

Effect of Entrepreneurial Orientation on Growth of Private Secondary Schools in North-Central Nigeria

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Abstract

This study drew out quite a few discrepancies as proprietors are confronted with the practicality challenges: of inculcating the EO components into their day to day activities and the overreliance of knowledge solely from teachers and class room materials has diminished the critical reasoning ability of private secondary school students in North-Central Nigeria. The Cochran sample size determination approach was adopted to attain the sample size of 385 surveyees; Bowely's allocation technique was used to allot appropriate sample size to each state in North-Central Nigeria and probability sampling with reference to stratified sampling was employed. The findings of the study revealed that with probability value of 0.001 which is less than 0.05 level of significance, the EO components i.e. Risk-taking, Innovativeness and Pro-activeness utilised in the study, possessed a statistically significant and positive effect on growth of private secondary schools in North-Central Nigeria.

Keywords: *Entrepreneurial, Orientation, Growth, North-Central, Nigeria.*

1. Introduction

The formidable strides and relevance of entrepreneurship in the rejuvenation of any nation's economic growth cannot be overstressed. Entrepreneurship is connected with restructuring and positively harnessing new concepts or ideas and resources which invariably uplifts a nation's wealth. Bosma et al. (2021) postulates that entrepreneurial activity facilitates economic recovering when facing the aftereffect of an economic distress as noted in 2008 financial turbulence. Recognizing the current COVID-19 situation, though the world is still at the recovering phase, individuals making major decisions to establish businesses or expand existing businesses constantly make deep-rooted contribution to job creation and income generation, sustained values to society and solidification of economies (Bosma et al., 2021). To properly enunciate the statement, the GEM report spelt out that as vaccination is vital for global health so too is entrepreneurship crucial to uncovering worldwide economic restoration (Bosma et al., 2021).

The Pricewaterhouse Coopers (PwC) Micro Small and Medium Enterprises (MSME) survey, (2020) reveals that in Nigeria, MSME constitutes 96% and 50% to the total number of businesses and national gross domestic product (GDP) in the country respectively. Dissecting the structural ownership, 73% of MSMEs are labelled Proprietorships, 14% are categorized as Private Limited Liability Companies, 13%, are considered Partnerships, 6%, are taken as Faith based organizations, 5% are Cooperatives and 1% as Others (Pricewaterhouse Coopers, 2020).

From the PwC MSME report, Small and Medium-sized Enterprise (SME) owners were asked about their growth plans for the next three years 42% of the respondents indicated the desire to expand within their current commercial operation while hinging on their operational capabilities for projected growth (Pricewaterhouse Coopers, 2020). From the remaining surveyed SME owners, 56% declared interest to diversify into other sectors which comprised of manufacturing 7%, food and beverages 7%, technology 7%, agriculture 8%, retail consulting 6%, trade 5%, finance and business 4%, real estate 4%, education 3%, while 2% showed no interest or desire to expand their business within the period under survey (Pricewaterhouse Coopers, 2020). Delving further into PwC MSME report, a case study was conducted on Potters land school; the owner Oyebusola Olanubi was asked to proffer fitting recommendation that could subdue the peculiarities/ hindrances of operating a business in Nigeria; she revealed the triumph of any nation is rooted in its education system (Pricewaterhouse Coopers, 2020). Further buttressing her view, Oyebusola Olanubi added that for a nation to compete in the global arena, perspicacious thinkers and innovators should be breed and nurtured rightly for the development of the nations (Pricewaterhouse Coopers, 2020).

The central focus of this study is to examine the effect of entrepreneurial orientation on growth of private secondary schools in North-Central Nigeria. Furthermore, the study is dissected into various sections namely: literature review which reveals the varied EO concepts and scholarly works, methodology adopted in the study, findings and finally crowned with conclusion.

2. Literature Review

2.1 Entrepreneurial Orientation

Linton (2016) noted that the conception of EO can be trailed back to the 1960's Aston Group. Linton (2016) stated that the enquiry chaired by Dreke Pugh assessed organisational functions and structures and connected them to different organisational variables such as context and performance. The firm context was deemed as firm size, technology and its environment; thus the variables formed a congruent basis of measurement for varied organisation as scholars could draw up ideal classifications of organisations (Linton, 2016). Furthermore, Henry Mintzberg at McGill University captivated by the entrepreneurial forms of firms developed three ideal modes of strategy-formulation in his article 1973 article (Linton, 2016). One dimension of theses modes focused on the quest for novel opportunities, impressive means of combatting uncertainties, concentrated power and purpose of growth (Linton, 2016). At McGill University, Danny Miller on the other hand alongside his colleague Peter Friesen started to build on the works of Mintzberg and Khandwalla; they defined entrepreneurial firms as firms that are fearlessly and constantly innovative while taking measurable risks in product market strategies (Linton, 2016). After a year, Miller enumerates three forms of firms as he defines entrepreneurial firms as that which engages in innovation with regards to product-market, shoulders risky endeavours and the first to initiate pro-active innovations that outshines competitors; he equally added innovativeness and risk-taking in the entrepreneurial dimension while introducing pro-activeness as another dimension (Linton, 2016). It is noteworthy that Miller never adopted the term entrepreneurial orientation still he has been universally applauded for instituting the concept of EO.

More so, EO ought to be done or exhibited based on one's free will as this ensures the ability to independently steer the business decision making process and strategy formulation. This action of free will leads to another dimension of EO called autonomy i.e. the ability to take up duties independently and be accountable or responsible for the outcome which could prove favourable/unfavourable. When the foretasted EO components are utilised separately or combined it produces a complex web of exceptional outcomes that reshapes individual or organisational strategic composition, decision making processes and managerial doctrines. Strategic management and EO can be placed side by side as EO dimensions can be viewed as the exhibition of tactics that could propel growth while strategic management can be viewed as the effective nurturing/grooming and deployment of tactics that instigates/ leads to growth.

2.2 Risk-taking

Risk-taking inclination is regarded as an uncommon way of carrying out activities and altering standard procedures to pursue some form of uncertain results (Khan et al., 2021). It is built on an entrepreneurs willingness to engage in preconceived business venture which results in increased performance (Okoli et al., 2021). Risk-taking proffers firms with avenue to grow and incorporate unique products/services while pondering on the consequences (Okoli et al., 2021).

Risk-taking is the core composition of entrepreneurship and is backed by varied intentions and justifications; it can be geared towards attainment of materialistic gain, enhancement of self-identity or coming forth with novel ideas (Olaolu & Obaji, 2020). Individuals undertake risks to abate an uncomfortable situation which may relate to finances/material needs, emotional and physical situations(Olaolu & Obaji, 2020). Risk-taking is categorised into voluntary and non-voluntary risks; voluntary risks are taken purposively under the notification/awareness that the transaction shouldered constitutes a threat; such risk is named risk by choice as the individual is able to exert some level of control over the situation and the individual who undertakes such risk is termed the decision maker presiding over situations i.e. when to continue and when to discontinue (Olaolu & Obaji, 2020).

Risk-taking requires making daring moves to embark on a venture that constitutes a great deal of uncertainties while taking into account the local and international disturbances that may occur in the business terrain. Risk-taking entails deploying hefty resources into a doubtful business whose outcome is unrevealed. It is worthy to note that not all risks begets a favourable outcome as some risks could harbour highly detrimental consequences, due to this reason, measurable/well calculated risks should be taken while deploying adequate risk management techniques.

Risk-taking can be associated to tactics used by individuals or firms to move away from the normal ways of doing things to an unscripted/unique way of conducting activities with the anticipation of a productive outcome. Like all other dimensions of EO risk-taking is triggered by the need/desire to achieve/satisfy something; this yearn for satisfaction could stem from materialistic gain, improvement of one's self/ self-worth, desire to establish /set in motion novel ideas. Risks are taken for varied reasons, some of which could be an escape route from uncomfortable situations such as financial crisis, to abate emotional and physical circumstances etc.

2.2 Innovativeness

Businesses that are innovatively inclined possess high chance of success than their counterparts because innovatively inclined businesses come up with time-saving work processes and enhanced performance that are more efficacious than businesses that are not innovatively inclined (Olaolu & Obaji, 2020). Thus significance and expected outcome of innovativeness are augmented productivity, enhanced partnerships and relationships, effective cost production, higher profitability, increased brand value and competitive

advantage; on the other hand, insufficient innovativeness leads to reduced market posture, declined productivity, diminished profit margin, market loss, loss of core staff and eventually total business failure (Olaolu & Obaji, 2020).

Innovativeness is concerned with the formulation of rare products, methods and services (Uchenna et al., 2019). Schumpeter in 1934 developed five categories of innovation that illustrates actions taken by an organisation they are: business model innovation, process innovation, merger and divestment innovation and product innovation (Uchenna et al., 2019). Business model innovation is the invention of novel market for firms product which entails uncovering an alternate source of material supply; process innovation is centred on developing new approaches to service delivery and production; merger and divestment innovation is centred on strategy formulation to reposition/re-adjust a firm and finally product innovation entail the inception of novel products or services or enhancement of already existing product (Uchenna et al., 2019).

Innovativeness, does not only entail invention of new products and services it literally envelopes multiple techniques into a single platform. It engulfs creating new products and seeking alternative supply source of materials, new approaches to production and delivery, viable strategy formulation and firm repositioning and refining of an existing product or birth of ingenious products.

2.4 Pro-activeness

Pro-activeness should not be ascribed to the advantage gained by firms in top growth industries with ample resources rather it should be viewed as strategy used to conquer financial and environmental limitations (Ngoma et al., 2017). Pro-activeness is the propensity of firms to harness valuable marketing strategies, focal strategies and pro-active measure to establish latest products, services, methods and technologies to outmatch competitors (Zhai et al., 2018).

Pro-actively inclined businesses attain competitive edge by leveraging on market opportunities ahead of their rivals to offer latest products and services; in a competitively dense industry, pro-activeness plays a significant role in acquiring and sustaining the competitive stance of an enterprise (Zhai et al., 2018). Thus businesses that wield this dimension of EO are prone to easy opportunity identification as they take prompt actions on opportunities which provokes innovative exploits in a firm (Zhai et al., 2018).

The capacity to explore initiatives and opportunities in the market environment with the intention to pacify futuristic challenges, needs and changes is termed pro-activeness (Al Mamun et al., 2017). Pro-activeness entails scouting for opportunities and having far sighted stance with regards to heavy capital investment in unconventional products and services in preparation of projected demand ahead of competitors (Al Mamun et al., 2017).

Proactively inclined businesses are usually rooted at an advantageous position due to their ability to foresee anticipated needs, quick identification of potential threats, ability to abate and treat critical issues that would have been detrimental if not detected early etc. More so, proactive firms possess the tendency to charge more than their competitors because they enjoy the benefits tied to prompt opportunity identification and exhibition of inventive idea that outmatches their rivals. Conclusively, pro-activeness is being able to stay ahead or above any situation. It warrants been foresighted to pre-empt the changes, threats, possibility or opportunities and conveying the most appropriate reaction to a competitive invitation and forecasted demand.

2.5 Growth measurement of secondary school

The intelligence mediation technique should be more evident in societies that supports a rigid mind set (i.e. a perception that intelligence is fixated) as such society conveys the impression that when one is impaired or has to devote more effort into a project, it indicates that such individual is not considered naturally intelligent/skilled and has lower chances of succeeding (Yeager et al., 2019). This invariably means that private secondary schools can instigate growth (i.e. the number of students and teachers) by inculcating the growth mind-set in students and teachers as this could in turn increase the desirability of the institution to prospective academic staffs and students. Teachers are deemed to be builders and shapers and their understanding of the varied degrees of intellectual capacity is paramount because they can devise ways of assisting students with academic challenges through diligence in hard work and modifying the student's belief system in themselves and their school projects. It also requires embodying the "I can achieve attitude" in pupils as this could drive motivation and stimulation of their psychological composition.

Jabbar et al. (2019) declared service quality to be the medium by which educational institutions enhance their marketing posture and upsurge the number of students. More so, student satisfaction via rendered service is essential as it is weighed by virtue of student expectation and initial occurrence (Jabbar et al., 2019). Jabbar et al. (2019) reinforced that evaluation of satisfaction is centred on experience of pupils via quality of service. It was vividly projected that satisfaction is strongly linked to students expectation which encompasses their educational/learning experience, behaviour of staff in institution, the school/institutions culture and the aptness to response (Jabbar et al., 2019).

When private secondary school owners continuously strive to achieve quality education for their school through: training programmes of academic staff, encouraging academic staff to deploy creative means of teaching instead of the usual garbage in garbage out syndrome, encouraging academic staff to devise ways of aiding students with learning difficulties while bearing in mind that students possess different levels of understanding, adhering to ideal class size as this promotes: adequate inspection of class works, student focus, participation, moral conducts e.t.c, such strive for quality education propels growth and it appeals to/lures potential teacher and students who would rather prefer to be linked or associated with private secondary schools with an outstanding delivery of quality education.

2.6 Empirical Review

Dong et al. (2020) scrutinized how entrepreneurial orientation and trust boost network range and entrepreneurial performance relationship. Primary data was retrieved through a time lagged two-wave survey in China. 837 entrepreneurial ventures or new firms were randomly picked from a wide list of registered enterprises with the Chinese local government situated in the Northeast, Middle and South of China. 15 managers were utilized as pilot study as this allowed alterations to the questionnaires before the main survey was conducted. To lessen methodological biasness, the study was conducted in two phases/waves: in the first phase, the questionnaire was distributed to 837 firm owners to measure network range while the second phase was conducted a year after as questionnaires were dispersed to firm owners who partook in the first survey.

From the investigation, positive network range performance relationship was affirmed and EO boosts the relationship between network range and entrepreneurial performance. The findings proposed that network range gives rise to premium performance when associated with large degree of EO and cognitive trust; thus validating the projected three-way interaction. It was recommended that managers: broaden their social networks to attain valid resources and information, modify their EO adequately, deploy their network to boost performance and finally nurture networks with extensive range and high degree cognitive trust to elevate the performance of the firm.

Acosta et al. (2018) scrutinized the effect of market orientation, network capability and entrepreneurial orientation on international performance of small and medium enterprises (SMES's). Quantitative technique was engaged in the study and survey was directed to managers of SME's in Mexico. The questionnaire contained 7-point Likert scale measurement and was structured in nature. In the study, market orientation was conceived as: inter-functional coordination, customer orientation and competition orientation. Network capability was perceived as intercommunication, dialogue, relational abilities and knowledge of partner while international entrepreneurial orientation was perceived as risk-taking, pro-activeness and innovativeness.

The questionnaires were indicted in English but later transposed to Spanish to accommodate managers of export returns in Mexico. A pre-test was executed with 25 manger and owners of SME's in the export sector to ensure the questions were comprehensible. The population of the study constitutes 8887 export SME's registered under the National Institute of Statistics and Geography of Mexico (i.e. Instituto Nacional de Estadística y Geografía, INEGI). Non-probability sampling was used and convenient sampling procedures were utilized to contact companies who participated in Export SME's FedEx tour event hosted by FedEx in collaboration with the Mexican department of economy.

The survey was self-administered with owner/mangers using their electronic devices (i.e. tablets, phones etc.) to stimulate online information gathering giving rise to 161 valid survey utilized in the study. The hypotheses were tested using PLS-SEM (partial least square- structural equation modelling). The results pin pointed that international performance for this sector of business is propelled/influenced favourably by network capability and international entrepreneurial orientation. It was equally proved that interdependence interaction exists amongst the explanatory variables of SME's international performance where international entrepreneurial orientation exhibits positive impact on network capability and international market orientation of SME's.

Hernández-Perlines et al. (2021) examined entrepreneurial orientation concern for socio emotional wealth preservation and family firm performance. For the study, two-way analysis was utilized i.e. second generation partial least squares-structural equation modelling (PLS-SEM) and fuzzy set qualitative analysis (fsQCA) were utilized. The techniques were deployed to the data on 106 Spanish family businesses. The outcome specified that: EO positively enhances family firm performance, socio emotional wealth conservation positively boosts EO and family firm performance and lastly, socio emotional wealth conservation positively adjusts / moderates the influence of EO on family business performance.

Okoli et al. (2021) conducted the study on entrepreneurial orientation and performance of selected SMEs in Southeast, Nigeria. The population of the study were 366 SMEs in South-eastern (i.e. Ebonyi, Anambara, Imo, Enugu and Abia states) Nigeria. Sampling was not required because all selected SMEs were completely adopted. The structured questionnaire was designed on a 5-point Likert scale measurement while face and content validity were used as validation instrument. Cronbach Alpha was used to check reliability while descriptive (i.e. percentages and frequencies) and simple regression analysis was adopted for data analysis. The study showed that significant positive relationship exists between pro-activeness, innovativeness and risk-taking on SME performance in Nigeria's South-eastern states. It was also concluded that entrepreneurial oriented business pilots the industry using innovations to satisfy customer needs and gives the business better grasp of the market. It was recommended that SME managers and owners be dedicated to process and revolutionary innovation in their operations so as to elevate customer base.

A research on the relevance of entrepreneurial orientation to students entrepreneurial intention was done by (Abubakar et al., 2019). The study deployed survey research technique of cross-sectional composition. The study population composed of 793 final year student of Federal University Dute (FUD). The sample size of 282 respondents was derived using Yamane sample size determination formula from which primary data was gathered via self-administered questionnaires while inculcating 5-point Likert scale measurement in the questionnaires. The sampling technique employed was simple random sampling due to the homogenous composition of the population. Data gotten from respondents (i.e. final year students) were analysed via

partial least square structural equation modelling (PLS-SEM). The study disclosed that EO components i.e. innovativeness, pro-activeness and risk-taking are positively and significantly important to the entrepreneurial intention of students. The recommendation stipulates that researchers should use the human capital theory and include other EO components for further justification.

Umami & Meutia (2017) researched on improving anticipative learning through entrepreneurial orientation in small to medium size enterprises. The study, aimed at disclosing the dominance of social networking and entrepreneurial adeptness on learning methods and entrepreneurial orientation as learning method/process is represented by anticipative learning in the study. The survey technique was applied and questionnaire were disseminated to obtain data. The population comprises of SME managers/owners of local products in Baten province Indonesia. 105 sample respondents were obtained as purposive sampling was adopted to gather responses from participants with three years' minimum experience. Data analysis was achieved via structural equation modelling (SEM). The findings disclosed that social networking and entrepreneurial adeptness/competence influences entrepreneurial orientation significantly and positively while entrepreneurial orientation significantly and positively impacts anticipative learning. It was anticipated that findings from the study adds to resource based view theory. More so, social networking and adeptness/competence are said to be embedded indication for business development as it is a tactical knowledge to improve EO which in turn uplifts anticipative learning of local SME products in Baten Indonesia. An investigation elucidating the linkages between entrepreneurial orientation and local government sustainability performance was delved into by (Deslatte & Swann, 2020). The study examines properly the part a firm's EO plays in connecting organizational capabilities, tactics and anticipated performance. Data was obtained from two sources firstly 2012 nationwide analysis of U.S local government beneficiaries of energy efficiency and conservation block grants (EECCGB) and questionnaires were dispatched to officially delegated liaison (i.e. energy department heads, city mayors, managers etc.) from which the sample size of 557 was derived. The second data source was derived through semi-structured interviews with city managers in 20 local governments situated in Chicago, Illinois urbane zone. The interview questionnaire was formed to encapsulate how firm environments, structure and institutions influence the readiness of organizations and city administrators to delve into entrepreneurial activities (i.e. proactivity, innovation and risk-taking) geared towards improving sustainability and service creation.

Each interview which took about 60 minutes were recorded and rephrased before coding was done by authors using NVivo 11 software. The results indicated that environmental factors such as administrative capabilities and political conditions influences EO positively and that strategic utilization of performance information, interagency alliance and venturing mediates the relationship between anticipated performance and EO. The interviews validate the findings and shades light on how local government administrators proactively collaborate with stakeholders, perceive risk-taking, engage in capacity building and pursuit of innovative sustainability.

Song et al. (2019) executed an investigation on entrepreneurial orientation, interaction orientation and innovation performance. The survey method was used to retrieve data and the questionnaires were deployed to EMBA/MBA graduates from Chinese university. Before the questionnaires were administered, they initiated a discussion with the head of MBA/EMBA programmes and inspected the participants who would be inculcated in the project. 300 questionnaires were distributed on site to EMBA and MBA respondents whom from discovery are high/middle level managers of various organizations. Out of the 300 administered questionnaires, 209 were obtained and considered valid for analysis.

Firstly, it was uncovered from the findings that EO and interaction orientation (IO) positively impacts knowledge combination capacity (KCC) which contributes to innovation performance. More so, the empirical results disclosed that collectivism in an organisation moderates the link between EO and knowledge combination capacity (KCC). It equally moderated the mediation effect of EO on organizational innovation performance by KCC. Furthermore, it was discovered that firm collectivism moderates the connection

between interaction orientation (IO) and KCC which equally moderates the mediation of IO on innovation performance by KCC. Hence it was suggested that managers pay sufficient attention to the market approaches (i.e. EO and IO) and the firm's culture which translates to improved innovative performance.

Anggadwita et al. (2021), articulated the key determinants of women's entrepreneurial intentions in encouraging social empowerment. The study delves deep into the influence of socio-cultural environments, entrepreneurial orientation (i.e. risk-taking, innovativeness and pro-activeness) and social perspectives on female entrepreneurial intention. The research was conducted using a cross-sectional questionnaire survey method and probability sampling with random sampling technique was applied. The questionnaires were disseminated both online and offline to 423 respondents. Out of 423 questionnaires dispersed only 400 were certified for usage. The results revealed that both social perspectives and socio-cultural environment have a significantly positive effect on EO likewise the socio cultural environment and EO have both significantly positive effect on female entrepreneurial intentions. Though EO is confirmed to play an essential role as mediator in the relationship between socio-cultural setting and the entrepreneurial intention of females, socio-cultural perspectives are confirmed to have no significant effect on the entrepreneurial intentions of women either directly or mediated with regards to EO.

Etim et al. (2017) researched on the influence of entrepreneurial orientation as survival strategy for small and medium scale enterprises. The research adopted ex-post facto design as it takes into cognisance compositional parameters of EO (i.e. risk-taking, pro-activeness and innovativeness). The study composed of the core industrial hub in Lagos namely; Illupeju and Ikeja. The population constitutes of 150 SME's in operation for at least five years. The study sample consists of firms listed in the directory of Manufacturers Association of Nigeria (MAN). Secondary data was employed for data collection while descriptive statistics (frequency tables) and multivariate regression model was adopted for data analysis to measure EO variables and network models on SME's survival. The SPSS 2.0 statistical tool was used to compute data obtained.

The highlights of the findings revealed that EO components (pro-activeness, risk-taking and innovation) have significantly positive impact on SME survival. The regression and correlation analysis conducted showed that the EO dimensions all had positive impact on firm survival. Innovation most significant having 0.915 correlation coefficient element of EO influencing the survival of SME's in Nigeria while pro-activeness was also most significant with correlation relationship of 43.3% joint strategies that impact on SME profitability, sustainability, growth and survival. The suggestions advise SME owners to dig into other progressive changes instigated by EO so as to enhance entrepreneurial attributes, perceptions and conduct that boosts up the existence of SME's in the entrepreneurial ecosystem.

Al-Henzab et al. (2018) undertook an investigation on the association among market orientation, technology orientation, entrepreneurial orientation and organizational performance. The study's focal point was to discover the connection between strategic orientation (i.e. technology orientation, entrepreneurial orientation and market orientation) and the performance of an organisation in the pharmaceutical industry situated in Jordan. Quantitative research design was adopted in the study and survey questionnaires was used to obtain information for examining the hypotheses from 14 pharmaceutical ventures in Jordan. The population comprised of employees working in the 14 companies which included both staff and managers since they are constantly associated with advancing the organizations strategy.

The sample size identified in the study comprised of 357 surveyees from which the questionnaires were administered to within the 14 pharmaceutical companies. In the questionnaires, the 5-point Likert scale was employed whereas descriptive statistics and multiple regression analysis were used for the data analysis. The SPSS v 21 was the statistical tool used for the analysis. The content validity, was conducted as well as application of Cronbach's alpha co-efficient for the reliability. The outcome of the analysis disclosed that strategic orientations (i.e. technology orientation, entrepreneurial orientation and market orientation) are positively significant associated and significant to the performance of an organization. More so, market

orientation accelerated firm development tagging along is technology orientation and lastly entrepreneurship orientation.

3. Methodology

This study adopts a descriptive research design while adopting cross-sectional survey method. Specifically, cross-sectional survey research is preferred, thus, adopted, because it enables the study to gather insights from targeted audience within particular interval for informed analysis. The population of this study covers the entire private secondary school owners across the North-Central region of Nigeria with a total of 3715 private secondary schools was retrieved from the Federal Ministry of Education (2022). The North-Central comprises seven states (FCT, Niger, Kogi, Benue, Plateau, Kwara and Nasarawa. According to the Federal Ministry of Education (2022) report. Based on the large number of participants involved in this study, Cochran (1963) sample size determination technique was utilised. From the calculated sample size, three hundred and eighty-five (385) private secondary school's owners are drawn for the survey. Probability sampling strategy was selected because, besides its suitability and usefulness for quantitative studies its sample typically represent the population, therefore, generalizability is very unlimited and stratified sampling was equally employed (Erba, et al., 2019; Maheshwari, 2017). Data was analysed using descriptive statistics was inculcated in the study and inferential statistics i.e. structural equation model was equally utilised. This method of data analysis was used to determine the relationship that exists between dependent (growth of private secondary schools) and independent (entrepreneurial orientation) variables.

3.1 Model Specification

This research adapts the empirical work of Soomro & Shah (2019) in order to specify the functional form of the model and examine the effect of entrepreneurial orientation on growth of private secondary schools in north central Nigeria. The structural equation model was utilized to test the research hypotheses for the study. Therefore, in specifying a functional relationship, the model becomes;

$$GPSS = f(EO) \tag{3.1}$$

$$EO = f(RT, INV, PRA) \tag{3.2}$$

$$GPSS = f(GPSSA, GPSSS) \tag{3.3}$$

Model 1

$$GPSSA = f(RT, INV, PRA) \tag{3.4}$$

Model 2

$$GPSSS = f(RT, INV, PRA) \tag{3.5}$$

Transforming the functional form of the model into an econometric equation, the models becomes;

Model 1

$$GPSSA_t = \beta_0 + \beta_1 RT_{it} + \beta_2 INV_{it} + \beta_3 PRA_{it} + \epsilon_{it} \tag{3.6}$$

Model 2

$$GPSSS_t = \beta_0 + \beta_1 RT_{it} + \beta_2 INV_{it} + \beta_3 PRA_{it} + \epsilon_{it} \tag{3.7}$$

Where;

EO = Entrepreneurial Orientation

GPSSA_t = Growth of Private Secondary Schools in terms of number of academic staff at time t

GPSSS_t = Growth of Private Secondary Schools in terms of number of students at time t

RT_t = Risk-taking at time t

INV_t = Innovativeness at time t

PRA_t = Proactiveness at time t

f = functional relationship

ε = Stochastic term
 β_0 = Model relationship Intercept
 $\beta_1 - \beta_5$ = the coefficients of the explanatory variables

4. Findings

The Structural equation modelling is basically a multivariate technique of statistical analysis that is mainly used to analyse structural relationships. Therefore, this method is a combination of factor analysis and multiple regression analysis which is also used to measure the structural relationship between measured variables and latent constructs. To achieve the objective, of the research the measurement model was tested by typically saturating the structural model, by allowing all the latent variables to correlate. It is important to note that the relationship between the measurement models is in the form of covariance meaning that our model is a confirmatory factor analysis and confirmatory factor analysis only consist of measurement models as presented in figure 1 below:

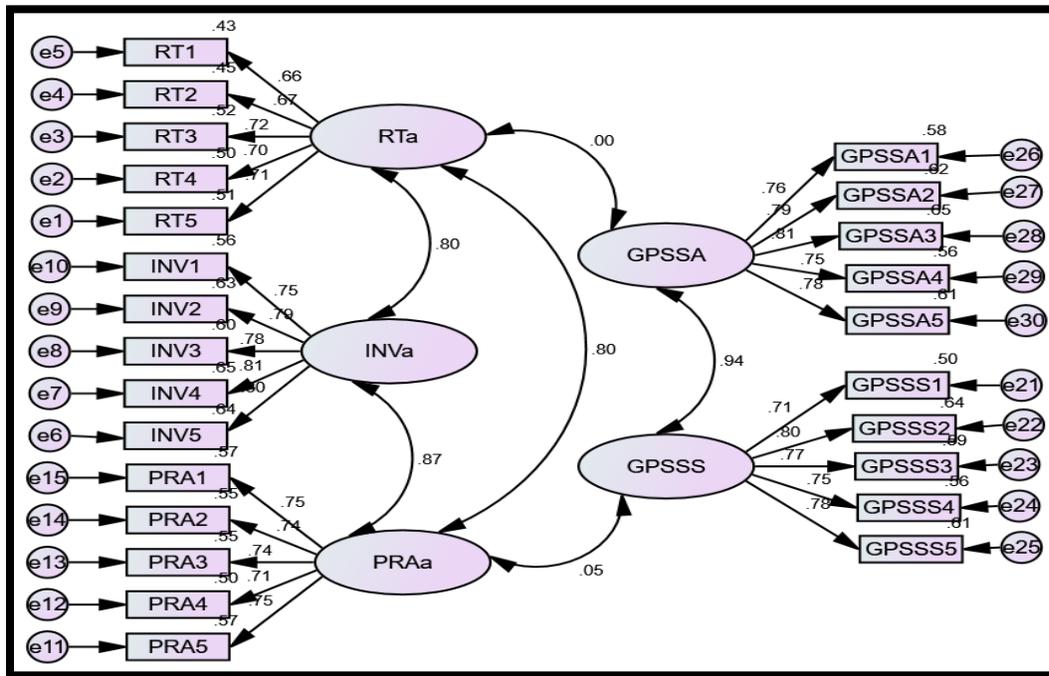


Figure 1: Measurement Model

From the figure above the first-order analytical measurement model showed a considerable fit to the survey data with the following results of the model summary; the chi-Square/df = 3.630; NFI = .915; GFI = .935; AGFI = .907; CFI = .958; RMSEA = .063. In analysing the model, it was discovered that the standardized factor loadings were all above 0.50 i.e. the factor loadings are above the recommended value of 0.50. The standardized first order factor loadings were significant and ranged from 0.695 to 0.806 indicating convergent validity. It can be concluded that the measurement model fits into the data see table 1 below;

Table 1: Confirmatory Factor Analysis

Extraction Method: Principal Component Analysis					
Section	Item	Initial	Extraction	Factor Loadings	AVE
Risk-Taking	RT1	1	0.540	.659	0.59
	RT2	1	0.642	.668	
	RT3	1	0.660	.724	
	RT4	1	0.668	.704	
	RT5	1	0.549	.711	
Innovativeness	INV1	1	0.624	.745	0.605
	INV2	1	0.660	.791	
	INV3	1	0.706	.775	
	INV4	1	0.688	.808	
	INV5	1	0.696	.801	
Proactiveness	PRA1	1	0.556	.753	0.544
	PRA2	1	0.595	.744	
	PRA3	1	0.693	.738	
	PRA4	1	0.659	.707	
	PRA5	1	0.727	.752	
Growth Of Private Secondary Schools In terms Of number Of Students	GPSSS1	1	0.563	.709	0.555
	GPSSS2	1	0.646	.797	
	GPSSS3	1	0.624	.770	
	GPSSS4	1	0.604	.746	
	GPSSS5	1	0.620	.781	
Growth Of Private Secondary Schools In terms Of Number Of Academic Staff	GPSSA1	1	0.608	.760	0.578
	GPSSA2	1	0.646	.787	
	GPSSA3	1	0.658	.809	
	GPSSA4	1	0.648	.748	
	GPSSA5	1	0.619	.783	

Source: SPSS/AMOS Output, 2022

Fit indices: chi-Square/df = 3.630 NFI = .915 GFI = .935 AGFI = .907 CFI = .958 RMSEA = .063

From the above table it can be clearly seen that the factor loadings for the construct are within the acceptable range of 0.659 to 0.808 which is above the recommended value of 0.50 or higher. The average variance is also above 0.5 which is in line with the requirements.

Since the measurement model estimated above gave satisfactory results, the structural equation model is presented in figure 2as follows:

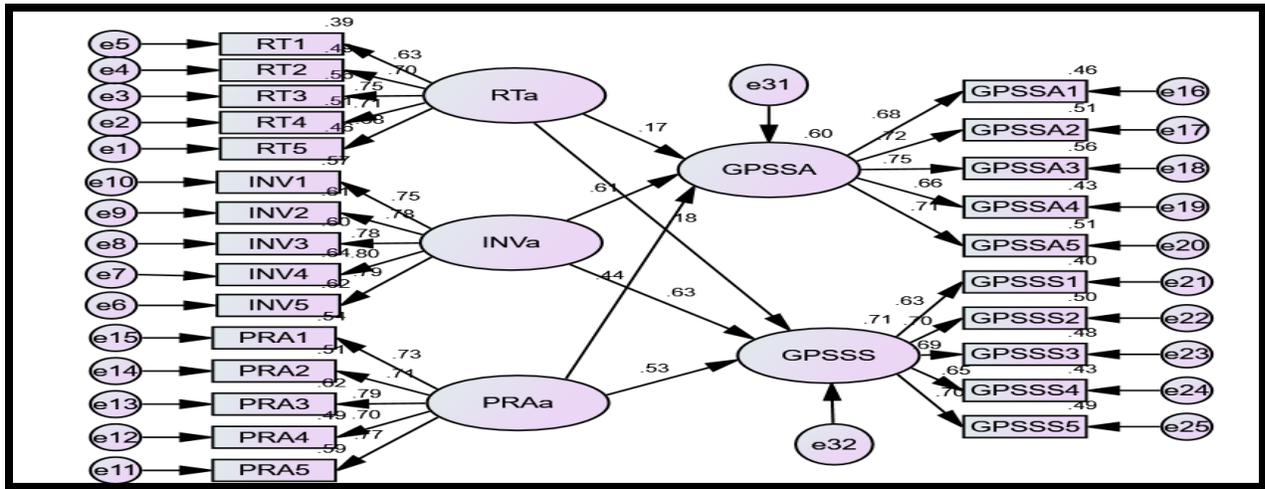


Figure.2: Structural Equation Modelling Path

From figure 2 above the multiple regression analysis was used to measure the structural relationship between measured variables and latent constructs as presented in table 2 below:

Table. 2 Regression Weights: Parameter Estimates and Model Fit

		Estimate	S.E.	C.R.	P
GPSSA	<--- RTa	.146	.041	3.585	***
GPSSA	<--- INVa	.484	.048	10.009	***
GPSSA	<--- PRAa	.324	.040	8.113	***
GPSSS	<--- RTa	.137	.036	3.823	***
GPSSS	<--- INVa	.453	.046	9.885	***
GPSSS	<--- PRAa	.351	.039	8.933	***
Fit indices: chi-Square/df = 4.568 NFI = .966 GFI = .929 AGFI = .906 CFI = .986 RMSEA = .046 R² GPSSA = .60 R² GPSSS = .71 Source: AMOS Output, 2022					

H0₁: Risk-taking has no significant effect on the number of academic staff of private secondary schools in North-Central Nigeria.

Risk-taking which is a component of entrepreneurship orientation was used to formulate the first null hypotheses of this research as stated above. From the estimated model presented in table 2 above it can be deduced that when Risk-taking increases by 1, Growth of Private Secondary School in terms of number of academic staff increases by 0.146. With a probability value of 0.001 which is less than 0.05%. In other words, the regression weight for RTa in the prediction of GPSSA is significantly different from zero at the 0.05 level of significance. This implies that the risk-taking capacity of the private secondary schools under study has positive effect on the number of academic staff of private secondary schools in North-Central Nigeria.

Any change or increase in risk-taking will boost growth by 0.146. Considering the p-value which less than 0.05% level of significance means that the coefficient of risk-taking is positive and statistically significant. Therefore, the null hypothesis which states that risk-taking has no significant effect on the number of academic staff of private secondary schools in North-Central Nigeria is hereby rejected therefore, accept the alternative hypothesis which states that risk-taking has a significant effect on the number of academic staff of private secondary schools in North-Central Nigeria is accepted. The conclusion of this hypothesis testing is in line with the findings of (Pretomode, 2019; Yeager et al., 2019).

HO₂: Innovativeness has no significant effect on the number of academic staff of private secondary schools in North-Central Nigeria.

The second hypothesis was formulated based on innovativeness which is a component of entrepreneurial orientation and from the results presented above it can be seen that when Innovativeness increases by 1, Growth of Private Secondary School in terms of number of academic staff (GPSSA) increases by 0.484. With probability of 0.001 which is less than 0.05%. In other words, the regression weight for INVa in the prediction of GPSSA is significantly different from zero at the 0.001 level of significance. This means that innovativeness has positive effect on growth of private secondary schools in terms number of academic staff a change or an increase in the school's innovative capacity will result to about 0.484 unit increase in number of teachers. The p-value which is less than 0.05% level of significance implies that the coefficient of innovativeness is positive and statistically significant. Hence, the null hypothesis is rejected which states that innovativeness has no significant effect on the number of academic staff of private secondary schools in North-Central Nigeria and accept the alternative hypothesis which states innovativeness has a significant effect on the number of academic staff of private secondary schools in North-Central Nigeria. The finding here are in line with (Duru et al., 2018; Okoli et al., 2021).

HO₃: Pro-activeness has no significant effect on the number of academic staff of private secondary schools in North-Central Nigeria.

From the above results when PRAa "increases by 1, GPSSA increases by 0.324. With the probability value of 0.001 which is less than 0.05%. . In other words, the regression weight for PRAa in the prediction of GPSSA is significantly different from zero at the 0.001 level of significance. This means that pro-activeness has positive effect on growth of private secondary schools in terms number of academic staff, thus signifying that a change or an increase in the schools proactive capacity will result to about 0.324 unit increase in number of academic staff. The p-value which is less than 0.05% level of significance implies that the coefficient of pro-activeness is positive and statistically significant. Hence, the null hypothesis is rejected which states that pro-activeness has no significant effect on the number of academic staff of private secondary schools in North-Central Nigeria and accept the alternative hypothesis which states that pro-activeness has a significant effect on the number of academic staff of private secondary schools in North-Central Nigeria. The finding here are in line with (Galbreath et al., 2020; Hossain & Al Asheq, 2019).

HO₄: Risk-taking has no significant effect on the number of students of private secondary schools in North-Central Nigeria.

From the results presented above when RTa "increases by 1, GPSSS increases by 0.137. With probability value of .001 which is less than 0.05%. In other words, the regression weight for RTa in the prediction of GPSSS is significantly different from zero at the 0.001 level of significance. This implies that the risk-taking capacity of the private secondary schools under study has positive effect on the number of Students of private secondary schools in North-Central Nigeria. Any change or increase in risk-taking will boost the number of students by 0.137. Considering the p-value which less than 0.05% level of significance means that the coefficient of risk-

taking is positive and statistically significant. Therefore, the null hypothesis which states that risk-taking has no significant effect on the number of students of private secondary schools in North-Central Nigeria is hereby rejected therefore, the alternative hypothesis is accepted which states that risk-taking has a significant effect on the number of students of private secondary schools in North-Central Nigeria. The conclusion of this hypothesis testing is in line with the findings of (Duru et al., 2018; Galbreath et al., 2020).

HO₅: Innovativeness has no significant effect on the number of students of private secondary schools in North-Central Nigeria.

When INVa “goes up by 1, GPSSS increases by 0.453. With the P-value of 0.001 which is less than 0.05%. In other words, the regression weight for INVa in the prediction of GPSSS is significantly different from zero at the 0.001 level of significance.” This means that innovativeness has positive effect on growth of private secondary schools in terms number of students. Therefore, a change or an increase in the school’s innovative capacity will result to about 0.453 unit increase in number of students. The p-value which is less than 0.05% level of significance implies that the coefficient of innovativeness is positive and statistically significant. Hence, the null hypothesis which states that innovativeness has no significant effect on the number of students of private secondary schools in North-Central Nigeria is rejected and accept the alternative hypothesis which states innovativeness has a significant effect on the number of students of private secondary schools in North-Central Nigeria. The finding here are in line with (Adegbuyi et al., 2018; Hossain & Al Asheq, 2019).

HO₆: Pro-activeness has no significant effect on the number of students of private secondary schools in North-Central Nigeria.

From the results of the estimated model it can be seen clearly that when PRAa increases by 1, GPSSS increases by 0.351. With the probability of 0.001 which is less than 0.05%. In other words, the regression weight for PRAa in the prediction of GPSSS is significantly different from zero at the 0.001 level of significance. This means that pro-activeness has positive effect on growth of private secondary schools in terms number of students, thus signifying that a change or an increase in the schools proactive capacity will result to about 0.351 unit increase in number of students. The p-value which is less than 0.05% level of significance implies that the coefficient of pro-activeness is positive and statistically significant. Hence, the null hypothesis is rejected which states that pro-activeness has no significant effect on the number of students of private secondary schools in North-Central Nigeria and accept the alternative hypothesis which states that pro-activeness has a significant effect on the number of students of private secondary schools in North-Central Nigeria. The finding here are in line with (Diaz & Sensini, 2020; Galbreath et al., 2020).

5. Conclusion

Empirical studies have shown that entrepreneurial orientation is linked to growth. Therefore, this study has empirically examined the effect of entrepreneurial orientation on the growth of private secondary schools in North central Nigeria in terms of number of staff and number of students using entrepreneurship orientation dimensions such as risk-taking, innovativeness and pro-activeness as the independent variables and growth in terms of number of academic staff and number of students as the dependent variable while sociocultural perception was used as a mediating variable, using structural equation modelling to analyse the relationship. Data analysis revealed that relationship exists between entrepreneurial orientation and growth of private secondary schools in North-Central Nigeria, and all the components of entrepreneurial orientation exerted a positive and significant effect on growth of private secondary schools.

Based on the findings and conclusion this research it is important to provide a set of policy recommendations that will aid the growth of secondary schools in Nigeria. It is therefore, recommended that:

- Private secondary school owners are encouraged to uphold the risk-taking dimension of EO which triggers bold investments on infrastructural amenities to accommodate anticipated growth in number of academic staff.
- An excellent reputation of the private secondary school is crucial hence, proprietors are nudged to enhance their inherent innovative attribute and ensure constant deployment of latest amenities to improve teaching, learning and extracurricular experience which in turn instigates retention of academic staff and growth in the number of academic staff.
- The pro-activeness of private secondary school owners is of the essence; thus proprietors are urged to exhibit their proactive attributes in all their operations and also in the aspect of skill gap of academic staff which can be addressed via teacher development and adaptive programmes to satisfy demand in the academic ecosystem and propel growth in the number of academic staff.
- In the quest to satisfy the escalating demand for secondary education via establishment of another branch, proprietors are advised to ensure that risk-taking decisions regarding enormous degrees of uncertainties are not made hastily instead deployment of risk management techniques be inculcated to make fitting decision that triggers growth in number of students.
- Optimum outcome of quality students is essential for private secondary schools; proprietors are encouraged to develop their innovativeness to create an avenue whereby students are often engaged in informative behavioural and career platforms, that shapes their morality and provide guidance to career choice which prepares them for life after secondary education and in turn, brings about growth in the number of students.
- Adhering to the conducive class size in private secondary schools eloquently enhances classroom conduct, interaction and inspires productive learning; proprietors are advised to sharpen their pro-activeness through regular strategy review and appropriate precautions taken to abate obsolete learning and operational strategies as these actions wholistically upheaves growth in the number of students.

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