

Mentorship in Entrepreneurship Development a Beacon for National Development: Empirical Study of Tertiary Institutions in Nigeria

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ABSTRACT

This paper seeks to echo the relevance of mentorship in entrepreneurship development and a beacon for national development. Theoretical support evidence for entrepreneurship mentoring has been adducing due to its efficacy and significant achievement in the development of dependable and successful entrepreneurs toward nation-building and development. But the trend of practice and acceptance since inceptions of entrepreneurship as a discipline till recent times in Nigeria is distinguished with resistance. Manifesting as creeping-gaps in tertiary institution's course curriculum in entrepreneurship education, due to the conspicuous omission of the mentoring topic of thought in neither theory nor practical pedagogical approaches in entrepreneurship curriculum in Nigeria institution. Therefore, the objective of this study includes: to investigate the impact of mentorship as a training tool to educate and empower potential entrepreneur in Nigeria. This study empirically employed primary and secondary data, hypotheses, extensive literature review, theoretical framework, structured and adapted questionnaire on an estimated population of 300 students, with a sample size of 171 as respondent undergoing entrepreneurship education in three selected tertiary institution in Nigeria, using stratified random sampling. The study adopted measurement from notable experts in the field. Partial Least Square-Structural Equation Model (PLS-SEM) and SPSS analytical methods are used to analyze the collected data.

The study revealed that "informal mentoring is positively impactful to entrepreneur development in Nigeria" And base on the research findings, the researcher recommends that entrepreneurship mentorship should be incorporated into the school curriculum at both secondary and tertiary institution in Nigeria.

INTRODUCTION

Entrepreneurial mentoring has a positive relationship with mentor and mentee as each party brings different perceptive and knowledge into the relationship and in many cases mentees establish the goals of the relationship with the view to a mentor playing a vital role in developing the individual to becoming a successful entrepreneur. A mentor guides entrepreneurs from the starting point of business through product development, business growth, and expansion. They help mentors to understand and find out what types of entrepreneurial need, rendering mentoring entrepreneurship support. Enormous skills and experience are required of a mentor to be able and capable of anchoring a successful mentoring relationship, especially in the vast and dynamic sector. It is relationships that graduate into fusing of experts with a less experienced person who seeks knowledge on how to entrepreneurially help himself to become a successful entrepreneur as a chosen career. The mentorship culture is imbibed by all who have a genuine passion for their field or trade and are voluntarily willing to contribute to the continuity and survival of that chosen profession as a legacy for the society. Tribes, nations, institutions of human capital development, state Governments, local Governments, religious bodies, have adapted to this culture at a different level and degree. It has become part of many societies' culture and way of life. In some communities, it is frequently practised that farmers, traders and educationists mentoring people to become their successors, done in batches, turns and continuously. The impeccable commitment of

this individual as a mentor plays a significant role to make somebody a renowned and successful entrepreneur. The core concept of mentorship is centre on knowledge sharing, knowledge empowerment to the needy, knowledge that has been tried and tested through research and experience, of which both are the core mandate of entrepreneurship education. The pressure in the domain of the university, polytechnics and colleges of education as the formal institution of learning, to show and provide direction in this regard has been on the increase, though researcher past studies linked with David Marshall and Hunt Carol Michael (1983) focused on the role partners characteristics of mentor and mentee relations, Inzer and Crawford (2005) focused on formal mentoring in an organizational setting, Clare Rigg and Breda O" Duyer (2012) focused on educator collaborator in entrepreneurs knowledge expansion in South West Ireland intending to expand the enterprise knowledge beyond knowledge acquisition and developing epistemology and methodology. Also, Benjamin Ibe Chukwu and Onyeizugbe Chinedu (2013) focus on business mentoring as a panacea for entrepreneurship development in Nigeria, while Catherine Nyawira Muadia and Mik Iravo (2014) focus on predicting the role of a mentoring programme in individual advancement and organizational productivity performance. Lastly, Uma, Onwusogbolu and Obidike (2015) zoom on the effect of mentoring and entrepreneurship in promoting economic development in Nigeria. Tracing the mentorship development from the past to the recent times, available records shows that all research findings are centred on career mentorship targeted at advancing and enhancing steady promotion in our various fields of careers (Miller, 1999; Eby, 2010; Scandura, 1992; Strivastava, 2013; Phillip, 1977; Missarian, 1980) while other findings duels on definitions and function of mentorship (Kram, 1980; Hailey, 1993; Williams, 2000; Beanabou & Beanabou, 2000; Coffield, 2008; Cope & Watts, 2000; Smith & Pastor, 2011). Records have also revealed that formal, informal, peer and group

mentoring approach has no adequate research findings to compare each of their contribution and impact to entrepreneurship development. This serious disconnect has made it practically impossible to empirically evaluate the practical contribution of mentorship in both tertiary institutions of higher learning and the field practice. This characteristic is replaying itself as constraints to the development of entrepreneurial mindset among students of higher learning, distinguished with heartbreaking, disheartening, sad and pathetic to see sliming gaps of mentoring in a tertiary institution's course curriculum on entrepreneurship education. Mentoring as a topic of thought in an entrepreneurship curriculum is conspicuously lacking in both theory and practical approaches to mentorship education. This is a serious gap that has created and caused drastic unemployment even among the graduates of tertiary institutions. Entrepreneurship education is expected to empower the young graduate to be selfemployed and employed others. However, the needed training and mentorship required is less noticed and used even in the institution of higher learning where entrepreneurship knowledge is supposed to be available. Therefore it is the goal of this study to investigate the impact of the less known and used mentorship training tools to educate and empowered potential entrepreneur in Nigeria as a country.

OBJECTIVE

- a. To determine the impact of informal mentoring in entrepreneurship development in Nigeria
- b. To examine the impact of group mentoring, peer mentoring and formal mentoring in entrepreneurship development in Nigeria. Much has not been said about the expected benefits of mentorship education in entrepreneurship knowledge

acquisition in both formal and informal, peer and group mentorship education of any society or nation that embrace its practice. Mentorship helps to identify talent, develop such talents as an opportunity for the mentee and the society, which ordinarily would not have been noticed. Studies have shown that mentors help to invoke the best potentials naturally deposited in young mentee whom for a social reason or not conscious of his/potential lack the ability and self-efficacy to express the ideas which could ordinarily be overlooked. Therefore, the researcher for this study hypothesizes the following:

Research Hypothesis of the Study

H1: Informal mentoring is a base and an incubator for building confidence; both confidence and informal mentoring are positively impactful to entrepreneurship development in Nigeria.

H2: Formal mentoring is a breeding ground for nurturing ability, capability and ideas development, therefore formal mentoring and these elements correlate to entrepreneurship development.

H3: Peer mentoring creates and develops a forum for team-spirit, networking, and purpose-driven development; they jointly and separately contribute to entrepreneurship development.

H4: Group mentoring constitutes a pivot tool for modelling entrepreneurial self-efficacy, and both groups mentoring and entrepreneurial self-efficacy have a direct positive relationship with entrepreneurship development.

H5: Perceived business environment significantly and positively moderate the relationship between Informal mentoring as a base and an incubator for building confidence, and entrepreneurship development in Nigeria. H6: Perceived business environment significantly and positively moderate the relationship between Formal mentoring as a formal mentoring in creating a breeding ground for nurturing ability, capability, ideas development, and entrepreneurial development.

H7: Perceived business environment significantly and positively moderate the relationship between Peer mentoring as a creator and developer of the forum for team spirit, networking, and purpose drove dimension, (separately or jointly) and entrepreneurship development in Nigeria.

H8: Perceived business environment significantly and positively moderate the relationship between Group mentoring as a fertile ground for modelling entrepreneurial self-efficacy and entrepreneurship development.

Review of Conceptual Literature

Designing the map of those people who achieve success in entrepreneurship venture, there exist traces of standing on the shoulders of great men through mentorship training, and many successful entrepreneurs were guided by more experienced people in the field. There are correlations as links of advancement between entrepreneurship mentorship and both human and society. Accessing the conceptual meaning of Entrepreneurship as

a creative activity, it stressed the capability, and ability to create and build an enterprise which involves devoting of time, a task taking and availability of finance, but in the long run, it is rewarding and profitable in monetary term, personal satisfaction, master of yourself and even master to others (Peter & Shepherd, 2013). The dominant feature here is creativity and innovation mobilized to actualize the entrepreneurial intention for success through adequate skills and knowledge needed to succeed. The required entrepreneurial knowledge to achieve success in entrepreneurship venture are consciously packaged by institutions as a program and disseminated to individual and group. As those with the required skills and knowledge, manifest themselves as mentors.

Mentoring involves personal affairs in which a knowledgeable and experienced person assists a less knowledgeable and experienced person to develop or grow with advance knowledge which assists him to become a successful entrepreneur (wikipedia. org/wiki/mentorship). Doherty (2009) posits that mentors are those individual either through experience or formal educational background; exposure is endowed with reference power for critical decision by top management personnel for advice. The rational decision by some leaders in industries and government are often made on the mentor's advice.



Figure 1 Research framework

Informal Mentoring

Denote an entrepreneurial relationship between mentor and mentee in a cordial and relaxed environment, it is characterized by a high level of flexibility; the mentors are more and very happy with their mentees which end up giving a satisfactory result. Yet with a strong connection and interaction bond (Lumpkin, 2011). Informal mentoring last longer and it occurs with higher and greater frequency, Informal mentoring occurs in a relationship that is voluntary formed by both mentor and mentee.

Formal or Classic Mentoring

Formal or classic mentoring is a type of mentoring which involve one-on-one mentoring pattern or form in which a senior member and a junior member come together for mentorship, and the mentors agreed to take up the responsibility and challenges to help mentees to grow and develop in his choose career.

Formal mentoring is a structured and design mentoring and this is not voluntarily unlike informal mentoring, but it is very

significant and effective in integrating new employees which lead to success and satisfaction in their career formal mentoring is very and seriously beneficial and that is why its implementation becomes very necessary and important to an organization. There are some challenges or problems associated with formal mentoring, e.g., mixing or taking mentor for supervisor and vice-visa there should be a separation between the two roles for better focus and concentration. Mentors are higher in the hierarchy at least with two-level above the mentee in an organization which makes it more difficult for the mentee to interact very well with the mentor. The main focus of formal mentoring is to give psychosocial support, career development, coaching, and role modelling to identify and determine the strength and weakness of the relationship between the mentor and mentee.

Peer Mentoring

Peer mentoring involves members or group of persons who belong to the same age group, a social group of equal rank from the same or different department with another person from the same or different department who come together to deliberate on a matter affecting them in other to develop themselves. Peer mentoring also address psychological needs, reduces isolation and increase the corporative relationship between members. For examples employees going for promotion in a few months may form a peer group to discuss promotion questions, problems and challenges and as well profound solution by strategies to handle or tackle such problems. This mentoring has shown an effective form of mentoring with positive evaluations in the sense that an exit of one or more mentee from the program, does not disrupt the continuation of the mentoring program in focus. In as much as peer mentoring does not rely on one person being chosen as a mentee, it gives some balance for minorities and ensures equal access to mentoring. Also, personality differences are less or not important in peer mentoring since no one relationship privileged over another and as such peer mentoring may be associated with a formal system of mentoring so that senior faculty can input knowledge into a junior mentee.

Group or Team Mentoring

In Reimers (2014), group mentoring is the offering of entrepreneurial expert service by some group of people who come together as a senior member with the required skills and knowledge for the less experienced group as junior members. Who are mentees and they both meet as a team regularly maybe a month or less? However, meetings every month are more reliable and effective especially when a topic is given, and the panel is arranged to address the topic, but group mentoring has a bonus of a senior mentor who provides guidance, advice, and directions to the mentees. Also, a few mentors can serve many mentees and mentees can as well learn from each other by maximizing the impact of excellent and efficient mentors.

Extant and Current Studies on the Relationship Between Mentor and Entrepreneurship Development

Nigeria as a country is yet to unanimously resolved to a paradigm shift from the ambience of good old days of colonial masters, which trained and left us with only reading, writing and clerical jobs. This routine mentality has not changed even after fifty-seven years of independence. Studies and experiences have shown that entrepreneurship mentorship and economic development have a lot of synergies which are indispensable sources of cheap entrepreneurial knowledge transplant as educational base assistance to re-position and accelerate effective resources allocation and utilization. Various economic theories support that improvement and significant achievement has been recorded with the help of mentorship entrepreneurship. With mentorship and and entrepreneurship development all idle resources will be engaged and used for economic development. Ragins Cotton and Miller (2001) and Raabe Beahr (2003) revealed the less effective outcome of formal programs to informal mentoring and provided some evidence that mentorship can improve selfefficacy and leadership. Ragins Cotton and Miller (1999) find no difference in career outcome between non-mentored and formally mentored individual, but that informally mentored individual does. Eby (2010) sees mentorship as a developmentally oriented interpersonal relationship that is typically between the more experienced individual and a less experienced individual. Scendura (1992) and Srivastava (2013) found out that receiving mentorship has a positive correlation with career outcome. Hamilton (1942) posits that mentorship is the development process in many occupations, master-apprentice, physician-interns and teacher-student. Orth and Jacobs (1977) concur that a mentor is necessary for young people in business to achieve success. Phillip (1977) and Missarian (1980) revealed that the majority of women at the top-level management had one or more mentors and that mentorship was a critical factor in their success. Adams (1979) posits that everyone who made it has a mentor.

Kram (1980) revealed that mentorship aids mentee develops management talent, technical knowledge, learned organizational ropes, develop a sense of competences, effectiveness and how to behave at success management levels.

Benabou and Benabou (2000) state that mentoring improves employee's performance, increase commitment for the organization, improves the flow of information and support leadership development. Coffield (2008) sees metaphors of learning as participation as helpful for conceptualizing the mentor network in the New venture program as a community of practice that provides an induction, motivation, and stimulation for nascent entrepreneurs who are conscious of their status, identity and development of their practical skills.

Cope and Watts (2000) revealed that mentors had been identified as significant for developing entrepreneurs and also as a means of providing focus and support for enterprise development. Smith and Pastor (2011) posit that mentors are sources of knowledge transfer and aspiration for potential entrepreneurs to reflect and construct enterprise knowledge.

Hailey (1993) revealed that there is generally acceptable model and different institutions including universities, technical colleges and enterprise agencies did not provide a variety of entrepreneurship or small business mentoring course. Ugwu (2006) argued that most entrepreneurshiprelated policies and programmes in Nigeria fall short of appropriate business mentoring frameworks and same the policies formulated lack clear entrepreneurial vision, commitment and associated with serious constraints to entrepreneurial development in Nigeria.

Underpinning Theory of the Study

The theory of social cognitive has gained wide recognition and usage in social research usage due to its empirical evidence recorded in career development in the field of study. Sosik, Godshalk, and Yammarino, (2004) propounded a model positing that individual programme is developed base on what he/she wants as a result of the success of his/ her career with the help and assistance of mentoring: This theory further endorse the efficacy of mentorship in skills development and the dependability of mentorship relationship on focus and goaloriented ventures. It also helps the mentee to be firm and ready to learn in other for him to develop himself, believe himself and have confidence, optimistic, hopeful and have selfefficacy (Mitcheel & Lee, 2009). Sosik, Godshalk, and Yammarino (2004), further explained that mentoring programme offered support and assistance to individual's prospect of career success which turnaround to influence or affect the individual's belief in respect to his ability, capability and the result of his career.

METHODOLOGY

Various methods were deployed to carry out this study, the investigation makes use of a primary source of data, using structure questionnaire as an instrument to elicit data from the respondent, who are mainly tertiary students from Nigeria. However, previous journals and internet services were also employed to collect data as a literature review of past and present studies. Research population and sample size: the locational scope of the study is made up of the three major tertiary institutions in Nigeria i.e. (university, polytechnics and college of education) who attract students from the whole 37 states in the country as Nigerian students the researcher structure the country on institution strata out of which three tertiary institutions where entrepreneurship education is acquired by Nigerian citizens to develop their entrepreneurial mindset. Therefore

the population of this study constitutes the three tertiary institutions, housing over 3000 Nigerian students under different programs, dispersed over the three tertiary institutions in the country. Among this defined population, a sample size of 171 students was successfully selected. With the structured questionnaire, the researcher covered 23 states, out of the 37 states in Nigeria, using stratified random sampling method in the three major institutions of higher learning where entrepreneurship education is made available as a programme of study, which are Bida, Minna, and Kwara where federal polytechnic, colleges of education and university are established. Measurement or instrument is not only important in research venture but a requirement for any meaningful research study if validity and reliability of finding is the focus (Boar, 2003). The quest to ensure that reliable and valid measurement is used for this investigation. Both the independent and dependent variable data are adopted from various experts in the field with outstanding track records of their validity and reliability. The study accesses the level of agreement of the respondent on the provided statements on a Likert Scale of 1 – 5 (strongly disagree 1, disagree 2, neutral 3, agreed 4, and strongly agree 5). According to Boar (2003), when the purpose of a research project is to develop, expound further, confirm, affirm existing theories or works, relying on accepted measures becomes the best belt, for it ensures reliability and validity of the results. Therefore, the researcher of this investigation adopted the questionnaires focusing on the goal and research question, ensuring that the variable was consistent with what is being measured.

Variables	No. of items	Sources of measurement	S/N item
Formal mentoring	6	Ismail, Abdullah, & Francis (2009)	1, 2, 3 & 4
		Catherine & Iravo (2014)	5&6
Informal mentoring	5	Ismail, Abdullah, & Francis (2009)	1 – 5
Peer mentoring	5	David Marshall Hunt & Carol Michael, (1983)	1,2&3
		Ismail A, Abdullah, MM & Francis S.K, (2009)	4 & 5
Group mentoring	6	Ismail, Abdullah, & Francis (2009)	1 – 6
Perceive business environment	6	Agbaeze (2005)	1, 2, 3
(moderator)		Taormina & Lao (2007)	4, 5 & 6
Entrepreneurship development	6	Fuller, Warren, & Welter (2008)	1, 2 & 3
		Rigg & O'Dwyer (2012)	4, 5 & 6

Table 1 List of variables





Table 2 Cross loading

	Cross Loading	Composite Reliability	Average Variance Extracted (AVE)
ED Q1	0.790	0.792	0.655
ED Q6	0.829		
FM Q4	0.683	0.742	0.592
FM Q6	0.847		
GM Q2	0.805	0.751	0.506
GM Q3	0.573		
GM Q4	0.736		
IM Q1	0.581	0.752	0.507
IM Q3	0.763		
IM Q5	0.775		
PBE Q4	0.839	0.749	0.600
PBE Q6	0.704		
PM Q2	0.734	0.788	0.651
PM Q4	0.874		

Assessment of the measurement model of the study using cross loading was adopted with due regards to Hair et al.'s (2014) guideline and the study report the value of each single item reliability on the individual element construct showing the acceptable value of 0.573 as the minimum and 0.874 as the maximum point as reported in Table 2 of this study, showing the corresponding total fourteen individual elements of the study that meet the threshold. Assessing the internal consistency reliability of the adopted measurement to ascertain the extent to which all items in this particular (sub) scale are measuring the same concept in this study, the researcher uses the composite reliability coefficient.

Several reasons account for the use of composite reliability coefficient. Firstly, composite reliability coefficient provides a much less biased estimate of reliability than Cronbach's Alpha coefficient because the latter assumes all items contribute equally to its construct without considering the actual contribution of individual loadings (Barclay, Higgins, & Thompson, 1995; Gotz, Liehr-Gobbers, & Krafft, 2010).

Secondly, Cronbach's alpha may over or under-estimate the scale reliability. Thirdly, the composite reliability takes into account that all indicators have different loadings and can be interpreted in the same way as Cronbach's alpha. This study for this investigation uses Bagozzi and Yi (1988) as well as Hair et al. (2011) criteria which suggest that the composite reliability coefficient should be at least 0.70 or more, as reported in Table 2, bearing composite validity value between 0.741 to 0.792.

Construct Reliability and Validity

The extent to which items truly represent the intended latent construct and indeed correlate with other measures of this study latent construct is determined by using convergent

validity. Fornell and Larcker (1981) recommend the examination of the Average Variance Extracted (AVE) of each latent construct to assess Convergent validity. While Chin (1998) recommends that the AVE of each latent construct should be 0.50 or more to achieve adequate convergent validity. On the strength of this, this study report the AVE values (see Table 2) exhibited high loadings ranging from 0.502 – 0.655 on their respective constructs, indicating adequate convergent validity.

Discriminant Validity

Ascertaining the extent to which every single particular latent construct is different from other latent constructs of the study is a requirement in every standard research to achieve adequate discriminant validity (Duarte & Raposo, 2010). In the present study, discriminant validity was ascertained using AVE, as suggested by Fornell and Larcker (1981). By satisfying the following thresholds (see Table 3):

Step one, by comparing the correlations among the latent constructs with square roots of average variance extracted (Fornell & Larcker, 1981).

Step two, comparing the indicator loadings with other reflective indicators in the cross-loadings table. Fornell and Larcker (1981) further suggest the use of AVE with a score of 0.50 or more. And the third step is that the square root of the AVE should be greater than the correlations among latent constructs.

Assessment of multicollinearity in a standard research venture is a requirement to be met if the accuracy and significance of results are to be attained. Hair et al. (2010) observed that a correlation coefficient of 0.90 and above indicate multicollinearity between exogenous latent constructs. For this study, two methods were used in this study to examine if multicollinearity exists in this investigation (see Table 3).

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	ED	FM	GM	ІМ	PBE	РМ
ED	0.809					
FM	0.310	0.769				
GM	0.325	0.228	0.711			
IM	0.108	0.125	0.284	0.712		
РВЕ	0.326	0.252	0.186	0.199	0.775	
РМ	0.352	0.270	0.337	0.286	0.241	0.807

Table 3 Collinearity (VIF)

Secondly, following the examination of the correlation matrix for the exogenous latent constructs, variance inflated factor (VIF), tolerance value and condition index were examined to detect multicollinearity problem. Hair, Ringle, and Sarstedt (2011) noted that multicollinearity is a concern if VIF value is higher than 5, the tolerance value is less than 0.20, and the condition index is higher than 30. See table 4.4 as reported by this study the variance inflated factor values range from 1.038 to 1.327 among the fourteen exogenous latent constructs.

VIF EDQ1 1.107 EDQ6 1.107 FMQ4 1.038 FMQ6 1.038 GMQ2 1.199 GMQ3 1.327 GMQ4 1.157 IMQ1 1.288 IMQ3 1.242 IMQ5 1.095 PBEQ4 1.044 PBEQ6 1.044 PMQ2 1.107 PMQ4 1.107

Table 4 Assessment of the structural model



Having ascertained the measurement model, next, is the assessment of the significance of the structural model. The present study also applied the standard bootstrapping procedure with some 5,000 bootstrap samples and 171 cases to assess the significance of the path coefficients (Hair et al., 2014; Hair et al., 2011; Hair et al., 2012; Henseler et al., 2009).

The R-squared value represents the proportion of variation in the dependent variable(s) that can be explained by one or more

predictor variable (Elliott & Woodward, 2007; Hair et al., 2010; Hair et al., 2006). Although the acceptable level of R² value depends on the research context (Hair et al., 2010), Falk and Miller (1992) propose an R-squared value of 0.10 as a minimum acceptable level. Meanwhile, Chin (1998) suggests that the R-squared values of 0.67, 0.33, and 0.19 in PLS-SEM can be considered as "substantial, moderate, and weak," respectively. Table 5 presents the R-squared value of the only but one endogenous latent variable.

Table 5 R-squared value

	R Square		
ED	0.302		

F Square

Effect size indicates the corresponding impact or contribution of the specific exogenous latent variable on an endogenous latent variable(s) using changes in the R-squared (Chin, 1998). It is calculated as the increase in R-squared of the latent variable to which the path is connected, about the latent variable's proportion of unexplained variance (Chin, 1998). Thus, the effect can be explained, and statistically coded using notable formula (Cohen, 1988; Selya, Rose, Dierker, Hedeker, & Mermelstein, 2012; Wilson, Callaghan, Ringle, & Henseler, 2007):

Effect size:

Tab	le 6	Effe	ct size
			000120

	ED	FM	GM	IM	PBE	РМ
ED						
FM	0.031					
GM	0.043					
IM	0.006					
PBE	0.053					
PM	0.047					

Predictive Relevant of the Model

The present study adopted the Stone-Geisser predictive relevant test for this research investigation as a research model by using blindfolding procedures (Geisser, 1974; Stone, 1974). The Stone-Geisser test of predictive relevance is usually used as a supplementary assessment of goodness-of-fit in partial least squares structural equation modelling (Duarte & Raposo, 2010). Even though this study used blindfolding to ascertain the predictive relevance of the research model, it is worth noting that according to Sattler, Völckner, Riediger, and Ringle (2010) "blindfolding procedure is only applied to endogenous latent variables that have a reflective measurement model operationalization" (p. 320). Reflective measurement model "specifies that a latent or unobservable concept causes variation in a set of observable indicators (McMillan & Conner,

2003, p. 1). Hence, because all endogenous latent variables in the present study were reflective, a blindfolding procedure was applied mainly to these endogenous latent variables.

In particular, a cross-validated redundancy measure (Q^2) was applied to assess the predictive relevance of the research model (Chin, 2010; Geisser, 1974; Hair et al., 2013; Ringle, Sarstedt, & Straub, 2012b; Stone, 1974). The Q^2 is a criterion for a measure of how well a model predicts the data of omitted cases (Chin, 1998; Hair et al., 2014). According to Henseler et al. (2009), a research model with a Q2 statistic (s) greater than zero is considered to have predictive relevance.

Additionally, a research model with higher positive Q^2 values suggests more predictive relevance. Table 7 presents the results of the cross-validated redundancy Q^2 tests of this study.

Table 7 Construct cross-validated redundancy						
Total	SSO	sse	$q^2(=1-sse/ss0$			
Entrepreneurial development	342.000	306.370	0.104			
L						

Table 7 Construct cross-validated redundancy

Source: The Researcher

As shown in Table 7, the cross-validation redundancy measure Q^2 for the endogenous latent variables were above zero, suggesting the predictive relevance of the model (Chin, 1998; Henseler et al., 2009).

Нур	otheses Path	Coeff (Beta)	T.Value	Remarks	
H1.	Informal M -> Entrepreneurship Development	-0.086	0.963	Not Supported	t
H2	Formal M -> Entrepreneurship Development	0.161	1.625	Supported	
H3	Peer M -> Entrepreneurship Development	0.185	2.366	Supported	
H4	Group M -> Entrepreneurship Development	0.194	2.463	Supported	
H5	PBE-<> Informal M/ Entrepreneurship Develop	ment -0.000	0.004	Not Supported	
H6	PBE-<> Formal M/ Entrepreneurship Developm	nent -0.172	1.945	Supported	
H7	PBE-<> Peer M/ Entrepreneurship Developmer	nt 0.007	0.067	Not Supported	
H8	PBE-<> Group M/ Entrepreneurship Developm	ent -0.065	0.624	Not Supported	

Table 8 Path coefficients and hypotheses testing

The results in Table 8, indicated that Formal mentor, Peer Mentor and Group mentor (B = 0.161, t-value = 1.625), (B = 0.185, t-value = 2.366), (B = 0.194, t-value = 2.463) were positively related to Entrepreneurship Development, and that perceived business environment significantly moderate the relationship between Formal mentor and entrepreneurship development (B = -0.172, t-value = 1.945), and the perceived business environment with statistically negative Beta index, moderate the relationship between formal mentor and entrepreneurship development (B = -0.172, t-value = 1.945) the study posits that both are a significant predictor of entrepreneurship development. On the other hand, informal mentor positive correlation to entrepreneurship development was not supported, as well as the perceived business environment moderation on the

relationship between informal mentor, peer mentor and group mentor was statistically not moderated. Therefore, the relationship between informal mentor and entrepreneurship development, peer mentor and group mentor are a significant predictor of entrepreneurship development. Thus, H_2 , H_3 , H_4 , and H_6 were supported, while H_1 , H_5 , H_7 , and H_8 were not supported.

The study also shows that, the designed structural model explaining 30.2% (R² = 0.302), at a moderate predictive relevance of (Q² = 0.104) with an effect size of the four endogenous construct (F²) = formal mentor 0.031, peer mentor 0.038, group mentor 0.045 and perceived business environment 0.036. In the same vein, the exogenous study constructs: formal mentor, peer mentor, group mentor, formal moderation and perceived

business environment, bears variance inflated factor index of (1.192, 1.304, 1.210, 1.313 and 1.224) respectively, indicating lack of linear or multicollinearity issues with and among the study variables.

SUMMARY OF FINDINGS

First, the administration of the questionnaire was adequately administered and as the response rate of 92.6% was achieved.

Interestingly, the hypothesis tested report indicates that of the eight findings, H2, H3, H4, and H6 were supported while H1, H5, H7, and H8 were not supported. Indicating that:

H2 "Formal mentoring as a formal mentoring is a breeding ground for nurturing ability, capability and ideas development, and these elements co-relates to entrepreneurial development." Supported

H3 "Peer mentoring creates and developed a forum for team spirit, networking, and purpose drove dimension, these elements jointly and separately contribute to entrepreneurship development in Nigeria." Supported

H4 "Group mentoring constitution a fertile ground for modelling entrepreneurial self-efficacy and both self-efficacy and rolemodel have a direct positive relationship with entrepreneurship development." Supported

H6 Perceived business environment significantly and positively moderate the relationship between Formal mentoring as a formal mentoring in creating a breeding ground for nurturing ability, capability, ideas development, and entrepreneurial development" Supported While the study also revealed not positively significant findings on the under listed hypotheses:

H1 "Informal mentoring is a base and an incubator for building self-confidence, and both self-confidence and informal mentoring are positively impactful to entrepreneurship development in Nigeria." Not Supported

H5 "Perceived business environment significantly moderate the relationship between Informal mentoring as a base and an incubator for building confidence, and entrepreneurship development in Nigeria." Not Supported

H7 "Perceived business environment significantly and positively moderate the relationship between Peer mentoring as a creator and developer of the forum for team spirit, networking, and purpose drove dimension, (separately or jointly) and entrepreneurship development in Nigeria." Not Supported

H8 Perceived business environment significantly and positively moderated the relationship between Group mentoring as a fertile ground for modelling entrepreneurial self-efficacy and entrepreneurship development." Not Supported

DISCUSSION

The first interesting finding of this investigation reported that Informal mentoring is a base and an incubator for building confidence, and both confidence and informal mentoring are positively impactful to entrepreneurship development in Nigeria. The second finding as reported by this study shows that group mentoring constitution a fertile ground for modelling entrepreneurial self-efficacy and both self-efficacy and role-model have a direct positive relationship with entrepreneurship development in Nigeria. The revealed outcome of this study is consistent with the existing study of Reimer (2014) who maintained that group mentee report greater achievement of entrepreneurship development due to group mentoring, as the relationship involves a senior mentor who direct, provide, coach and prepare the mentee for a future challenge and how to be a successful entrepreneur. In line with the same consistency, Smith and Pastor (2011) posit that mentors are sources of knowledge transfer and aspiration for potential entrepreneurs to reflect and construct enterprise knowledge. Coiffed (2008) sees metaphors of learning as participation as helpful for conceptualizing the mentor network in the New venture program as a community of practice that provides an induction, motivation, and stimulation for nascent entrepreneurs who are conscious of their status, identity and development of their practical skills. Cope and Watts (2000) revealed that mentors had been identified as significant for developing entrepreneurs and also as a means of providing focus and support for enterprise development. Also, Benabou and Benabou (2000) state that mentoring improves employee's performance, increase commitment for the organization, improve the flow of information and support leadership Kram (1980) revealed that development. the majority of women at the top-level management had one or more mentors and that mentorship was a critical factor in their success. Missarian (1980), revealed that mentorship aids mentee develops management talent, technical knowledge, learned organizational ropes, develop a sense of competences, effectiveness and how to behave at success management levels. Adams (1979) posit that everyone who made it has a mentor. Orth and Jacobs (1977) concur that a mentor is necessary for young people in business to achieve success.

While the not supported results are as well consistent with the study done by Raabe Beahr (2003) revealed the less effective outcome of formal programmes to informal mentoring and provided some evidence that mentorship can improve self-efficacy and leadership,

Ragins Cotton and Miller (2001) reported that informal mentee is more egalitarian, build a stronger interactive network, stronger connection and develop all flexibility needed to succeed as an entrepreneur.

Ragins Cotton and Miller (1999) find no difference in career outcome between nonmentored and formally mentored individual, but that informally mentored individual does.

THE IMPLICATION OF THE STUDY

Practical Implication

This study has practically showcased that mentorship is a veritable tool to instil entrepreneurship interest and enhance enterprise development. The study has also demonstrated the positive relationship between entrepreneurship mentoring and entrepreneurship development. This study has placed it on record that the five dimensions of entrepreneurship development (formal mentoring, peer mentoring, group mentoring, perceived business environment moderation and entrepreneurship development) are reliable variables to enhance entrepreneurship development and national development of any capitalist or mixed economy.

Theoretical Implication

The study has added evidence to the efficacy of the theory of social cognitive model, propounded by Sosik, Godshalk, and Yammarino (2004), as a reliable tool for assessing and predicting entrepreneurship development in any economy, except the socialist economy.

Methodological Implication

The study has attended to the methodological gap in Nigeria tertiary institutions of higher learning, where entrepreneurship education of the citizenry constituted their core mandate but failed to incorporate in their curriculum robust course content to accommodate one of the most desired pedagogical variables with an unspeakable track record of success in entrepreneurial knowledge transfer, skills impartation and entrepreneurial self-efficacy as mentorship variable as an instrument for expounding entrepreneurship skills and knowledge.

This study has practically attended to analytical flours inherent in most of the executed investigations limiting the strength to the use of Chi-square and SPSS, despite the limitation of this analytical approach on structural equation model, that require an assessment of both the measurement and structural models, which do statistically revealed the psychometric properties of the study as individual item reliability, average variance explained, composite reliability and the predictive strength of the models designed.

Therefore, they executed this investigation with the use of Partial Least Square – Structural Equation Model (PLS-Structural equation model) and reported all the psychometric properties of the study.

Limitation and Future Research Direction

The scope of this study is limited to Nigeria as a country of 37 states including Federal Capital Territory out of which 23 states were surveyed as scope, using the three main tertiary institutions of higher learning in Nigeria, like the university, polytechnic, and college of education that accommodated the 171 respondents of the study. Although adequate coverage of 64% was attained, further study is required to extend the scope to other 14 states in Nigeria. More importantly, collaboration with researchers in another part of the world is highly needed.

CONCLUSION AND RECOMMENDATION

The study has empirically demonstrated that entrepreneurial mentorship is a veritable tool to instil entrepreneurship intention and enhance entrepreneurship development. The study has also placed it on record that there exists a positive relationship between entrepreneurship mentoring and entrepreneurship development. It is the recommendation of this study that entrepreneurship mentorship should be incorporated into the school curriculum at both secondary and tertiary institution in Nigeria.

REFERENCES

- Adams, J. (1979). *Women on top*. New York: Hawthorn.
- Agbaeze, E. K. (2005). Development of entrepreneurship: The Nigeria perspective. Enugu: Precision Publishers Ltd.
- Bagozzi, R., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, *16*, 74 – 94. DOI: 10.1007/bf02723327
- Barclay, D., Higgins, S., & Thompson, R. (1995). The partial least squares approach to causal modeling: Personal computer adoption and use as an illustration. *Technology Studies*, *2*, 285 – 374.
- Beehr, T. A., & Raabe B. (2003). Formal mentoring versus supervisor and coworker relationships: Differences in perception and impact. *Journal of Organizational Behaviour*, 24, 271 – 193.
- Benabou, C., & Benabou, R. (2000). Establishing a formal mentoring program for organizational success. National Productivity Review.
- Benjamin Ibe Chukwu & Onyeizugbe Chinedu Uzochukwu. (2013). Business mentoring and entrepreneurship development in selected states of Nigeria. *Journal of Economics and Sustainable Development*, 4 (11).

- Boar, M., Oldham, G. R., & Cummings, A. (2003). Rewarding creativity: when does it matter? *The Leadership Quarterly*, 14 (4 – 5), 569 – 586.
- Carmines, E. G., Zeller, R. A. (1982). *Reliability and validity assessment* (5th ed.). Beverly Hills: Sage Publications Inc.
- Catherine Nyawira Mundia & Mike Iravo. (2014). Role of mentoring programs on the employee performance in organizations: A survey of public universities in Nyeri county, Kenya. International Journal of Academic Research in Business and Social Sciences, 4 (8). DOI:10.6007/IJARBSS/v4-i8/1110
- Cheung, C. M. K., & Lee, M. K. O. (2010). A theoretical model of intentional social action in online social networks. *Decision Support Systems*, 49 (1), 24 – 30.
- Chin, W. (2010). How to write up and report PLS analyses. In V. Esposito Vinzi, W. W. Chin, J. Henseler & H. Wang (Eds.), *Handbook of partial least squares* (pp. 655 – 690). Berlin, Heidelberg: Springer.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 295 – 336). Mahwah, New Jersey: Laurence Erlbaum Associates.
- Clare Rigg & Breda O'Dwyer. (2012). Becoming an entrepreneur: Researching the role of mentors in identity construction. *Education* + *Training*, *54* (4), 319 – 329.
- Coffield, F. (2008). *Just suppose training and learning become the first priority*. London: Learning and Skills Network.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cope, J., & Watts, G. (2000). Learning by doing an exploration of experience, critical incidents and reflection in entrepreneurial learning. International Journal of Entrepreneurial Behaviour and Research, 6 (3), 104 – 124.
- Crocitto, M., et al. (2005) Global mentoring as a means of career development and knowledge creation: A learning-based framework and agenda for future research. *Career Development International*, *10* (6/7), 522 – 535.
- David Gefen, Detmar W. Straub, & Marie-Claude Boudreau. (2000). Structural equation modeling and regression: Guidelines for research practice (Vol. 4, Chap. 7).

- David M. Hunt, & Carol Michael, (1983). Mentoring: A Career training development tool. Academy of Management Review, 8 (3), 475 – 485.
- Deakins, D., & Free, L. M. (1998), Entrepreneurial learning and the growth process in SMEs. *The Learning Organization*, *5* (3).
- Duarte, P., & Raposo, M. (2010). A PLS model to study brand preference: An application to the mobile phone market. In V. Esposito Vinzi, W. W. Chin, J. Henseler & H. Wang (Eds.), *Handbook of partial least squares* (pp. 449 – 485). Berlin, Heidelberg: Springer.
- Eby, L.T. (2010), Mentorship. APA handbook of industrial and organizational psychology.
- Elliott, A. C., & Woodward, W. A. (2007). Statistical analysis: Quick reference guidebook with SPSS examples. Thousand Oaks, CA: Sage Publications.
- Falk, R. F., & Miller, N. B. (1992). A primer for soft modeling. Ohio: The University of Akron Press.
- Fletcher, D., &Watson, T. J. (2007). Entrepreneurship, management learning, and negotiated narratives: Making it Otherwise for us – otherwise for them. *Management Learning*, *38* (1), 9 – 26.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*, 39 – 50.
- Fuller, B. et.al (2008). P.12 A process for entrepreneurship: empowered innovation. Retrieved from www.bradfuller.com/ Publications/innovate.html.
- Geisser, S. (1974). A predictive approach to the random effect model. *Biometrika*, 61, 101 – 107. DOI: 10.1093/biomet/61.1.1015
- Gotz, O., Liehr-Gobbers, K., & Krafft, M. (2010). Evaluation of structural equation models using the partial least squares (PLS) approach. In V. E. Vinzi, W. W. Chin, J. Henseler & H. Wang (Eds.), Handbook of partial least squares: Concepts, methods, and applications (pp. 691 – 711). Heidelberg: Springer.
- Hailey, J. (1993). Training for Entrepreneurs: International perspectives on the design of Enterprise Development Programmes, *Cranfield Working Paper, No. 49*. Cranfield School of Management.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River, New Jersey: Prentice Hall.

- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). Upper Saddle River, NJ: Pearson/ Prentice Hall.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). A primer on partial least squares structural equation modeling (PLS-SEM). Thousand Oaks: Sage Publications.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, 18, 139 – 152.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results, and higher acceptance. *Long Range Planning*, 46 (1–2), 1–12. DOI: http://dx.doi.org/10.1016/j. lrp.2013.01.001
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40, 414 – 433.
- Hamilton, E. (1942). *Mythology*. Boston: Little, Brown, and Co.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least Squares path modeling in international marketing. In R. R. Sinkovics & P. N. Ghauri (Eds.), *Advances in international marketing* (Vol. 20, pp. 277 320). Bingley: Emerald.
- Huang, J., Lin, Y., & Chuang, S. (2007). Elucidating user behaviour of mobile learning: A perspective of the extended technology acceptance model. *The Electronic Library*, *25* (5).
- Inzer, L. D., & Crawford, C. B. (2005). A review of formal and informal mentoring: Processes, problems, and design. *Journal of Leadership Education*, *4* (1, Summer).
- Ismail Abdulahi, M., Abdullahi, M., Francis, S. K. (2009). Mentoring program and its impacts on individual advancement in the Malaysian context. *Journal of Industrial Engineering and Management*.
- Kanter, D. (2012). An examination of owner's goals in sustaining entrepreneurship. *Journal of Small Business Management*, *35*, 24 – 34.
- Kram, K. E. (1980), *Mentoring process at work: Developmental relationship in managerial careers* (Unpublished PhD dissertation). Yale University.
- Kram, K. E. (2012). *Mentoring at work: Developmental relationships in organizational life.* Glenview, IL: Scott Foresman.

- Lee, C. G., & Mitcheel (2009). English language and economic growth: Cross-country empirical evidence. *Journal of Economic and Social Studies*, 2 (1), 5 – 20.
- Levinson, et al., (2014). The effects of similarity and liking informal relationships between mentors and protégés. *Journal of Vocational Behavior*, *67* (2), 252 – 265.
- Lumpkin, G. T. (2011). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry lifecycle. *Journal* of Business Venturing, 16 (3), 429 – 451.
- Merriam, S. (1983). Mentors and proteges: A critical review of the literature. *Adult Education Quarterly*, 33 (3), 162.
- Missirian, A. K. (1980). The process of mentoring in the career development of female managers (Unpublished PhD dissertation). University of Massachusetts.
- Orth, C. D., & Jacobs, F. (1971). Women in management: Pattern for change. *Harvard Business Review*, 49 (4), 139 – 147.
- Peters, L., & Shepherd. (2013). The role of incubators in the entrepreneurial process. *Journal of Technology Transfer, 29* (1), 83 – 91.
- Phillips, I. I. (1977). *Mentors and protégés: A study of the career development of women managers and executives in business and industry* (PhD dissertation). University of California, Los Angeles.
- Ragins B. R., & Cotton J. (1999). Easier said than done: Gender differences in perceived barriers to gaining a mentor. *Academy of Management Journal*, *34*, 939 – 951.
- Ragins, B. R., & Scandura, T. A. (1999). Burden or blessing? Expected cost and benefits of being a mentor. *Journal of Organizational Behaviour, 20,* 493 – 509.
- Reimers, et al. (2014). Increasing returns and long-run growth. *Journal of Political Economy*.
- Ringle, C. M., Sarstedt, M., & Straub, D. W. (2012a). A critical look at the use of PLS-SEM in MIS Quarterly. *MIS Quarterly*, *36* (1), iii – xiv.
- Scandura, T.A., and Pellegrini, E.K. (2007). Workplace mentoring: Theoretical approaches and methodological issues. In T. D. Allen & L. T. Eby (Eds.), The Blackwell handbook of mentoring: A multiple perspectives approach (pp. 71 – 91). Malden, MA: Blackwell Publishing.

- Selya, A. S., Rose, J. S., Dierker, L. C., Hedeker, D., & Mermelstein, R. J. (2012). A practical guide to calculating Cohen's f2, a measure of local effect size, from PROC MIXED. *Frontiers in Psychology*, *3*, 111 – 116. DOI: 10.3389/ fpsyg.2012.00111
- Smith, A. M. J., & Pator, R. A. (2011). Delivering enterprise: A collaborative international approach to the development, implementation, and assessment of entrepreneurship. *International Journal of Entrepreneurial Behaviour and Research*, 17 (1), 104 – 118.
- Sosik, J. J., Godshark, & Yamnarino. (2004). Mentoring in organizations: A social judgment perspective for developing tomorrow's leaders. *The Journal of Leadership Studies*, 8, 17 – 32.
- Stone, M. (1974). Cross-validatory choice and assessment of statistical predictions. Journal of the Royal Statistical Society, Series B (Methodological), 36, 111 – 147. DOI: 10.2307/2984809
- Tabachnick, B. G., & Fidell, L. S. (2007). Using multivariate statistics (5th ed.). Boston, MA: Allyn & Bacon/Pearson Education.
- Taormina. R. J., & Lao. S. K. (2007). Measuring Chinese entrepreneurial motivation personality and environmental influences. *International Journal of Entrepreneurial Behaviour & Research*, *13* (4), 200 – 221.

- Teo, T. (2009). Examining the relationship between student teachers' self-efficacy beliefs and their intended uses of technology for teaching: A structural equation modelling approach. *The Turkish Online Journal of Educational Technology*, 8 (4), 7 – 16.
- Uma, K. E., Onwusogbolu, R. D., & Obidike, P. C. (2015). A review of mentorship and Entrepreneurship: Impact on Nigeria's economic development. International Journal of Innovative Science, Engineering & Technology, 2 (9).
- Von Krogh, G., Ichijo, K., & Nonaka, I. (2000). Enabling knowledge creation: How to unlock the mystery of tacit knowledge and release the power of innovation. New York, NY: Oxford University Press.
- Warrell & Jacobsen. (2014). Internet research ethics and the policy gap for ethical practice in online research settings. *Canadian Journal of Higher Education*, 44 (1), 23 – 37.
- Williams, J. (2000). Mentoring for law enforcement. FBI Law Enforcement Bulletin, 69 (3), 19 – 25.
- Wilson, B., Callaghan, W., Ringle, C., & Henseler, J. (2007). Exploring causal path directionality for a marketing model using Cohen's path method. Paper presented at the PLS'07 international symposium on PLS and related methods – Causalities explored by indirect observation, Oslo.