Technopreneurship Engagement: The Behavioral Intentions of Nigerian and Indonesian Undergraduates in an Emerging Society 5.0

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Abstract. Developing the mindset of the younger ones towards technopreneurship engagement is important so as to reduce youth unemployment. This study therefore investigated some factors namely entrepreneurship attitudes, skills, and knowledge (e-ASK) in relation to the behavioral intentions to technopreneurship engagement among Nigerian and Indonesian Undergraduates in an Emerging Society 5.0. The descriptive research design was used. The study was piloted by two null hypotheses. The target population comprised all 5019 undergraduates in two purposively selected Nigerian and Indonesian universities, out of which 336 were selected through stratified random sampling technique. A self-designed, validated, and reliable instrument (r=.88) entitled “Behavioural Intentions of Technopreneurship Engagement Scale (BITES)” was used for data collection. Methods of data analysis were Multiple Regression and Independent t-test. Findings showed that the joint contributions of e-ASK to the variance in technopreneurship engagement were 5.5%. There was also significant difference in behavioral intentions to technopreneurship engagement among Nigerian and Indonesian undergraduates (t=2.376; df=334, p<.05). In broad term, this study investigated the behavioral intentions of Nigerian and Indonesian undergraduates towards technopreneurship engagement in an emerging society 5.0. Specifically, the objectives of the study are to: 1) determine the joint contributions of entrepreneurship attitudinal, entre-preneurship skills, entrepreneurship knowledge (e-ASK) in predicting the behavioral intentions for technopreneurship engagement.

Key words: entrepreneurial attitudes, entrepreneurial skills, entrepreneurial knowledge, behavioral intentions


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INTRODUCTION

Entrepreneurship or entrepreneurship is actually not foreign to the community, both in terms of historical (historical) and normative. Doing business or buying and selling is the process of transferring ownership of goods or property to another party by using money as a medium of exchange. This activity is inseparable from daily human activities. Opportunities are things that must be used for entrepreneurs, because opportunities can provide an opportunity for someone when they will start entrepreneurship (Short et al., 2010). Pairs Trading is a trading strategy consisting of a long position in one security and a short position in another security in a predetermined ratio. If the two securities are stocks from the same financial sector (like two mining stocks), one may take this ratio to be unity (Elliott et al., 2005) In order to fulfill primary and secondary needs, humans carry out countless buying and selling transactions. In an economic system, buying and selling will encourage trade, and stimulate commerce and industry.

With growing production, it will encourage new jobs and bring goodness to trade activities. With the opening of employment opportunities, people's income will increase and the industry will develop more. findings (Gedeon, 2010) Entrepreneurship is a multi-dimensional concept that includes owning a small business (Risk Theory), being innovative (Dynamic Theory), acting as a leader (Traits School), or starting up a new company (Behavioural School). It includes spotting opportunities to drive the market toward equilibrium (Austrian School) or causing disequilibrium through “creative destruction” (Schumpeter). Entrepreneurship as a function of the types of people engaged in entrepreneurial activity and, as a result, has largely overlooked the role of opportunities.(Alvarez & Barney, 2008) Generally, entrepreneurship entails finding out the opportunities and converts the same into reality in the form of products and services to maximize profit and develop a business. Entrepreneurship is an important issue in the economy of a developing nation. The economic progress or decline of a nation is largely determined by the existence and role of this group of entrepreneurs. No nation in the world is capable of becoming a developed country without being supported by a number of young people and entrepreneurial communities. Promoting entrepreneurship has become a key instrument of policies for economic growth and employment creation (Stam et al., 2009).
Enterprise development: is a third and the most critical. This states the supports and services that incubate and help develop their own businesses. It goes beyond entrepreneurship education by helping youth to access small loans that are needed to begin business operations and by providing more individualized attention to the development of a viable business idea (Awogbenle & Iwuamadi, 2010). It is a decisive factor for economic development and as a key enabler of innovation (Acs & Audretsch, 2003). However, in this era of technology, there emerged a new concept called Technopreneur-ship, which involves human innovations with the help of technology for individual and national socio-economic development. According to (Bailetti, 2012), technology entrepreneurship is a vehicle that facilitates prosperity in individuals, firms, regions, and nations. Unlike a normal entrepreneur, a technopreneur begins his business with nothing but with a brainstorming idea to create a product or solution that uses technological solutions to change the way of doing something in an orthodox way. With up to 4 times the range, 2 times the speed, 8 times the broadcast message capacity, and increased coexistence with other cellular and wireless technologies, Bluetooth enhancements open up more possibilities than ever before. In industry 5.0, bluetooth has great speed compared to the previous one (Yaakop et al., 2017). In an emerging era of Society 5.0, technopreneurship seems to be favored. This is because the era of Society 5.0 signifies the advent of a society where advanced technologies such as artificial intelligence (AI), big data, Internet of Things (IoT), and robotics are further enhanced and implemented into our industries and social lives, thereby changing the ways of our society in such a dramatic way as to seem to have happened in a disruptive manner.

Advances in information technology in the modern era are currently growing rapidly from year to year. But it seems that it has not been widely used by people in this country. Advances in information technology should be able to be used to start a business or business for people who want to maintain their lives for the better. Technology entrepreneurship lies at the heart of many important debates, including those around launching and growing firms, regional economic development, selecting the appropriate stakeholders to take ideas to markets, and educating managers, engineers, and scientists. Unless a generally accepted definition of technology entrepreneurship is established, however, these debates lose their focus (Bailetti, 2012). New technology based firms, immersed as they are in the challenge of finding an application for their promising technology, face an information asymmetry with the market. Regardless of the personal reputation and background of the entrepreneur, customers are reluctant to consider a new and untested product from an unknown new venture (Giones & Miralles, 2015). Entrepreneurial organizations are unique. Depending on the type of enterprise (technology intensive, manufacturing, etc.) or the kind of industry (technology), start-ups are usually small, constantly changing, and their financial capabilities are limited. Dynamic environmental variables, such as competition, changes in technology, and governmental policies require careful attention both entrepreneurs and policy makers (Todd & Javalgi, 2007).

According to (Vamvaka et al., 2020), researchers like (Hindle et al., 2009) have started theorizing and focusing, since many years ago, their attention on developing models for understanding and potentially predicting entrepreneurial behavior. The term “intention” has been defined by various authors in convergent ways. A generic definition of behavioral intention is provided by (Ajzen, 2002), for whom intentions represent “indications of a person’s readiness to perform a behavior.” Entrepreneurial intention can therefore be seen as a strong predictor of planned behavior towards venture creation since starting a business is an intentional act (Fayolle, 2007);(Owoseni, 2014). One of the research streams in the literature, regarding the formation of behavioral intention has been the role of attitudes. Attitude toward a behavior refers to the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question (Ajzen et al., 2009). (Vamvaka et al., 2020)argued that many studies that have examined the fit of the theory of planned behavior in the domain of entrepreneurship have commonly concluded that both attitude and planned behavior control PBC are significant predictors of intention. (Krueger et al., 2013) further argued that entrepreneurial attitudes and perceptions play an important role in creating an entrepreneurial intention. Research conducted by (Nurdiyanto, 2018) technopreneurship and participant skills have a positive effect of 9.37% on the learning process.

At a time of substantial changes in the global economy, the creation and development of high-growth, technology-oriented firms have been recognized as critical factors for increasing national (and local/regional) wealth and competitiveness. In this context, TEE can play a key role by facilitating the creation of economic value from technological change (Boocock et al., 2009). Technology is very important for entrepreneurship because according to (Audretsch & Ciaiazza, 2016) High-growth regions offer effective levels of formal institutions (such as technology licensing offices, business angels, venture capital, incubator firms) and informal supports (such as risk oriented culture, social norms, laws for property protection, regulation of entry) that positively influence knowledge creation, technology transfer and entrepreneurship. Besides the findings(Hülsbeck & Pickavé, 2014) our results
clearly show that high-technology entrepreneurship is highly dependent on regional knowledge production by industry and university, while technology entrepreneurship does not depend on these factors. Then (Supriyati et al., 2017) the study evidences how regulatory environmental conditions (property rights and government programs) enhance while other regulatory conditions (support for science and technology) and normative conditions (opportunity perception and national culture) simultaneously retard the probability that a new/established venture develops new technology entrepreneurship initiatives. These effects are moderated and intensified by the influence of the economic cycles.

The information age provides a very large scope in organizing activities through new, innovative, transparent, accurate and timely ways so that the information process will be faster and easier. According to (Abraham et al., 2017) an online survey investigated whether and how names of advanced driver assistance systems (ADAS) and automation features relate to expected automation levels. Systems with “Cruise” in their names were associated with lower levels of automation. “Assist” systems appeared to create confusion between whether the driver is assisting the system or vice versa. Survey findings indicate the importance of vehicle technology naming and its impact in influencing drivers’ expectations of responsibility between the driver and system in who performs individual driving functions. Branding of high-technology products has evolved along with the development of mass production and mass marketing. In our brand value model for technology B2B markets, tangible performance-, price- and distribution-related components have shown to be of the highest importance. (Hamann et al., 2007); (Altschuler & Tarnovskaya, 2010). Finding (Rubera & Droege, 2013) Tobin's q relationship was equal across all branding strategies; technology innovation appears to be key for investors. Second, for design innovation, the impact for Corporate Branding was positive while for Noncorporate it was null; the same pattern was observed for sales and Tobin's q. Third, for the interaction, the impact for Corporate Branding was significantly less than the positive impacts for Noncorporate. For Noncorporate, the marginal impact of design innovation on sales or Tobin's q increased with the level of technology innovation. For Corporate Branding however, there was no interaction in the case of sales and a negative interaction for Tobin's q. Thus, the marginal impact of design innovation on Tobin's q decreased with increasing levels of technology innovation. The unprecedented digital revolution has transformed the meaning and forms of entrepreneurship across the globe. The emerging field of technology entrepreneurship research has not been able to keep pace with the fast changes in the digitization of our society and economy (Giones & Brem, 2017).

Findings (Mosey et al., 2017) no longer debating how it should be defined, and whether it is important, but should focus upon how best to investigate, analyze and share how technology entrepreneurship can be encouraged across the myriad of international regions and universities that seek to do so. As developing countries, Indonesia and Nigeria continue to improve their network infrastructure by following various developments in information technology that will lead to an era where internet use has become a daily necessity for all activities. People are now familiar with terms such as e-commerce, e-government, e-entrepreneurship, e-education, e-library, e-journal, and all electronic-based ones. Finding (Mathew, 2010) elaborate the barrier which is faced by women in carrying out entrepreneurial activity in the Middle East. The use of ICT tools and techniques will help the women in business and developing the activity to receive consideration in the society. The women in Middle East countries face various challenges which restrict them to undertake entrepreneurial activities and use of ICT. (Tshikovhi & Shambare, 2015)'s study confirmed that personal attitudes have significant influence on entrepreneurship intentions, and that personal attitudes were observed as having a greater influence than entrepreneurial knowledge. Tshikovhi and Shambare's study demonstrated that personal attitudes (β= 0.624) had a higher contribution to entrepreneurship intentions than entrepreneurship knowledge (β= 0.510). What can be inferred from the findings of Tshikovhi and Shambare's study is that entrepreneurship knowledge is equally an important predictor worthy of investigating in a study of this nature. This undoubtedly shows that entrepreneurship knowledge is important. (Tshikovhi & Shambare, 2015)'s study therefore established that entrepreneur-ship intentions were influenced by entrepreneurial knowledge.

Further, entrepreneurship skills have also been found very relevant in explaining the possible predictors of behavioral intentions to technopreneurship engagement. By entrepreneurial skills, (Liñán & Chen, 2009) meant those activities or know-how required to establish and operate an enterprise successfully. Research findings by (Rosly et al., 2015) found that creativity does influence one's entrepreneurial intentions and should be considered as part of the overall analysis in disclosing one's entrepreneurial competence. They referred to the possibility of learning and adopting exclusive characteristics that are essential for performing entrepreneurial tasks that involve interactions within a social and material environment (Pyysäinen et al., 2006). Technopreneurship potential of graduates has become one of the national agenda and has been attracting the interest of policy makers, educationists and de-
Technopreneurship is the process of organizational creativity it is also a process of main stream innovation to continually find solutions to important corporate problems and implementing the solutions to, in turn, satisfying the economy or target. (Fowosire & Idris, 2017) Regarding the relationship between entrepreneurial skills and behavioral intentions to technopreneurship engagement (Scherer et al., 1991) reported that entrepreneurial skills in the form of higher personal attraction and subjective norms foster individuals to feel competent and venture into entrepreneurship. Digitization of products and services across industries, the entrepreneurial opportunities in these markets are also increasing infused with digital technologies. The digital entrepreneurship research agenda proposed here rests on this premise. The research questions and issues outlined here would hopefully not only motivate but also guide future research efforts in this area (Nambisan, 2017).

Based on the afore background, it then presupposes that there is an urgent direct need for a study that will suggest possible student-domiciled factors which are capable of spur their intentions to engage in technopreneurship. This study therefore interrogated the behavioral intentions among Nigerian and Indonesian undergraduates to engage in technopreneurship. Youth constitutes a significant population in any country. They are usually the productive segment of the population. However, there has been a high rate of unemployment among youths in developing nations which has become worrisome among the generality of the people. In fact, hardly is there any forum concerning youth that the issue of their unemployment will not be brought to the fore. The rate of unemployment has been mounting all over the world, especially with the recent global meltdown. (Owoseni, 2014). Digital entrepreneurship highly dependent on external sources of financing to foster growth (Cavallo et al., 2019). Among the most chosen alternative solution to unemployment issues is entrepreneurship (Egunsola et al., 2012). Digital technologies have the potential to democratize entrepreneurship by providing access to international market knowledge and facilitating interactions with customers and partners (Pergelova et al., 2019). Digital technologies have nowadays a significant impact on how new business ventures are imagined and created (Elia et al., 2020). Digital entrepreneurship has been viewed as a critical pillar for economic growth, job creation and innovation by many countries including the Member States of the European Union (Zhao & Collier, 2016). However, there seems to have been a paradigm shift from entrepreneurship to technopreneurship as a decisive factor for economic development and as a key enabler of innovation.

Netizens are the most active factor in the chain of ICIs. Given that the process of consumption for netizens is the process of transmission of Internet culture product, efforts should be made to enhance the dual roles of netizens as both the producers and governors of ICIs by strengthening their self-discipline. Specifically, in the era of AI, the requirement for quality entrepreneurs has become even higher. The entrepreneurs who will be needed in the future are those who can use AI to reconfigure the lines of production, distribution, exchange, and consumption in order to change the way humans live and think. Moreover, media and industry associations should properly guide public opinion and serve as a bridge between industries and the government, so as to create an orderly Internet entrepreneurial environment (Xie et al., 2019). A collective intelligence approach is then adopted to define a descriptive framework and identify the distinguishing genes of a digital entrepreneurship ecosystem (Song et al., 2022). There is an urgent need to address this ugly incident in view of serious negative consequences it has on the economic development of the nation. To prevent youth from engaging in banditry, kidnapping, and other forms of social vices, they need to be engaged in productive activities. With the advent of emerging technologies, there is the need for reorientation among the youths towards technopreneurship. The need to bridge this lacuna motivated the Researchers to embark on this study which investigated the behavioral intentions among Nigerian and Indonesian undergraduates to engage in technopreneurship.

In broad term, this study investigated the behavioral intentions of Nigerian and Indonesian undergraduates towards technopreneurship engagement in an emerging society 5.0. Specifically, the objectives of the study are to: 1) determine the joint contributions of entrepreneurship attitudinal, entrepreneurship skills, entrepreneursh knowledge (e-ASK) in predicting the behavioral intentions for technopreneurship engagement; 2) investigate the difference in behavioral intentions for technopreneurship engagement between Nigerian and Indonesian undergraduates.

Two null hypotheses were formulated and tested at 0.05 level of significance to guide the study. These null hypotheses are: 1) there is no significant joint contributions of entrepreneurship attitudinal, entrepreneurship skills, entrepreneurship knowledge (e-ASK) in predicting the behavioral intentions for technopreneurship engagement; 2) behavioral intentions for technopreneurship engagement between Nigerian and Indonesian undergraduates is not significantly different.

**METHOD**

Research method is a method used in a study to achieve research objectives. Research method or often
called research methodology is a research design or design. This design contains a formulation of the object or subject to be studied, data collection techniques, data collection and analysis procedures regarding the focus of a particular problem. The research method is "the methods used by researchers in designing, implementing, processing data, and drawing conclusions regarding certain research problems". The method used in this research is descriptive method. The approach used in this research is a quantitative approach. Descriptive research is a research method aimed at describing existing phenomena, taking place in the present or in the past. It is characteristic for descriptive research that it is restricted to factual registration and that there is no quest for an explanation why reality is showing itself this way. In principle, descriptive research is not aiming at forming hypotheses or development of theory. Another characteristic of descriptive research is objectivity or neutrality. Descriptive research is about describing how reality is. In this regard descriptive research differs from prescriptive research that it is primarily concerned with the question how the reality should be. Descriptive research is making inventories; prescriptive research is normative. It is characteristic for descriptive research that it is restricted to factual registration and that there is no quest for an explanation why reality is showing itself this way. In principle, descriptive research is not aiming at forming hypotheses or development of theory. Another characteristic of descriptive research is objectivity or neutrality. Descriptive research is about describing how reality is. In this regard descriptive research differs from prescriptive research that is primarily concerned with the question how the reality should be. Descriptive research is making inventories; prescriptive research is normative (Lans & Van der Voordt, 2002). Descriptive analysis is needed on research variables, but it is its own nature, and is not associated with other variables. Existing data from the results of the distribution of answers or questionnaire scores by respondents for each research variable, which will then be edited. This analysis is used to analyze the data by describing the data that has been collected as it is without intending to make conclusions that apply in general or generalizations. The collected data is then researched and processed and then distributed into tables, after which a descriptive discussion is carried out with numbers, percentages and frequency distributions.

The descriptive research design was used for the study, with a target population of all 5019 undergraduates in two purposively selected Nigerian and Indonesian universities. The sample size consisted of 336 participants who were selected through a stratified random sampling technique. A self-designed, validated, and reliable instrument \( r=0.88 \) entitled “Behavioural Intentions of Technopreneurship Engagement Scale (BITES)” was used for data collection. This instrument is made up of eight Sections. Section A sought the demographic background of the respondents, while Sections BD sought information on each of the sub-scales of e-ASK and behavioral intentions. Multiple Regression was used to test hypothesis one while hypothesis was tested with Independent t-test at 0.05 level of significance.

Before performing multiple linear regression analysis, the classical assumption test is carried out first, namely the normality test, which aims to determine whether the data is normal or not, according to (Ghozali, 2011) "The normality test aims to test whether in the regression model the confounding or residual variables have a normal distribution". This test aims to determine the residual value is normal or not. The normality test of the data used graphical analysis and statistical analysis using Kolmogorov-Smirnov. On the analysis of the graph refers to the book (Ghozali, 2011) the basis for making decisions on graph analysis: a) if the data spreads around the diagonal line and follows the direction of the diagonal line or the histogram graph shows a normal distribution pattern, then the regression model fulfills the assumption of normality. b) if the data spreads far from the diagonal and does not follow the direction of the diagonal line or the histogram graph does not show a normal distribution pattern, then the regression model does not meet the assumption of normality.

Then the Kolmogorov-Smirnov test refers to (Juliansyah, 2015) with the following applicable criteria: a) Determine the significant level of the test, for
example = 0.05, b) Compare p with the significant level obtained, c) If the significant obtained > , then the sample comes from a normally distributed population, d) If the significance obtained is < , then the sample does not come from a normally distributed population. After that the Multicollinearity Test is data that can be analyzed further so there will be no multicollinearity, according to (Ghozali, 2011) "Multicollinearity test aims to test whether the regression model found a correlation between the independent variables (independent). A good regression model should not have a correlation between the independent variables". One way to determine the existence of multicollinearity is to look at the tolerance value and the opposite value of the Variance Inflation Factor (VIF). There is multicollinearity if the tolerance value is 0.10 or equal to the VIF value 10. If the tolerance value is > 0.10 or VIF < 10, there is no multicollinearity. After that the Heteroscedasticity Test is data that can be analyzed further so there will be no heteroscedasticity, according to Ghozali (2011:139) "Heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another observation". The provisions of the heteroscedasticity test according to Ghozali (2011:139) are as follows: a) If there is a certain pattern, such as the dots that form a certain regular pattern (wavy, widen then narrowed), it indicates that heteroscedasticity has occurred. b) if there is no clear pattern, and the points spread above and below 0 on the Y axis, then there is no heteroscedasticity.

In addition to using the graphical method of testing the heteroscedasticity assumption, it can also be done with the statistical test method of the Glejser test. The Glejser test is carried out by regressing the absolute value of the residual on the independent variable. If the significant value is above the 5% or 0.05 confidence level, it can be concluded that the regression model does not contain heteroscedasticity. Multiple linier regression model analysis is used to simultaneously regress the independent variables and the dependent variable, according to (Sofar, Silaen, & Heriyanto, 2017) The multiple regression equation with two predictors or two independent variables is formulated as follows:

\[ Y = \alpha + b_1X_1 + b_2X_2 + b_3X_3 \]

Information:

- \( Y \) : dependent variable (dependent)
- \( X_1, X_2, X_3 \): independent variables (independent)
- \( b_1, b_2, b_2 \): regression line coefficient
- \( \alpha \): constant number

The variables in this study are divided into X and Y variables. This study was conducted to determine the effect of entrepreneurship attitudinal (X1), entrepreneurship skills (X2), entrepreneurship knowledge (X3) behavioral intentions (Y). Researchers also find out the dominant variables in terms of influencing the integrity of the manager.

The description of this research design is as shown in Figure 1.

**Figure 1. Research Design Model**

Information:

- X1: entrepreneurship attitudinal
- X2: entrepreneurship skills
- X3: entrepreneurship knowledge
- Y: behavioral intentions

1. Simultaneous Test (F Statistics Test) according to (Ghozali, 2011) "The F statistical test basically shows whether all the independent or independent variables included in the model have a joint effect on the dependent/bound variable". To test this hypothesis, the F statistic was used with the following decision-making criteria:

   a. Quick lock: if the F value is greater than 4 then Ho can be rejected at a 5% confidence level. In other words, we accept the alternative hypothesis, which states that all independent variables simultaneously and significantly affect the dependent variable.

   b. Comparing the calculated F value with the calculated F value with the F value according to the table. If the calculated F value is greater than the table F value, then Ho is rejected and Ha is accepted.

2. Partial Test (t statistical test) according to (Ghozali, 2011) "Test statistic basically shows how far the influence of one explanatory/independent variable individually in explaining the
dependent variables”. This partial test (t statistic) is used to determine whether each independent variable forming the regression model individually has a significant effect on the dependent variable or not. How to do the t test is as follows:

a. Quick lock: if the number of degrees of freedom (df) is n 20 or more, the degree of confidence is 5%, then Ho which states bi = 0 can be rejected if the value of t is greater than 2 (in absolute value). In other words, we accept the alternative hypothesis, which states that an independent variable individually affects the dependent variable.

b. Comparing the value of the t statistic with the critical point according to the table. If the calculated t statistic value is higher than the t table value, we accept the alternative hypothesis which states that an independent variable individually affects the dependent variable.

The coefficient of determination (R2) essentially measures how far the model’s ability to explain variations in the dependent variable is. The small value of R2 means that the ability of the independent variables in explaining the variation of the dependent variable is very very limited. A value close to one means that the independent variables provide almost all the information needed to predict the variation of the dependent variable. In general, the coefficient of determination for cross-sectional data is relatively low due to the large variation between each observation, while for time series it usually has a high coefficient of determination. The dominant test is used to determine which variable has the most dominant effect on the dependent variable. To determine the most decisive (dominant) independent variable in influencing the value of the dependent variable in a linear regression model. The beta coefficient is used to see the relative importance of each independent variable and there is no multicollinearity between the dependent variables.

RESULTS AND DISCUSSION

H01: There is no significant joint contribution of entrepreneurship attitudinal, entrepreneurship skills, entrepreneurship knowledge to the prediction of behavioral intentions for technopreneurship engagement.

The regression model meets the assumption of normality if the histogram shows a normal distribution pattern and the probability plot is located around the diagonal line, and the significance value of the Kolmogorov-Smirnov test is greater than used. The test results are presented as follows:

![Figure 2. Normality Test Results](image)

![Figure 3. Heteroscedasticity Test Scatterplot](image)

This study has a Variance Inflation Factor (VIF) less than 10, so it can be said that there are no symptoms of multicollinearity.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.253a</td>
<td>.064</td>
<td>.055</td>
<td>1.91039</td>
<td>1.674</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Entrepreneurship Knowledge, Entrepreneurship Attitudinal, Entrepreneurship Skills
b. Dependent Variable: Behavioral Intentions
The results of the analysis in Figure 3 show that the points spread randomly and do not form a certain pattern. This Multiple regression analysis was used to determine the joint contribution of the selected factors to the prediction of behavioral intentions for technopreneurship engagement among Nigerian and Indonesian undergraduates. From Table 1, it was revealed that the Adjusted R Square value of .055 indicated entrepreneurship knowledge, entrepreneurship attitudinal, entrepreneurship skills jointly contributed 5.5% of the variance in the behavioral intentions for technopreneurship engagement. However, in order to determine the significance or otherwise of this obtained Adjusted R Square value, Analysis of Variance was run.

**Table 2. F Value of the Adjusted R Square of e-ASK**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>82,580</td>
<td>3</td>
<td>27,527</td>
<td>7.542</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>1211,658</td>
<td>332</td>
<td>3.650</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1294,238</td>
<td>335</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Behavioral Intentions
b. Predictors: (Constant), Entrepreneurship Knowledge, Entrepreneurship Attitudinal, Entrepreneurship Skills

From Table 2, the F-value of 7.542 at degrees of freedom 3, 332 was significant (p<.05). This clearly indicated that the joint contribution of the selected explanatory factors to the prediction of behavioral intentions for technopreneurship engagement among Nigerian and Indonesian undergraduates was significant. These explanatory factors should always be taken very seriously in the determination of technopreneurship engagement.

**Table 3. Relative Contributions of the Selected e-ASK to the Variance in Behavioral Intentions for Technopreneurship Engagement**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>5.188</td>
<td>.791</td>
</tr>
<tr>
<td>Entrepreneurship Attitudinal</td>
<td>.260</td>
<td>.058</td>
</tr>
<tr>
<td>Entrepreneurship Skills</td>
<td>-.075</td>
<td>.057</td>
</tr>
<tr>
<td>Entrepreneurship Knowledge</td>
<td>.034</td>
<td>.054</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Behavioral Intentions

Further more, in terms of relative contributions of these selected explanatory factors to the variance in behavioral intentions for technopreneurship engagement, Table 3 showed that entrepreneurship attitudinal made the highest contribution (β=.250), followed by entrepreneurship skills (β=-.075), and then entrepreneurship knowledge (β=.036). However, only the contribution of entrepreneurship attitudinal was significant (p<.05).

H02: Behavioral intentions for technopreneurship engagement between Nigerian and Indonesian undergraduates is not significantly different.

**Table 4. Behavioral intentions for technopreneurship engagement between Nigerian and Indonesian undergraduates**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Nationality</th>
<th>X</th>
<th>SD</th>
<th>N</th>
<th>df</th>
<th>t</th>
<th>P</th>
<th>Remark</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Intentions for Techno-</td>
<td>Nigerian</td>
<td>7.00</td>
<td>1.56</td>
<td>336</td>
<td>334</td>
<td>-</td>
<td>.007</td>
<td>Sig.</td>
<td>Failed to accept H0</td>
</tr>
<tr>
<td>prneurship Engagement</td>
<td>English</td>
<td>7.58</td>
<td>2.26</td>
<td></td>
<td></td>
<td>2.376</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Student t-test was run to determine significant difference in behavioral intentions for technopreneurship engagement between Nigerian and Indonesian undergraduates. From Table 7, it was revealed that there was a significant difference (t=2.376; df=334, p<.05), and that the behavioral intentions for technopreneurship engagement among Indonesian undergraduates seem more favorable compared to their Nigerian counterparts. The Researchers therefore failed to accept the hypothesis that was postulated that Behavioral intentions for technopreneurship engagement between Nigerian and Indonesian undergraduates is not significantly different. Result from null hypothesis one which stated that there is no joint contributions of entrepreneurship attitudinal, entrepreneurship skills, entrepreneurship...
knowledge (e-ask) to the prediction of behavioral intentions for technopreneurship engagement showed that these selected factors jointly contributed 5.5% of the variance in the behavioral intentions for technopreneurship engagement, which was significant (F-value of 7.542 at degrees of freedom 3, 332 was significant at p<.05). It was shown further that entrepreneurship attitudinal made the highest contribution (β=.250), followed by entrepreneurship skills (β=.075), and then entrepreneurship knowledge (β=.036). These findings corroborate findings from some previous studies earlier reviewed in the background. For instance, Vamvaka, et al., (2020) argued that many studies that have examined the fit of the theory of planned behavior in the domain of entrepreneurship have commonly concluded that both attitude and planned behavior control PBC are significant predictors of intention. Regarding the relationship between entrepreneurial skills and behavioral intentions to technopreneurship engagement, (Scherer et al., 1991) reported that entrepreneurial skills in the form of higher personal attraction and subjective norms foster individuals to feel competent and venture into entrepreneurship. Also,(Tshikovhi & Shambare, 2015)'s study established that entrepreneurship intentions was influenced by entrepreneurial knowledge.

Also, result from the second hypothesis which stated that behavioral intentions for technopreneurship engagement between Nigerian and Indonesian undergraduates is not significantly different showed that there was a significant difference (t=-2.376; df=334, p<.05), and that the behavioral intentions for technopreneurship engagement among Indonesian undergraduates seem more favorable compared to their Nigerian counterparts. This finding might be due to the fact that Indonesian students are more exposed to technopreneurship in schools than their Nigerian counterparts.

CONCLUSION

The conclusions that have been obtained are students need to work on their entrepreneurship skills, entrepreneurship knowledge, and technological skills which were found to have contributed significantly to behavioral intentions to engage in technopreneurship, with significant difference established between Nigerian and Indonesian undergraduates which the latter had better behavioral intentions to engage in technopreneurship than the former. Nigerian undergraduates are advised to take a step above entrepreneurship to become technopreneurship by paying serious attention to all the selected factors in this study, the curriculum contents of Entrepreneurship education course in these two Institutions should be revised to incorporate the modern technopreneurship concept.

REFERENCES


