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Article

Investigating the Influence of Entrepreneurial Behaviour and Innovation among Undergraduate Students of Selected Universities in Southwest Nigeria

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Abstract: Entrepreneurs are those who take initiative and work tirelessly to turn their business ideas into viable, successful companies through innovation. Understanding entrepreneurial behaviour is essential to comprehend how entrepreneurs establish, promote, and expand new businesses. This study investigates the influence of entrepreneurial behaviour and innovation among undergraduate students of selected universities in southwest Nigeria. The target audience was made up of undergraduate students from selected private universities in southwest Nigeria. To be more precise, the purposive sampling method was used to choose the study's participants. To gather information from a varied cross-section of students, 370 copies of the questionnaire were distributed. Only 296 copies of the surveys that were sent out were returned, which indicates an 80.2% response rate. Structural equation modelling was used to examine the data gathered. The results showed that opportunity identification significantly influences innovation more than self-efficacy and risk tolerance. Opportunity identification is the most important factor of entrepreneurial behaviour that helps students to be innovative and become entrepreneurs. The study recommended that to foster entrepreneurship behaviour and innovation among undergraduates, universities in Nigeria should integrate experiential learning opportunities across disciplines to nurture self-efficacy, opportunities identification, and risk tolerance through entrepreneurship education.



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Keywords: business ventures; entrepreneurial behaviour; entrepreneurship education; opportunity identification; risk-taking; self-efficacy; innovation

1. Introduction

In recent times, entrepreneurial education has become increasingly relevant among undergraduate students as they seek to prepare themselves for the rapidly changing job market. It helps them develop a range of skills, including critical thinking, problem-solving, communication, and leadership skills, that can be applied to various careers (Kassean et al. 2015; Kuratko 2005). Entrepreneurship education has also been a tool to develop entrepreneurial behaviour among undergraduate students. Entrepreneurial behaviour refers to the attitudes, actions, and mindset of college students who are interested in creating or leading their business ventures or working within entrepreneurial environments (Gieure et al. 2020). It involves identifying opportunities, generating ideas, and taking steps to turn those ideas into successful businesses (Clinton et al. 2021). Entrepreneurial behaviour can manifest in various ways, from starting businesses to participating in entrepreneurship competitions, joining entrepreneurship clubs, or taking courses in entrepreneurship (Kassean et al. 2015). Such activities allow students to develop their business acumen and networking skills, and gain practical experience in the field of entrepreneurship. Therefore, students who participate in various entrepreneurial programmes with a well-structured strategy are more likely to develop rich entrepreneurial behaviour. Some of the important factors that influence entrepreneurial behaviour are

self-efficacy, opportunity identification, and risk tolerance (Garaika et al. 2019; Koloba and May 2014; Nab et al. 2013).

Self-efficacy refers to an individual's belief in their ability to perform specific tasks or achieve specific goals (Santos and Liguori 2019). Opportunity identification entails spotting and seizing potential opportunities for career and personal development (Ucbasaran et al. 2009), while risk tolerance refers to the capacity and readiness to take risks (Moreschi 2005). Hassan and Buang (2017) believed that cultivating entrepreneurial behaviour in students is crucial since it might indirectly produce entrepreneurial and innovative ideas. By generating innovative ideas and developing businesses that solve problems, students can contribute to economic growth, create job opportunities, and address social issues in their communities such as poverty and unemployment (Fonseca et al. 2019).

Innovation is the heart and driving force behind an entrepreneur's development. It entails identifying and exploiting economic possibilities, resulting in establishing a company or commercial entity (McMullen et al. 2021). Innovation aids the development of new, more sustainable goods, services, and business models that advance both the economy and society. Due to its potential to address some of the most urgent problems facing the world today, including poverty, inequality, climate change, and environmental degradation, innovation is recognized as a major factor in sustainable development (Lüdeke-Freund 2020). Additionally, it can enable technology development and transfer, which will aid developing nations in their pursuit of Sustainable Development Goals (SDGs). These are a group of 17 interrelated objectives that were approved by the UN in 2015 to address issues such as poverty, inequality, and climate change. Many of these objectives, especially those connected to economic growth, environmental sustainability, and social inclusion, depend heavily on innovation.

In the educational context, many universities offer innovation workshops and events that provide opportunities for students to learn about innovation, develop new skills, and network with other like-minded individuals (Hassan et al. 2020). Despite the importance of entrepreneurship education to the development of entrepreneurial behaviour and innovation in developed nations, it has not been emphasised in developing countries such as Nigeria. Graduate unemployment has continued to be on the increase in Nigeria. According to Oyekanmi (2020), 80,291,894 economically active persons (aged 15 to 64) out of 116,871,186 are unemployed in Nigeria, and a little over 2.9 million of those unemployed in these statistics hold graduate or postgraduate degrees. This indicates that universities need to cultivate specific elements of entrepreneurial behaviour that can stimulate innovation among undergraduate students before graduation. Furthermore, there is still a great deal of uncertainty regarding how innovation will result in a more sustainable society, even though it has long been viewed as the answer to sustainable development (Lüdeke-Freund 2020).

While there is a substantial body of research on entrepreneurial behaviour, the majority of earlier studies have concentrated on examining how entrepreneurial behaviour influences the development of entrepreneurial intentions among undergraduates (Othman and Asiar 2019). More importantly, prior literary analyses were conducted in industrialized nations with a minimal focus on developing countries (Fonseca et al. 2019). There is a scarcity of literature to show that a strong relationship exists between entrepreneurial behaviour and innovation in Nigeria. Consequently, there is a gap in the body of knowledge.

This research stands to fill that missing intellectual gap by focusing on the development of entrepreneurial behaviour and innovations among undergraduate students in southwest Nigeria. Other studies have made use of correlation and regression analysis. This study makes use of a structural equation model for its analysis. The study's objectives are as follows: (a) to what extent does self-efficacy affect innovation; (b) in what way does opportunity identification affect innovation; (c) to what extent does risk tolerance influence innovation.

2. Literature Review

2.1. Entrepreneurial Behaviour

Entrepreneurial behaviour is the set of actions taken by an entrepreneur to alter and define an opportunity and position it as marketable with the primary objective of forming a new enterprise (Sharma 2021). Robbins et al. (2008) stated that entrepreneurial behaviour stems from the definition of attitudes. Attitudes are people's evaluative statements about items, people, and events; they reveal a person's inner thoughts toward an object which might be endorsed or opposed. Permatasari and Agustina (2018) revealed that early entrepreneurial experience influences students' decisions and behaviour regarding the pursuit of an entrepreneurial career and can help students to think and behave analytically, openly, flexibly, and strategically. Cortellazzo et al. (2020), also viewed entrepreneurial behaviour as a series of behavioural actions taken by the entrepreneur to position and accept the opportunity in the market. Hughes et al. (2021), argued that entrepreneurial behaviour refers to the actions taken by people who can see and appraise business possibilities, acquire the resources needed to take advantage of them, and take appropriate actions to ensure success. Furthermore, entrepreneurial behaviour refers to the conduct of people who are involved in the process of starting new businesses and whose activities are observable to others. Hence, an individual with entrepreneurial behaviour will enthusiastically engage in various entrepreneurship-related activities.

Schmidt et al. (2018) developed eight dimensions of entrepreneurial behaviour from the contributions of various researchers. These include: (i) an entrepreneur as a creative person (one who connects ideas, information, requirements, desires, and resources to create new services, products, and operational concepts); (ii) a leader (an individual with the capacity to motivate or control others' actions), a planner (the person who plans for the future, attempting to anticipate the measures required to achieve his or her objectives); (iii) opportunity detector (an individual who is aware of possible market prospects for innovative products and services); (iv) persistence (perseverance required to continue working on tasks and achieve goals, especially in the face of hardship); (v) risk-taking (the willingness to invest large resources in a project in the face of uncertainty); (vi) self-efficacy (the conviction in one's ability to manage the available resources required for the project's success); (vii) sociable (the ease with which one may effectively engage with others). In addition, Gielnik et al. (2020) stated that one of the factors that motivate an individual to launch a new business is influenced by self-efficacy. This study will make use of three (self-efficacy, opportunity identification and risk tolerance) of the eight dimensions of entrepreneurial behaviour indicated by Garaika et al. (2019), Koloba and May (2014), and Nab et al. (2013).

Self-efficacy: Self-efficacy plays an important role in entrepreneurship. Due to its direct and indirect role in analysing individual entrepreneurial goals, opportunity recognition, and other aspects, the importance of self-efficacy in the field of entrepreneurship has been highlighted by various scholars (Alammari et al. 2019). It describes a person's confidence in their capacity to carry out the duties and face the difficulties involved in beginning and operating a business (Elnadi and Gheith 2021). Self-efficacy measures a student's level of assurance in their capacity to take the essential steps to start a business (Alammari et al. 2019). Students who have a high level of self-efficacy in entrepreneurship have faith in their capacity to launch and run a successful business. They show a greater interest in engaging in entrepreneurial activities and are more inclined to view entrepreneurship as a viable and attractive career option. According to Bandura (1997), four stages can help entrepreneurs improve their sense of self-efficacy: (i) performance accomplishments; (ii) vicarious experience; (iii) verbal persuasion; (iv) physiological states or physiological arousal. Therefore, when faced with obstacles and setbacks, students with self-efficacy are more persistent and passionately driven to overcome them. They subsequently produce higher output.

Opportunity identification: According to Nab et al. (2013), opportunity identification is the act of identifying a market need that can be achieved by creating or providing a good or

service. Often, this is accomplished through investigation, idea generation, questionnaires, discussions, and participant observation. Opportunity identification is the process of being aware of the requirements or circumstances that must exist before an organization or particular management team may transform and create something new (Nab et al. 2013). Opportunities are identified by student entrepreneurs via social interactions and educational experiences and are based on their individualized perspectives (Olokundun et al. 2018a). Students' ability to identify opportunities is the driving force behind the entrepreneurial process. These abilities involve social networks and being knowledgeable, as well as access to the necessary information and resources required to take action and produce the desired results (Ucbasaran et al. 2009). According to Shook et al. (2003), the opportunity identification process has five stages: entrepreneurial intention, incubation, insight or opportunity identification, opportunity appraisal, and opportunity exploitation. Thus, it is important to note that opportunity identification is a desired entrepreneurial behaviour in the academic environment since it results from a nexus between students' objectives and their effective production of value (Olokundun et al. 2018a).

Risk Tolerance: Risk tolerance has been seen as a key characteristic of successful entrepreneurs. An entrepreneur is someone who possesses the creativity to combine resources in novel ways and is willing to bear the risk and/or uncertainty associated with the activity (Koloba and May 2014). The process of starting a new business is consistently referred to as risky due to the high degree of uncertainty and failure rate (Antoncic et al. 2018). A person's propensity for taking risks can be described as their willingness to do so. Students with a strong tendency for risk-taking will start businesses rather than look for conventional employment (Luc 2020). They are also risk-takers who are not afraid to take calculated chances and risk failure. According to Antoncic et al. (2018), taking risks is a key quality among students who want to work in the field of entrepreneurship and found successful businesses. Therefore, the ability to accept risks seems to be a key factor affecting students' decision to become entrepreneurs.

2.1.1. Innovation

A concept must be widely embraced and integrated into people's daily lives to be considered innovative (Aslam et al. 2020). Ridley (2020) defined innovation as the process of turning an idea into wealth. Innovation is the propensity to generate new ideas and thoughts in creating processes, products, and services (Fonseca et al. 2019). Innovation involves the creation of new technologies, products, services, processes, and business models that provide new economic possibilities (Oktavio et al. 2019). Innovation is not a random occurrence; instead, it is a systematic and streamlined process that requires rigour and can be learned and implemented (Shaher and Ali 2020). Obialo (2020) believed that the implementation of creative inspiration is innovation. Therefore, to succeed in inventing new things, an entrepreneur must have the foresight to seek out and harness the wellspring of creativity (Hisrich and Kearney 2013). Innovation has helped to create new products, services, and business models that are more sustainable and can contribute to economic growth and social well-being. The main components of students' innovation activities are innovative awareness and innovative ability, which are also impacted by innovation personality (Liu et al. 2019). Higher institution educates through demonstrating and sharing new technologies and allowing ideas to be debated. The facilitators have a responsibility to encourage students' creative thinking by providing ideas, and role models and generating ongoing opportunities (Aslam et al. 2020). The teaching atmosphere should be interactive as a result of students' innovative thinking, which is essential for their survival.

2.1.2. Entrepreneurship Education and the Role of Entrepreneurial Universities

Entrepreneurship education among undergraduate students is aimed at equipping them with the knowledge, skills, and mindset necessary to start and manage their businesses or become innovative and entrepreneurial individuals within established organizations (Moses et al. 2016). It typically includes a combination of theoretical learning and ex-

periential activities that foster entrepreneurial thinking, opportunity recognition, business planning, and other essential aspects of entrepreneurship (Ogbari et al. 2018). Universities and colleges often offer entrepreneurship courses or programmes that provide students with the necessary knowledge and tools to identify opportunities (Olokundun et al. 2018b). These programs can teach students frameworks for opportunity identification, encourage creative thinking, and provide case studies of successful ventures (Hassan et al. 2020). The goal is to inspire and empower undergraduate students to explore entrepreneurial career paths, develop their entrepreneurial competencies, and contribute to economic growth and innovation. Furthermore, by incorporating the principles and behaviours of successful entrepreneurs, entrepreneurial education can evolve to become more dynamic, practical, and impactful, shaping the vision of education towards fostering entrepreneurial behaviour and preparing students for the challenges and opportunities of the future.

2.2. Empirical Review

Entrepreneurial behaviour among undergraduate business, social science, and engineering students was also explored by Permatasari and Agustina (2018). The study's objective was to compare how personality traits affected students' entrepreneurial aspirations and actions. As independent variables, the study used personality characteristic categories such as internal locus of control, need for achievement, risk tolerance, and entrepreneurial consciousness. The results demonstrated that entrepreneurship education at private universities significantly influenced students' entrepreneurial behaviour by enhancing specific personality qualities. Similarly, of Johnson et al. (2018), investigated how perceived entrepreneurial behaviour (PEB) affected undergraduate students at the University of Ibadan's entrepreneurial intention (EI). The researchers concluded that it is important to encourage students' skill and talent development because doing so will boost their self-efficacy and inspire them to engage in creativity and environmentally conscious behaviour. Mahmoud and Garba (2019) stated the three variables affecting Nigerian university students' intentions to start their business. The study used three independent variables—attitude, subjective norms, and perceived behavioural control—as well as entrepreneurial intention as the dependent variable. The Theory of Planned Behaviour (TPB) model's theories served as the foundation for this investigation. The regression analysis's findings revealed that only attitude had a substantially positive relationship with students' entrepreneurial ambition; however, perceived behavioural control and subjective norms did not have a meaningfully negative relationship with entrepreneurial intention. The undergraduate entrepreneurship curriculum should focus more on developing students' entrepreneurial attitudes, according to policymakers. Furthermore, Othman and Asiar's (2019) study investigated the degree of entrepreneurial behaviour and goals among Bumiputra students enrolled in private universities in Kuala Lumpur. A questionnaire served as the study's primary research tool, and it was filled out by 387 students in total. The data were examined using SPSS version 22.0. The findings showed that students had modest levels of entrepreneurial behaviour and objectives. Entrepreneurial behaviour and intentions are moderately positively correlated, according to Pearson correlation coefficients.

2.3. Hypothesis Development for Entrepreneurial Behaviour and Innovation

2.3.1. Self-Efficacy and Innovation

Due to the close relationship between entrepreneurial self-efficacy and significant entrepreneurial outcomes, it has thus far gained attention in the field of entrepreneurship (Chen 2006). SE is a person's favourable psychological factor that fosters creativity and inner motivation and controls their behaviour in a particular way (Bandura 1997). Those who have high self-efficacy are more likely to pursue and subsequently stick with a task than people who have low self-efficacy beliefs (Nowiński et al. 2019). Students with higher SEs are better able to complete tasks, and it serves as a crucial indicator of originality and innovation (Rabbani et al. 2020).

Hypothesis 1 (H₁). *Self-efficacy positively influences innovation.*

2.3.2. Opportunity Identification and Innovation

The study of opportunities identification is becoming a crucial component of entrepreneurial education (Ogbari et al. 2018). Due to the propensity for seeing business opportunities, entrepreneurs are typically characterized as being innovative and imaginative. To be innovative, one must be creative, whether seeking to address a particular issue or spot a brand-new opportunity. According to Shane and Venkataraman (2000) and Gielnik et al. (2014), the two major factors that influences opportunity identification are prior knowledge (gathered through various forms of training and professional experience) and intellectual or psychological qualities.

Hypothesis 2 (H₂). *Opportunity identification positively influences innovation.*

2.3.3. Risk Tolerance and Innovation

Risk tolerance is emphasized in the creation of innovation and is frequently cited as an important motivator for the investigation and application of novel concepts. The lower the rate of failure of innovation, the greater the students' capacity to tolerate risk (Dhinaiya 2018). Establishing an inclusive innovation environment can help students' risk tolerance, which is a key aspect in encouraging autonomous innovation in businesses. According to research, it is essential to foster students' innovative abilities by supporting their autonomy when completing learning tasks (Martín et al. 2017). Therefore, a comfortable and accepting educational environment that fosters innovation can encourage student entrepreneurs (Koloba and May 2014; Moses et al. 2016).

Hypothesis 3 (H₃). *Risk tolerance positively influences innovation.*

3. Results

Hypotheses Testing and Structural Model

Structural equation modelling was employed to test the hypothesis. The model was selected to represent the interactions between various construction kinds. The statistical method known as structural equation modelling (SEM) quantifies and examines the connections between observable and latent variables. Figures 1–3 show the model fit metrics that were used to evaluate the general goodness of fit of structural equation modelling based on previously defined, widely accepted standards. Figure 1 illustrates the results of an examination of the data using the structural equation modelling technique, which reveals the connection between entrepreneurial behaviour and innovation. According to Figure 1, self-efficacy ($\beta = 0.209$, $p < 0.05$) and opportunity identification, which is the key indicator ($\beta = 0.370$, $p < 0.05$) and risk tolerance ($\beta = 0.293$, $p < 0.05$), are both significant predictors of entrepreneurial behaviour. The parameter estimates shown in Figure 2, the most important predictor of innovation is opportunity identification. The researcher concluded that entrepreneurial behaviour dimensions—self-efficacy, opportunity identification, and risk-taking—have a substantial impact on innovation because all of the p -values are less than 0.05, as shown in Figures 2 and 3 (p -values and t -values, respectively).

Table 1 below also shows the PLS statistical findings between entrepreneurial behaviour and innovation among undergraduate students at selected universities in south-west Nigeria. Innovation was measured with the four elements listed in the table, while nine particular items were used to measure entrepreneurial behaviour. The results demonstrate that entrepreneurial behaviour (self-efficacy, opportunity identification, and risk tolerance) is highly influenced by entrepreneurial innovation. The results showed that self-efficacy was significantly influenced by innovation ($\beta = 0.209$, $R^2 = 0.043$, t -statistics = 2.533 > 1.96, p -value = 0.000 < 0.05).

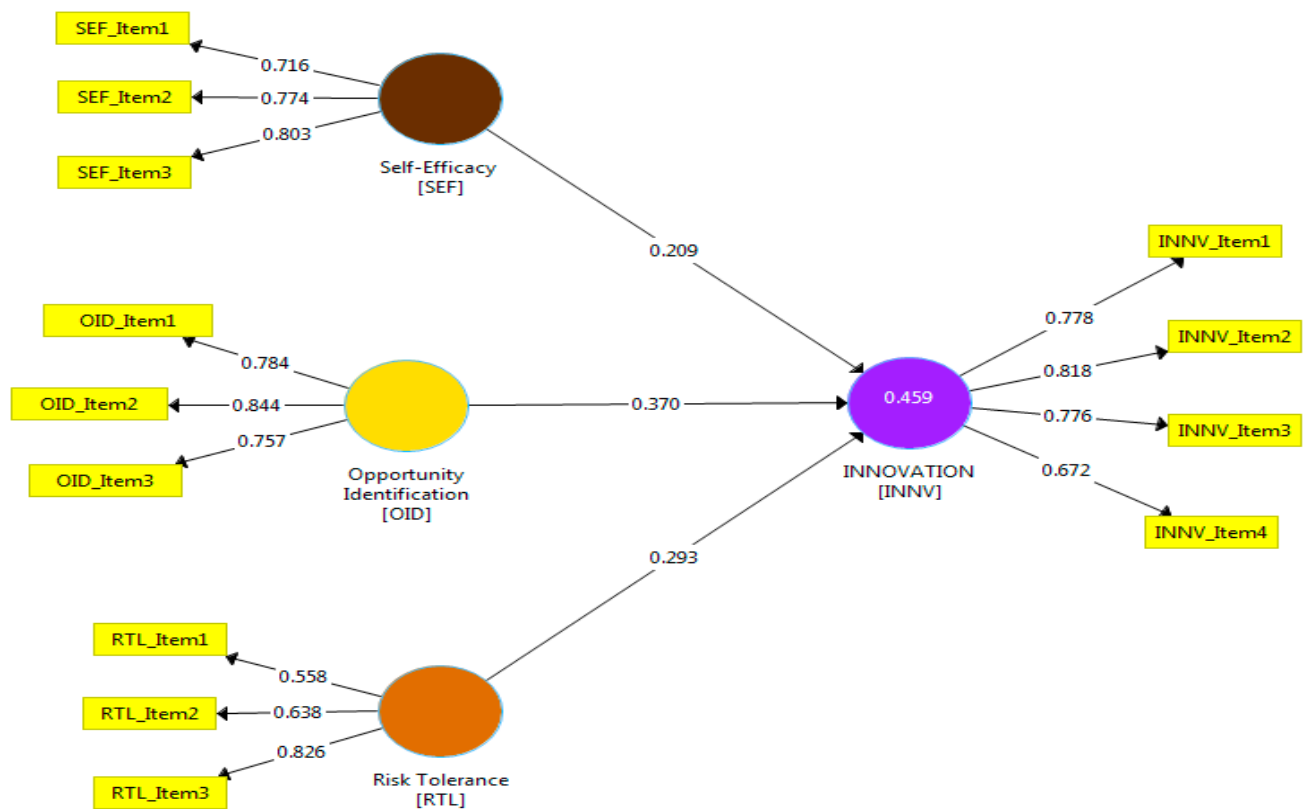


Figure 1. Path Diagram and Co-efficient of entrepreneurial behaviour and innovation.

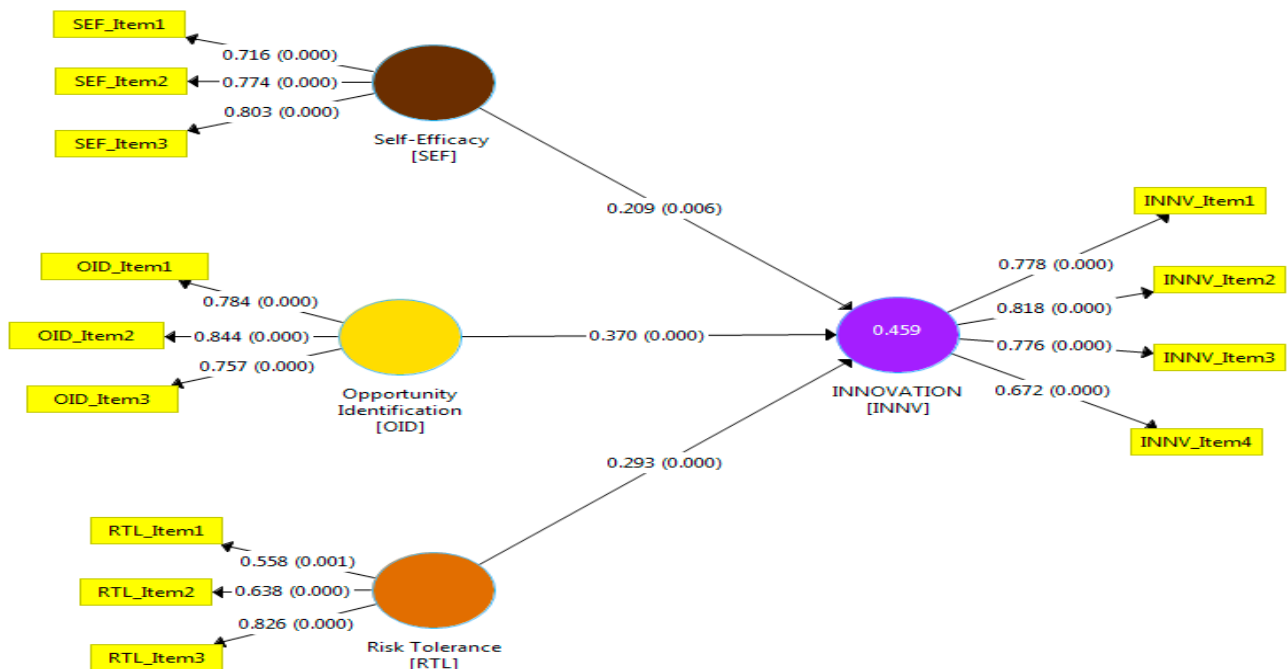


Figure 2. *p* values of self-efficacy, opportunity identification, risk tolerance and innovation.

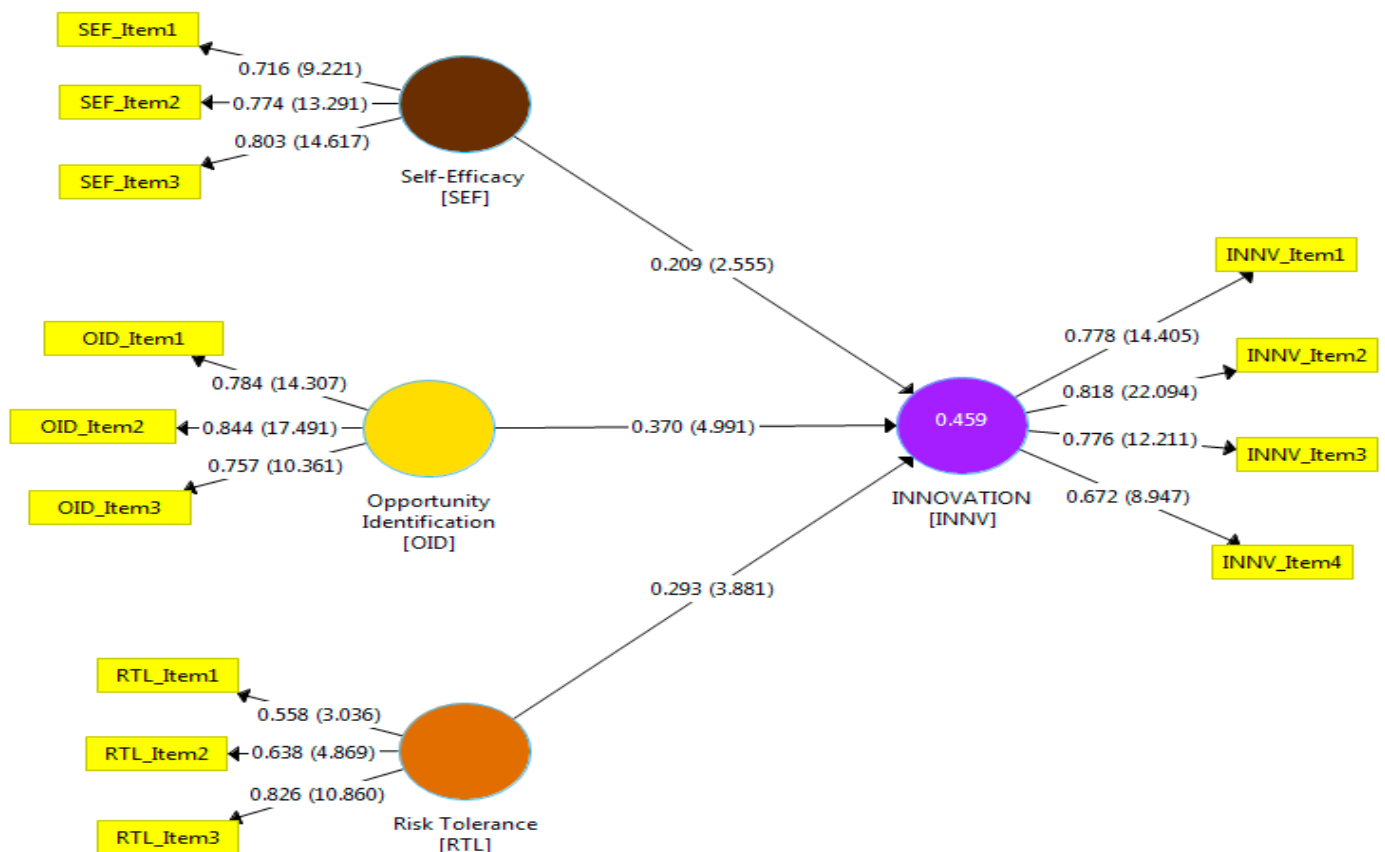


Figure 3. t values of self-efficacy, opportunity identification, risk tolerance and innovation.

Table 1. Path coefficient for Entrepreneurial Behaviour (EB) and Innovation (INV).

			Path Coefficient	R-Square	Std. Dev	t-Statistics	p-Value
SE	→	INV	0.209	0.043	0.014	2.533	0.006
OID	→	INV	0.370	0.136	0.022	4.991	0.000
RTL	→	INV	0.293	0.085	0.036	3.881	0.000

The Path coefficient of 0.209 suggests a strong correlation between entrepreneurial behaviour and innovation among undergraduate students at selected universities in southwest Nigeria. A self-efficacy variance of 88% may be attributed to innovation, according to the R^2 value of 0.136. Additionally, it was discovered that opportunity identification significantly affects innovation at ($\beta = 0.370$, $R^2 = 0.136$, t -statistics = 4.991 > 1.96, p -value = 0.000 < 0.05). The path coefficient of 0.370 suggests that undergraduate students at selected universities in southwest Nigeria have a positive association between opportunity identification and innovation.

The Path coefficient of 0.293 indicates a positive correlation between risk tolerance and innovation among Nigerian undergraduate students at selected universities in southwest Nigeria. According to the R^2 value of 0.085. Entrepreneurial behaviour significantly influences innovation according to statistical study ($\beta = 0.293$, $R^2 = 0.085$, t -statistics = 3.881 > 1.96, p -value = 0.000 < 0.05).

Opportunity identification has the highest predictive value, followed by risk tolerance and self-efficacy, according to the statistical analysis shown in Table 1. From this, it can be concluded that opportunity identification influences innovation more.

4. Materials and Methods

The objective of this paper was to investigate the influence of entrepreneurial behaviour and innovation among undergraduate students. Entrepreneurial behaviours such as self-efficacy, opportunity identification, and risk-taking were used to measure entrepreneurial behaviour. Three private institutions were specifically chosen for this study because they provide a BSc degree program in entrepreneurship in southwest Nigeria. Multiple sampling techniques (purposive, stratified, and convenience) were used, and a structured questionnaire was used for the study. The survey was purposive because only institutions that offered entrepreneurship as a BSc degree programme were chosen. The study was stratified in nature because the students were divided into strata. The questionnaires were administered at their convenience. Undergraduate students from these three universities make up the study's population. The sample size for this study was 370 respondents, which was established using a [Taherdoost \(2016\)](#) table sample size estimation method with a 0.05 margin of error and a 95% confidence level. Of the 370 copies of the survey distributed, 296 were validated as legitimate and suitable for analysis, yielding an 80.2% response rate. A Likert scale was used with five possible outcomes, which ranged from strongly agree, agree, undecided, disagree, to strongly disagree. A regression and a variance-based model were used. A variance-based model and regression were used to analyse the data with the use of Statistical Package for Social Sciences (SPSS) version 22 and structural equation modelling (SEM), PLS3. The identities of participants and institutions were kept confidential following ethical research procedures. The factor model was used to evaluate the degree of dependency, and the level of fitness and discriminant and convergent analysis was used to assess concept validity. Table 2 below display the biographical data of the respondents.

Table 2. Distribution of Biographical Data of the Respondents ($n = 296$).

Variables	Frequency	Percentage
Gender		
Male	125	41.9
Female	171	56.1
Age		
16 to 25 years old	231	78.0
25 years old and above	65	22.0
Educational Status/Levels		
200 level	102	34.5
300 level	98	33.1
400 level	96	32.4

According to the aforementioned demographic factors, 56.1% of respondents were female and 41.9% were male. In accordance with the data above, 78.0% of respondents were aged 16 to 25, and 22.0% were aged 25 or older. According to the table, 34.5% of respondents had a 200-level education, 33.1% had a 300-level education, and just 32.4% had a 400-level education.

Table 3 depicts the sources of entrepreneurial behaviour and innovation.

Table 3. Sources of items in the research instrument.

S/N		Number of Question	Sources
1	Entrepreneurial Behaviour (Independent Variable)	9	Schmidt et al. (2018) ; Gielnik et al. (2014) ; Garaika et al. (2019) ; Koloba and May (2014) ; Nab et al. (2013) .
2	Innovation (Dependent Variable)	4	Aslam et al. (2020) ; Lüdeke-Freund (2020) ; Ridley (2020)

5. Discussion of Findings

This study examined the influence of entrepreneurial behaviour on innovation. The first hypothesis predicted that self-efficacy has a significant influence on innovation among undergraduate students of selected universities in southwest Nigeria. The outcome of the structural equation modelling analysis revealed a connection between self-efficacy and innovation. This means that students who have high levels of self-efficacy see issues as challenges, create objectives, and are dedicated to achieving them; they intensify their efforts to succeed and be innovative. These students put in more effort, persist longer with challenging assignments, and display resilience by recovering from challenging learning circumstances toward innovation. This follows the finding of [Johnson et al. \(2018\)](#) and [Garaika et al. \(2019\)](#) that students that display self-efficacy behave innovatively and creatively.

Additionally, opportunity identification contributes significantly to innovation. This also suggests that identifying opportunities is essential to entrepreneurship. Finding a solid idea is every entrepreneur's first step. This relates to the innovation process as well as the creative pursuit of ideas. Discovering great ideas has never been simple, but recognizing opportunities can result in both personal and social benefits. This finding corroborates the finding of [Wei et al. \(2019\)](#) and [Hassan et al. \(2020\)](#) that the ability to recognize attractive business opportunities might encourage students' perceptions of innovation. It can also assist students in incorporating new information consistently to develop their innovative skills and personalities.

In the same vein risk tolerance has to do with having the necessary resources and controls in place to absorb or tolerate the specific risk, as well as accepting the outcomes of risk should they materialize. The investigation of the structural equation modelling yielded the conclusion that their risk tolerance significantly influences innovation. The findings demonstrate that university undergraduate students are proactive toward risk and innovation. This is in accordance with the works of [Moreschi \(2005\)](#) and [Dhinaiya \(2018\)](#) that if the risk tolerance assessment process is carried out well, financial plans will not end up with misapprehension and dissatisfaction.

Furthermore, the results from the findings show that self-efficacy has the lowest predictive value. This indicates that the Entrepreneurial Education (EE) syllabus of Nigerian universities can be improved to foster entrepreneurial behaviour (self-efficacy) and innovation by incorporating practical, hands-on experiences such as entrepreneurial projects, case studies, and real-world simulations, and by emphasizing design thinking, problem-solving, and creativity as core components of the curriculum. Additionally, integrating industry partnerships, mentorship programs, and exposure to entrepreneurial ecosystems can provide students with opportunities to apply their knowledge, develop entrepreneurial skills, and cultivate an innovative mindset. Hence, developing entrepreneurial behaviour among undergraduate students is essential for preparing the next generation of leaders and innovators, and it is an important component of a dynamic and thriving economy.

6. Conclusions and Recommendations

This study concludes that entrepreneurial behaviour influences students' ability to innovate. This is shown by the combining factor of entrepreneurial behaviour which is self-efficacy, opportunity identification, and risk tolerance. This implies that universities should channel students' self-efficacy, opportunity identification, and risk tolerance toward innovation to solve societal challenges such as unemployment, poverty, and insecurity through entrepreneurship education. To develop entrepreneurial behaviour with an emphasis on innovation, this study recommends that universities in Nigeria create an environment that fosters self-efficacy, opportunity identification, critical thinking, risk tolerance and creativity while offering industry partnerships and specialized courses that cover key entrepreneurial skills and concepts. Additionally, establishing entrepreneurship centres, supporting networking and collaboration, and providing access to funding and resources will further enhance the development of entrepreneurial education with a focus on innovation. These measures will help nurture entrepreneurial behaviour and innovative thinking that will

prepare students for entrepreneurial endeavours. Furthermore, to foster entrepreneurial behaviour and innovation among undergraduates, universities in Nigeria should integrate experiential learning opportunities across disciplines to cultivate entrepreneurial behaviour that embraces self-efficacy, opportunities identification, and risk tolerance.

6.1. Contributions to Knowledge

1. This study contributed to the literature by showing the link between self-efficacy and innovation.
2. This study extends the extant literature on opportunity identification by providing empirical validation of its role in innovation among undergraduate students.
3. This study has also examined the particular function of risk tolerance as a prerequisite for innovation among undergraduate students.
4. This study offers concrete evidence of the distinctive role of research in undergraduate students' entrepreneurial behaviour.
5. This study contributes to sustainable development goal 9 (innovation, industry, and infrastructure) and goal 4 (quality education).

6.2. Limitation/Further Studies

1. Nigeria is divided into six geopolitical zones. For this study, only three private universities in southwest Nigeria with entrepreneurship degree programs were used. The study's scope could be expanded in the future to include other Nigerian regions and universities.
2. In this study, only structural equation modelling was employed. Utilizing the Smart Partial Least Square 3.0 approach, the assumptions were examined. In the future, research may employ several approaches, notably interviews, to obtain extra data that this quantitative study did not.
3. Only selected universities that offer entrepreneurship BSc degree programmes in southwest Nigeria were included in the target audience. Other researchers can make use of universities that offer entrepreneurship courses in any part of Nigeria.

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