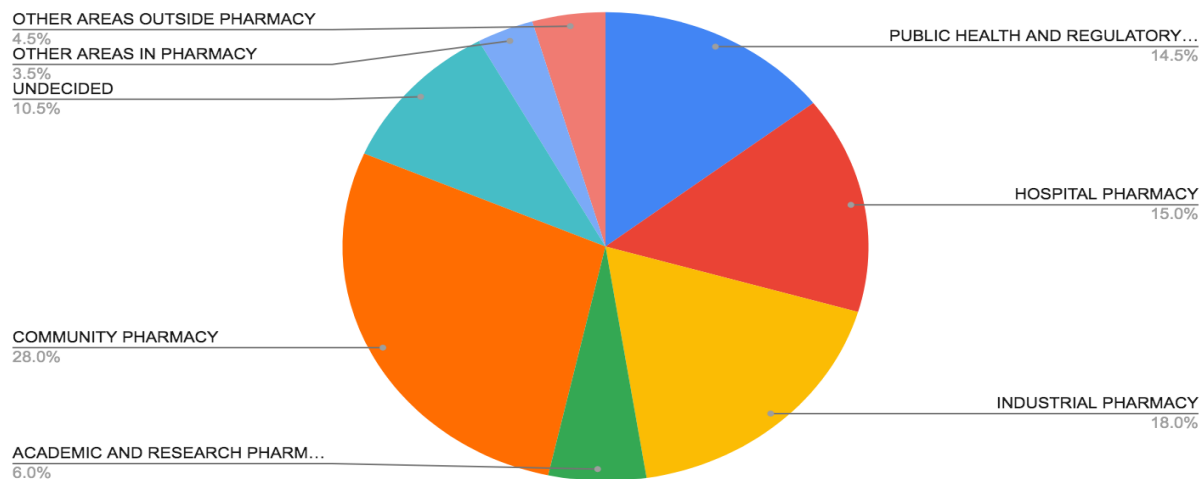


Figure 1: Career options of pharmacy undergraduates

Table 9: The Relationship between Entrepreneurial Traits and Career Options of Pharmacy undergraduates

Career Options	Correlations with Entrepreneurial Traits	
Public health and regulatory pharmacy	Correlation coefficient (r)	0.561
	Sig (2-tailed)	0.053
Hospital pharmacy	Correlation coefficient (r)	0.571
	Sig (2-tailed)	0.053
Industrial pharmacy	Correlation coefficient (r)	0.791
	Sig (2-tailed)	0.031
Academic and Research pharmacy	Correlation coefficient (r)	0.610
	Sig (2-tailed)	0.048
Community pharmacy	Correlation coefficient (r)	0.823
	Sig (2-tailed)	0.022
Undecided	Correlation coefficient(r)	0.431
	Sig (2-tailed)	0.061
Other areas in pharmacy	Correlation coefficient (r)	0.321
	Sig (2-tailed)	0.065
Other areas outside pharmacy	Correlation coefficient (r)	0.421
	Sig (2-tailed)	0.061

Note: Significant p-value less 0.05

DISCUSSION OF FINDINGS

Table 7 shows the results of the assessment of the level of entrepreneurial traits. The highest possessed trait was 'Proactiveness' with weighted average (WA) of 4.12 on the measuring scale of 5, followed by 'Autonomy' (WA=4.085), 'Risk taking propensity' (WA=3.745), 'Achievement motivation' (WA=3.625), 'Innovativeness' (WA=3.355), the lowest possessed entrepreneurial trait was 'internal locus of control' with weighted average (WA) of 2.795. Mean of weighted averages was computed to be 3.621. The students' response shows a high level of entrepreneurial trait 4 (WA=3.6), this implies that they have a high inclination towards entrepreneurship. This is comparable to similar studies conducted among pharmacy students by Afolabi et al., 2016 and Showande & Durowaiye, 2019. In the study carried out by Afolabi et al., 2016, the students' self-reported responses showed a high level of entrepreneurial trait while the study carried out by Showande & Durowaiye (2019) showed that students in the study had high mean scores on the PSEO (Pharmacy student's Entrepreneurial orientation) summated scale and its subscales, thus signifying high proclivity towards entrepreneurial intents. Teixeira (2008) also reported that pharmacy and chemistry students have high entrepreneurial inclinations.

In this study, 'proactiveness' (WA=4.12) was the trait with the highest score. Proactiveness suggests a forward-looking perspective characteristic of the marketplace leader that has the foresight to act in anticipation of future demand and shape the environment (Lumpkin & Dess, 2001). Proactiveness is a crucial trait, because it suggests a forward-looking perspective that is accompanied by innovativeness and taking of anticipatory actions. The lowest scoring trait was 'Locus of control' with a WA of 2.795. This implies that students have a low internal Locus of control. According to Inegbenebor (2007) Locus of control is a personality construct that is defined as perceived control over the events in one's life. People with higher internal locus of control are more likely to exercise entrepreneurial behaviours and have a higher need for achievement compared to those with a lower internal locus of control (Diaz & Rodriguez, 2003). Brockhaus (1982) also showed that successful entrepreneurs exhibited more internal locus of control than unsuccessful ones. The religion of respondents obtained in demographic data, showed that 100% of the sampled students were Christians. It can therefore be inferred that the reason for the low internal locus of control is that Christians believe and tribute the control of their destiny and actions to the supremacy of God. Majority of Christians believes that the control of their successes or failures and achievement in life solely dependents on God's grace and Providence.

Table 8 shows the desired options of Career practice by the respondents. 29 (14.5%) chose public health and regulatory pharmacy, 30 (15%) chose Hospital pharmacy, 36 (18%) chose Industrial pharmacy, 12 (6%) chose Academic and research pharmacy, 56 (28%) chose Community pharmacy, 21 (10.5%) were undecided, 7 (3.5%) chose other areas in pharmacy and 9 (4.5%) chose other areas outside Pharmacy. The desired career option by the study population further confirmed the positive intention of the students to undertake entrepreneurship with most respondents (28%) indicating interest in pursuing a career in Community pharmacy while 18% indicated interest in pursuing a career in industrial pharmacy. A total of 46% showed interest in career options in pharmacy practice (community pharmacy practice and industrial pharmacy practice) that are characterized by strong entrepreneurial intentions. Venturing into business require not only knowledge but skills for effective business performance. It was also noted that 25 (10.5%) of the respondents were undecided as to what career path to pursue upon graduation. This is probably attributed to the inherent flaws in the admission policy of the university where candidates who apply for admission after writing the

matriculation examination are admitted into programs they did not apply for. It may also result from improper counseling of students while in the pharmacy school with regards to career paths to pursue upon graduation. Students who do not determine and focus on career paths during university years, upon graduation work in an unplanned manner which impedes effective career development arising from waste of time and resources in the process of crossing from one career path to another. This has to a greater extent delayed the career growth and development of many pharmacists in Nigeria. Against this background, it is imperative that activities such as career days, courses and seminars, workshops, guidance and counselling are organized for undergraduates which will be enable them to identify their career paths early during undergraduate study (Kıran & Karaca, 2018).

Table 9 shows the correlation between entrepreneurial traits and career options of the respondents. Industrial and community pharmacy were found to have strong positive correlations with dimensions of Entrepreneurial traits such as innovativeness, Achievement motivation, internal locus of control, proactiveness, risk taking propensity, autonomy with a correlation coefficient (r) of +0.791 and +0.823 respectively. Public health and regulatory pharmacy have a correlation coefficient (r) of +0.561, Hospital pharmacy have a correlation coefficient (r) of +0.571, Academic and research pharmacy have a correlation coefficient (r) of +0.610, those with an undecided path have a correlation coefficient (r) of +0.431, other areas in pharmacy have a correlation coefficient of (r) of +0.321 and other areas outside pharmacy have a correlation coefficient of +0.421.

Community pharmacy have the strongest positive correlation coefficient (r) of +0.823, followed by Industrial pharmacy with a strong positive correlation coefficient (r) of +0.791. This signifies that individuals with high internal locus of control, achievement motivation, innovativeness, autonomy, risk taking propensity and proactiveness are more likely to have positive attitude towards entrepreneurship via Community and Industrial pharmacy. Afolabi et al., 2016 reiterated that in today's ever-changing healthcare environment, community pharmacy requires more than clinical expertise, they also need entrepreneurial traits which include creativity, innovation, problem solving, perseverance, passion, and willingness to undertake business risks.

Academic/research pharmacy, public health and regulatory pharmacy and Hospital pharmacy have correlation coefficients (r) of +0.610, +0.561 and +0.571 respectively. Although these career paths have positive correlation, the strength of correlation was moderate. This signifies that entrepreneurial behaviour is also found among employees within organizations, where it is known as Intrapreneurship. Undecided and other areas outside pharmacy have a weak correlation of +0.431 and +0.421 respectively, with other areas in pharmacy having the weakest correlation coefficient of +0.321, as the r value approaches zero.

CONCLUSION

The study concludes that there is a high level of entrepreneurial traits among undergraduate pharmacy students at the University of Port Harcourt, Nigeria, and that majority of pharmacy undergraduates of the university have the desire to further their careers in Community pharmacy and industrial Pharmacy. A strong positive and significant relationship exist between Entrepreneurial traits and Career options of pharmacy undergraduates of the university of Port Harcourt, Nigeria with majority of the students choosing a career path in community pharmacy practice and industrial pharmacy practice upon graduation.

RECOMMENDATIONS

The study recommend incorporation of entrepreneurship education in pharmacy undergraduate curriculum to further strengthen or enhance students' entrepreneurship skills upon graduation. Also, the study recommend stakeholders to conduct seminars, guidance counselling and workshop on career development and entrepreneurial skills for undergraduates which will enable them to identify and choose career paths early enough for future development.

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