

## Social Network and Human Capital as Determinants of Entrepreneurial Opportunity Recognition in Nigeria

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### Abstract

The study investigated social network and human capital as determinants of entrepreneurial opportunity recognition in Nigeria. Triangulation method of data collection was adopted while ex-post facto research design was conducted in the study. Hence, purposive and convenience sampling techniques were adopted in sampling four hundred and forty three (443) male and female participants participated in the study. The independent variables are social network and human capital while the dependent variable is entrepreneurial opportunity recognition. A hypothesis was stated and tested. Hence results showed that, there was a joint prediction entrepreneurial opportunity recognition by social network and human capital factors of age, gender, experience and education  $F(5, 443) = 7.053$ ;  $R^2 = 0.139$ ;  $p < .05$ ). Similarly, it revealed that age ( $\beta = 0.101$ ;  $t = 2.165$ ;  $p < .05$ ); education ( $\beta = 0.113$ ;  $t = 3.287$ ;  $p < .05$ ); experience ( $\beta = 0.094$ ;  $t = 2.151$ ;  $p < .05$ ) and social network ( $\beta = 0.088$ ;  $t = 1.811$ ;  $p < .05$ ) independently predicted entrepreneurial opportunity recognition. However, results showed that gender did not independently predict entrepreneurial opportunity recognition ( $\beta = -0.032$ ;  $t = -0.438$ ;  $p > .05$ ). It was concluded that social network and human capital are among the significant predictors of individuals' entrepreneurial opportunity recognition. Hence, recommendation was made that trainers, educators, government and individuals should be more liberal and combine their personal efforts in their bid to identify successful areas of business opportunities.

**Key words:** Social network, Human capital, Entrepreneurship, Opportunity recognition

### Introduction

Opportunity recognition has been acknowledged to be a key issue of the entrepreneurial process (Ozgen & Baron, 2007) because it represents the first critical step to the venture creation (Christensen & Peterson, 1990). The decision to found a new venture often arises from a person's belief that he or she has recognized an opportunity with profit potential, suggesting that variance in the tendency of people to start businesses can be explained by differences between them in their tendency to recognize entrepreneurial opportunities (Gaglio and Katz, 2001; Baron, 2007). Hence, an entrepreneurial opportunity consists of a set of ideas, beliefs and



actions that enable the creation of future goods and services in the absence of current markets for them (Venkataraman, 1997). Because opportunity recognition is a process, the personal characteristics of a person of human capital and his social connections may influence it, perhaps by facilitating access to information useful in the opportunity recognition process. Therefore, this study investigates social network and human capital as determinants of entrepreneurial opportunity recognition in Nigeria.

Social network is a network of social relations among entrepreneurs and the significant others in the social environment such as friends, family members, business associates, political or prominent figures, mentors and the likes who can in one way or the other influence the functions of a person. For instance, a Significant other can facilitate a person's access to financial supports, relevant information for the practice of entrepreneurship and government regulation policies, goodwill, social connections, knowledge and other business resources. Significant others could also be seen as a source of referral for an entrepreneur or individual to various targeted areas of possible opportunity for economic value. So, social networking with these people could serve as a source of valuable information or business knowledge for entrepreneurs to recognize business opportunities.

On the other hand, human capital is a composite variable which consists of age, gender, education and experience. Education for instance, could serve as an instrument of acquiring knowledge. Knowledge however, is gained through a formal or an informal means of learning. Individuals who have certain types of existing knowledge have a better likelihood to use such knowledge than those who do not have such knowledge (Ardichvili, Cardozo & Ray, 2003). However, individuals may become more knowledgeable at a particular task through experience. They may become increasingly efficient and learn to focus attention primarily on the key dimensions that are likely to contribute most variance to the outcome of decisions. This further explains that, experience in a particular market may provide information for discovery of more of new business opportunities in the market environments. Therefore, education and experience could facilitate the integration and accumulation of knowledge-base for entrepreneurial opportunity recognition process.

### **Statement of the Problem**

Though, opportunity recognition is often considered to be the first critical step in the entrepreneurial process, but limited empirical research has been conducted on factors that enhance a person's ability to identify or recognize a profitable business and venture into it. Some previous studies have demographic factors such as age, gender, socio-economic status, parental influence as contributing factors to opportunity recognition (Vinogradov & Isaksen,



2008; Knotts, Jones & Brown, 2008; Singh, Knox & Crump, 2008; Raduam, Naresh & Lim 2006; Mueller & Dato-on, 2008). Hence, those studies focused only on situational factors, which could account for the acknowledged high failure rate of business ventures in some parts of the world most especially countries such as Nigeria where the phenomenon of entrepreneurship is lately given scientific investigation. This therefore calls for a more empirical study that investigates the phenomenon of entrepreneurial opportunity recognition from the perspectives social network and human capital.

In view of the above, this study would like to provide answers to the following research questions:

- Would human capital (i.e. age, gender, experience and education) significantly predict entrepreneurial opportunity recognition?
- Could social network significantly influence entrepreneurial opportunity recognition?
- Would there be a significant joint and independent influence of social network and human capital on entrepreneurial opportunity recognition?

### **Purpose of the Study**

The general objective of the study was to investigate the joint prediction of entrepreneurial opportunity recognition by human capital and social network.

The specific objectives on the other hand were:

- To examine the independent prediction of entrepreneurial opportunity recognition by the human capital factors of age, gender, experience and education.
- To investigate the independent prediction of entrepreneurial opportunity recognition by social network.

### **Relevance of Study**

Small and Medium Enterprises (SMEs) are important to the development of Nigeria's economy and unemployment issue. It is a bed rock of innovation and creativity; serves as a multiple source of economic growth; help in distributing social influence and power, thus serve as a means of distributing social-economic and political power among local business operators against multinationals that are dominating the political and economic power; keep large organizations on their toes thereby providing alternative for consumers; and provide direct employment for the people. Therefore, entrepreneurship should be the main focus of Nigeria. Nevertheless, entrepreneurial opportunity recognition is very relevant to the improvement of national economy as it positively affects the standard of living of citizens and promotes the image of the nation.

In view of the above, findings of this study will contribute immensely to the understanding and practice of entrepreneurship by creating a significant milestone in

exploitation of resources for economic value. Similarly, findings of this study will specifically stimulate individuals' knowledge and understanding of the importance of the relevant identified personal and contextual factors; thereby add to the literature of entrepreneurship.

### **Review of Literature**

In their various research Choo & Trotman, (1991); & Weber, (1980) suggest that as individuals become more knowledgeable at a particular task through experience, they become increasingly efficient; they learn to focus attention primarily on the key dimensions, the ones that contribute most variance to the outcome of decisions. Hills, Hansen & Hultman, (2005) findings also show that experience in a particular marketplace provides information and possibly ability to manage such.

Similarly, Hills, Shrader, & Lumpkin, (1999) in a related study, found that entrepreneurs who used social network sources to get information on new venture ideas identified significantly more opportunities than those who did not use social network sources. The study reports further that social network contacts allow individuals to gather information from a wide range of individuals, leading them to gather and evaluate many new ideas.

Arenius & De Clercq, (2005) in their study of network-based approach on opportunity recognition, reports that human capital plays an important role in stimulating business ownership to access information, which is necessary to discover opportunities in the market place. Buttressing the finding of Arenius & De Clercq, Ardichvili, Cardozo & Ray, (2003) stress those individuals who have certain types of existing knowledge have a better likelihood to use such knowledge than those who do not have such knowledge.

Shepherd & DeTienne, (2001) in their study of discovery of opportunity reports that Knowledge and experience play an important role in identifying opportunities. Also stressed that, to identify an idea and recognize an opportunity in a specific field, one must be knowledgeable about the domain and have a solid understanding of the knowledge base. Singh, (2000) further found that social networking plays an important role in opportunity recognition, and reported that entrepreneurs' social ties influence their recognition of entrepreneurial opportunities and entrepreneurial pursuits.

According to Cohen & Levinthal, (1990), & Burt (1992), individuals' education may facilitate access to knowledge which may enhance knowledge management. Similarly, Gimeno, Folta, Cooper, & Woo, (1997) argue that prior knowledge gain from education facilitates the integration and accumulation of new knowledge. Bandura, (1978), in his findings stresses that, highly educated individuals have more self-confidence to possess the capabilities to come up with good ideas for new venture creation than lowly educated individuals.



Evans & Leighton, (1990); Jo & Lee, (1996); & Shane, (2003) in the various studies, emphasized the importance of human capital as a source of entrepreneurial knowledge, with education and professional experiences facilitating entry into entrepreneurship and shaping entrepreneurial ventures. Hence, Jo & Lee (1996) report that professional knowledge through previous work experience has a positive effect on entrepreneurial growth. However, Magnusson & Endler, (1977) opine that the interaction between individuals' characteristics and situational conditions predict entrepreneurial behavior better than any of the aforementioned factors alone.

According to Baron, (2004) prior knowledge, experience, passion and social networks are seen as enablers of either the recognizing or discovery of opportunity. However, Gartner & Shaver, (2004) reported in a study of 1,686 owner/managers Participants that opportunities are external and stable where the opportunity would exist for a sufficiently long period of time to allow discovery by the entrepreneur.

#### **Statement of Hypotheses**

Based on the literature reviewed, this study hypothesized that;

- Social network and human capital will jointly and independently predict entrepreneurial opportunity recognition.

#### **Operational Definition of Terms**

**Entrepreneurship:** This simply refers to the innovative scheme that provides business opportunity creation for individuals regardless of the resources currently controlled.

**Entrepreneur:** This is defined as an individual innovator or developer who recognizes and seizes business opportunities into workable or marketable ideas, and offers the converted ideas to people inform of goods and services for profit.

**Entrepreneurial Opportunity Recognition:** This is defined as an individual's perception of the possibility to create a new business or improving on the position of an existing, resulting in a new profit potential. The construct was measured using a five-item scale of entrepreneurial opportunity recognition designed with 5-Likert response format by Shane, Nicolaou, Cherkars & Spector (2009). High score on the scale indicates a high level of business opportunity recognition, while low score indicates low a level of business opportunity recognition.

**Social Network:** This is simply defined as a network of relationships among entrepreneurs and significant others in the society. The construct was measured using a 12-item validated social network scale, designed with a "Yes and No" response format by Gaag & Snijders, (2004). High score on the scale indicates a social network, while low score indicates low a level of business opportunity recognition.

**Human Capital:** This is a composite variable that is made up of four factors; education, entrepreneurial experience, gender and age.

**Age:** This refers to the chronological number of years of an individual counting from birth till

the time of this present study. Participants were asked to mention their ages.

**Education:** This explains the highest academic qualification of Participants. Participants were asked to indicate their highest educational qualifications.

**Entrepreneurial Experience:** This simply refers to a covert psychological factor that is evident in individuals' entrepreneurial skills. It was measured as a discrete variable. Participants were simply asked of their years of experience.

**Gender:** The simply tells whether a Participant is male or female and participants were asked to indicate.

## **Methodology**

### **Data Collection**

Triangulation method of data collection was adopted for the study. The method was adopted with a view to explore at least one other means of data collection in addition to questionnaire. Hence, an in-depth interview was also conducted, so as to overcome the weakness or intrinsic biases and problems that come from using only questionnaire. Moreover, ex-post facto research design was adopted in this study, because there was no active manipulation performed upon any of the variables involved. The independent variables are social network and human capital while the dependent variable is entrepreneurial opportunity recognition.

### **Participants of the Study**

Research participants were of two categories namely Executive Master Students and Entrepreneurs categories. There were two hundred and seventy-nine (279) (66.7%) male and one hundred and thirty-nine (139) (33.3%) female Executive Master of Business Administration (MBA) Students; sixteen (16) (64%) male and nine (9) (36%) female Entrepreneurs. Their average age was thirty-three (33) years; their average year in business was five (5) years. Of 418 MBA Students, 41% were single, 57% were married. 56% had HND/BSc/BA/Bed, 43% had M.Sc/MA/MEd. 84% established their business by themselves, 16% inherited the business; Of the 25 Entrepreneurs, 12% had first school leaving certificate, 16% had senior secondary school education, 8% had OND/NCE, 56% had HND/B.SC/BA/B.Ed, 8% had M.Sc/M.Ed. 72% established the business themselves, 28% inherited the business.

### **Instrumentation**

A list of structured interview questions, a high sound quality recording tape, three (3) empty recording cassettes of ninety-minute (90-minute) duration each, a packet of Tudor battery, jotters, biros, pencils, a list of names of stores and workshops of participants, with two research



assistants and validated questionnaire forms made up the research materials used in the study gather relevant data from Participants.

The in-depth interview questions were generated having reviewed thoroughly, literature on entrepreneurial opportunity recognition. Twenty-five (25) questions were initially generated and subjected to validations. Five (5) Psychologists in the Department of Psychology, University of Ibadan were given the twenty-five (25) questions for expert judgment on suitability of the questions and content validity. Based on the judgments of the Psychologists, 11 structured questions were eventually arrived at, which formed the interview questions.

The questionnaire form on the other hand, is made up of three validated scales of measurement that were used to measure social network, human capital and entrepreneurial opportunity recognition; and a structured open ended scale that tapped information on educational qualification, years of business experience, sex, age and marital status of participants. The questionnaire was therefore divided into three different sections namely; Section A, B and C. Detailed description of the features of the questionnaire form is given as followed;

### **Socio-Demographic Information**

This section of the questionnaire tapped relevant demographic information of the Participants. The information comprised of educational qualification, sex, age and marital status.

### **Social Network**

This section is made up of 12- item scale that measures social network. The scale was designed and validated with a “yes and no” response format by Gaag & Snijders, (2004). The scoring procedure for the scale indicates that, high score on the scale represents high social network, while low score represents low social network. Authors of the scale report an alpha coefficient of 0.85, while the present study reports Cronbach’s alpha of 0.84.

### **Entrepreneurial Opportunity Recognition**

Entrepreneurial opportunity recognition was measured with a validated scale of entrepreneurial opportunity recognition that was designed with 5-Likert response format by Shane, Nicolaou, Cherkars & Spector (2009). The scoring procedure for the scale indicates that high score on the scale represents high entrepreneurial opportunity recognition, while low score represents low entrepreneurial opportunity recognition. Authors of the scale report Cronbach’s alpha of .72, while the Researcher of this study reports Cronbach’s alpha of .61.

### **Procedure for Data Collection**

Researchers sought formal consent of authorities of three universities in the South-West region



of Nigeria namely Obafemi Awolowo University (O.A.U), University of Lagos (UNILAG) and Lagos Business School (L.B.S) through an official letter from the Head of Department of Psychology, University of Ibadan, to involve the Executive Master of Business Administration Students of the Universities as participants in the study. Participants were asked to signify their interest in participating in the study a consent form attached with the questionnaire form. They were told that by participating in the study, they are contributing to the knowledge base of entrepreneurship and the national economy respectively. Therefore, participation was voluntary based and participant could withdraw if so wish.

For the interview session, participants were formally approached in their various workshops and market places within Ibadan Metropolis, with an official letter and a consent form to seek their voluntary participation. They were asked questions from the list of structured interview questions and told be sincere with their responses, hence anybody who feels no longer interested could withdraw at any point and that the material and information supplied are research and will be treated confidentially. So participants' responses were recorded and translated for analysis.

**Statistical Analysis**

Having screened the data collected with questionnaire and interview, inference and descriptive statistics were performed respectively. The hypothesis stated was tested with multiple regression analysis while demographics and interview data were run with descriptive statistics of mean, frequency and percentage.

**Results:** Hypothesis which stated social network and human capital will jointly and independently predict entrepreneurial opportunity recognition was tested using multiple regression analysis. Result is presented in summary table below.

**Summary Table of Multiple Regression Analysis Showing the Independent and Joint Predictions of Entrepreneurial Opportunity Recognition by Human Capital and Social Network**

VARIABLES	R	R <sup>2</sup>	B	T	F	P
Gender	0.402	0.139	-0.032	-0.438	7.053	>.05
Age			0.101	2.165		<.05
Education			0.113	3.287		<.05
Experience			0.094	2.151		<.05
Social Network			0.088	1.811		<.05



The results in the table above shows that gender, age, education, experience and social network jointly predict entrepreneurial opportunity recognition  $F(5, 443) = 7.053$ ;  $R^2 = 0.139$ ;  $p < .05$ . Similarly, it reveals that age ( $\beta = 0.101$ ;  $t=2.165$ ;  $p < .05$ ); education ( $\beta = 0.113$ ;  $t=3.287$ ;  $p < .05$ ); experience ( $\beta = 0.094$ ;  $t=2.151$ ;  $p < .05$ ) and social network ( $\beta = 0.088$ ;  $t=1.811$ ;  $p < .05$ ) independently predict entrepreneurial opportunity recognition. However, gender did not independently predict entrepreneurial opportunity recognition ( $\beta = -0.032$ ;  $t= -0.438$ ;  $p > .05$ ). Hence, the hypothesis which stated that social network and human capital will jointly and independently predict entrepreneurial opportunity recognition was to a large extent confirmed.

### **Discussion**

This study was conducted to investigate social network and human capital as determinants of entrepreneurial opportunity recognition in Nigeria. Hypothesis was stated that social network and human capital will jointly and independently predict entrepreneurial opportunity recognition. It was tested and confirmed. Results showed that gender, age, education, experience and social network jointly predicted entrepreneurial opportunity recognition. Similarly, results revealed that age, education, experience and social network independently predicted entrepreneurial opportunity recognition, as 83% of the interviewed participants reported high level of social network, 89% reported human capital while 95% reported both social network and human capital as the secret of their success in entrepreneurial activities. However, it further showed that gender did not predict entrepreneurial opportunity recognition.

The above results are supported by the previous findings of Choo & Trotman, (1991); & Weber, (1980). In their various researches, they reported that as individuals become more knowledgeable at a particular task through experience, they become increasingly efficient; they learn to focus attention primarily on the key dimensions, the ones that contribute most variance to the outcome of decisions.

Similarly, Hills, Shrader, & Lumpkin, (1999) in a related study, found that entrepreneurs who used social network sources to get information on new venture ideas identified significantly more opportunities than those who did not use social network sources. The study reports further that social network contacts allow individuals to gather information from a wide range of individuals, leading them to gather and evaluate many new ideas.

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Knowledge and experience play an important role in identifying opportunities. Also stressed that, to identify an idea and recognize an opportunity in a specific field, one must be knowledgeable about the domain and have a solid understanding of the knowledge base. Singh, (2000) further found that social networking plays an important role in opportunity recognition, and reported that entrepreneurs' social ties influence their recognition of entrepreneurial opportunities and entrepreneurial pursuits.

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### **Conclusion**

This study examined social network and human capital as determinants of entrepreneurial opportunity recognition in Nigeria. In the light of the above, hypothesis was stated and tested respectively based on literature reviewed and data collected. Hence, the following conclusions were drawn from the findings of the study:

- 1 Social network and human capital are significant joint predictors of Nigerians' entrepreneurial opportunity recognition.
- 2 Social network is a significant independent predictor of Nigerians' entrepreneurial opportunity recognition.
- 3 Age is a significant independent predictor of Nigerians' entrepreneurial opportunity recognition.
- 4 Education is a significant independent predictor of Nigerians' entrepreneurial opportunity recognition.
- 5 Experience is a significant independent predictor of Nigerians' entrepreneurial opportunity recognition.
- 6 Gender is not a significant independent predictor of Nigerians' entrepreneurial opportunity recognition.

### **Implications**

The study found social network and human capital as significant joint and independent predictors of entrepreneurial opportunity recognition. The finding has implications for the



lecturers, career counselors, trainers, parents and government to give adequate considerations to personality factors of individuals and some situational variables in the process of teaching, career counseling, training and planning entrepreneurship programmes for individuals such that, will address and arouse the potentials of people to assume the responsibility of helping themselves, and help them in creating enabling environment that promotes economic value for their benefit and the society at large.

Moreover, findings of this study required all stakeholders to acquire and improve their professional knowledge of entrepreneurship through class room learning, seminar, workshop, lectures, training and also, subject themselves to enduring practical learning and apprentice programme under more experienced and knowledgeable entrepreneurs who will not only teach but also show them the rudiments of entrepreneurship.

### **Recommendations**

Based on the confirmation of the joint and independent predictions of entrepreneurial opportunity recognition by social network and human capital, this study recommends that stakeholders most especially, lecturers, career counselors, trainers, parents, mentors and government to give adequate considerations to both situational and personality factors of individuals in the process of teaching, counseling, training and planning entrepreneurship programmes for individuals regardless of age and gender. In addition, all stakeholders should acquire and improve their professional knowledge of entrepreneurship through class room learning, seminar, workshop, lectures, training and also, subject themselves to enduring practical learning and apprenticeship programme.

Finally, individuals are admonished to think outside the box, most especially, the youths, and discover their natural endowments in terms of potentials, see ways of converting them to goods and services through innovation and creativity, which provides for the needs of people in exchange for money. By so doing, they will add values to lives, enrich themselves and most importantly impact positively to the growth of the national economy.

### **Limitation of Study**

There are numbers of factors that have limited the generalization of results of this study:

- There was no active control over extraneous variables and this implies that the changes observed on the dependent variables could have been caused by factors not controlled in the study.
- Only social network and human capital were considered in this study as independent variables, some other variables could also explain entrepreneurial opportunity recognition.
- Time set for data collection was very short. This makes the sample size limited.



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