

Assessment of Determinants Affecting Student's Entrepreneur Career Intention to Search a Startup Opportunity in Africa

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Abstract

From last many generations unemployment velocity has been mounting in Ethiopia. So, this research aims to evaluate the determinants of Students' Entrepreneurial Career Intentions of university students of Ethiopia as a solution. A quantitative, cross-sectional research design and simple random sampling was adopted. Data was collected from the sample of 350 university students. In descriptive statistics, mean and standard deviation and in inferential statics correlation and regression analysis was use. To analyze the data SPSS version 20 was used. The results show, entrepreneurial intentions of students are influenced directly by the students' entrepreneurship education, innovativeness, proactiveness, risk taking and self-efficacy as correlation coefficient for all is having strong positive relation and with p-value is more than 0.05. It can be concluded from the regression analysis that innovativeness is the most contributing factor among all others explored variables. The findings suggest for ministry of higher education and universities to emphasize more on entrepreneurship education in developing personal skills, attributes and behavioral aspects to realize the full potentials of students with regards to entrepreneurial intention.

Keywords: Entrepreneurial Intentions, Behavior, Traits, Demographics, Entrepreneurship Education, Entrepreneurship Intention.

1.1 Introduction

In majority of countries, former students have been facing a deficient job opportunities. (Guzmán-Alfonso & Guzmán-Cuevas, 2012). Around the globe, learner opts for entrepreneurship, because it provides a cipher of alternative for precious careers. Thus, entrepreneurship has become a trendy part of investigate among academics (Chienwattanasook & Jernsittiparsert, 2019). According to Rusok (2017) entrepreneurship education is the process of developing the ability to recognizing trade opportunities. Since passion is a significant learning factor, passion and learning accompany entrepreneurial learning (Somjai & Sangperm, 2019).

However, entrepreneurship exploration in Africa has not acknowledged much attention from academics although this is changing as Africa is developing as an upcoming economic power house (Dvouletý & Orel, 2019). Entrepreneurial intentions are highly regarded as an accurate determinant of entrepreneurial behavior. (Vijayakumar, 2019). This study attempts to critically review the antecedents to entrepreneurial intentions in respect of behavioral and personality factors.

1.2 Statement of the problem

Despite various studies conducted in different countries on antecedents of entrepreneurial intention; Most of these studies were conducted in other countries. So, it is appropriate to conduct the study with Ethiopian context. The empirical evidence available in the country such as (Abebe, 2015;

Admasie, 2018; Desalegn F., 2019; Gerba, 2012) which studies the entrepreneurial intention fail to include important variables such as Risk Taking, Innovativeness, and Pro-activeness as determinates of entrepreneurial intentions.

Therefore, those variables are worthy to incorporate in determining the factors of entrepreneurial intention. Thus, the researcher tries to apply a broader perspective on antecedent of entrepreneurial intention through including the determinants of entrepreneurship to advances the limitation of the mainstream direct relationship between the antecedents' entrepreneurial determinants (independent variable) and entrepreneurial intention as dependent variable.

1.3 Objectives of the Study

1. To identify the major determinants that affects Entrepreneurial Career Intentions among graduate students of Bule Hora University.
2. To determine the relationship of identified determinants on Entrepreneurial Career Intentions of graduate students of Bule Hora University.
3. To access the impact of determinants entrepreneurship on Entrepreneurial Career Intentions.

2. Literature Review

Entrepreneurship provides a platform for economies of the world to increase the number and quality of entrepreneur(Sriyakul & Jermsittiparsert, 2019). Entrepreneurship is a result of intentional and planned behavior (Krueger Jr., 2000). The well-known entrepreneurial intentions models (Doll & Ajzen, 1992) proposes a three-dimensional model for establishing an organization. While measuring their entrepreneurial intentions and propose different analyzing models, among this model, The Entrepreneurial Event Model (Shapero & Sokol, 1982)and The Theory of Planned Behavior (Ajzen, 1991) are the most commonly used and representative model.

2.1 Determinants of Entrepreneurial intention

2.1.1 Innovativeness

Minsky (1990) defined entrepreneur as an innovator and (Drucker, 1985) suggests that Innovation is the most basic role of entrepreneur and innovation is the specific tool of Entrepreneurs in which they exploit change (Gurel, 2010a). Innovativeness is the ability and willingness of individuals to think differently, creatively, and recognize opportunities to produce novel and practical ideas, create new markets, and introduce new products and services (Vuorio, 2018). According to Robinson (1991) innovation in business is related to perceiving and acting upon business activities in new and unique ways.

2.1.2 Pro-activeness

Proactive personality is the tendency to initiate and sustain actions that directly change the Surrounding situation (Crant, 1995). Proactivity shows a high level of energy, goal orientation and competitiveness of an individual (Leutner, 2014). According to Zhu (2018) proactive personality is also associated with Entrepreneurial alertness. Different studies show that the relation between proactive personality and entrepreneurial Intention of self- employment are significantly higher (Sánchez, 2013). Plenty of research studies conformed the positive relation between pro-activeness and entrepreneurial intention like Crant (1996); Hu (2018); Rathore & Shukla (2019).

2.1.3 Risk taking

Risk-taking propensity has been conceptualized by Sexton & Bowman (1990) as one's orientation toward taking chances in a decision- making situation. Risk-taking propensity refers to the willingness to take or avoid risks. Entrepreneurship has always been associated with risk taking (Ozaralli & Rivenburgh, 2016); (Sánchez, 2013). Different studies indicate that there is a statistically significant relationship between risk taking and entrepreneurial intentions of university students (Nabi, 2011) (Gurel, 2010); (Ozaralli & Rivenburgh, 2016); (Sánchez, 2013). Students with

entrepreneurial inclinations had higher scores in risk-taking propensity compared to students with no such inclination (Pathan, 2016).

2.1.4. Self Efficacy

Bandura & Locke (2003) defined the concept self-efficacy as one's beliefs in their abilities to perform a certain level of performance or desired outcomes. Therefore, Self-efficacy has been critical variable which is investigated in the cognitive study of entrepreneurial behavior (Mwange, 2018). Self-efficacy can also be used to know why some individuals decided to work for others instead of becoming entrepreneurs/self-employed since some individuals avoid entrepreneurial activities not because of their lack of ability but because they believe that they do not have such ability (Mwange, 2018). Entrepreneurial self-efficacy (ESE) is very important variable because it incorporates both personality as well as environmental factors and it is also considered as a strong predictor of entrepreneurial intentions and action (Bird, 1988).

2.2 Conceptual Framework of the study

After reviewing of related theoretical and empirical literatures, the researcher identified four proposed determinants of Entrepreneurial Intentions and one mediating Variable. Therefore, based on the overall review of related literatures the following Research framework in which this peculiar study was developed.

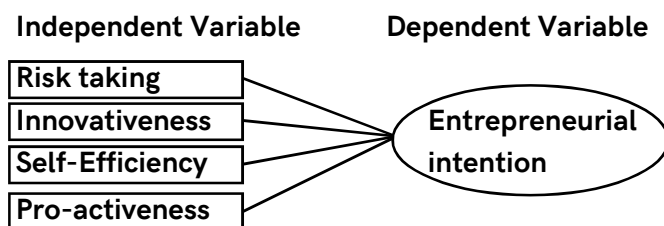


Figure 2.2: Conceptual Framework

Source: Researchers own construction-based review of literature

3. RESEARCH DESIGN AND METHDOLOGY

3.1 Description of the study area

Bule Hora city administration is located in Northern part of country west Guji Zone Oromia Region which is far away from Addis Abeba (464 km). Bule Hora is a city administration with varying elevation. The topography of the town is known by its undulating area, plain, mountain, valley and low plateaus. It has latitude and longitude of 5°35'N 38°15'E and altitude of 1716 above sea level. (West Guji Zone report 2012 E.C)

3.2 Research design

The researchers were employing the explanatory design, where the researcher was employed, one phases of the research Explanatory (causal and relational) design using quantitative approach of data collection and analysis was used so as to capture the details and adequate information under the study. The researcher under this study was implemented the explanatory research with cross-sectional survey design.

3.2. Sampling Design and Procedure

The study population/participants were graduate students of Bule Hora University, who has taken entrepreneurship courses. For the purpose of this study simple random sampling was used to select a representative sample from identified target population.

3.3. Sample Size Determination

To draw the sample from the Target population, the sample size determination formula of Yamane, 1967 was used.

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{2925}{1 + 2925(0.05)^2}$$

$$n = 352$$

3.4. Sampling technique

The sampling techniques were strata sampling techniques. Of this purposive sampling was used to select student respondents from the Bule Hora University, while stratified sampling was used to categorize heterogeneous group to be homogeneous strata. This total sample size is proportionally distributed to each stratum.

Table 3.1: List of Faculty those who was take entrepreneur course

No	Faculty	Total population	Sample to be drawn
1	Engineering	1172	102
2	Business and economics	594	52
3	Natural and computational science	494	43
4	Social science and humanity	471	41
5	Informatics	62	5
6	Agriculture	70	6
7	Health	62	5
Total		2925	352

Source: Data from BHU registrar office (2021)

4.1 Data Cleaning

Based on the methodologies specified in chapter three (simple random sampling), 375 questionnaires were distributed and 362 were returned for analysis. Meanwhile, in the process of cleaning the data for its completeness and practical response pattern, only 350 of the questionnaires were found valid or workable. Accordingly, those 350 workable responses obtained from respondents were used for data analysis with Statistical Package for Social Science (SPSS) Version 20.

Table 4.1: Response Rate

Respondent No	Data Collection Tools	No. Respondents analysis	returned for workable	valid or Respondent	Rate %
1	Questionnaires	375	362	350	93.96%

4.1.1 Reliability Test

In general, reliabilities less than 0.60 are considered poor; those in the range of 0.60 to 0.80 are considered good and acceptable. In this study, all the independent variables and dependent variable, met the above requirement. The alpha value for each variable is identified and summarized in table as shown below.

Reliability Statistics	
Cronbach's Alpha	N of Items
.883	6

Table 4.2: Reliability Statistics for all variables

	Cronbach's Alpha
RT	.890
INN	.852
SE	.869
PA	.855
EI	.848

Source: Own Survey, computed in SPSS, 2021

Table 4.3: Descriptive Statistics for Independent and Dependent Variables

Variables	Mean	Std. Deviation	Extent of highest mean score
Entrepreneurial intention	4.0185	.80551	
Risk-taking	4.0642	.97272	1st
Proactiveness	3.9948	.95303	2nd
Innovativeness	3.8947	.94166	3rd
Self-efficacy	3.6383	.87052	4th

Source: Own Survey, computed in SPSS, 2021

Based on the above table descriptive mean result the highest mean value was scored by risk taking with a mean value of (4.0642), proactiveness (3.9948),

innovativeness (3.8947), and self-efficacy (3.6383), respectively. The overall entrepreneurship intention levels of students, which is an aggregate of the four statements, is agreed to an average agreement rating of ($M=4.0185$, $SD=.80551$) which is found that on average the majority of respondents reported themselves to be intention to start their own business in the foreseeable future. Also, As we can see from the table the mean score of each variable is ranged from low of 3.6383 ($SD=.87052$) to a high of 4.0642 ($SD=.97272$); therefore it appears that respondents in the given sample are relatively rated all of the variable above the average score of 5 point liker scale.

4.2 Pearson correlation analysis

Table 4.4 below shows the level of correlation between the dependent variable entrepreneurial intention and independent variables innovativeness, self-efficacy, proactiveness and risk taking. Innovativeness is positively correlated to entrepreneurial intention with a Pearson correlation coefficient of $r=.756$ and Sig. (2tailed) is 0.000 which is <0.05 so that, there is a strong relationship between the two variables. Proactiveness is positively correlated to entrepreneurial intention with a Pearson correlation coefficient of $r=.699$ and Sig (2-tailed) is 0.000 which is <0.05 which implies a strong relationship between entrepreneurial intention and proactiveness.

Table 4.4: Correlation Analysis of Each predictor Variable with entrepreneurial intention

		EITOTAL
RTTOTAL	Pearson Correlation	.625**
	Sig. (2-tailed)	.000
	N	350
INNTOTAL	Pearson Correlation	.756**
	Sig. (2-tailed)	.000
	N	350
SETOTAL	Pearson Correlation	.640**
	Sig. (2-tailed)	.000
	N	350
PATOTAL	Pearson Correlation	.699**
	Sig. (2-tailed)	.000
	N	350

Sources: Own Survey, computed in SPSS, 2021

The results of the Pearson correlation analysis also revealed a positive correlation between risk taking and entrepreneurial intention with a correlation coefficient of $r=.625$ and Sig. (2tailed) is 0.000 which is <0.05 so that, which implies a strong relationship between the variables. There was a positive correlation between entrepreneurial intention and self-efficacy ($r=.640$, $p<0.05$) which implies a strong relationship between the two variables. Thus, the analysis indicated that innovativeness was the most correlated variable with the dependent variable entrepreneurial intention ($r=.756$, $p<0.05$). There was also a strong positive relationship between innovativeness and proactiveness with the dependent variable entrepreneurial intention with the correlation coefficient of ($r=.699$, $p<0.05$) and ($r=.0329$ $p<0.05$) respectively. The lowest correlation is found between risk taking entrepreneurial intention at ($r=.625$, $p<0.05$).

4.3 Regression Analysis

In order to test for the influence of each independent variable (innovativeness, self-efficacy, proactiveness and risk-taking) on dependent variable (entrepreneurial intention), multiple regression analysis was performed.

Table 4.5: Model Summary

Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
dimension 0	1	.844 ^a	.713	.709	.81262	2.384
a. Predictors: (Constant), PATOTAL, SETOTAL, RTTOTAL, INNTOTAL						
b. Dependent Variable: EITOTAL						

Source: Own Survey, computed in SPSS, 2021

The above (table 4.5) indicates, the independent variables statistically predicting the overall level of entrepreneurial intention in Bule Hora university students. From the table the R value 0.844 indicate that the presence of strong correlation between the

independent variables and dependent variable. The value of R^2 0.713 which indicate that the independent variables explain 71.3 % the dependent variable with unexplained factors of 28.9 %.

This indicate that 71.3% of the variance in entrepreneurial intention level can be explained by the variance of the determinants of the aforementioned variable (innovativeness, self-efficacy, proactiveness and risk-taking) taking in to account the sample size and independent variables.

Furthermore, the standard error of the estimate is a measure of the variability of the multiple correlations.

4.3.1 ANOVA Result Table

Table 4.6: ANOVA result table

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	564.931	4	141.233	213.873	.000 ^a
	Residual	227.823	345	.660		
	Total	792.754	349			
a. Predictors: (Constant), PATOTAL, SETOTAL, RTTOTAL, INNTOTAL						
b. Dependent Variable: EITOTAL						

Source: Own Survey, computed in SPSS, 2021

The analysis of variance (ANOVA) tells us whether the overall results of a model are significantly good degree prediction of the outcome variable. The regression Sum of squares is 564.931. Here, each sum squares (i.e., Regression, residual and Total under the source column) has a corresponding degree of freedom (DF) associated with it. Total degree of freedom is $n-1$ ($DF=350-1=349$), one less than the number of observations. The regression degree of freedom for the above table is four (4), which is the number of independent variables (Innovativeness, Self-Efficacy, Proactiveness and Risk Taking). The residual sum of squares (residual for left over) is sometimes known in the literatures as Error Sum of Squares is that part still cannot be accounted for after the regression model is fitted. It has 345 degrees of freedom ($=349-4$) for this research paper. The mean squares are the sum of

squares divided by the corresponding degrees of freedom.

4.3.2 Test of Significance

Table 4.7: Regression Coefficients of the Variables

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.219	.195		6.243	.000
RTTOTAL	.136	.027	.197	5.122	.000
INNTOTAL	.357	.041	.375	8.652	.000
SETOTAL	.140	.027	.199	5.163	.000
PATOTAL	.214	.035	.255	6.069	.000

Source: Own Survey, computed in SPSS, 2021

The t-test associated with p-value is significance (p or sig value is less than 0.05) then the predictor is making significant contribution to the model the smaller the value of the sign (the larger the value of t) the greater the contribution of that predictor to entrepreneurial intention.

Table 4.7 indicated that the influence of innovativeness (INN), self-efficacy (SE), proactiveness (PR) and Risk taking (RT) on Entrepreneurial intention level in Bule Hora University graduating students.

Innovativeness ($t = 8.652$, $P < 0.05$), Risk Taking ($t = 5.122$, $P < 0.05$), Proactiveness ($t = 6.069$, $P < 0.05$) and self-efficacy ($t=5.163$, $P > 0.05$) found to be the strange and statistically significant influence on entrepreneurial intention. The regression coefficient $\hat{\alpha}$ represents the change in the outcome resulting from a unit change in the predictor and that if a predictor is having a significant impact to predict the outcome then this $\hat{\alpha}$ should be different from 0 (and big relative to its standard error). The p-value is less than 0.05 for all the variables hence; it indicates that the all 4 independent variables are significant predictor of entrepreneurial intention.

Therefore, the $\hat{\alpha}$ is different from 0 and the researcher found that the predictor variables make a statistically significant contribution in predicting entrepreneurial intention, Risk taking ($\hat{\alpha}_1 = .136$, Innovativeness ($\hat{\alpha}_2$)

$\beta_3 = .357$, self-efficacy $\beta_4 = .140$ and Proactiveness $\beta_5 = .214$ are statistically significant variables in predicting entrepreneurial intention.

One unit change in risk taking will cause 13.6% change in entrepreneurial intention. One unit change in innovativeness will cause 35.7 % change in dependent variable, entrepreneurial intention. One unit change in self-efficacy as an independent variable will cause 14 % change in dependent variable entrepreneurial intention. One unit change in proactiveness as an independent variable will cause 21.4 % change in dependent variable entrepreneurial intention. Thus, innovative is the most influencing factor among all four explored variables.

5. Conclusions

The findings of this study are believed to have a practical implication which shows areas of intervention students need to develop personal skills, attributes and behavioral patterns that enhance their entrepreneurial capabilities. It also offers valuable directions and insight for those academics, educational policy developer, and government officials who formulate, deliver and examine the fruitfulness of education systems of the universities in the country and make the necessary changes accordingly to advance the entrepreneurial mindset of university students. Accordingly, the following recommendations are made based on the research findings and the conclusion. The policy implication of the research is to emphasis on entrepreneurship education in empowering the young force of a country. This advice is very critical for two main reasons.

First, the findings revealed that entrepreneurship education not only has a direct influence on entrepreneurial intention but also it interacts strongly with other constructs both directly and indirectly. The findings call for ministry of higher education of Ethiopia to emphasize more on entrepreneurship education in developing personal skills, attributes and behavioral aspects to realize the full potentials of students with regards to entrepreneurial intention.

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