



Triggers that Energize Potential Entrepreneurs: What We Know about University Students in Southern Ethiopia

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Authors' contributions

This study was carried out in collaboration among the co-authors. Author ST designed the study and coordinated the survey work. Authors MT and TA were involved in the survey work and did literature review. Authors MT, TA and TH analyzed the data. All of the authors collaborated in the write-up for the first draft of the manuscript and as well read and approved the final manuscript.

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ABSTRACT

The purpose of this study was to identify factors that initiate potential entrepreneurs to follow through and engage in an entrepreneurial activity among university students located in Southern Ethiopia. The study employed a cross-sectional survey design where the questionnaire was the main data collection tool. Data were collected from 665 final year university students from five universities. Subjects were randomly selected from business and non-business oriented programs comprising of 18 departments. Descriptive statistics, factor analysis and Tobit regression model were the main methods used to analyze and present data. The study found key factors that energize potential entrepreneurs to include: perceived internal locus of control ($p=.000$), social connections ($p=.000$), gender ($p=.000$) and to lesser extent the desirability (idea attractiveness) ($p=.069$), and subjective norms or pressure from significant others ($p=.108$). Self-efficacy was found to have a negative effect but statistically significant ($p=.004$). On gender, the study concluded

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that female students have problems in seizing and working on entrepreneurial opportunities as compared to males. Besides, the decision to engage in an entrepreneurial activity could be far beyond an individual's perception about their capabilities (self-efficacy); inner strength to deal with uncertainties or risk taking ability (internal locus of control), and the presence of strong social bridging ties which connect an individual to different resources were identified as the main factors that identify potential entrepreneurs from others.

Keywords: Potential entrepreneurs; university students; Southern Ethiopia.

1. INTRODUCTION

In a growth conscious world, nations have placed a lot of emphasis on entrepreneurship to stimulate economic development and to curb unemployment. According to [1], countries are investing towards creating competitive entrepreneurs and building a vibrant entrepreneurial culture through a range of new policies, such as; funding, physical infrastructure and advisory services. In institutions of higher learning, entrepreneurial education is seen as a crucial step towards achieving such a goal. Studies indicate that institutions of higher learning are creatively investing on entrepreneurial education in order to bring attitudinal change towards entrepreneurship for job creation and to promote economic development [2,3]. However, knowledge about developing entrepreneurial attitude and consequently potential entrepreneurs among university students in Ethiopia is limited.

Researchers like [4] refer entrepreneurship as "the pursuit of an opportunity irrespective of existing resources" and 'entrepreneurs' as "those who perceive themselves as pursuing such opportunities" (p.91). On potential entrepreneurs, [4] refer the term to those individuals who take up an initiative when an attractive opportunity presents itself (p.91). However, researchers argue that the potential to accept such an opportunity requires some pre-existing preparedness; meaning, potential entrepreneurs may not have the intention to start a business, but, they may have the potential to engage in an entrepreneurial activity. Based on research, potential entrepreneurs are self-reliant, passionate, persistent or risk-takers, information seekers, opportunity focused, hard working and forward looking [5]. It is not surprising to note that not everybody can become an entrepreneur; for some, even when they possess the required entrepreneurial skills or capabilities, they would rather work for others rather than take the risk associated with entrepreneurship.

Based on [6], entrepreneurs do not necessarily just portray the ability to deal with uncertainties, but, undertaking an economic activity and innovating requires skills that make entrepreneurs exceptionally different where profit seeking drives their motives. To be innovative, there is a need to rethink entrepreneurial education to ensure that all young people have a concrete entrepreneurial experience before they leave school to join the labor market [7]. According to [7] the labor market is changing and that change requires a rethinking of the skills and experiences taught in schools and institutions.

Students need to be adequately prepared for the transition from school to work; specifically, there is need to develop a strong focus on entrepreneurial education that energizing students to be future entrepreneurs. It is often argued that educators need to recognize and value non-formal learning so as to raise the applicability of skills that are acquired outside the formal system. Based on [7], non-formal learning should include 'soft skills' which vary by field ranging from "personal characteristics (confidence, temperament, work ethics) to social and cognitive skills (communications, problem-solving)" (p.15) in addition to competences like financial management, technology knowledge, and networking. Additionally, it is argued that people do not differ on their attitude towards risk, but, variation is observed on their competences and creative capacities as well as other skills like talents in an entrepreneurial activity [6].

1.1 Problem Statement

The Ethiopian economy nowadays has been one of the fastest growing economies in the world [8], but, the country's economic growth rate has outpaced the employment growth rate. Improved expansions and access to higher education in the country since a couple of decades has made it possible for a large proportion of the youth to enroll in the institutions of higher learning. However, many agree that although there is an

increase in educational attainment, employment opportunities are not at par with the newly educated job-seekers [9]. The country's employment data indicate that while formal employment has increased, informal employment decreased from 4.3% in 2005 to 3.2% in 2013 in the urban areas where the rate of unemployment is reported to be at 17.5% [10,9]. According to [11], a large youth population residing in the urban areas (age 10-29) has become a challenge for the country in terms of employment and job creation. Literature show that the attitude of graduating students towards entrepreneurship and their dependency on the government and private organizations for employment are major causes of concern [11].

Studies show that Ethiopia lags behind other African countries in terms of entrepreneurship. A study conducted in Ethiopia indicated that only 24% of Ethiopians are likely to start a business in the next three years as compared to 53% in Sub-Saharan Africa [12]. Another study conducted in the same country [2] on entrepreneurial intention of university students in Southern Ethiopia further show that only 9.5% and 34.9% of the university students were likely to start their own business within two and five years, respectively, after graduation. Since formal employment is no longer a guarantee for majority of university graduates, looking for ways that foster entrepreneurial spirit, attitudinal change, innovativeness, and creative ways of thinking amongst students is critical for them to focus on entrepreneurship as a future career option. Research work on potential entrepreneurs is limited especially on factors that trigger and energize individuals to go through the transition of having entrepreneurial intentions to following through and seizing an opportunity when it presents itself.

1.2 Conceptual Framework

The rapidly changing global environment requires a supply of potential entrepreneurs who are ready to take the initiative when they perceive a viable opportunity [4]. This implies that an entrepreneurial event needs some pre-existing preparedness to take that opportunity. However, scientific queries like 'how can we identify potential entrepreneurs?' and 'what determines emergence of potential entrepreneurial spirit?' still remain unanswered.

Entrepreneurship studies date back to the 18th and 19th century when personality traits and

contexts under which new businesses emerged were the main areas of focus [13]. However, new perspectives have led to the development of theories under social, cognitive and developmental psychology which have provided testable entrepreneurial research models [14]. The theory of planned behavior (TPB) [15] has overtime provided a useful conceptual framework for analyzing human behavior [16]. Based on Ajzen's theory, human behavior is intentional and planned. Researchers [14,4] have further argued that opportunities are seized by those who are prepared; meaning, individuals respond to situations and opportunities within their environment, process the signal and construct information into a viable business plan. Similarly, [17] pointed out that at certain times some force(s) may lead to life changes which make individuals to choose different behavioral alternatives. Triggers that energize and precipitate entrepreneurial behavior are therefore more internalized and planned.

Researchers like [4] have questioned the assumption made in intention models that the target behavior is salient in an entrepreneur's mind. The researchers argue that a salient change in the situation is needed to precipitate intentions and thus the behavior. A social psychological approach to career decisions was therefore proposed with a need to modify the intention models to address the question of potential. The proposition therefore led to merging of the '*entrepreneur event*' model [17] with the '*theory of reasoned action*' [18]. The proposed social psychological entrepreneurial model was used as a foundation to guide this research [14].

2. RESEARCH METHODOLOGY

2.1 Sampling Procedures and the Data Collection

The study used a cross-sectional survey design taking into consideration its inexpensive nature, and the rapid turnaround in data collection [19]. The design was also advantageous as it allowed collection of data on several attributes of the population from a sample, and generalization of the findings.

The study was conducted in five universities namely; Arba Minch, Dilla, Hawasa, Mizan Tepi and Wolaita Sodo universities located in Southern Ethiopia. The study participants were undergraduate university students in their final

year of study. Efforts were made to include female students as well as students taking entrepreneurial oriented courses and those who do not. Two departments were selected randomly to represent business oriented and non-business oriented programs in each university where intact classes were used as representative samples. A total of 18 departments from five universities were included in the study.

The questionnaire was the main data collection tool designed in both English and Amharic due to language barrier. The instrument was pilot tested in Wachemo University and the Cronbach alpha tests used to evaluate the reliability of the Likert scale items included in the instrument. Based on the test, alpha values ranged from .739 to .932 for all items. About 700 questionnaires were distributed to the students and the return rate was 95%, but, only 636 questionnaires had relevant data to run the regression analysis. A cross-sectional survey design requires a large sample to carry out inferential statistics [20]. In a case where the population of interest is roughly 15,000, a sample size of roughly 375 with a sampling error of 5% and confidence level of 95% is proposed. This was not an issue for our study as the sample size was large enough to make inference based on the findings.

2.2 Analytical Framework

Entrepreneurial behavioral models range from simple to complex relationships that require multivariate analyses. The underlying economic theories on factors that influence entrepreneur decision are based on the assumption that individuals are motivated by utility maximization. Individuals behave consistently with utility maximization and that they will pursue an opportunity when the anticipated utility exceeds that of not taking the action [21]. Researchers have shown that the decision to take up an opportunity or not can be modeled as binary where Logit and Probit models have been used [21]. However, in our case a significant fraction of the data had zero values (corner solution) and the use of binary models leads to loss of information. The presence of zero values destroys the linearity assumption and the ordinary least squares method becomes untenable [22]. Due to this limitation, the Tobit regression model was deemed appropriate as it allows the study of dependent variables where a

large proportion of cases have zero as the lowest possible value [21].

The econometric modeling strategy employed in this study mirrors the work of Tobin [21] where in our case some observations on the data on being a potential entrepreneur were zero. The Tobit regression model which uses the maximum likelihood estimation was therefore used to investigate the potential of being an entrepreneur for university graduating students. The dependent variable measured as the likelihood of starting one's own business within the next five years after graduation is a continuous variable, but, with a limited range in which the value falls between 0 and 100%. In this case, data were censored where the sample data indicated a mixture of discrete and continuous distributions. Therefore, a Tobit model which accommodates censoring in the dependent variable was employed. The model takes the following specification [21]:

$$y_i^* = \beta x_i + \mu_i \approx N(0, \sigma^2) \quad i = 1, \dots, n \quad (1)$$

$$y_i = y_i^* \quad \text{if } y_i^* > 0$$

$$y_i = 0, \quad \text{if } y_i^* \leq 0$$

Where, y_i^* is the latent variable generated by the classical, y_i is the observed censored variable, β is a vector of parameters, x_i is a vector of exogenous explanatory variables, μ_i is the error term that is independently distributed with zero mean and constant variance (σ^2). In this case, consistent with the expectations, there were a share of observations with zero values, meaning; some students had no intention of starting a business within the next five years and that they had only one plan; to search for formal employment opportunities.

Regarding the interpretation of the Tobit estimates, researchers argued that the structural coefficient estimates often exaggerate the substantive differences in the models. The differences can become substantially small when the coefficients are scaled to give the marginal effects, or derivatives of the conditional mean function [21]. According to [24,23], the Tobit model can be decomposed into two parts: the effects of the explanatory variables on the decision to become an entrepreneur, and the effects of the explanatory variables on the potential entrepreneur's passion towards pursuing an entrepreneurial opportunity.

2.3 Description and Measurement of Variables Used in the Tobit Regression Model

Potential entrepreneurs (the dependent variable) was measured with the students' self-evaluation questionnaire that asks one's probability level (on a scale of 0 to 100%) that he or she intends to own a business, five years after graduation [25]. From the probability score rated by the respondents, direct numbers (in percentile) were used for Tobit regression analysis.

The choice of predictor variables for the Tobit model was based on the available data as well as both the theoretical and empirical literature related with entrepreneurial behavior. Based on [26], measures that predict individual's entrepreneurial intention could also be used to measure a person's preparedness to engage in an entrepreneurial activity. An individual's potential to be an entrepreneur could therefore partly depend on factors such as; individual's attributes, institutional support, and psychosocial competences.

2.3.1 Individual characteristics

Studies on entrepreneurship indicate that there is a gender gap in venture creation between male and female entrepreneurs [25]. Findings have shown that only a small percentage of women invest on self-employment as compared to men [25]. Similarly, a study conducted in Ethiopia showed that women face barriers related with accessing business information, and they lack the ability to identify good business ideas [27]. In contrast, some studies have found entrepreneurial intention not to vary with gender [28]. However, in this study the entrepreneurial spirit of men was hypothesized to be much higher than that of women.

Researchers argued that exposure in the business sector (work experience in a business), informal training, and education influence entrepreneurial intentions [29,2,14]. In this study, potential to be an entrepreneur was expected to increase with exposure to the business world in addition to formal and informal training on entrepreneurship.

Researchers have suggested that an individuals' place of residence may be a contributing factor on whether they eventually become entrepreneurs or not [25]. In this study, it was

hypothesized that students residing in urban areas were more exposed and therefore more likely to be potential entrepreneurs.

2.3.2 Institutional support

In literature, the factor has been used to predict entrepreneurial intentions of university students. Studies argued that many students' entrepreneurial dreams are hindered by inadequate preparation [30]. The role of academic institutions in encouraging young people choice of entrepreneurial careers through educational support cannot therefore be overemphasized. Studies for example, [31] found a positive and significant relation between education support and entrepreneurial intention. Besides, access to entrepreneurial support services like training opportunities, and knowledge of how to write a business plan provided for by institutions have been found to significantly support an entrepreneurial activity [32].

The influence of situational factors or the environment in which a venture is created as well as the social context cannot be overlooked. Potential entrepreneurs face increased uncertainty. An individual's perceptions regarding barriers to business start-up like competition, law and regulation difficulties, stigma associated with failure, risk aversion may influence creation of potential entrepreneurs [4]. Perception about laws and regulation as well as fear of competition in the market was hypothesized to have a negative effect in predicting if an individual could become a potential entrepreneur.

2.3.3 Psychosocial competences

Several psychosocial characteristics have been proposed to influence entrepreneurial activity. Ajzen's TPB framework and Krueger and Shapero's Entrepreneurial event has been widely tested and proved to effectively predict entrepreneurial intention and potential [33,2,4]. The attitude approach has however been found to better predict entrepreneurial potential than the demographic and personality trait approach [14]. Key dimensions adapted for this study include: 1) perceived internal or external locus of control (propensity to act or ability to initiate and persists on a goal-directed behavior, (3) subjective norms (perceived social pressure regarding the behavior), 4) perceived self-efficacy/feasibility or belief about own capabilities); and 5) perceived desirability (the

degree of idea attractiveness) [33,26,34,32,14,4]. The last two components (desirability and feasibility) create credibility, and when combined with propensity to act creates potential [33].

Individual's competence in creating social networks was used as a measure to gauge an individual's coordination, and organizational skills that are critical in business start-up and performance. Individuals with greater social connections are assumed to have extensive and strong bridging ties. These individuals have the ability to develop networks among entrepreneurs and individuals which is critical for survival and growth of a business [26]. The factor was hypothesized to have a positive impact in the decision to become an entrepreneur.

The problem with determining these perceived predictors was two-fold: first, these variables are latent variables which need appropriate measurement approaches so as to quantify them for ease of analysis; and second, identifying the appropriate predictor components or factors among the many perceived entrepreneurial attributes was a challenge.

To ease these challenges, data were gathered through a set of 5-point Likert scale questions which included 25 items ranging from strongly disagree =1, disagree = 2, undecided = 3, agree = 4, to strongly agree = 5. Then, factor analysis was computed on SPSS software version 20 and six factors were extracted as significant predictors for the regression analysis. The number of factors extracted can be defined by the user. However, factor analysis extraction method available in SPSS was used to reduce the set of variables in the data set assuming that the set of variables have some systematic interdependence and a linear relationship exist between the factors and the variables [35]. The Kaiser's (1960) criterion or the Eigenvalue rule and factor analysis is the most widely used technique [35]. Under this rule, only factors with a Eigenvalue of 1.0 or more are retained. Using this criterion, our data revealed six factors which accounted for 58.2% of the total variance in the data that was used to explain potential entrepreneurs.

Using the proportion of these percentages as weights on the factor score coefficients, a Non-standardized Index (NSI) was developed for each case as shown in equation 2:

$$NSI_n = (\alpha) (\text{Factor } i \text{ score}) \quad (2)$$

Where, NSI_n is the predictor's index of the n^{th} respondent, α is the proportion of the variance explained by each factor, i is the respective factor generated by the factor analysis representing each latent variable while NSI is a continuous measure that indicates the relative coefficient score of each respondent.

The value of the index can be positive or negative, making it difficult to regress in a Tobit model through STATA. Therefore, a Standardized Index (SI) was developed for each perceptive predictor, the value of which can range from 0 to 100, as shown in the equation 3 [36]:

$$SI = \left(\frac{NSI_i - MinNSI}{MaxNSI - MinNSI} \right) 100 \quad (3)$$

In this case, both minimum and maximum non-standardized indices were used in the computation.

3. RESULTS AND DISCUSSION

3.1 Descriptive Statistics

Result in Table 1 presents the background information of respondents. Results show that roughly 48.3% of the students have no intention of starting a business any time in the future while 56.2% indicated that they intend to start their own business within the next five years.

With regards to gender, results show that 71.9% of the students were male while 28.1% were female. On their place of residence, majority (52.9%) reside in urban areas while 47.1% came from rural areas. Students were also asked to state if they have ever worked in a business premise (small or large). From Table 1, about 50.9% had experience working as sales persons in a business while 49.1% had no experience. On program affiliation, 50.5% were enrolled in business oriented programs while 49.5% were enrolled in non-business related programs. Data from Table 1 further show that course support (Likert scale measure with 5 items) was on average 3.67 with a standard deviation of .970 (the scale score was weighted by the number of items).

3.2 Determinants of Potential Entrepreneurs

The study used a Tobit regression model to identify factors that determine potential

Table 1. Participants' background information

Variable	Description	Frequency	%
Potential Entrepreneurs	Zero probability	279	43.8
	Above zero, $y > 0$	358	56.2
Demographic characteristics			
Gender	Male	451	71.9
	Female	176	28.1
Residence	Urban	324	52.9
	Rural	288	47.1
Experience with sales	Yes	321	50.9
	No	310	49.1
Group	Business	322	50.5
	Non-Business	315	49.5
		Mean	SD
Course support		3.67	.970

entrepreneurs among graduating university students. Results from the Tobit analysis are presented in Table 2, including; the marginal effect on the probability that an observation is uncensored ($\partial P(y > 0|x)$); the marginal effect on positive observations ($\partial E(y|x, y > 0)$), and, the marginal effect on the latent variable ($\partial E(y^*|x)$). From Table 2, the likelihood ratio statistic of 7.40 was significant at the 1% probability level, ($\text{prob.} > \text{chi}^2 = .00$) indicating that the model had a strong explanatory power.

The interpretation of the coefficients in a Tobit model is not straight forward. The coefficients

produced by the Tobit analysis are un-standardized and represent the effects of change in the independent variables on the latent (the unobservable) dependent variable. The two desired effects in a Tobit analysis (for those with zeros and those with non-zeros) are: effect of an independent variable on the probability of becoming an entrepreneur ($\partial P(y > 0|x)$), and how far a potential entrepreneur (with non-zero probability) is energized towards taking an opportunity; that is, the expected change due to a specific change in an independent variable ($\partial E(y^*|x)$) for those above zero.

Table 2. Un-standardized Tobit coefficients and marginal effects

Tobit Regression				No. of Obs. = 636		
Log likelihood = -2183.814				LR Chi2 (10) = 7.40		
				Pr > Chi2 = .000		
				Pseudo R ² = .015		
Explanatory variables	Coeff.	Std. err	t-ratio	Marginal effects		
				$\partial \text{Pr}(y > 0 x)$	$\partial E(y x, y > 0)$	$\partial E(y^* x)$
Constant	-17.193	24.735	-.70			
Courses	2.243	3.095	.72	.011	.439	1.040
Locus of control	-.539	.116	-4.64***	-.003	-.105	-.250
Subjective norms	.336	.209	1.61*	.002	.066	.156
Networks	.666	.179	3.72***	.003	.130	.309
Regulatory	-.190	.158	-1.20	-.001	-.037	-.088
Self-Efficacy	-.553	.191	-2.90***	-.001	-.108	-.256
Desirability	.312	.171	1.82*	.002	.061	.145
Gender	24.504	5.609	4.37***			
Birthplace	3.948	5.347	.74			
Experience	-1.554	5.218	-.30			
σ	60.153	1.966				
Obs. summary	279 left – censored observations			at B2 <=		
	357 uncensored observations					
	0 right – censored observations					

*** Significant at 1%, ** Significant at 5%, * Significant at 10%

Note: B2 is the dependent variable

From Table 2, results reveal a positive and significant relationship for four variables out of eleven: that is, subjective norms, social networks, desirability and gender. Two variables (i.e., perceived external locus of control, and self-efficacy) had a negative sign, but, had a statistically significant relationship with potential to be an entrepreneur at 1% probability level. However, three variables (course support, regulatory, and birthplace) maintained the expected signs but were not statistically significant.

From Table 2, only gender out of the three demographic variables (including experience and birthplace) was statistically significant at 1% probability level. The result could be interpreted to mean that male students were more likely to become entrepreneurs, and as well more likely to take up an opportunity when it presented itself compared to female students. The finding on gender aligns with the study by [34] who found that men were more likely to engage in an entrepreneurial activity. This result could be attributed to the fact that in the study area, women face more challenges as they seek to participate in economic life.

The findings shown in Table 2 on the five psychosocial competences (i.e., perceived external locus of control, subjective norms, desirability, self-efficacy, and social networks) were found to be the major drivers that initiate potential entrepreneurs to seize an opportunities and engage in an entrepreneurial activity.

Perceived locus of control (either internal or external) was used as a proxy to measure an individual's ability to initiate and persist on a goal directed behavior. The factor had a negative effect, meaning; individuals who believe on luck and those who are driven by financial gains (external locus of control) exhibit low entrepreneurial potential. From the result, individuals who exhibit high internal locus of control were better placed to become potential entrepreneurs. The coefficient was statistically significant at the 1% probability level. The expected change due to a unit change on the perceived locus of control towards externalizing the causes of success or failure on an entrepreneurial activity (for those above the limit, $y > 0$) would decrease an individual's potential to be an entrepreneur by .105 points. These findings confirm that higher external locus of control (i.e., believing on luck and other external factors) would likely de-energize potential

entrepreneurs; meaning, they will be less likely to take an initiative and stay focused on the goal when the opportunity presented itself. The result was in line with what [32] found that internal locus of control was a significant factor in explaining engagement in an entrepreneurial activity.

Social networks served as a measure of an individual's competences in creating connections, coordination as well as organizational skills in business start-up. It was argued that individuals with greater social connections also have greater social capital, such as, information and capital amassed through extensive and strong bridging ties. The coefficient was statistically significant at the 1% probability level; hence, an excellent energizer for potential entrepreneurs. The expected change due to a unit change on an individual's social connections (for those above the limit, $y > 0$) would increase an individual's potential to be an entrepreneur by .130 points. These individuals have the potential to develop networks among entrepreneurs, suppliers, customers and connections that are critical in the survival and growth of a business [26].

Perceived subjective norms have been used as a measure of social pressure from significant others (i.e., family, neighbors and friends) regarding engagement in an entrepreneurial activity. The factor was positive and statistically significant at the 10% probability level. From the result, it was indicative that subjective norms to a lesser extent initiate a potential entrepreneur to take up an opportunity when it presented itself. The expected change due to a unit change on the social pressure (for those above the limit, $y > 0$) would increase an individual's potential to be an entrepreneur by .066 points. Worth noting was that studies like [14] found insignificant result on association between subjective norms and entrepreneurial intentions, However, it is evident that beyond having an entrepreneurial intention, entrepreneurs who follow through with their vision to engage in an entrepreneurial activity require support from significant others to stay focused on the idea.

Desirability was used as a proxy for idea attractiveness; meaning, potential entrepreneurs were attracted to the entrepreneurial activity due to work flexibility, need to be independent, to achieve higher social status, gain higher control, need to be creative, and to achieve their vision. The factor was positive and statistically

significant at the 10% probability level. The expected change due to a unit change on the desirability in relation to the attractiveness of the idea (for those above the limit, $y > 0$) would increase an individual's potential to be an entrepreneur by .061 points. The result aligns with what [32] observed that desirability serve as a motivational factor which energize potential entrepreneurs to stay focused.

Self-efficacy was used as a measure of individuals' capabilities or perception about their skills and abilities with regard to being an entrepreneur. Contrary to our expectations, the factor was negative and statistically significant at the 1% probability level. The factor has been shown to be a good predictor of entrepreneurial intention [2,34]. The contradicting result on the relationship between self-efficacy and potential entrepreneurs could reflect the ground reality of the national context in which the study was conducted. It may be true that although university students in the study area expressed high entrepreneurial intention (feeling of self-confidence), an individual's level of self-efficacy is not the main factor which ignites the fire that would initiate an individual to pursue an entrepreneurial opportunity. Otherwise, some may be content with letting others take the lead even when they have the capability. Though this study did not look at the interaction between gender and self-efficacy, it could be deduced from our study that potential female students would be more likely to worry about their level of self-efficacy as compared to their male counterparts. Studies that looked on the interaction between gender and self-efficacy found that women compared to men were more likely to worry about their capabilities while engaging in an entrepreneurial activity [34]. This could be so in our case considering that women were less likely to engage in entrepreneurial activities compared to men. Socialization experiences and social expectation especially in Ethiopia may lead to differing preferences for men and women particularly in entrepreneurship which is associated with masculinity. The expected change due to a unit change on an individual's self-efficacy (for those above the limit, $y > 0$) would decrease an individual's potential to be an entrepreneur by .108 points.

4. CONCLUSION

This study identified key factors that would initiate university students to become potential entrepreneurs in the next five years after

graduation. The study concluded that the higher an individual externalize their locus of control (believing on luck or financial gains) the less likely they would pursue an opportunity when it presented itself. The strength of an individual's internal locus of control, idea attractiveness (desirability), and social networks or social support from significant others were found to be powerful drivers that initiate potential entrepreneurs to pursue an entrepreneurial opportunity. In addition, gender was found to be a major factor for potential entrepreneurs in that women worry about their self-efficacy before engaging in an entrepreneurial activity.

To sum it up, being male, and with strong social bridging ties coupled with strong internal locus of control were observed to be the best triggers that drive a potential entrepreneur to engage in an entrepreneurial activity and to stay focused.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Mahajar AJB, Yunus JBM. Inclination towards entrepreneurship among University of Pendidikan Sultan Idris students. *The Journal of Global Business Management*. 2012;8(2):248-256.
2. Thuo M, Abo T, Toma S. Entrepreneurial intentions of university students: Insights for entrepreneurial education in Ethiopia. *European Journal of Business and Management*. 2016;8(22):5-35.
3. Zhou M, Xu H. A review of entrepreneurship education for college students in China. *Adm. Sci*. 2012;82-98. DOI: 10.3390/admsci2010082
4. Krueger N, Brazeal D. Entrepreneurial potential and potential entrepreneurs.

- Entrepreneurship Theory and Practice. 1994;91-104.
5. Biraglia A, Kadile V. The role of entrepreneurial passion and creativity in developing entrepreneurial intentions: Insights from American home brewers. *Journal of Small Business Management*. 2017;55(1):170-188. DOI: 10.1111/jsbm.12242
 6. Yaduma PS, Hammad DB. Determinant of entrepreneurial potentials among vocational technical teacher education students in North Eastern States, Nigeria. *Social Sciences and Humanities*. 2013; 4(2):445-452.
 7. Bamber J. Developing the creative and innovative potential of young people through non-formal learning in ways that is relevant to employability. *European Commission, Expert Group Report*; 2012.
 8. Ferede T, Kebede S. Economic growth and employment patterns, dominant sector, and firm profiles in Ethiopia: Opportunities, challenges and prospects. *Swiss Programme for Research on Global Issues for Development. R4D Working Paper*. 2015;2.
 9. Broussard NH, Tekleselassie TG. Youth unemployment: Ethiopia country study. *International Growth Center (IGC), Working Paper*; 2012.
 10. United Nations Development Programme. *About Ethiopia*; 2012. Available:<http://www.et.undp.org/content/ethiopia/en/home/countryinfo.html> (Accessed 19 February 2017)
 11. Sandhu MS, Jain KK, Yusof M. Entrepreneurial inclination of students at a private university in Malaysia. *New England Journal of Entrepreneurship*. 2010;13(1):1-12.
 12. Herrington M, Kelley D. *African entrepreneurship: Sub-Saharan African Regional Report*. Canada: *Entrepreneurship Monitor Report, GEM, IDRC*; 2012.
 13. Puga JL, García JG. A comparative study on entrepreneurial attitudes modeled with logistic regression and Bayes nets. *The Spanish Journal of Psychology*. 2012;15(3):1147-1162.
 14. Krueger NF, Reilly MD, Carsrud AL. Competing models of entrepreneurial intentions. *Journal of Business Venturing*. 2000;15(5-6):411-432.
 15. Ajzen I. From intentions to actions: A theory of planned behavior. In: Kuhl J, Beckman J, editors. *Action Control: From cognition to behavior*. New York: Springer-Verlag; 1985.
 16. Peterson DK. The Colbert bump® and The Facebook® follow-through for generation snark: A test and extension of the Ajzen's theory of planned behavior for 2012. *Journal of Management Research*. 2012;4(3):43-65.
 17. Shapero A, Sokol L. The social dimensions of entrepreneurship. In: Kent C, Sexton D, Vesper KH, editors. *The encyclopedia of entrepreneurship*, 72-90. Englewood Cliffs (NJ): Prentice-Hall; 1982.
 18. Ajzen I, Fishbein M. *Understanding attitudes and predicting social behavior*. Englewood (NJ): Prentice-Hall; 1980.
 19. Creswell JW. *Research Design: Quantitative, qualitative and mixed methods approaches*. 3rd Ed. Los Angeles: SAGE; 2009.
 20. Cohen L, Manion L, Morrison K. *Research methods in education*. 5th Ed. New York: RoutledgeFalmer; 2000.
 21. Greene WH. *Econometric analysis*. 5th Ed. New Jersey: Prentice Hall; 2003.
 22. Amemiya T. Tobit models: A survey. *Journal of Econometrics*. 1984;24:3-61.
 23. McDonald JF, Moffitt RA. The uses of Tobit analysis: The review of economics and statistics. 1980;62(2):318-21.
 24. Roncek DW. Learning more from Tobit coefficients: Expanding a comparative analysis of political protest. *American Sociological Review*. 1992;57:503-507.
 25. Lengyel G. Potential entrepreneurs: Entrepreneurial inclination in Hungary, 1988-2011. *Budapest: Táarki European Social Report*; 2009.
 26. Curral L, Santos SC, Caetano A. Theoretical foundation on the entrepreneurial potential. *Amity Business Journal*. 2013;2(1):1-11.
 27. Amentie C, Negash E. The study on female undergraduates' attitudes and perceptions of entrepreneurship development (comparison public and private universities in Ethiopia). *J Account Mark*. 2015;4:123. DOI: 10.4172/2168-9601.1000123
 28. Suartha N, Suprapti NWS. Entrepreneurship for students: The relationship between individual entrepreneurial orientation and entrepreneurial intention. *European Journal of Business and Management*. 2016;8(11):45-52.
 29. Mulyadi RSS, Rochaida E, Paminto A. The influence of entrepreneurship on

- ability and success of small business of Woven Sarong in Samarinda – Indonesia. *European Journal of Business and Management*. 2016;8(12):90-95.
30. Wang CK, Wong PK. Entrepreneurial interest of university students in Singapore. *Technovation*. 2004;24(2):163-72.
31. Turker D, Selcuk SS. Which factors affect entrepreneurial intention of university students? *Journal of European Industrial Training*. 2009;33(2):142-159.
32. Fini R, Grimaldi R, Marzocchi GL, Sobrero M. The foundation of entrepreneurial intention. Paper Presented at the Copenhagen Business School, Solbjerg Plads 3 DK2000 Frederiksberg Denmark, CBS-Summer Conference; 2009.
33. Nguyen C. Entrepreneurial intention of international business students in Vietnam: A survey of the country joining the trans-pacific partnership. *Journal of Innovation and Entrepreneurship*. 2017;6:7. DOI: 10.1186/s13731-017-0066-z
34. Almobaireek WN, Manolova TS. Who wants to be an entrepreneur? Entrepreneurial intentions among Saudi university students. *African Journal of Business Management*. 2012;6(11):4029-40. DOI: 10.5897/AJBM11.1521
35. Yong AG, Pearce S. A beginner's guide to factor analysis: Focusing on exploratory factor analysis. *Tutorials in Quantitative Methods for Psychology*. 2013;9(2):79-94.
36. Krishnan V. Early child development: A conceptual model. Presented at the Early Childhood Council Annual Conference, Christchurch, New Zealand; 2010.

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