

ENTREPRENEURIAL CAPACITY AND ENTREPRENEURIAL INTENTION OF CHEMISTRY AND CHEMISTRY-RELATED GRADUATE EMPLOYEES OF THE FEDERAL INSTITUTE OF INDUSTRIAL RESEARCH OSHODI (FIIRO), LAGOS

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ABSTRACT: *All over the world, there is growing literature on entrepreneurial intention as a broad research area of interest amongst researchers in entrepreneurship. However, most of these studies are from the developed world and mostly conducted on students. Against this background, this study seeks to evaluate the entrepreneurial capacity and entrepreneurial intention of Chemistry and Chemistry-Related Graduate Employees of the Federal Institute of Industrial Research Oshodi (FIIRO), Lagos. Questionnaires designed in six-point Likert scale format was used as the instrument for gathering the study primary data. The population size comprises all the 109 respondents from the sample area. The entire population was used as sample for the study. Thus, 109 questionnaires were administered and 49 were retrieved. Data generated was analyzed using correlation and regression analysis. The result reveals that there is relationship is positive and significant ($r = 0.975$, $p = 0.000 < 0.05$) between entrepreneurial competency and entrepreneurial intention. The study also reveals a positive and significant relationship ($r = 0.967$, $p = 0.000 < 0.05$) between entrepreneurial self-efficacy and entrepreneurial intention. The result yielded a coefficient of multiple regression of $R=0.981$ and multiple R-square of 0.962. The result also revealed that Adjusted $R^2=0.960$; indicating that about 96.0% of variance was accounted for by the independent variables. The study recommends appropriate entrepreneurial training for Chemistry and Chemistry-related graduate employees of FIIRO to be able to convert their entrepreneurial intention into entrepreneurial activities and pick career as entrepreneurs.*

KEYWORDS: entrepreneurial competency, entrepreneurial self efficacy, entrepreneurial capacity, entrepreneurial intention.

INTRODUCTION

As at today, Nigerian economy is not at its best. Even before the advent of Covid-19 pandemic, Nigerian economy has been in comatose. As a nation, we have missed every of our

developmental projections. We are nowhere close to realization of our vision of becoming the 20th largest economy in the world being the goal of Nigeria Vision 20:2020. Today, the nation has dropped abysmally in almost every rating of human and economic development indices including being rated currently as the second World Capital of the poorest people on the planet earth.

Despite this, the nation has high rating in entrepreneurial activities though most of such activities lack innovation. Entrepreneurship therefore, remains the only succor to grow and develop our economy because the potential is very high and we have not yet tapped twenty-five percent of the available potential and capacity for entrepreneurial development. Despite this pull factor for entrepreneurship development in Nigeria, high rate of unemployment though a push factor, has also being a great impetus for entrepreneurial development in Nigeria with many youths including students displaying high entrepreneurial tendencies and intention to circumvent the scourge of unemployment.

Many researchers have conducted empirical studies on entrepreneurial intentions and factors both internal (e.g. trait) and external (e.g. environment) affecting entrepreneurial intentions and how such intentions are converted to entrepreneurial activity (Lin, Li, Zhao and Zhao, 2019; Luyu and Dandan, 2019; Botha, Carriethers and Venter, 2019; Al Mamum, Che Nawi, Shamsudin, 2016; Saraih, Aris, Abdul Mutalib, Ahmad, Adbullah and Amlus, 2018; Pihie and Bagheri, 2013; Othman, Sa'adah and Hisan, 2020; Wathsnakom, Khlaisang and Songkiinau, 2020; Amofah, Saladrigue and Akwaa-sekyi, 2020).

All over the world, there is growing literature on entrepreneurial intention as a broad research area of interest amongst researchers in entrepreneurship. However, Nabi & Linan (2011) report that much of these studies are from the developed world. Typical of such are in: Spain (Camelo-Ordaz, Diáñez-González, & Ruiz-Navarro, 2016; Espiritu- Olmos & Sastre-Castillo, 2015); Poland (Nowinski & Haddoub, 2019) and USA (Hsu, Wikluud and Cotton., 2017). Literature is still scanty on this subject area in Nigeria. This is a need therefore, to expand frontier of knowledge in this area of research. Appropriate policies could be formulated based on the recommendations from such studies to increase the nation's rating on entrepreneurship index which will in turn have direct positive impact on the national socio-economic development.

Objective of the Study

The broad objective is to examine the effect of some factors that could influence entrepreneurial intention amongst Chemistry and Chemistry-related graduate employees of the Federal Institute of Industrial Research Oshodi (Lagos) while the specific objectives are:

1. To evaluate the influence of entrepreneurial competency on entrepreneurial intention.
2. To evaluate the influence of entrepreneurial self-efficacy on entrepreneurial intention.
3. To evaluate the influence of entrepreneurial capacity (entrepreneurial competency and entrepreneurial efficacy) on entrepreneurial intention.

Research Questions

This study is guided by the following research questions:

1. How does entrepreneurial competency influence entrepreneurial intention?
2. How does entrepreneurial self-efficacy influence entrepreneurial intention?
3. How does entrepreneurial capacity (entrepreneurial competency and entrepreneurial self-efficacy) influence entrepreneurial intention?

Hypotheses

The following are the hypotheses:

1. H₀₁: Entrepreneurial competency has no significant effect of entrepreneurial intention.
2. H₀₂: Entrepreneurial self-efficacy has no significant effect on entrepreneurial intention.
3. H₀₃: Entrepreneurial capacity (entrepreneurial competency and entrepreneurial self – efficacy) have no significant effect on entrepreneurial intention.

Significance of the Study

Entrepreneurial intentions precede entrepreneurial activities. As a matter of fact, entrepreneurial intention is a prerequisite for entrepreneurial activities. If any nation wishes to enhance entrepreneurial activity, it must begin first with proper evaluation of entrepreneurial intention of her citizens before developing a blueprint to convert the entrepreneurial intention to entrepreneurial activities. It is therefore, pertinent to critically analyze factors that could influence entrepreneurial actions. Some of these factors could be internal factors peculiar to individuals. In this case, it could be personality trait, as well as individual skills and experience acquired over the years. It could also be external factors influence mainly by the environment. This study draws its significance from the fact that entrepreneurial intention, if properly harnessed will enhance entrepreneurial activities. By this, individuals with entrepreneurial intention, will begin to start new ventures. These new ventures will lead to creation of employment in our overblown labour market as well as enhance national socio-economic development which could result to enhancement of national GDP. In summary, the study could be to increase in the number of entrepreneurs in Nigerian economy.

Scope of the Study

In this study, only entrepreneurial competency and entrepreneurial self-efficacy are captured as factors influencing entrepreneurial intention. While entrepreneurial intention is the dependent variable, entrepreneurial competency and entrepreneurial self-efficacy are independent variable.

In this study, entrepreneurial competency is measured by sub-variables : marketing management, financial management, information management and leadership. Entrepreneurial self-efficacy is measured by sub-variables optimism and overconfidence while entrepreneurial Intention is measured by subjective measures adapted from literature. The target population is Chemistry and Chemistry-related graduate employees of the Federal Institute of Industrial Research Oshodi, Lagos. Respondents that are not Chemistry and Chemistry-related graduate employees of FIRO

are excluded for the study. Research design approach for this study is cross sectional design. The design does not take into consideration the possible changes in respondents' opinion over time.

REVIEW OF LITERATURE

Conceptual, theoretical and empirical reviews on the variables in this study are presented here under.

Conceptual Review

The variables are reviewed in terms of basic definitions as offered by various authors in this section. The variables are reviewed conceptually in the following order: entrepreneurial intention, entrepreneurial competency and entrepreneurial self efficacy.

Entrepreneurial Intention

Entrepreneurial intention precedes entrepreneurial activities. Entrepreneurial intention could therefore, could be said to be the starting point of entrepreneurial action or activity. Entrepreneurial intention is mould on individual's personality traits, competencies and effect of the environment (Al Mamun, Nawi and Shamsudin, 2016). Individual who wants to be an entrepreneur will have to take such decision consciously and deliberately to ensure success. Entrepreneurial intention starts through a process by which an individual passes through many stages in life and in the process get exposed to many opportunities which he perceived to have high business potentials and deliberately make preferred choice from the identified opportunities. Looking at this deeply, the process leading to entrepreneurial intention must be properly planned and analyzed before embarking on entrepreneurial activity to ensure success on the new venture.

Ajzen (1991) look at intention as the extent of effort an individual may want to put in to achieve a specific task or exhibit certain behavior while Thompson (2009) look at entrepreneurial intention to mean an individual "self-acknowledged belief" that will result in starting a new venture future. Entrepreneurial intention rate of 10.1% is reported in South Africa by Herrington, Kew and Mwanga (2017) which was found to be very low when compared to the rates in other countries in Africa and developed countries. The findings of Segal, Borgia and Schoenfeld (2005) in their work indicate that individuals may have intention to become an entrepreneur but it is not automatic that such intention will be converted to entrepreneurial action. Some research evidences have however, shown that the rating of students on their intention to starting new venture taking actual entrepreneurial action to start up the venture are not in agreement (Nabi, Walmsley and Holden, 2013; Smith and Beasley, 2011).

Entrepreneurial Competency

Competency refers to skills, abilities, knowledge as well as behavior needed by individual to succeed in a given task (Davis, Naughton, and Rothwell, 2004). Bird (1995) on the other hand, define entrepreneurial competency in terms of observable behavior which is in part intra-psychic

attributes exhibited by entrepreneur. Entrepreneurial competency has also been defined in specific by Sarwoko, Surachman, Armanu and Hadiwidjojo (2013) as those attributes and behavior put together that allow an entrepreneur to function in a manner to achieve success in a business venture. Man, Lau and Chan (2002) in their work consider personality traits, skills and knowledge as major considerations in entrepreneurial competency and listed relationship, organizing, opportunity, conceptual, strategic, and commitment as six major areas of entrepreneurial competencies. Kiggundy (2002) offers a more comprehensive definition for entrepreneurial competency to include attitudes, expertise, abilities, mindset, wisdom, beliefs, values, skills, knowledge, personality and behavioral tendencies.

Nine areas of entrepreneurial competencies were reported by Inyang and Enuoh (2009) namely time management, human resources management, financial management, marketing management, business ethics, communication, social responsibility, leadership and decision making. Ahmad, Ramayah and Kummerow (2010) describe and measure entrepreneurial competency using relationship, learning, strategic, conceptual, familism, opportunity, personal and ethics. In his work, Huck (1991) enumerate twelve (12) entrepreneurial competencies need to achieve success by entrepreneur to include: planning, accounting, budgeting, financing, marketing management, merchandising, production, risk control, advertising and sales promotion, personnel relations, purchasing, facilities and equipment.

Entrepreneurial Self Efficacy

Self efficacy is a broad area of research interest in Psychology but has received much attention since its introduction in entrepreneurial study. According to Bandura (1982), self-efficacy is the conviction that behavior needed to produce an expected outcome can be executed successfully. Some authors have also considered that belief that certain actions can be organized and executed effectively is referred to as self-efficacy (Bandura, 1997; Chen, Greene & Crick, 1998; Gist & Mitchell, 1992). Campo (2011) looks at entrepreneurial self-efficacy from the point of view of the extent to which an individual believes he or she can start and operate a new venture successfully. Research evidence has shown that individuals having high entrepreneurial self efficacy has high probability to become an entrepreneur in future (Segal, Borgia and Schoenfeld, 2005). Relationship between optimism, overconfidence, and entrepreneurial self efficacy has been established by Forbes (2005). Overconfidence provides a measure of the accuracy of individual's ability while entrepreneurial self efficacy provides a measure on how individuals perceive their abilities (Forbes, 2005). Douglas and Fitzsimmons (2005) observe that entrepreneurs with previous experience in business success may display high entrepreneurial self-efficacy which could lead to greater overconfidence.

Research in overconfidence in corporate framework was pioneered by Malmendier and Tate (2005). Researchers have regarded optimism as a functional attribute of entrepreneurs because highly confident and optimistic individual has high tendency to cope with the tough process of setting up new venture and run venture with high ability to whether the storm to navigate the

venture to success (Hayward, Forster, Sarasvathy & Fredrickson, 2010; Lejarraga & Pindard-Lejarraga, 2013; Ucbasaran, Westhead, Wright and Flores, 2010).

Theoretical Review

Theoretical reviews on the major variables are presented in this section. Theories that are relevant with each variable are reviewed to provide theoretical framework to guide this study.

Entrepreneurial Intention: Theory of Planned Entrepreneurial Behaviour

Many theories are available to guide studies on entrepreneurial intention but the theory of planned entrepreneurial behavior has been found appropriate for this study. This theory considers the social as well as individual attributes of the entrepreneurs. This implies that characteristics, attitudes, as well as social backgrounds could affect an intention which will develop into a behavior (Ajzen, 2002 cited in Bhat & Singh, 2018). This theory had used to describe the buying pattern of shoppers where the buying pattern was driven by purchase intentions. Subjective norms, perceived behavior and attitudes were found to be the three main components driving purchase intention. In this context, predictors of entrepreneurial intentions were found to be both perceived behavior and attitudes towards entrepreneurial characteristics (Ajzen, 1991 and 2002 cited in Bhat & Singh, 2018). Also, entrepreneurial intention has been found to be influenced by family background.

Entrepreneurial Competency Model

Generic Entrepreneurial Competency Model

The generic entrepreneurial competency model is presented here. Other theories related to entrepreneurial competency are reviewed and presented here as well namely: management school of entrepreneurship theory, leadership school of entrepreneurship theory and human capital model.

McClelland (1973) pioneered the competency movement. Mansfield (1996) describes competency model as a comprehensive description of the needed behaviors expected from an employee to perform effectively in a given job schedule. Competency model could be regarded as the success formulae for achieving and attaining high level of organizational performance. According to Lee (2008), competency model provides the lead way to exhibiting desired behaviors for excellent performance.

Onstenk (2003) observe that in starting and nurturing new venture to growth, proper entrepreneurial competencies is required. Furthermore, he noted that ability to recognize business opportunities and effective communication with all stakeholders in the business environment are needed competencies by an entrepreneur for high business performance.

There are various entrepreneur competency models available in literature. The Generic Entrepreneur Competency Model by Mansfield, McClelland, Spencer and Santiago (1987) is a popular one use for identifying entrepreneurs with high potential for success. Another popular

entrepreneur competency model in literature is the National Research Council of Canada (NRC) Entrepreneurship Model developed by NRC use for supporting employees in transiting successfully to entrepreneurs in a technology-based business enterprise. Details on the Generic Entrepreneur Competency Model is presented elaborately in the book “Competence at Work: Models for Superior Performance” (Spencer and Spencer, 1993).

There are a total of twenty two competencies in the Generic Entrepreneur Competency Model; seven of which are major competencies presented under seven clusters with each cluster having sub clusters. In NRC Entrepreneurship Model however, there are three major clusters of competencies with each of them having varied competencies.

Many researchers have used the competency model in the conduct of entrepreneurial research and the model is becoming very popular in entrepreneurial studies (Bird, 1995; Baron and Markman, 2003; McGregor, Tweed and Henley-King., 2000; Schmitt-Rodermund, 2004). Bird (1995), in her study on “Theory of Entrepreneurial Competencies”, suggests that entrepreneurial competencies development could be influenced by such factors as industry experience, past work experience and education. Quite a number of studies are in support of this view. Chandler and Jansen (1992) for example, find that education plays vital role in development of competencies of business founders. Krueger and Brazeal (1994) observe that past work experience has high potential for improving skills and ability for identifying business opportunities.

Management School theory of Entrepreneurship

The management school theory assumes that conscious learning can bring about entrepreneurship development. In this theory, entrepreneurial failure is assumed to be as a result of poor management tactics. It is therefore, assumed that entrepreneurial competency can be enhanced through training in management functions.

Leadership School of Entrepreneurship

The leadership school theory of entrepreneurship assumes an entrepreneur is a leader with vision and ability to set achievable goals, attract people to rally around his vision with a view to transforming it into reality (Kao, 1989). In this school, a successful entrepreneur is taken as ‘people manager’, a leader and a mentor who is able to lead people to for task accomplishment. In this theory, the entrepreneur must be able to get task accomplished while responding or meeting the needs of the team involved in the task accomplishment.

Human Capital Model

In human capital theory, experience and knowledge of the entrepreneur are of essence. It assumes that through human capital, entrepreneurs are more efficient in organizing and choice of efficient approaches in the process of starting and managing new ventures. Chandler and Hanks (1994, 1996) observes positive impact in business performance when entrepreneurs found new businesses in the same branch where they had gathered previous work experience. Also, Dunn

and Holtz-Eakin (2000) report that success rates of founders' of business and parents that are on self employment correlates positively.

Entrepreneurial Self Efficacy: Social Cognitive Theory

Some researchers have considered entrepreneurship as a career and as such have explained entrepreneurial self efficacy using career-related behavior theories. In making decision related to career, Brown and Hacket (1994) establish that self-efficacy plays a key role and influence such decision making behavior to a large extent. This position is supported by social cognitive theory which place emphasis and recognition on the essence and the role of self-beliefs and self thought in guiding behavior of individuals as well as provides explanation to what motivates individuals (Segal, Borgia & Schoenfeld, 2005). Social cognitive career theory as pioneered by Bandura's (1989) social cognitive theory, states that there three main factors in psychological process involve in career decisions and behaviour namely: self-efficiency, outcome expectations and goals usually stated in terms of individual's determination to be involved in a specific behavior (Bandura, 1986; Lent et al., 1994).

Palich & Bagby (1995) demonstrated in their research that cognitive biases could affect entrepreneurs in decision making while Buzenitz & Barney (1997) researched into finding out how cognitive biases affect entrepreneurs and non-entrepreneurs. Some of these cognitive biases have been study extensively by researchers and one of such that has received great much in literature is the overconfidence bias. In this bias, people making decisions tend to be carried away and rely so much on the initial data on a situation to make decision neglecting new information when available, that could alter decision making dynamics (Fischhoff, Slovic & Lichtenstein, 1977).

In entrepreneurship studies, overconfidence bias has been reported to play a very significant role (Simon, Houghton and Aquino, 1999). Busenitz and Barney (1997) in their studies found that entrepreneurs displayed greater overconfidence that managers. Simon and Houghton (2003) in their studies observe that managers with higher levels of overconfidence have high tendency to be successful in making introductions of products adjudged risky with low probability of success.

Entrepreneurial optimism has also been explained using cognitive theory though relationship between optimism and entrepreneurial experience has been subjected to contrasting arguments. Jovanovic (1982) observe that in founding ventures, the experience of the entrepreneur plays a vital role in moderating level of optimism with conclusion that experienced entrepreneurs becomes less optimistic over time compared to entrepreneurs with less experience. Tversky & Kahneman (1974) however, noted that the experience of the experienced entrepreneur could led to greater optimism resulting to higher confidence to succeed in entrepreneurial activities than the inexperienced entrepreneurs..

Empirical Framework

Review on empirical framework on entrepreneurial intention, entrepreneurial competency and entrepreneurial self efficacy are presented in this section.

Entrepreneurial Self Efficacy and Entrepreneurial Intention

Researchers have observed that entrepreneurial self-efficacy has important role to play in entrepreneurial intentions and actions (Dyer, Gregersen, & Christnesen, 2008). For instance, some researchers have reported that self efficacy is a good predictor for start-up intentions (Krueger, Reilly & Carsrud, 2000; Nwankwo, Kanu, Marire, Balogun and Uhiara, 2012; Ayodele, 2013; Fitzsimmons & Douglas, 2005; Drnovsek, Whiset & Cardon, 2010).

Torres and Watson (2013) in their study on performance of small businesses in Mexico, examine the link between self-efficacy of managers and their entrepreneurial intentions. The results show that owner or manager with high belief levels about his or her capacity to perform has higher performance. The study also noted that expansion, one of the three self efficacy factors used in the study affects performance positively but has negative effect on entrepreneurial intentions.

Lin, Li, Zhao and Zhao (2019) in their study report a significant positive effect between entrepreneurial attitude and entrepreneurial intention of college students. The study also observed that in entrepreneurial self-efficacy and entrepreneurial intention relationship, entrepreneurial attitude's role is that of partial intermediary.

Campo (2011) investigates the relationship between self efficacy and intentions of some individuals in Barranquilla-Colombia to become entrepreneurs and the extent of moderating effect of gender on this relationship. The study concludes that gender do not moderate the relationship between self-efficacy and entrepreneurial intentions.

Saraih, et al. (2018) examines the influence of self-efficacy on entrepreneurial intention amongst engineering students from Public Higher Educational Institution (PHEI) in Malaysia. Findings revealed that the students from these public institutes demonstrated a high interest in entrepreneurial intention (mean=3.67, SD=.54) and a moderate level of self-efficacy (mean=3.22, SD=.71) with self-efficacy showing significant association with entrepreneurial intention ($\beta=.45$, $p<.01$) as exhibited by the engineering students in these institutes.

Pihie and Bagheria (2013) examine the link between entrepreneurial self-efficacy, self regulation and entrepreneurial intention amongst some university students in Malaysia. The report show that entrepreneurial self-efficacy has significant positive effect on the students' intention to become entrepreneurs; the study also observe that the relationship between entrepreneurial self efficacy and entrepreneurial intention of the students is partially moderated by self regulation.

Othman, et al. (2020) in their study on the effect of entrepreneurship education on entrepreneurial self efficacy and entrepreneurial intention levels amongst polytechnic students, observed that students who are exposed to entrepreneurship education are higher in entrepreneurial self-efficacy compared to students who were not exposed to the entrepreneurial education but no significant difference was observed for both groups in entrepreneurial intention.

Entrepreneurial Competency and Entrepreneurial Intention.

Botha, Carriethers and Venter (2019) in their study show unusual result that negates the role of experience or competency of the entrepreneur in entrepreneurial action and their behaviors in recurring entrepreneurial intention. Al Mamun, Nawi and Shamsudin (2016) in their study on entrepreneurial intention of some group of students, examine the effect of entrepreneurial competencies of the students on the intention to become entrepreneurs in future. The findings of the study show positive correlation between the students' competencies and their entrepreneurial intentions. The competencies assessed in this study include: students' innovativeness, recognition of income generating opportunities, entrepreneurial skills, innovativeness, as well as competency to seek information.

Daliman, Sulandari and Rosyana (2019) studied the role of gender, attitude and perception of entrepreneurship controls mediation on the achievement of entrepreneurship competence and intentions among 192 students at Universitas Muhammadiyah Surakarta, Malaysia. The study concludes that students' exposure to entrepreneurship lecture to gain entrepreneurial competence has no direct influence on the students' entrepreneurial intentions. It is however, observed that the exposure, shows an indirect effect on entrepreneurial intention of the students with attitudes and perceptions of entrepreneurial control as mediators. In this study, attitude and perception of entrepreneurial control has direct effect on student entrepreneurial competence. In this study, gender plays no role either directly or indirectly entrepreneurial competency achievement and its effects on entrepreneurial intentions.

Gaps in Literature

Though studies on factors affecting entrepreneurial intention are abound in literature, most of them are focused on students in the universities and sometimes not specific. Some studies have also focused on lecturers in these universities but literature is very scanty on entrepreneurial intention of employees of research Institutes who have the mandate to conduct applied research targeted for enterprise/venture/industrial development. Therefore, there is the need conduct entrepreneurial intention study amongst technology developers for the industry cannot be overemphasized.

METHODOLOGY

Cross-sectional design approach is used for this study. Chemistry and Chemistry-related graduate employees of the Federal Institute of Industrial Research Oshodi, Lagos, Nigeria, is the

population. There are 109 of this category of employees in the employment services of FIIRO and because of the small nature of the population, all the 109 employees of FIIRO who are Chemistry and Chemistry-related graduates were selected as samples. Questionnaire is used to collect primary data on both the dependent variable (Entrepreneurial Intention) and independent variables (entrepreneurial competency and Entrepreneurial Self efficacy). Secondary data are collected from published and unpublished intellectual resources both online and hard copy materials. The statements are presented on Likert 7-point scale. Simple and Multiple Regression Analysis are employ to predict the impact of the independent variables on the dependent variable using Statistical Packages for Social Sciences (SPSS).

FINDINGS

The analysis is based on the forty-nine (49) copies of questionnaires that were retrieved fully completed and validly used for study.

Table 1: Summary Correlation Analysis Showing Entrepreneurial Intention Influence on Entrepreneurial Competency of Chemistry and Chemistry-related Graduate Employees of the Federal Institute of Industrial Research, Oshodi, Lagos

Items		Entrepreneurial Intention	Entrepreneurial Competency
Entrepreneurial Intention	Pearson Correlation	1	.975
	Sig. (2-tailed)		.000
	N	50	50
Entrepreneurial Competency	Pearson Correlation	.975	1
	Sig. (2-tailed)	.000	
	N	50	50
	Mean	25.56	26.78
	Std. Deviation	4.46	3.48

** . Correlation is significant at the 0.05 level (2-tailed).

Sources: Researcher's Field Report, 2021

The correlation above shows that there is a significant relationship between entrepreneurial intention and entrepreneurial competency of chemistry and chemistry-related graduate employees of the Federal Institute of Industrial Research, Oshodi, Lagos. The relationship is positive and significant ($r = 0.975$, $p = 0.000 < 0.05$). The findings incline the study of Al Mamun, Nawi and Shamsudin (2016) whose study show positive correlation between the students' entrepreneurial competencies and entrepreneurial intention. The findings also partly incline with the findings of the study by Daliman, Sulandari and Rosyana (2019) where entrepreneurial competency shows an indirect effect on entrepreneurial intention of the students with attitudes and perceptions of entrepreneurial control as mediators.

Table 2: Summary Correlation Analysis Showing Entrepreneurial Intention Influence on Entrepreneurial Self efficacy of Chemistry and Chemistry-related Graduate Employees of the Federal Institute of Industrial Research, Oshodi, Lagos.

Items		Entrepreneurial Intention	Entrepreneurial Self-Efficacy
Entrepreneurial Intention	Pearson Correlation	1	.975
	Sig. (2-tailed)		.000
	N	50	50
Entrepreneurial Self-Efficacy	Pearson Correlation	.967**	1
	Sig. (2-tailed)	.000	
	N	50	50
	Mean	25.56	25.58
	Std. Deviation	4.46	4.83

** . Correlation is significant at the 0.05 level (2-tailed).

Sources: Researcher's Field Report, 2021

The correlation above shows that there is a significant relationship between entrepreneurial intention and entrepreneurial self-efficacy of chemistry and chemistry-related graduate employees of the Federal Institution of Industrial Research, Oshodi (FIIRO) Lagos. The relationship is positive and significant ($r = 0.967$, $p = 0.000 < 0.05$). This finding is in agreement with Saraih, et al. (2018) where entrepreneurial self-efficacy shows significant association with entrepreneurial intention. Also in agreement with this study are the findings of Campo (2013) and Pihie and Bagheria (2013) showing entrepreneurial self efficacy having significant effect on entrepreneurial intention.

Table 3: Summary of Regression on Joint Prediction of entrepreneurial capacity Entrepreneurial Competency and Entrepreneurial Self-efficacy (Entrepreneurial Capacity) on Entrepreneurial Intention

R=.981 R ² =.962 Adj. R ² =.960 Std. Error=.808						
Model	Sum Squares	of Df	Mean Square	F	Sig. (p value)	Remark
Regression	756.635	3	378.318			
Residual	30.059	46	.653	578.953	.000	Sig.
Total	786.694	49				

Source: Field Work, 2021

As indicated above, the linear combination of the joint prediction of entrepreneurial competency and entrepreneurial self-efficacy (entrepreneurial capacity) on entrepreneurial intention is

significant ($F_{(3,46)} = 578.958, p < 0.05$). The result yield a coefficient of multiple regression of $R = 0.981$ and multiple R-square of 0.962. The result also reveal that Adjusted $R^2 = 0.960$; indicating that about 96.0% of variance was accounted for by the independent variables. Therefore, the findings show that entrepreneurial capacity has a significant positive effect on entrepreneurial intention.

CONCLUSION AND RECOMMENDATION

The study found that entrepreneurial self-efficacy and entrepreneurial competency individually and in combination significantly influence entrepreneurial intention. As self-efficacy and competency are important antecedent of behavior, they influence individual's attitudes and behaviors about career choice and career development. People choose careers in areas in which they feel most competent and avoid those in which they feel less competent or less able to compete. People who feel themselves competent for an occupation tend to choose that occupation, prepare themselves much better for the career, and are more committed to and successful in their careers. Therefore, choosing a career as an entrepreneur depends on how individuals convert entrepreneurial intention into entrepreneurial activities. The study recommends appropriate entrepreneurial training for Chemistry and Chemistry related graduate employees of FIIRO who display high level of entrepreneurial intention to be able to convert the intention into entrepreneurial activity and pick a career as entrepreneurs.

Suggestion for Further Studies

The cross-sectional nature of the data will make it impossible of changes in entrepreneurial capacity to be measured over time. For example, exposure to training could improve the capacity of the respondents; also, improvement in national economy could have significant effect on entrepreneurial intention. A sample size of 49 may not be large enough to generalize the findings of the study to the larger population of the employees of the Federal Institute of Industrial Research Oshodi, Lagos.

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