

Entrepreneurial Education and Entrepreneurship: The Mediating Role of Social Skills in University Students

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Article Detail:	Abstract
<p>Received: 02 Jan 2023; Received in revised form: 01 Feb 2023; Accepted: 07 Feb 2023; Available online: 14 Feb 2023</p> <p>©2023 The Author(s). Published by International Journal of English Language, Education and Literature Studies (IJEEL). This is an open access article under the CC BY license (https://creativecommons.org/licenses/by/4.0/).</p> <p>Keywords— Entrepreneurial Education, Social Skills, Entrepreneurship, Political Acumen, Entrepreneurial Opportunity Recognition.</p>	<p><i>The study sought to investigate the various mediating impacts of social skills in the form of political acumen and entrepreneurial opportunity recognition on perceived entrepreneurial education and entrepreneurship of university students. This was accomplished through the use of a survey research design. The study used primary qualitative data that was converted into quantitative data using 5-point Likert scaling. The questionnaire used for the study was tested for its reliability and validity using confirmatory factor analysis and was found to be adequate for the study. Data was gotten from 269 Bingham University student entrepreneurs in Nigeria and was analysed using structural equation modelling. The findings revealed that there is a positive significant relationship between perceptions of entrepreneurial education and entrepreneurship; political acumen and entrepreneurial opportunity recognition each play a mediating role between perceived entrepreneurial education and entrepreneurship; and social skills work together to mediate perceived entrepreneurial education and entrepreneurship. The study, therefore, recommends that student entrepreneurs should construct a learning network through their engagement in the classroom and develop professional entrepreneurial and social skills.</i></p>

1. Introduction

Entrepreneurship encompasses the process of ascertaining new ways of combining resources (Ruskovaara and Pihkala, 2015). Since the world is ever-growing, new ways of combining resources are viewed as pertinent. Development agencies, governments, and academics from all over the world are persuaded that entrepreneurship is essential for economic growth, the creation of jobs, and the raising living standards for people in various areas (Malebana & Swanepoel, 2015; Prakash et al., 2015). The viewpoint is based in part on the assertions of influential scholars like Joseph Schumpeter (1883 - 1950), who stress entrepreneurship as one of the key forces driving economic growth (Moroz & Hindle, 2012). If entrepreneurship is essential to

socioeconomic change, it follows logically that societies with more people who exhibit entrepreneurial traits and, consequently, engage in more entrepreneurial activity would fare better economically than those with fewer such people. In light of this, there are growing requests to increase entrepreneurial education (Irikefe, 2021). The goal is to create a sizable pool of inventive and creative human capital.

Innovative skills are fostered via entrepreneurship education and are a significant factor for future growth (Ruskovaara and Pihkala, 2015). Innovation-driven development methods are currently placing new demands on entrepreneurial education. However, the majority of the current research and debate in this area focuses on the establishment of teaching staff in the

entrepreneurial education ecosystem, curriculum development, and whether entrepreneurship education can affect the intention of entrepreneurship (Falck et al., 2016; Pittaway & Cope, 2016). According to social cognitive theory, learners' individual characteristics and surroundings have a significant impact on how entrepreneurship education is implemented. The research on entrepreneurship education may be further improved by a thorough examination of the process that motivates innovation and development (Morris et al., 2013).

The creation of new goods or entry into new markets is considered to be the consequence of entrepreneurship since innovation is viewed as an internal motivator and is related to an entrepreneurial attitude (Miller, 2011). The acquisition of resources, the development of inventive ability and personality, and the creation of multi-level learning channels for entrepreneurs by integrating multiple knowledge and value systems are all essential outcomes of entrepreneurial education. Entrepreneurship education encompasses general ability growth and enhancement of professional ability in addition to information study and skill improvement. Entrepreneurial competence, which is crucial for success, primarily relates to the capacity to see possibilities and generate the required resources and money, in addition to technical, financial, and legal knowledge (Kettunen et al., 2013). Bacigalupo et al. (2016) developed an entrepreneurial competence framework that incorporates opportunity identification, entrepreneurial skills that represent "resources," action areas, and 15 competency lists because entrepreneurship ability is diverse. Comparing models and categorizations of entrepreneurial talents, Giancesini et al. (2018) made the case that entrepreneurial abilities are made up of personality traits, entrepreneurial knowledge, and skills. The development of skills and potential resources to support innovation are becoming more important topics in research on entrepreneurial capacity.

In Nigeria for example, it is observed that the Federal Government of Nigeria through her National Universities Commission (NUC) has imbued entrepreneurial education into the country's university system. The NUC mandated all universities in the country to build skill acquisition centres to foster entrepreneurial education. The NUC averred that to curb graduate unemployment there is a need to equally review the curriculum for entrepreneurship courses. More so, Nigerian graduates were unemployed due to a mismatch between tertiary

institution output and the dwindling job market (Odoh, 2022). According to Gundry et al. (2014), fostering creative abilities that can be used in activities, teaching, and situations that encourage innovation is a goal of entrepreneurship education. Following the NUC's mandate, universities like Bingham University Karu have developed skill acquisition centres in a bid to foster entrepreneurial education. However, it is not quite clear how entrepreneurial education affects the students' entrepreneurship or entrepreneurial intent. This study sought to assess the effect of entrepreneurial education on students' entrepreneurship, using Bingham University, Karu as a case study.

Whilst a direct relationship may exist between entrepreneurial education and student entrepreneurship, there is a need to consider intervening variables to match real-world scenarios. In this instance, social skills in the form of political acumen and identification of opportunities are considered. This is because, in the learning network, student entrepreneurs employ multi-party contact to accomplish knowledge iteration; interactions between the environment, organisations, and entrepreneurs lead to innovation (Anderson et al., 2014). According to Bacigalupo et al. (2016), opportunity identification, entrepreneurial skills, and action are viewed as three crucial aspects of entrepreneurial competency. Political acumen may provide business owners with a sense of assurance and command over their working environment, according to studies. According to Ferris et al. (2005), they are likely to be involved confidently in the dynamics of the environment and successfully modify attitudes and actions to cope with ambiguous situations. Political acumen is thought to explain how people see opportunities (McAllister et al., 2016). Students with strong political acumen may successfully combine available resources, correctly recognise and decipher social signs from their surroundings, and eventually establish themselves as key players in technology and product creation. In order to examine how perceived entrepreneurial education affects entrepreneurship, this study chooses political acumen and entrepreneurial opportunities as mediators.

The selection of Bingham University, Karu was due to many reasons. The university is close to Nigeria's Federal Capital Territory and has a diverse mixture of students from all over the country. More so, the university has complied with the NUC's entrepreneurial education mandate and has developed an entire department to that effect. Hitherto the issues raised, the following hypotheses were formulated:

H₀₁: There is no significant relationship between perceptions of entrepreneurial education and students' entrepreneurship at Bingham University.

H₀₂: Political acumen does not mediate the relationship between entrepreneurial education and student entrepreneurship at Bingham University.

H₀₃: Entrepreneurial opportunity recognition does not mediate the relationship between entrepreneurial education and student entrepreneurship at Bingham University.

H₀₄: Social skills do not mediate the relationship between entrepreneurial education and student entrepreneurship at Bingham University.

2. Literature Review

2.1. Entrepreneurial Education and Entrepreneurship

Entrepreneurial education encompasses a collection of formalised teachings that inform, prepare, and educate anyone interested in taking part in socio-economic development through a project to encourage business creation, entrepreneurship awareness or small business development is known as entrepreneurship education (Irikefe, 2021). Entrepreneurship is the capacity and willingness to build, manage, and run a business, including all of its risks, in order to make a profit (Falck et al., 2016). Entrepreneurship promotes economic growth. Entrepreneurs, including student entrepreneurs, are crucial in market economies because they may function as the country's economic development wheels. According to Malebana and Swanepoel (2015), they create new employment by developing new goods and services, which leads to an acceleration of economic development.

Students' perceptions of their entrepreneurial education are tied to their perceptions of entrepreneurship or entrepreneurial intent—universities' major role is to stimulate innovation through entrepreneurship education (Falck et al., 2016). The key process of students' entrepreneurship activities is innovative awareness and inventive ability, which are also impacted by innovation personality. Universities' educational systems must create an academic atmosphere that may act as a catalyst for entrepreneurship (Irikefe, 2021). Learners will be driven to extend their cognitive capabilities if they are consistently pushed to increase their topic knowledge (Bandura, 1999), forming a defensive mechanism to remove the negative impact produced by perceived pressure (Granieri et al., 2017). Entrepreneurs are

created, rather than born, by teaching the necessary information and abilities for a new business endeavour. The process of developing student entrepreneurs' abilities is a social interaction process in which knowledge resources are obtained and converted through observation or active engagement in entrepreneurial education. This process also includes the creation of new knowledge through the transformation of experience and the application of knowledge. Entrepreneurial education has the potential to transform a student's attitude toward entrepreneurship (Galloway & Brown, 2002).

Students' perceptions and attitudes toward entrepreneurial education can influence whether students' creativity is expressed and constitute a self-judgment of one's perceived competence in generating novel ideas (Beghetto and Kaufman, 2010), resulting in the formation of an internal, stable and lasting, innovative personality. Simultaneously, entrepreneurial education provides student entrepreneurs with the information, knowledge, and other resources they require, thereby creating a strong environment of innovation and entrepreneurship, reducing environmental uncertainty, and creating a good environment for innovation and development. Entrepreneurial education provides a comprehensive learning management system for student entrepreneurs, assisting them in establishing correct values and cognitive systems, improving their perceptions of innovation, and continuously integrating, accumulating, and integrating new knowledge to shape their innovative ability and personality.

2.2. Political Acumen

Political acumen encompasses the ability to use the knowledge of relationships and structures. It is the capacity to successfully comprehend people at work and utilise such information to encourage others to act in ways that benefit one's personal and/or organisational aims (Ferris et al., 2005). Individuals with exceptional political acumen have superior social skills and may assist people in better understanding and influencing others in difficult contexts, and so achieve personal and organisational goals (Munyon et al., 2015). Political acumen bridges barriers and compensates for the weaknesses of social networks on college campuses, and facilitates the successful establishment and utilisation of network relationships (Fang et al., 2015). Politically astute people are good at cultivating ties with those who possess significant resources and positioning themselves in favourable positions within their social network (Fang et al., 2015). Individuals acquire access to information, role

models, and mentors through social networks, develop relationships, and gain the regard and support of peers. The capacity of the entrepreneur to acquire the trust of others is critical (Tocher et al., 2015). After all, people are more likely to openly share their information and thoughts with those they trust.

Student entrepreneurs with political skills display problem-solving abilities in relationship circumstances through distinct activities (Treadway et al., 2013). Highly politically driven student entrepreneurs may successfully govern and forecast dynamic and confusing surroundings (Kacmar et al., 2013), and can favourably affect innovation by improving entrepreneurs' appeal (Baron & Tang, 2009). Entrepreneurial education includes a variety of resources for student entrepreneurs. The human capital social network created by highly competent student entrepreneurs improves entrepreneurial teams' capacity to obtain resources, lowers the cost of resource acquisition, and boosts entrepreneurs' readiness to share information. The integration provides new information and contributes favourably to creativity through reciprocity, which combines access to resources and current resources (Tolstoy, 2009). As a result, it is pertinent to assess whether political acumen mediates the relationships between perceived entrepreneurial education and entrepreneurship.

2.3. *Entrepreneurial Opportunity Recognition*

Three key activities that entrepreneurs must complete are opportunity identification and exploitation, taking calculated risks, and innovation (Chandler & Hanks, 1994). According to Shane and Eckhardt (2003), opportunity recognition is the process of identifying novel and possibly lucrative concepts that are impacted by both personal traits and external circumstances. Recognizing entrepreneurial opportunities is the primary activity in the early stages of student entrepreneurship; it is the process of accurately assessing market needs and processing relevant resources to continue to develop entrepreneurship skills and personality. Choosing promising business prospects, creating, and putting into practice methods for utilising them (Chandler & Hanks, 1994). Such skill is frequently acquired experientially through active learning (Mitchelmore & Rowley, 2010).

Social learning is a continual process that involves learning, doing, reflecting, and collaborating. Iterative learning is seen as a crucial aspect of adjusting to environmental changes. Opportunity identification is increasingly serving as a primary motivator of

entrepreneurial conduct in a volatile entrepreneurial environment (Wang et al., 2013). In addition to acquiring resources through entrepreneurial education, student entrepreneurs also develop new opportunities, enhance their chances of success, and contribute to team building. They also incorporate processing into the production of new goods or services. As a result, it is pertinent to assess whether entrepreneurial opportunity recognition mediates the relationships between perceived entrepreneurial education and entrepreneurship.

2.4. *Social Skills: Political Acumen and Entrepreneurial Opportunity Recognition*

Social skills of an entrepreneur encompass the combination of entrepreneurial opportunity awareness, and political acumen. Developing skills enables businesspeople to identify and seize opportunities, which enables them to be more creative (Fillis & Rentschler, 2010). Gaining access to the knowledge, influence, and recommendations required for success depends on political acumen (Fang et al., 2015). Politicians are driven by a desire to succeed, and they can take the appropriate steps at the appropriate times to accomplish their objectives (Blickle et al., 2010). In a similar vein, we argue that political acumen may be used to explain how businesspeople identify chances to influence others (McAllister et al., 2016). High acumen allow businesspeople to show a good understanding of society (Brouer et al., 2011); this social skill is helpful for successfully securing the crucial resources needed for entrepreneurship in a changing and complicated environment. Entrepreneurs' keen agility is a requirement for the success of opportunity recognition (Ardichvili et al., 2003).

Student entrepreneurs benefit from the social network and interpersonal connections as they broaden their resource acquisition capabilities and enhance their capacity to integrate resources. Interpersonal interactions increase the effectiveness of resource development and product innovation by assisting participants in understanding and putting creative decisions into practice (Fang et al., 2015). The seeming genuineness aids in information exchange and serves as a foundation for new product or service innovation. Hence, it is pertinent to assess whether social skills (both political acumen and entrepreneurial opportunity recognition) mediates the relationships between perceived entrepreneurial education and entrepreneurship.

2.5. *Theoretical Framework: Social Cognitive Theory*

In the 1960s, Albert Bandura developed the Social Learning Theory (SLT), which later became known as Social Cognitive Theory (SCT). The idea that learning happens in a social setting with a dynamic and reciprocal interplay of the person, environment, and behaviour was evolved into the SCT in 1986. The emphasis on social impact and on both external and internal social reinforcement is what makes SCT special. SCT takes into account both the many ways in which people learn and practise behaviours as well as the social context in which those behaviours are used (Bandura, 2018).

Bandura et al., (2003), averred that when people believe their own actions and talents can produce the desired results, they are more likely to pursue their goals. Their cognitive abilities are enhanced, their ideas and behaviours are continuously adjusted, and their entrepreneurship is made more purposeful, directive, and coherent. The theory of social cognition is used in this study to investigate how students in entrepreneurial education can improve their capacity to recognise opportunities through political acumen, which in turn influences entrepreneurs' innovative awareness, innovative capacity, and innovative personality.

Learning is no longer a solitary activity but is now executed in a complex web of interactions, moving from observation (Bandura, 1978) to participation (Tavella & Franco, 2015); in a network (Chen & Chang, 2014). Through self-direction, individuals may modify the present in order to achieve their desired results and goals (Bandura, 2018). The entire development of students is the primary objective of general education, and the entrepreneurial curriculum system sets the groundwork for an overall increase in students' entrepreneurial aptitude. The social skills learning network offers student entrepreneurs multi-level learning channels that they may use to continually hone their learning and practise abilities, from observation to involvement. Therefore, entrepreneurial education may boost students' confidence in their ability to handle novel and unexpected issues.

3. Methodology

The survey research design was used in the study, which is based on replies obtained from primary data. The justification for employing a survey research design is that the information needed in this study is gathered through the administration of a questionnaire. The questionnaire was chosen because it is quick to complete and typically includes standardised responses that make it straightforward to collect data; it also allows respondents to submit answers that are private to them. This tool was used to gather responses regarding entrepreneurial education, entrepreneurship and social skills from respondents.

The study's sample size was 269 student entrepreneurs from Bingham University in Karu, Nigeria. While convenience sampling is the sample method utilised. Because there was no sample frame, convenience sampling enabled the researcher to collect data which would not have been feasible otherwise. It is unclear who was an entrepreneur or not, hence the questionnaire were given to only students that were confirmed entrepreneurs. More so, the sample size is above 10% of the population of students in Bingham University and above 200 minimum size used for SEM analysis according to Jackson (2001).

3.1. Data Collection Instrument: Validity and Reliability

The questionnaire was tested to ensure consistency and that the questions were correctly answered. A Likert scale of 5 points was used to measure the extent to which the various respondents agreed or disagreed with the issues raised; with "1" indicating "strongly disagree" and "5" indicating "strongly agree." Using confirmatory factor analysis, the discriminant validity of each variable was tested. A minimum Cronbach's Alpha value of 0.7 is stated to be reliable (Schindler, 2021).

Table 1: Confirmatory factor analysis results of variable discriminant validity.

Model	χ^2	df	χ^2/df	CFI	GFI	TLI	IFI	NFI	RMSEA
Four-factor model	438.757	319.200	1.375	0.931	0.862	0.924	0.932	0.885	0.035
Three-factor model	521.888	309.700	1.685	0.917	0.846	0.903	0.918	0.873	0.048

Model	χ^2	df	χ^2/df	CFI	GFI	TLI	IFI	NFI	RMSEA
Two-factor model	556.395	299.250	1.859	0.909	0.840	0.89	0.910	0.868	0.054
Single-factor model	579.890	292.600	1.982	0.904	0.832	0.882	0.906	0.865	0.058

Four-factor model: entrepreneurial education, political acumen, entrepreneurial opportunity recognition, and entrepreneurship. Three-factor model: entrepreneurial education + political acumen, entrepreneurial opportunity recognition, and entrepreneurship. Two-factor model: entrepreneurial education + political acumen + entrepreneurial opportunity recognition and entrepreneurship. Single-factor model: entrepreneurial education + political acumen + entrepreneurial opportunity recognition + entrepreneurship.

Source: Researcher's Computation, 2022.

Table 1 demonstrated that, when compared to the single-, two-, and three-factor models, the four-factor model utilised in this study was the most appropriate. The combined effect was excellent, the four-factor model fitting indices were adequate, and the model fitting degree was satisfactory.

For the variable on entrepreneurial education, six items were measured such as "An innovative university campus atmosphere has inspired your entrepreneurial dream," "Startup course learning provides the knowledge you need to start a business," and "The university provides support for your business, shop, and entrepreneurial trainers". The Cronbach's alpha coefficient for this scale as shown in Table 1 is 0.848, indicating that it is reliable.

For the variable on political acumen, four items were measured such as "networking skill," "interpersonal influence," "social astuteness," and "apparent honesty." The total Cronbach's coefficient of the political acumen scale as shown in Table 1 is 0.955, indicating that the scale is reliable.

For the variable on recognizing entrepreneurial opportunities, four items were measured such as "alertness of possible business prospects," "actively seeking and acquiring information about business prospects," "products and services that can effectively identify customers' needs" and "assessing the viability of such potential entrepreneurial activity." The total Cronbach's coefficient of the entrepreneurial opportunity recognition scale as shown in Table 1 is 0.877, indicating that the scale is reliable.

For the variable on entrepreneurship, four items were measured such as "I prefer be autonomous and solve problems from numerous viewpoints," "I always have many fresh approaches and new ideas," "I have strong curiosity and like to make the first move" and "I can absorb and implement risky ideas." The results reveal

that the scale's Cronbach's coefficient as shown in Table 1 is 0.904, indicating that it is reliable.

For the control variables, the study accounts for demographic characteristics such as student entrepreneurs' gender and education level, and it removes the potential impacts of perceived entrepreneurial education and innovative partnerships.

3.2. Techniques for Data Analysis

SPSS 26.0, AMOS 22.0, and other data analysis tools such as Microsoft Excel are used in this work. The study is separated into three steps: (1) test measurement model, which includes model fit, reliability, and validity tests; (2) descriptive statistics on each variable; and (3) multi-mediation tests utilising the regression bootstrapping approach in Hayes' (2013) PROCESS module (Model 6).

The common source variation in this study is assessed using Harman's single component analysis. Without rotation, exploratory factor analysis was carried out. According to the findings, the variation for the first factor's interpretation was 20.609%, and the variance for all the factors combined was 48.382%. About half of the total cumulative variation was explained by the first component. As a result, there was no common technique bias impact amongst the assessed variables.

Using the AMOS 22.0 programme, a confirmatory factor analysis was carried out on each variable in this study to evaluate its discriminant validity. Table 1's findings demonstrated that the four-factor model utilised in this study was the most appropriate when compared to the single-, two-, and three-factor models. The four-factor model's fitting indices and model fitting degree were both satisfactory, and the combined effect was adequate.

4. Data Presentation and Analysis

4.1. Characteristics of Respondents

Participants were drawn from Bingham University Karu. Questionnaires were delivered to 269 student entrepreneurs via convenience sampling method who completed the questionnaires. Males made up 45.72% of the respondents, while females made up 54.28%. Undergraduate and basic students made up 84.76% of

the responses, while postgraduate students made up 15.24% of the responses.

4.2. Descriptive Statistics and Correlations

SPSS 22.0 was used to statistically assess the mean, standard deviation, and correlation coefficient of the study variables. The mean and standard deviation of each variable, as indicated in Table 2, were within the permissible range.

Table 2: Mean, standard deviation, and correlations for the study variables

S/N	Variable	Mean	SD	1	2	3	4	5	6
1	Gender	0.585	0.576	1					
2	Education level	0.261	0.425	-0.105	1				
3	Entrepreneurial education	3.715	0.705	-0.160	0.021	1			
4	Political acumen	3.620	0.627	-0.111	0.056	0.591	1		
5	Entrepreneurial opportunity recognition	3.649	0.726	-0.098	0.073	0.573	0.738	1	
6	Entrepreneurship	3.812	0.678	-0.159	0.694	0.588	0.732	0.742	1

Source: Researcher’s Computation, 2022.

Table 2 shows that there is a substantial association between entrepreneurial education, political acumen, entrepreneurial opportunity recognition, and entrepreneurship as shown in the correlation coefficient between the variables. Additionally, there is a strong positive link between gender and entrepreneurship. The outcomes of descriptive statistics and related analysis serve as a foundation for subsequent data analysis by giving an initial illustration of the relationship between variables.

4.3. Structural Equation Model Analyses

Structural equation modelling was used as a multivariate statistical analytic tool to examine the structural connections of the study variables. This method combines component analysis and multiple regression analysis to examine the structural link between measured variables and latent constructs. To build the structural equation model, the main effect was first investigated using entrepreneurial education as the independent variable and entrepreneurship as the dependent variable. Table 3 shows the results of the multiple mediation model.

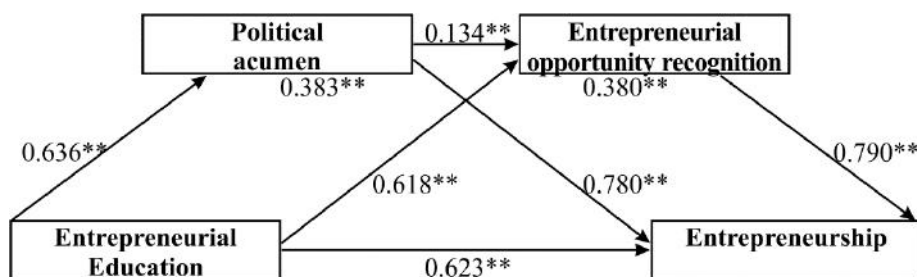


Fig.1: The unstandardized path coefficients in model testing.

Source: Researcher’s Depiction, 2022

Model 1 fits the data well since its fitting indexes “ $\chi^2/df = 2.615$; CFI = 0.911; GFI = 0.891; TLI = 0.898; IFI = 0.911; NFI = 0.890; and RMSEA = 0.077” fulfil the criteria. Results of the main effect test indicate that entrepreneurial education has a favourable impact on

entrepreneurship ($\beta = 0.623$, $p < 0.001$), and H_01 is rejected in favour of the alternate hypothesis.

Second, models 2 and 3 were developed using political acumen and entrepreneurial opportunity as sole

mediators. The findings demonstrate that the model is well-fitting “Model 2: $\chi^2/df = 1.003$, CFI = 1.000, GFI = 0.908, TLI = 0.997, IFI = 0.998, NFI = 0.959, and RMSEA = 0.004.” In order to assess the mediating effect, procedure V3.1 employed the bootstrap approach to repeat the sample 5,000 times. Based on the presumption that H02, the mediating impact of political acumen was 0.383, with a 95% confidence interval [0.283, 0.431], excluding 0, hence H02 is rejected in favour of the alternate hypothesis. Likewise, “Model 3: $\chi^2/df = 1.416$, CFI = 0.940, GFI = 0.910, TLI = 0.933, IFI = 0.940.” Based on the supposition that H3, the mediating impact of recognising entrepreneurial opportunities is 0.380, with a 95% confidence interval [0.287, 0.423], excluding 0, hence H03 is rejected in favour of the alternate hypothesis.

The chain multiple mediation effect was also examined in model four—whether social skills (both

political acumen and entrepreneurial opportunity recognition) mediates the relationships between perceived entrepreneurial education and entrepreneurship. The two mediator factors in the political acumen and entrepreneurial opportunity recognition were shown to be correlated. The study makes the assumption that the two factors does not mediate the relationship between perceived entrepreneurial education and entrepreneurship or entrepreneurial intent. Therefore, the mediating impact was examined using Hayes' (2013) multiple mediation approach. In accordance with procedure V3.1, the chain multi-mediation impact of political acumen and entrepreneurial opportunity recognition was substantially examined, and the 95% confidence interval of the mediating effect was determined by extracting 5,000 bootstrap samples. Table 3 presents the outcomes.

Table 3: Results of the multiple mediation model

Effect	Intermediate path	Effect Value	Boot standard error	Upper limit	Lower limit
Direct effect	EE→ENT	0.139	0.043	0.045	0.208
Mediating effect	EE→PA→ENT	0.252	0.038	0.157	0.304
	EE→EOR→ENT	0.086	0.024	0.041	0.125
	EE→PS→EOR→ENT	0.138	0.025	0.079	0.176
<i>EE, entrepreneurial education; PA, political acumen; EOR, entrepreneurial opportunity recognition; ENT, entrepreneurship.</i>					

Source: Researcher’s Computation, 2022.

Table 3 shows the results of the direct and multiple mediation model. Entrepreneurial education→Entrepreneurship had a significant direct impact of 0.139, with a 95% confidence range of [0.045, 0.208], excluding 0. Entrepreneurial education→political acumen→entrepreneurship had a significant mediation impact of 0.252, with a 95% confidence range of [0.157, 0.304], excluding 0. Entrepreneurial education→entrepreneurial opportunity recognition→entrepreneurship, with a mediating impact of 0.086, a 95% confidence interval of [0.041, 0.125], excluding 0, and a significance level of 0.01. Indicating that political acumen and entrepreneurial opportunity recognition are between entrepreneurial education and entrepreneurship, hence, H04 is rejected in favour of the alternate hypothesis. The multi-mediating effect of the entrepreneurial education→political acumen→entrepreneurial

opportunity recognition→entrepreneurship chain is 0.138, 95% confidence interval [0.079, 0.176], excluding 0.

4.4. Discussion of Findings

Based on social cognitive theory, the study investigated the mechanisms through which perceived entrepreneurial education affected entrepreneurship. The individual and continuous mediation roles of social skills, as well as the political acumen and entrepreneurial opportunity recognition capacity of student entrepreneurs, were simultaneously tested and confirmed using the structural equation model. An alternative approach to thinking about the effect of perceived entrepreneurial education on the entrepreneurship of intermediary mechanisms is offered by the chain-based multi-mediating function in entrepreneurship interactions. The outcomes of the empirical investigation are as follows: Main impact

test, first. The findings indicate that views of entrepreneurial education and perceptions of entrepreneurship will be positively correlated. (2) Test of intermediary impact. The test results demonstrate that perceived entrepreneurial education and entrepreneurship are respectively mediated by political acumen and entrepreneurial opportunity recognition. Political acumen improves one's capacity to spot business possibilities and acts as an ongoing mediator in the perceived benefit of entrepreneurial education on entrepreneurial intent.

The results provide insight into how entrepreneurial education-related abilities are related to inventive awareness, innovative ability, and innovative personality. They also provide an answer to the issue of whether entrepreneurship and innovation are observable. In addition to developing students' human capital, such as their knowledge and abilities, entrepreneurial education has the potential to alter their attitudes and behaviours. Entrepreneurship education as environmental effects on shifting attitudes has, for the most part, been disregarded (Medvedeva, 2011). According to the social cognitive theory, human conduct is influenced by the environment and the difference between possessing capabilities and believing in such skills. If they believe their own actions and talents can produce the desired consequences, people are more likely to pursue their goals. According to social cognitive theory, people may see their future selves through cognitive and motivational processes, acting as agents and active participants in the creation of the conditions that surround them.

We take a novel way to comprehending how entrepreneurial education-related abilities might affect entrepreneurship. According to the social cognitive theory, persons who get entrepreneurial education not only acquire new skills but also immerse themselves in the entrepreneurial community, boosting their capacity to identify and seize genuine business opportunities within the community. The nature of entrepreneurial talent is multifaceted and changing (Zahra et al., 2006). The fundamental elements of entrepreneurial competence are skills and the capacity to recognise business opportunities. The general talents of entrepreneurs are explicit political acumen based on infection, attraction, and persuasion, whereas the professional skill that entrepreneurs require is the ability to recognise business opportunities. In order to confirm that political aptitude and the ability to recognise business opportunities play multiple mediating roles in the

relationship between perceived entrepreneurship education and innovation, structural equation modelling is used. This method clarifies the precise route and internal mechanism of entrepreneurial competence in the impact of perceived entrepreneurial education on entrepreneurship. The research findings support the notion that perceived entrepreneurial education shows the primary forces influencing the growth of entrepreneurship as it shapes entrepreneurial aptitude from general to professional.

5. Conclusion and Recommendation

The study looked into the ways by which perceived entrepreneurial education influenced entrepreneurship of university students. The structural equation model was used to test and confirm the individual and continuous mediation roles of social skills in the form of political acumen and entrepreneurial opportunity recognition student entrepreneurs of university students. The test results show that perceived entrepreneurship education and entrepreneurship are mediated by political acumen and entrepreneurial opportunity recognition, respectively. Political acumen enhances one's ability to identify business opportunities and serves as a continuing intermediary in the perceived benefit of entrepreneurial education on entrepreneurship.

The primary focus of entrepreneurial education is learning; thus students should take into account the distinctive aspects of their campus. Numerous entrepreneurial ideas carried out by students are built on original technological change and ingenuity. Student entrepreneurs should construct a learning network by their engagement in the classroom, utilise their influence to continually acquire and exchange valuable resources through persuasion and collaboration, create a network of shared social resources, and develop professional entrepreneurial and social skills.

References

- [1] Anderson, N., Potočnik, K., & Zhou, J. (2014). Innovation and creativity in organizations: a state-of-the-science review, prospective commentary, and guiding framework. *Journal of Management*, 40, 1297–1333. <https://doi.org/10.1177/0149206314527128>
- [2] Ardichvili, A., Cardozo, R., & Ray, S. (2003). A theory of entrepreneurial opportunity identification and development. *Journal of Business Venturing*, 18, 105–123. [https://doi.org/10.1016/S0883-9026\(01\)00068-4](https://doi.org/10.1016/S0883-9026(01)00068-4)

- [3] Bacigalupo, M., Kampylis, P., Punie, Y., and Van den Brande, G. (2016). *EntreComp: the entrepreneurship competence framework*. (Luxembourg: Publication Office of the European Union). <https://doi.org/10.2791/593884>
- [4] Bandura, A. (1978). Social learning theory of aggression. *Journal of Communication*, 28, 12–29. <https://doi.org/10.1111/j.1460-2466.1978.tb01621.x>
- [5] Bandura, A. (2018). Toward a psychology of human agency: pathways and reflections. *Perspectives of Psychological Science* 13, 130–136. <https://doi.org/10.1177/1745691617699280>
- [6] Baron, R. A., & Tang, J. (2009). Entrepreneurs social skills and new venture performance: mediating mechanisms and cultural generality. *Journal of Management* 35, 282–306. <https://doi.org/10.1177/0149206307312513>
- [7] Beghetto, R. A., & Kaufman, J. C. (2010). *Nurturing creativity in the classroom: How to discourage creative thinking in the classroom*. Cambridge University Press.
- [8] Blickle, G., Wendel, S., & Ferris, G. R. (2010). Political skill as moderator of personality-job performance relationships in socioanalytic theory: test of the getting ahead motive in automobile sales. *Journal of Vocational Behaviour*, 76(2), 326–335. <https://doi.org/10.1016/j.jvb.2009.10.005>
- [9] Brouer, R. L., Harris, K. J., & Kacmar, K. M. (2011). The moderating effects of political skill on the perceived politics-outcome relationships. *Journal of Organisational Behaviour*, 32, 869–885. <https://doi.org/10.1002/job.718>
- [10] Chandler, G. N., & Hanks, S. H. (1994). Founder competence, the environment and venture performance. *Entrepreneurship Theory and Practice*, 18, 77–89. <https://doi.org/10.1177/104225879401800306>
- [11] Chen, C. M., & Chang, C. C. (2014). Mining learning social networks for cooperative learning with appropriate learning partners in a problem-based learning environment. *Interactive Learning Environment*, 22, 97–124. <https://doi.org/10.1080/10494820.2011.641677>
- [12] Covin, J. G., & Slevin, D. P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal* 10, 75–87. <https://doi.org/10.1002/smj.4250100107>
- [13] Falck, O., Gold, R., & Heblich, S. (2016). Lifting the iron curtain: school-age education and entrepreneurial intentions. *Journal of Economics Geography*, 17, 1111–1148. <https://doi.org/10.1093/jeg/lbw026>
- [14] Fang, R., Chi, L., & Chen, M. (2015). Bringing political skill into social networks: findings from a field study of entrepreneurs. *Journal of Management Studies*, 52, 175–212. <https://doi.org/10.1111/joms.12107>
- [15] Ferris, G. R., Treadway, D. C., Kolodinsky, R., & Hochwarter, W. A. (2005). Development and validation of the political skill inventory. *Journal of Management*, 31, 126–152. <https://doi.org/10.1177/0149206304271386>
- [16] Fillis, D., & Rentschler, R. (2010). The role of creativity in entrepreneurship. *J. Enterprising Cult.* 18, 49–81. <https://doi.org/10.1142/S0218495810000501>
- [17] Galloway, L., & Brown, W. (2002). Entrepreneurship education at university: a driver in the creation of high growth firms? *Educational Training*, 44, 398–405. <https://doi.org/10.1108/00400910210449231>
- [18] Giancesini, G., Cubico, S., Favretto, G., & Leitão, G. C. C. (2018). “Entrepreneurial competences: comparing and contrasting models and taxonomies” in *Entrepreneurship and the industry life cycle*. Vol. 6, eds. S. Cubico, G. Favretto, J. Leitão, and U. Cantner (Cham, Switzerland: Springer International Publishing), 13–32. https://doi.org/10.1007/978-3-319-89336-5_2
- [19] Granieri, A., La Marca, L., Mannino, G., Giunta, S., Guglielmucci, F., & Schimmenti, A. (2017). The relationship between defense patterns and DSM-5 maladaptive personality domains. *Frontiers in Psychology*, 8, 1–12. <https://doi.org/10.3389/fpsyg.2017.01926>
- [20] Gundry, L. K., Ofstein, L. F., & Kickul, J. R. (2014). Seeing around corners: how creativity skills in entrepreneurship education influence innovation in business. *Internal Journal of Management Education*, 12, 529–538. <https://doi.org/10.1016/j.ijme.2014.03.002>
- [21] Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: Guilford Press.
- [22] Irikefe, B. O. (2021). Technical, Vocational Education and Training (TVET): A Time-honoured Platform for Combating Violent Crimes and Volatile Activities in Nigeria. *International Journal of Vocational Education and Training*, 26(2), 21-43.
- [23] Jackson, D. L. (2001). Sample size and number of parameter estimates in maximum likelihood confirmatory factor analysis: A Monte Carlo investigation. *Structural Equation Modeling*, 8, 205–223.
- [24] Kacmar, K. M., Andrews, M. C., & Harris, K. J. (2013). Ethical leadership and subordinate outcomes: the mediating role of organizational politics and the moderating role of political skill. *Journal of Business Ethics*, 115, 33–44. <https://doi.org/10.1007/s10551-012-1373-8>
- [25] Kettunen, J., Kairisto-Mertanen, L., & Penttilä, T. (2013). Innovation pedagogy and desired learning outcomes in higher education. *On the Horizon*, 21, 333–342. <https://doi.org/10.1108/OTH-08-2011-0024>
- [26] Malebana, M. J., & Swanepoel, E. (2015). Graduate entrepreneurial intentions in the rural provinces of South Africa. *Southern African Business Review*, 19(1), 89–111.

- [27] McAllister, C. P., Parker Ellen, B. III, Perrewé, P. L., & Ferris, G. R. (2016). Checkmate: using political skill to recognize and capitalize on opportunities in the 'game' of organizational life. *Bus. Horiz.* 58, 25–34. <https://doi.org/10.1016/j.bushor.2014.09.008>
- [28] Medvedeva, T. A. (2011). Developing an innovative style of thinking and innovative behavior. *Syst. Pract. Action Res.* 25, 261–272. <https://doi.org/10.1007/s11213-011-9221-9>
- [29] Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Manag. Sci.* 29, 770–791. <https://doi.org/10.1287/mnsc.29.7.770>
- [30] Miller, D. (2011). Miller (1983) revisited: A reflection on EO research and some suggestions for the future. *Entrepreneurship Theory and Practice*, 35, 873–894.
- [31] Mitchelmore, S., & Rowley, J. (2010). Entrepreneurial competencies: a literature review and development agenda. *International Journal of Entrepreneurial and Behavioural Research*, 16, 92–111. <https://doi.org/10.1108/13552551011026995>
- [32] Moroz, P. W., & Hindle, K. (2012). Entrepreneurship as a process: Toward harmonizing multiple perspectives. *Entrepreneurship: Theory and Practice*, 36(4), 781–818 <https://doi.org/10.1111/j.1540-6520.2011.00452.x>.
- [33] Morris, N. M., Kuratko, D. F., & Pryor, C. G. (2013). Building blocks for the development of university-wide entrepreneurship. *Entrepreneurship Research Journal*, 4, 45–68. <https://doi.org/10.1515/erj-2013-0047>
- [34] Munyon, T. P., Summers, J. K., Thompson, T. W., & Ferris, G. R. (2015). Political skill and work outcomes: a theoretical extension, meta-analytic investigation, and agenda for the future. *Personnel Psychology*, 68, 143–184. <https://doi.org/10.1111/peps.12066>
- [35] Odoh, J. (2022, October 28). *Unemployment: NASENI Asks NUC, NBTE to Review Entrepreneurship Curriculum*. Leadership Newspaper. Retrieved October 21, 2022, from <https://leadership.ng/unemployment-naseni-asks-nuc-nbte-to-review-entrepreneurship-curriculum/>
- [36] Pittaway, L., & Cope, J. (2016). Entrepreneurship education: a systematic review of the evidence. *International Small Business Journal: Researching Entrepreneurship* 25(5), 479–510. <https://doi.org/10.1177/0266242607080656>
- [37] Prakash, D., Jain, S., & Chauhan, K. (2015). Entrepreneurial intensity in relation to presence of entrepreneurship development cell: A study of institutes offering professional courses in national capital region Delhi. *International Journal of Management Education*, 13(1), 95–105 <https://doi.org/10.1016/j.ijme.2015.01.004>.
- [38] Ruskovaara, E., & Pihkala, T. (2015). Entrepreneurship education in schools: empirical evidence on the Teacher's role. *The Journal of Educational Research*, 108, 236–249. <https://doi.org/10.1080/00220671.2013.878301>
- [39] Shane, S., & Eckhardt, J. T. (2003). "The individual-opportunity nexus" in *Handbook of entrepreneurship research*. ed. Z. Acs (Great Britain, England: Kluwer Academic Publishers), 161–191. https://doi.org/10.1007/0-387-24519-7_8
- [40] Tavella, E., & Franco, L. A. (2015). Dynamics of group knowledge production in facilitated modelling workshops: an exploratory study. *Group Decision and Negotiation*, 24, 451–475. <https://doi.org/10.1007/s10726-014-9398-2>
- [41] Tocher, N., Oswald, S. L., & Hall, D. J. (2015). Proposing social resources as the fundamental catalyst toward opportunity creation. *Strategic Entrepreneurship Journal*, 9, 119–135. <https://doi.org/10.1002/sej.1195>
- [42] Tolstoy, D. (2009). Knowledge combination and knowledge creation in a foreign-market network. *Journal of Small Business Management*, 47, 202–220. <https://doi.org/10.1111/j.1540-627X.2009.00268.x>
- [43] Treadway, D. C., Breland, J. W., & Williams, L. M. (2013). Social influence and interpersonal power in organizations roles of performance and political skill in two studies. *Journal of Management*, 39, 1529–1553. <https://doi.org/10.1177/0149206311410887>
- [44] Wang, Y.-L., Ellinger, A. D., & Wu, Y.-C. J. (2013). Entrepreneurial opportunity recognition: an empirical study of R&D personnel. *Management Decision* 51, 248–266. <https://doi.org/10.1108/00251741311301803>
- [45] Zahra, S. A., Sapienza, H. J., & Davidsson, P. (2006). Entrepreneurship and dynamic capabilities: a review, model and research agenda. *Journal of Management Studies*, 43, 917–955. <https://doi.org/10.1111/j.1467-6486.2006.00616.x>