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Analysis on determinants of students self employment intension in newly established Universities of Ethiopia by Aschalew Mulugeta, Dire Dawa University, Ethiopia

Abstract

Entrepreneurship and small businesses have been designated as the “engines of growth” because of their job creating phenomenon, not only in the advanced countries but also developing and privatizing economies across the globe. Fostering entrepreneurship among university students has become an important topic among entrepreneurship researchers. The university is an institution, which students pass on toward working life.

The aim of this study was to investigate determinants of entrepreneurial intensions among newly established universities of Ethiopia by taking Dire Dawa University as a case study. The paper also tried to describe the level of students’ entrepreneurial intension, students’ attitude towards entrepreneurship, entrepreneurial environment created in the university, whether or not entrepreneurship course delivered in the university created self employment intension.

To do so the researcher applied stratified proportionate random sampling technique in which 690 sample respondents from institute of technology, school of business and economics, school of social science, school of natural science, school of health and school of Law were taken as a sample via single population proportion formula of Kish and Leslie. Further primary source of data was collected via questionnaire from previous entrepreneurial intentions standardized questionnaires of different scholars. For the sake of analyzing the data Descriptive statistics was calculated using frequencies and percentages and then Binary Logistic regression analysis with 95% CI was used to assess the relative effect of independent variables on the dependent variable. The majority (77%) of sample student respondents have no Entrepreneurial intention. In multivariate analysis, attitude towards entrepreneurship was found to be a statistically significant factor of student’s entrepreneurial intension. Those who have favorable attitude towards entrepreneurship more likely to have entrepreneurial intension than those who don’t have favorable attitude towards entrepreneurship ($\exp(B)=6.348$, 95%=CI 3.28, 12.26). better self employment/entrepreneurial intension was also observed in those students who are willing to take risk than those who don’t in which those students who have high risk taking propensity almost three time entrepreneurial intension than those who have low risk taking propensity ($\exp(B)= 2.67$, 95%=CI (1.906, 3.755)). Similarly those high proactive personality students have 1.57 times self employment intension than low proactive personality students ($\exp(B)= 1.57$, 99%=CI ((1.293, 2.603)). Participation in entrepreneurship course also statistically significant in determining students entrepreneurial intension in DDU albeit those who participate in the course didn’t have that much significant difference in their self employment intension ($\exp(B)= 1.04$, 95%=CI (0.732, 1.500). Further those students who have high perceived behavioral control have 4.65 times self employment intension than low perceived behavioral control students ($\exp(B)= 4.65$, 95%=CI ((2.342, 9.231)). Attitude towards university entrepreneurial environment was also statistically significant factor for students’ entrepreneurial/self employment intension ($\exp(B)= 1.1$, 95%=CI (0.781, 1.550)) . However, subjective norm wasn’t statically significant in determining DDU students’ entrepreneurial intensions.

Generally, the over level of entrepreneurial or self employment intensions of students in Dire Dawa University is too low. Further students perceived the way entrepreneurship course delivered and entrepreneurial environment created in the university is not satisfactory/ adequate enough to urge students to pursue entrepreneurial career as an option for their future career.

Key words: entrepreneurial intension, Dire Dawa University, Determinants of entrepreneurial intension, attitude towards entrepreneurship

Introduction

Background of the study

Entrepreneurship and small businesses have been designated as the “engines of growth” because of their job creating phenomenon, not only in the advanced countries (Birch 1987; Dimo 2007) but also developing and privatizing economies across the globe’ Governments and policymakers have become keenly aware of the economic development benefits that are derived from the establishment and growth of entrepreneurial endeavors (Khan *et.al*, 2008).

Intention stems from intentionality, which is a state of mind directing a person’s attention toward a specific goal in order to achieve something. The entrepreneurial process is a way of thinking; a way of thinking that emphasizes opportunities over threats. Identifying opportunities is clearly an intentional process, and, therefore, entrepreneurial intentions are important for the explanation of entrepreneurship (Krueger, Reilly, & Carsrud, 2007).

Entrepreneurial intentions have a psychological nature. “Psychologists have proven that intentions are the best predictors of any planned behavior, particularly when the behavior is rare, hard to observe, or involves unpredictable time lags” (Krueger *et al.*, 2007). Since new business ventures are not developed in a day, entrepreneurship could be seen as a type of planned behavior.

A variety of intention models have been developed in previous research. As indicated by Peterman and Kennedy (2003) most models of entrepreneurial intention focus on the pre-entrepreneurial event and make use of attitude and behavior theory (Ajzen, 1991), and self-efficacy and social learning theory (Bandura, 1997). More and more theorists explain entrepreneurial intentions as a variable within larger psychological models: e.g. Davidsson (1995) developed a so-called economic-psychological model of factors influencing individuals’ intentions to start a new business. Autio *et al.* (2005) tested this model with a group of university students. Intentional elements, such as expectations, attention, and belief, appear to have a strong impact on our behavior.

Krueger and other colleagues have discussed entrepreneurial intentions to show that people will not indulge in starting new firms as a reflex, but rather they consider the option much more carefully and quite well in advance (Krueger *et al.*, 2005, Scutjens and Stam 2006). The drive comes from within an individual who intend to set up a business venture. Even though researchers still tell that situational as well as individual attributes serve as poor predictors of new business formation, the fact remains that it is an individual who personally envisages and articulate into business ideas. As mentioned above, it is apparently normal in course of living for people to choose entrepreneurship as a career.

Various societal and organizational attributes as well as organizational and individual aspects are accounted to be of essence in deriving entrepreneurs and entrepreneurship in any community (Gelderen *et al.*, 2008).

In Teixeira *et al.*, (2006) are quoted to show that the continued economic uncertainty, corporate and government downsizing and a declining number of corporate recruiters on the education system have been fostering the appeal of self employment. But it is also being noted as common for tertiary education to prepare students not only as job seekers but mostly as job creators by becoming self employed (Gelderen *et al.*, 2008 cross referenced in Emnet and Chalchissa, 2013).

We are in an age where the entrepreneurial culture should flourish to the extent that entrepreneurship needs to be regarded as a career that is desirable to every individual.

Consequently the aim of this study was to investigate determinants of self employment/entrepreneurial intention of Dire Dawa University (DDU) students.

Statement of the Problem

Fostering entrepreneurship among university students has become an important topic among entrepreneurship researchers. The university is an institution, which students pass on toward working life. Right after graduation, students decide where their career will start. Autio *et al.*, 2007 state the following: "It is our impression that career preferences of university students can be influenced, and that university students tend to gravitate toward fashionable career options."

Ajzen (2000) explains three factors, which are crucial in changing the intention and the actual behavior. First of all, the belief and attitude somebody has toward the behavior. A student could for instance have a positive attitude toward entrepreneurship because one of the parents is an entrepreneur. Other factors influencing the attitude in the entrepreneurial situation are e.g. willingness to take risks, locus of control, need for independence, etc. (Krueger *et al.*, 2007). The second factor is a social factor termed subjective norm.

This factor refers to the social pressure from the environment on the individual to perform or not to perform the behavior; e.g. parents who encountered negative experiences with entrepreneurship, could pressure their children not to start their own business. The third factor influencing intention is the perceived behavioral control. The idea is that the actual behavior does not only dependent on the motivation or intention to perform certain behavior, but also on the perception of the difficulty of performing the behavior. This perception can be developed through for instance experience.

Autio *et al.*, 2005 suggest: "the greater the degree to which behavior can be controlled, the greater is the influence of intentions on the eventual behavior."

Studies of Gaddam, 2008, Gelderen *et al.*, 2008, Souitaris *et al.*, 2007 and Raab *et al.*, 2005 discussed business trainings have its own impact on the level of entrepreneurial skills among students.

It would appear that career choice is a cognitive process driven by beliefs, attitudes and experiences and prior research confirms that entrepreneurial careers fit a similar pattern (Davidsson 2004; Katz 2006; Shaver and Scott 2007).

Krueger *et al.* 2006 found that personal and situational variables indirectly influenced entrepreneurial intentions through influencing key attitudes and perceptions. However, the role

entrepreneurship education, university's role in creating and promoting entrepreneurial environment wasn't in depth analyzed in previous studies. This research aimed at identifying determinants factors of undergraduate Dire Dawa University (DDU) students' self-employment/entrepreneurial intentions.

In doing so the research answered the following questions:

1. What is the level of entrepreneurial or self employment intention of DDU students?
2. What is DDU students' attitude towards entrepreneurship?
3. What are the determinants of entrepreneurial intentions of DDU students?

Objectives of the study

General Objective

- Analyze DDU students' entrepreneurial/self employment intention

Specific Objectives

- To describe the level of self employment intentions of DDU student
- To describe the students attitude towards entrepreneurship/self employment
- To examine determinants of entrepreneurial intentions among DDU students

Scope of the Study

This study focused on the antecedents of self employment/entrepreneurial intension among students of Dire Dawa University. The study stick on both internal and external factors/determinants of entrepreneurial intensions namely proactive personality of students, risk taking propensity of students, attitude towards entrepreneurship, perceived behavioral control, subjective norm, participation in entrepreneurship education, university entrepreneurial environment. There are several unknowns in predicting behavior which are found in overt process: unintentional behaviors and contextual behavior, these weren't taken in to consideration.

Significance of the Study

This study would have the potential to contribute to at least the following aspects. . First and foremost, this study will contribute a lot to the university in order to thoroughly understand its students towards self employment intension and take a remedy/action in creating entrepreneurial environment which stimulate students to become self employed/entrepreneurs since universities are expected to incubate entrepreneurs rather than institutions to produce those who are waiting jobs/employment opportunities from government, non government organizations. Consequently, the university has to play its role in the fulfillment of the country's Millennium Development Goal (MDG).

Second, the subjects of this study (students of Dire Dawa University) will be benefited from the study by getting some insights regarding the importance of self-employment/entrepreneurship.

Review of related Literature

For a better understanding of entrepreneurial behavior this chapter provides some highlights of previous research on entrepreneurial intentions, and will explain a recent model of entrepreneurial intention in more detail. This chapter answers the following sub-question: How can intentions explain the decision toward self-employment?

Previous research

Intention stems from intentionality, which is a state of mind directing a person's attention toward a specific goal in order to achieve something. The entrepreneurial process is a way of thinking; a way of thinking that emphasizes opportunities over threats. Identifying opportunities is clearly an intentional process, and, therefore, entrepreneurial intentions are important for the explanation of entrepreneurship (Krueger, Reilly, & Carsrud, 2007).

Entrepreneurial intention models frequently contain elements of rationality versus intuition (Bird, 1988). On the one hand entrepreneurs base their decisions with rational, analytic, and cause-and-effect-oriented processes. The development of a business plan, resource acquisition, and goal directed behavior, are examples of rational intentions. On the other hand, intuitive, holistic, and contextual thinking influences entrepreneurs' intentions and consecutive actions. Entrepreneurs have a vision about their venture, a feeling that their venture will succeed. The entrepreneurs' vision is often based on this intuitive thinking.

Bird and Jelinek (1988) also mention the difference between the internal and external locus of control individuals in which they find themselves. They stress that successful entrepreneurs distinguish themselves from less successful ones by the interaction of their internal and external locus.

Theory of planned behavior

Entrepreneurial intentions have a psychological nature. "Psychologists have proven that intentions are the best predictors of any planned behavior, particularly when the behavior is rare, hard to observe, or involves unpredictable time lags" (Krueger *et al.*, 2007). Since new business ventures are not developed in a day, entrepreneurship could be seen as a type of planned behavior. In order to understand the behavior of people, Ajzen (1991) developed the 'Theory of Planned Behavior' (TPB). The TPB of Ajzen, (1991), helps to understand how we can change the behavior of people (see figure 1). The central factor in Ajzen's (1991) TPB is the individuals' intentions to perform a specific behavior. Intentions are assumed to be the motivation to certain behavior. Thus, the stronger the intention to perform certain behavior, the more likely it will be performed.

Ajzen (1991) explains three factors, which are crucial in changing the intention and the actual behavior. First of all, the belief and attitude somebody has toward the behavior. A student could for instance have a positive attitude toward entrepreneurship because one of the parents is an entrepreneur. Other factors influencing the attitude in the entrepreneurial situation are e.g. willingness to take risks, locus of control, need for independence, etc. (Krueger *et al.*, 2000). The second factor is a social factor termed subjective norm. This factor refers to the social pressure from the environment on the individual to perform or not to perform the behavior; e.g. parents who encountered negative experiences with entrepreneurship, could pressure their children not to start their own business. The third factor influencing intention is the perceived behavioral control. The idea is that the actual behavior does not only dependent on the motivation or intention to perform certain behavior, but also on the perception of the difficulty of performing the behavior. This perception can be developed through for instance experience. Further research of the TPB (Ajzen, 1991) identifies antecedents of each of these factors, which have been included in figure 1 as well (Krueger *et al.*, 2007).

Autio *et al.* (1997) go even further with stating that, “previous research successfully tested the theory of planned behavior.” It is stated that attitudes explain approximately 50% of the variance in intentions, and intentions explain approximately 30% of the variance in behavior. Autio *et al.* (1997) suggest: “the greater the degree to which behavior can be controlled, the greater is the influence of intentions on the eventual behavior.” Thus, the importance of intentions in explaining entrepreneurial behavior is intensifying.

Intentions are the best predictors of entrepreneurship, though it is difficult to fully understand the reasons behind an entrepreneurial intention. In the last couple of years various models of entrepreneurial behavior have been developed. The models discussed in this chapter explain: the influence of attitude according to the theory of planned behavior; the importance of self-efficacy in predicting our behavior; and the significant role of personality traits and contextual factors as explained in a recent model of entrepreneurial intent. Intentions are the single best predictor of any planned behavior. Knowing all the antecedents of entrepreneurial intention, and their role in predicting the entrepreneurial behavior is hard and still needs further research. At least the current researchers agree that intentions help to explain and model why many entrepreneurs choose for self-employment.

Effectiveness of entrepreneurship education in shaping entrepreneurial intention

There are numerous of fascinating stories about successful entrepreneurs who received insufficient grades during their academic careers or even dropped out of school to start their own business.

The opponents argue that entrepreneurship education is unimportant, since entrepreneurs are born and not made (McIntyre & Roche, 1999). It is possible to teach students various business subjects, but teaching entrepreneurship is different; successful business ventures start with a good idea, motivation, and of course hard work. Moreover the opponents argue that entrepreneurs have a ‘fire in the belly that cannot be taught’ (McIntyre & Roche, 1999). This fire is part of the personality of the entrepreneur; the personality, as mentioned in chapter 3, has a vital influence on the intention towards self-employment.

Although personality traits are difficult to influence, the vast majority of knowledge required by entrepreneurs can be taught. The impact of entrepreneurship education on the successfulness of new ventures can therefore not be ignored (Solomon, Duffy, & Tarabishy, 2008). Entrepreneurship programs have flourished in the last couple of decades, and the effectiveness has been proven with the increasing amount of business start-ups and the positive effects on economic growth and development. In addition Gorman, Hanlon, and King (1997) concluded after ten years of literature review that: “most of the empirical studies surveyed indicated that entrepreneurship can be taught, or can at least be encouraged by entrepreneurship education.”

Entrepreneurial education can have the impact on personality entrepreneurial traits through:

1) Self-efficacy. According to Shook, Bratianu, (2010); Guerrero, *et al.*,(2008); Lián, *et al.*, (2011), self-efficacy is a power or capacity to produce a desired effect, and is one of the key factors of the entrepreneurial intention. Sánchez (2011) states that self-efficacy is an important determinant of successful entrepreneurial behaviors. De Noble, *et al.* (1999) measures entrepreneurial self-efficacy by the six factors: 1) risk and uncertainty management skills; 2)

innovation and product development skills; 3) interpersonal and networking management skills; 4) opportunity recognition; 5) procurement and allocation of critical resources and 6) development and maintenance of an innovative environment. Other scientists (McGee, *et. al.*, 2009) define self-efficacy through the five dimensions (searching, planning, marshalling, implementing people, and implementing finance).

2) Risk taking is the tendency of an individual to take risks (Pillis, Reardon, 2007). The individuals who tolerate higher risk are more inclined to entrepreneurship while the ones who tolerate lower risk are less inclined to entrepreneurship.

3) Pro activeness or the propensity to act is associated with entrepreneurial behavioral intentions. Segal, *et. al.* (2005) identifies this personality trait with tolerance for risk.

4) Behavioral control – it measures the individuals' perception of how easily and successfully they could establish and run a business, if they chose to start one (Kautonen, *et. al.*, 2011).

5) Need for achievement is one of the widely-spread indicators showing whether a person is inclined to entrepreneurship or not.

6) Internal locus of control is associated with entrepreneurial success. The people who show strong self-control usually believe that the quality of life depends on their own actions, for example, education, hard work and so forth.

7) Attitude towards business. The attitude of young people from developed and developing countries towards business was researched in more detail by Iakovleva, *et. al.*(2011). It was evaluated by the following factors: business advantages and disadvantages, the feeling of happiness from the performed activity, business as an interesting and attractive occupation. Liñán, *et. al.* (2011) describes the attitude towards business as individual associations (positive or negative) about an entrepreneur.

Factors Affecting Entrepreneurial Intention

From the substantial number of previous research on entrepreneurial intention it has been identified that three factors dominate entrepreneurial intention. One is his or her demographic profile that includes age, sex, previous experience, influence of role model. Second one is personality traits that include self-efficacy, confidence, autonomy, locus of control, risk taking tendency, professional attraction. Third factor is contextual that includes education and environment (Wärneryd, 1988).

According to trait theory of entrepreneurship- entrepreneurial intentions are dictated by some particular traits. Those are: High need for achievement; which means a need to always achieve new bold goals, risk taking propensity; which defined as a willingness to take financial risks, tolerance for ambiguity; which refers no fear of the unknown, innovation; which is an ability to create new or modify existing business concepts, intuition; which is synonymous of make decisions based on 'gut feelings', internal locus of control which is synonymous to a belief that the future is determined by their own actions and also proactiveness; which is making plans for events before they occur (Boyd and Vozikis, 1994).

According environmental approach theory-Choice of Entrepreneurship is related to external factors beyond the individual's control, seen as a cultural phenomenon, education and experience, family background. Ahmed *et al* (2010) worked on some factors to identify the determinants of entrepreneurial intentions among students in Pakistan. They investigated the effect of innovation, education, family background and gender difference on creating intentions. They found innovativeness and family business experience are related with entrepreneurial intention.

Contingency theory of entrepreneurship suggests that people do not become entrepreneur willingly rather situations or contingencies force them to become so. In such situations they have some motivations for becoming entrepreneurs in certain situations (Shaver and Scott, 1991). (Tubbs and Ekeberg, 1991) identified different types of refugees whose entrepreneurial intentions are dictated due to different posing situations. Those are Foreign refugees: people escaping political or religious persecution or to seek economy with greater opportunities, Corporate Refugees: people dissatisfied with corporate environment, Parental refugees: children of self-employed parents, Feminist Refugees: women who feel discriminated against by supervisors, peers, education system, corporate world, Social Refugees: people who do not agree with certain aspects of their society -- usually start a business tied to their hobby or craft and Educational Refugees: young people who drop out of the education system -- feel restricted or because of circumstances.

According to McClelland's Achievement Motivation Theory few people want to become entrepreneurs because they possess more needs of certain important aspects than normal people do. McClelland and colleagues studied the behavioral effects of three needs: need for achievement, need for power and need for affiliation (Honig, 2004). On the other hand-motive acquisition theory suggests that mentality and personality of people are not nature gifted. Those are flexible with the changing situation. An individual can be influenced and motivated towards a goal by changing his thinking, mentality, attitude etc. It is possible by different types of training like: motivate vocational choices, technical, managerial, security, creativity, autonomy etc (Guzmán and Santos, 2001).

Relationship between Entrepreneurial Intention and Various Determinants

Relationships between personality traits and entrepreneurial behavior are frequently discussed in entrepreneurship research. Nishantha (2009) examined effect of personality traits on motivation of students to select entrepreneur career. He indentified that need for achievement and risk taking propensity are highly contributed for developing positive attitude toward entrepreneurship but the relationship between internal locus control and entrepreneurial attitude is not significant.

Urbano (2008) investigated the impact of perceived desirability (social norms and attitude) and perceived feasibility (self-efficacy) on entrepreneurial intentions.

Tong, Tong, Loy (2011) worked on only two personality traits including need for achievement and desire for independence. They ignored important traits like risk taking propensity, self-efficacy, and autonomy. Along with personality traits, they examined the contribution of family background and subjective norms to generate entrepreneurial intention among students. Internal factors like willingness to take risks need for independence and locus of control are studied by Franke and

Luthje (2004). They also investigated some external factors like market, education, training, network, society, inspiration likely to affect student intention to be an entrepreneur. It is recognized that situational variables are very important in the decision to start a business; it is

Schools	No of students	Proportion	No of sample el.
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the convergence of attitudes and situational factors that leads to business start-ups (Shapero, 1982). Situational variables like environment, educations, network, and subjective norms have been studied in previous researches to determine the intention of entrepreneurs. Kennedy et. al (2003) found subjective norms positively related with entrepreneurial intentions. Keat, Selvarajah, Meyer (2011) examined relationship between entrepreneur education and inclination toward entrepreneurship. They also examined some demographic characteristics and business background. They identified two entrepreneurship variables, i.e university roles to promote entrepreneurship and entrepreneurial curriculum and content along with gender, working experience, and mother's occupation are statistically significant.

Methods

Research Design

This study was quantitative with the problem of the research showing the linkage between entrepreneurial intentions of DDU students and its antecedents: the study was cross-sectional and the data was collected from March 2014-April2014.

The framework presented in figure 2 brings Theory of Planned Behavior, participation in entrepreneurship education, university entrepreneurial environment, and two personality traits together in one model

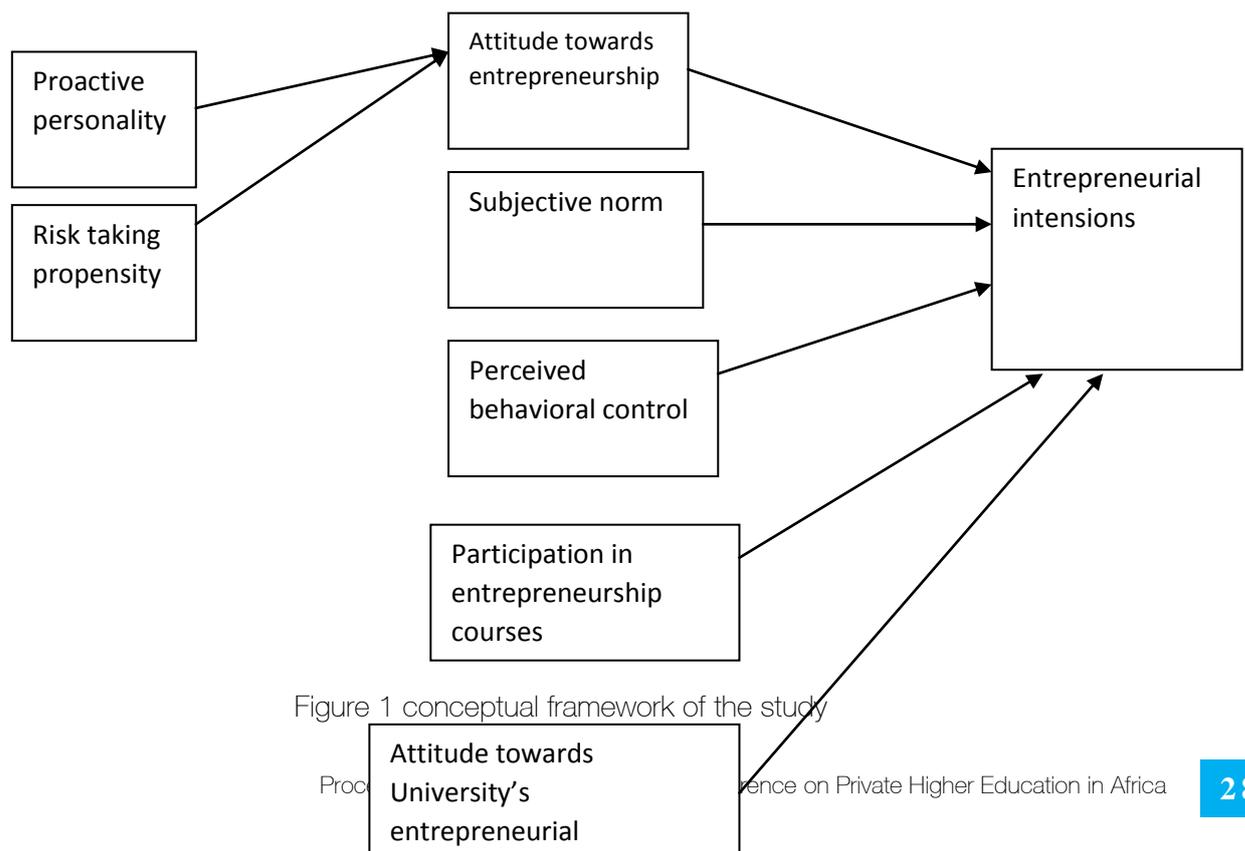


Figure 1 conceptual framework of the study

SBE	1,437	0.16	107
IOT	5167	0.56	386
SSSH	645	0.07	49
SNCS	1,475	0.16	110
SMHS	222	0.024	17
SOL	285	0.03	21

Sampling design

As mentioned in the scope of the study, the unit of analysis or respondents of this research was DDU students which are this study. The subjects of the study are students from institute of technology, school of business and economics, school of social science, school of natural science, school of health and school of law which are a total number of more than 9270. So that we have 6 stratum, the sample determination is based on single population proportions formula given by: (Kish and Leslie, 1965):

$$n = \frac{no}{1 + (no/N)}$$

Table 1. Sample determination of proportion and number of students from different schools

$$n_0 = \frac{Z^2 pq}{e^2}$$

Where

$$no = \frac{z^2 \cdot P(1-P)}{e^2}$$

N= Total population

Z= level of confidence, means the value of Z0.05 =1.96 using Z table.

e= error term or precision measurement (4%)

p=proportion of a sample, when the proportion of the sample is unknown then we can use p=0.5.

n=sample size

This formula was used because of absence of prior knowledge of p and q ; taking the value of p and q as 0.5 each and the error term to be 0.04 and a confidence interval of 95%. The mathematical computation will give us a sample size of 600, but to offset some non-response rate, 15% of the determined sample size will be added and make the final sample size was be 690. Consequently, the sample determined was distributed as per the weights of each stratum.

Source of Data

The study gathered data mainly from primary sources and some secondary data. The primary source of data was collected via questionnaire from previous entrepreneurial intentions questionnaires.

Since various questions were already tested by previous authors (Lüthje & Franke, 2003; Krueger et al., 2000; Carayannis, Evans, & Hanson, 2003; Autio et al. 2001; Francis *et al.*, 2004; Kickul & Gundry, 2002; Hisrich & Peters, 2002; Hartog, Ferrer-i-Carbonell, & Jonker, 2000), their research could be seen as pre-test information. For instance Lüthje and Franke (2003) use an extensive validation process (e.g. preliminary study, validity and reliability criterion) for each construct of their questionnaire.

Data analysis and Interpretation

First descriptive statistics was calculated using frequencies and percentages and then Logistic regression analysis with 95% CI was used to assess the relative effect of independent variables on the dependent variable. Descriptive analysis was conducted in which the responses were summed up and a total score was obtained for each respondent. The mean score was calculated and those scored above the mean have positive and scores below the mean meant negative for predictors of self employment intentions kept in the conceptual framework of the study.

Data Analysis and Interpretations

Demographic characteristics of students of Dire Dawa University

A total of 613 (out of 690 distributed questionnaire) students participated in the study making response rate of 88.8% of which 64.3% were male and 35.7% were female students. The majority 342 (55.8%) respondents were IOT students and the remaining 93(15.2%), 90(14.7%), 69(11.3%) 19(3.1%) sample students belong to School of Natural and computational science, school of business and economics, School of social science and humanities(social science + school of law) and school of medicine respectively. Regarding their year of study 192(31.3%) were first year students, 187(30.5%) were second year students, 143(23.3%) were third year students, 50 (8.2%) were fourth year students and 41(6.7%) were fifth year students. 49.3% respondents were orthodox religion followers and the remaining 26.1%, 23.8%, 0.7%, 0.2% were Muslims, Protestants, Catholics and others religion followers respectively. Respondents were also asked to indicate their mothers' and fathers' employment status in which 236(38.5%) students mothers are self employed and 223 (36.4%) of sample students fathers are self employed and the remaining are not. Table one below summarized demographic information of sample respondents:

Table 2: Demographic characteristics of students of Dire Dawa University

Characteristics	Frequency	Percentage
Gender		
Male	394	64.3
Female	219	35.7 %
Total	613	100
Program of study		
IOT	342	55.8
SNCS	93	15.2
SBE	90	14.7
SSSH	53	8.6
SM	19	3.1
SL	16	2.6
Total	613	100
Year of study		
1 st year	192	31.3
2 nd year	187	30.5
3 rd year	143	23.3
4 th year	50	8.2
5 th year	41	6.7
Religion		
Orthodox Christians	302	49.3
Muslims	160	26.1
Protestants	146	23.8
Catholics	4	0.7
Others	1	0.1
Total	613	100

Source: (own survey, 2015)

Cronbach's alpha for the study variables

The consistency of the variables is checked with the Cronbach's alpha statistics. Cronbach's alpha is an index of reliability associated with the variation accounted for by the true score of the "underlying construct" (Nunnally, 1978). Cronbach's Alpha's can only be measured for variables which have more than one measurement question. For the participation in entrepreneurship education and self employment intension (dummy) variables, the Cronbach's alpha reliability test is therefore not applicable.

McKinley, Manku-Scott, Hastings, French, and Baker (1997) state that for comparing groups, Cronbach's alpha values of 0.7 to 0.8 are regarded as satisfactory, though lower thresholds are sometimes used in literature. Nunnally (1978) has stated that 0.5 is a sufficient value, while 0.7 is a more reasonable Cronbach's alpha.

Table 3: Cronbach's alpha values of study variables

Constructs	Number of items	Cronbach's alpha
Attitude towards entrepreneurship	6	0.72
Proactive personality	5	0.86
Risk taking propensity	5	0.76
Subjective norm	3	0.74
Perceived behavioral control	4	0.7
Attitude towards university environment for entrepreneurship	7	0.77

Source: (own survey, 2015)

As shown in the above table the Cronbach's alpha values of the study variables ranges from 0.7 α to 0.86 α ; this is adequate and sufficient research tool for this study.

Level of Entrepreneurial intention in Dire Dawa University

Intention stems from intentionality, which is a state of mind directing a person's attention toward a specific goal in order to achieve something. The entrepreneurial process is a way of thinking: a way of thinking that emphasizes opportunities over threats. Identifying opportunities is clearly an intentional process, and, therefore, entrepreneurial intentions are important for the explanation of entrepreneurship (Krueger, Reilly, & Carsrud, 2000).

The central factor in Ajzen's (1991) TPB is the individuals' intentions to perform a specific behavior. Intentions are assumed to be the motivation to certain behaviour. Thus, the stronger the intention to perform certain behaviour, the more likely it will be performed.

As shown in the Table 4 below 77% of students have no Entrepreneurial intention where as the remaining 23% of students have an intension; indicating that the majority of the students won't show entrepreneurial behavior or becoming self employed.

Table 4: Percent and frequency of students with different entrepreneurial intention

Entrepreneurial intention	Frequency	Percent
no intention	472	73
high intension	141	23
Total	613	100.0

Source: (own survey, 2015)

When we look at entrepreneurial intensions across different program of study in DDU as shown in table 5 below among 141 (23%) student respondents' who have self employment intension the majority 63.2% were from IOT and the remaining 16%, 12%, 5.2%, 2%, and 1.6% were from SNCS, SBE,SSSH,SM, and SL respectively.

Table 5: The entrepreneurial intensions of students across different program of study in DDU

Program of study		intension		Total
		no	yes	
	School of Business and Economics	73	17	90
	School of Social Science and Humanities	46	8	53
	School of Natural and computational Science	71	22	93
	School of Law	14	2	16
	Institute of Technology	254	88	342
	School of Medicine and Health science	16	3	19
Total		472	141	613

Source: (own survey, 2015)

Students' attitude towards entrepreneurship

The *attitude towards entrepreneurship* variable is important for the ultimate dependable variable, entrepreneurial intentions. It refers to the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question. In general, the more favorable the attitude toward the behavior, then the stronger will be an individual's intention to perform the behavior (Ajzen, 1991).

Table 6: DDU students' attitude towards entrepreneurial intension.

Indicators of attitude	Negative attitude		Positive attitude		Indifferent	
	No	%	No	%	No	%
In business, it is preferable to be an entrepreneur, rather than a large firm employee	335	54.6	201	32.8	77	12.6
I can earn more money to be self employed than working for someone else	370	60.3	176	28.7	67	11
I would rather found a new company than be the manager of an existing one	290	47.3	215	35.1	108	17.6
Starting my own business sounds attractive to me	406	66.2	147	24	55	9.8

I personally consider entrepreneurship to be a highly desirable career alternative for people with my professional and education background	378	61.7	160	26.1	75	12.2
I am too busy with classes to consider starting my own business	300	48.9	237	38.7	76	12.4
students' attitude towards entrepreneurship(summery index)	Favorable attitude 289(47.1%) mean score=21 Unfavorable attitude 324 (52.9%)					

Source: (own survey, 2015)

As indicated in the above table 52.9% of the students have unfavorable attitude towards entrepreneurship but the remaining 47.1% of sample respondents in DDU have favorable attitude towards self employment. Further 66.2% of students have thought that starting their business sounds unattractive to them.

Students subjective norm

It refers to the perceived social pressure to perform or not to perform the entrepreneurial behavior. Drawing a correspondence to the expectancy-value model of attitude, it is assumed that Social norm is determined by the total set of accessible normative beliefs concerning the expectations of important referents. Normative beliefs are concerned with the likelihood that important referent individuals or groups approve or disapprove of performing a given behavior (Ajzen, 1991).

Table (6) below about the Social norms of the respondents measured by 5 scales of three items referring to the source of influence and motivation behind student's attitudes towards entrepreneurship. The majority 422 (68.8%) of sample respondents of the university didn't have favorable subjective norm. This means that friends, the family or associates didn't have a great deal of influence in encouraging students to think or plan for starting their own firms after graduation. However, students seemed not to be encouraged by their parents and family (383, 62.5%), close friends (373, 60.8%). Only 191(31.2%) of students have expressed they have strong support from parents and close friends.

Table 7: Survey results of assessment of student responses in relation to the support they receive.

Indicators of subjective norm	Unfavorable subjective norm		Favorable subjective norm		Indifferent	
	No	%	No	%	No	%
My family and friends support me to start my own business	298	48.6	258	42.1	57	9.3
If I became an entrepreneur, my family would consider it to be good.	383	62.5	166	27.1	64	10.4
If I became an entrepreneur, my close friends would consider it to be good.	373	60.8	170	27.7	70	11.5

Students subjective norm (summery index)	Better subjective norm 191(31.2%) Lower subjective norm 422 (68.8%) 10	mean score=
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Source: (own survey, 2015)

Level of perceived behavioral control of DDU students

Perceived behavioral control focuses individuals' ability to perform a behavior. The majority sample student respondents 353 (57.6%) of sample respondents lack some control over their current behavior to decide in becoming self employed. However, 260 (42.4%) of the students have relatively better internal locus of control and confidence in becoming successful entrepreneurs and consider self employment as their future career. Table 7 below illustrates the frequency and percentages of perceived behavioral control:

Table 8: Assessment of perceived behavioral control of students under different conditions

Indicators of perceived behavioral control	High PBC		Low PBC		Indifferent	
	No	%	No	%	No	%
I am confident that I would succeed if I started my own business	176	28.1	396	64.6	45	7.3
It would be easy for me to start my own business	245	40	287	46.8	81	13.2
To start my own firm would probably be the best way for me to take advantage of my education	171	27.9	379	61.8	63	10.3
I have the skills and capabilities required to succeed as an entrepreneur	184	30	359	58.6	70	11.4
Students PBC (summery index)	Better PBC=260(42.4%) Lower PBC=353(57.6%) mean score=14					

Source: (own survey, 2015)

As indicated in the above table 64.6% of sample respondents don't have confidence to become successful if they start their own business. Further 58.6% of sample respondents perceived they don't have adequate skill and capability required to succeed as an entrepreneur.

Proactive personality of DDU students

Students who possess proactive personalities are according to Kickul and Gundry (2002, p.87): "able to take action to influence environmental change." Which means that these personalities can: scan for opportunities, show initiative, take action, and reach their goals by bringing about changes.

Table 9: Summaries of students' level of proactive personality.

Indicators of proactive personality	High proactive personality		Low proactive personality		Indifferent	
	No	%	No	%	No	%
I enjoy facing and overcoming obstacles to my ideas	282	46	331	54		
Nothing is more exciting than seeing my ideas turn into reality	301	49.1	312	50.9		
I excel at identifying opportunities	250	40.7	363	59.3		
I love to challenge the status quo	289	47.1	324	52.9		
I can spot a good opportunity long before others can	275	44.9	338	55.1		
Students PBC (summery index)	High proactive personality=299 (48.8%) Low proactive personality= 314 (51.2%) mean= 17					

Source: (own survey, 2015)

331(54%) of the respondents indicated they didn't enjoy facing challenges and trying to overcome challenges when they tried to realize their ideas whereas 282 (46%) did. The greater majority 59.3% of sample respondents didn't have the initiative to excel their skill and knowledge to scan opportunities and also 55.1% of the respondents didn't have the motivation to identify opportunities before others come up with it. Overall 51.4 of sample respondents have low proactive personality where as 48.8% of respondents have high proactive personality.

Risk taking propensity of DDU students

The most common personality traits associated with entrepreneurial intentions is the risk taking propensity (Bosma *et al.*, 2001).

As presented in the table below 319(52%) of sample respondents holds high risk aversion and high fear of failure however the remaining 294(48%) sample of respondents were relatively willing to take risks while doing their business.

Table 10: Summaries of risk taking propensity of DDU students.

Indicators of risk taking propensity	High risk taking propensity		Low risk taking propensity		Indifferent	
	No	%	No	%	No	%
I can take risks with my money, such as investing in buying shares/stocks.	243	39.6	327	53.3	43	7
When I travel I tend to take new routes	234	38.2	330	53.8	49	8
I like to try new foods, new places, and totally new experiences	273	44.5	306	49.9	34	5.6
I will take a serious risk within the next six months	178	29	381	62.2	54	8

You are willing to buy a lottery if 100 birr will be disposed among 10 people who are willing to buy the lottery.	143	23.3	405	66.1	65	10.6
Students PBC (summery index)	High risk taking propensity=294(48%) Low risk taking propensity= 319 (52%)					mean= 14

Source: (own survey, 2015)

DDU students' evaluation of their University's entrepreneurial environment

As presented in the table below 473(77.1%) of sample respondents perceived the DDU environment isn't conducive in which students are not encouraged to pursue their own ideas and there is no a well functioning infrastructure to support the start-up of new firms by students. Further students who have taken entrepreneurship course in the university discussed the way entrepreneurship course delivered in the university didn't well prepare students for entrepreneurial career in which from those sample respondents\who took the course 121(93.1%) assured the issue.

Overall, majority of sample respondents of revealed the DDU didn't create conducive/adequate entrepreneurial environment for its students.

Table 11: Summarizes of DDU students perception of their university's entrepreneurial environment

Indicators of students evaluation towards entrepreneurship education and university environment	Positive attitude		Negative attitude	
	No	%	No	%
I know many people in my university who have successfully started up their own business	198	32.3	415	67.7
In my university, people are actively encouraged to pursue their own ideas	192	31.3	421	68.7
In my university, you get to meet lots of people with good ideas for a new business	245	40	368	60
Entrepreneurship courses at my university prepare people well for an entrepreneurial career (this question should be answered by those who take the course)	9	6.9	121	93.1
In my university there is a well functioning support infrastructure to support the start-up of new firms	192	31.3	421	68.7
Entrepreneurship cannot be taught	172	28	441	72
Entrepreneurial or business related examples are included in classes	259	42.2	354	57.8
evaluation towards university entrepreneurial env't (summery index)	Favorable attitude= 473(77.1%) Unfavorable attitude= 140(22.9%)			mean=18

Students' attitude towards Dire Dawa entrepreneurial environment

Students were asked to evaluate towards local communities support to entrepreneurs, access to finance, private investors support to entrepreneurs. Table 11 below summarizes this:

Table 12: Summaries of student perceptions of the local community support to entrepreneurs.

Indicators of students' attitude towards Dire Dawa entrepreneurial environment	Positive attitude		Negative Attitude		Indifferent	
	No	%	No	%	No	%
Dire Dawa is an excellent City to start a business	229	37.4	314	51.2	70	11.4
Dire Dawa local community supports entrepreneurs	213	34.7	282	46	118	19.3
It is easy to raise the money needed to start a new business in Dire Dawa	235	38.3	289	47.3	89	14.5
There are programs exempting student loan repayments for more students to pursue a business venture after graduation in Dire Dawa	176	28.7	307	50.1	130	21.2
In Dire Dawa Private sector have supported for students result in more university based business start-ups	186	30.3	317	51.7	110	18
Students PBC (summery index)	Favorable attitude= 296(48.3%) Unfavorable attitude=317(51.7%) mean=15					

Source: (own survey, 2015)

As table 12 above shows 317 (51.7%) unfavorable attitude towards Dire Dawa entrepreneurial environment in which 51.7% of respondents discussed private sectors of Dire Dawa administration didn't support students result in more university based business start ups, 50.1% of respondents mentioned there is no program creating access to finance to student to pursue a business venture after graduation in Dire Dawa where as 296(48.3%) of sample respondents have favorable attitude towards Dire Dawa administration entrepreneurial environment.

Role of DDU Students proactive personality and risk taking propensity on their Attitude towards entrepreneurship

As Lüthje & Franke, 2008 indicated stable personality traits like proactive personality and risk taking propensity play their pivotal role in shaping attitude towards entrepreneurial intensions.

In a bivariate analysis as presented in table 13 below DDU students attitude towards entrepreneurship was significantly higher among students who are high risk taking propensity and among students who have high proactive personality [(Exp(B)= 6.465 95% CI=(1.914, 21.836), (Exp(B)= 3.86, 99% (0.639,15.99) respectively.

Table 13: Students attitude towards entrepreneurship

Variables	Exp(B) (95%CI)	p-Value
Risk taking propensity		
Low risk taking propensity	1	
High risk taking propensity	6.465 (1.914, 21.836)	0.04**
Proactive Personality		
Low proactive personality	1	
High proactive personality	3.186 (0.639, 15.99)	0.01*

Source: (own survey, 2015)

DDU students self employment intension and its determinants

In this study attitude towards entrepreneurship, subjective norm, perceived behavioral control, attitude towards entrepreneurship course and university's entrepreneurial environment were presented as immediate determinants of students self employment intension in the conceptual framework of the study.

In multivariate analysis, attitude towards entrepreneurship was found to be a statistically significant factor of student's entrepreneurial intension. Those who have favorable attitude towards entrepreneurship more likely to have entrepreneurial intension than those who don't have favorable attitude towards entrepreneurship (exp(B)=6.348, 95%=CI 3.28,12.26). better self employment/entrepreneurial intension was also observed in those students who are willing to take risk than those who don't in which those students who have high risk taking propensity almost three time entrepreneurial intension than those who have low risk taking propensity

(exp(B)= 2.67, 95%=CI (1.906, 3.755)). Similarly those high proactive personality students have 1.57 times self employment intension than low proactive personality students (exp(B)= 1.57, 99%=CI ((1.293, 2.603)). Participation in entrepreneurship course also statistically significant in determining students entrepreneurial intension in DDU albeit those who participate in the course didn't have that much significant difference in their self employment intension (exp(B)= 1.04, 95%=CI (0.732, 1.500)). Further those students who have high perceived behavioral control have 4.65 times self employment intension than low perceived behavioral control students (exp(B)= 4.65, 95%=CI ((2.342, 9.231)). Attitude towards university entrepreneurial environment was also statistically significant factor for students' entrepreneurial/self employment intension (exp(B)= 1.1, 95%=CI (0.781, 1.550)) . However, subjective norm wasn't statically significant in determining DDU students' entrepreneurial intensions.

Generally, students proactive personality, risk taking propensity, attitude towards entrepreneurship, participation in entrepreneurship course, attitude towards university entrepreneurial environment, perceived behavioral control were significant predictors of students entrepreneurial intension/self employment intension of DDU students except subjective norm as summarized in the table 14.

Table 14: Summaries of the significance of students attitude towards entrepreneurship

Variables	Exp(B) (95%CI)	P-Value
Attitude towards entrepreneurship		
Un Favorable attitude	1	
Favorable attitude	6.348 (3.28,12.26)	0.036
Risk taking propensity		
Low risk taking propensity	1	
High risk taking propensity	2.67 (1.906, 3.755)	0.04
Proactive Personality		
Low proactive personality	1	
High proactive personality	1.578 (1.293, 2.603)	0.01
Participation in entrepreneurship education		
No	1	
Yes	1.048(0.732, 1.500)	0.00
Attitude towards University Entrepreneurial environment		
Unfavorable attitude	1	
Favorable attitude	1.100 (0.781, 1.550)	0.024
Perceived behavioral control		
Low PBC	1	
High PBC	4.65(2.342, 9.231)	0.05
Subjective norm		
lower subjective norm	1	
higher subjective norm	3.931(2.054, 7.522)	0.481
Attitude		
Positive attitude	1	
Negative attitude	0.080 (0.046, 0.137)	0.291

Source: (own survey, 2015)

Summary of Findings and Recommendations

Summary of Findings

- The majority (77%) of sampled student respondents have no Entrepreneurial intention where as the remaining 23% of students have an intension.
- 52.9% of the students have unfavorable attitude towards entrepreneurship but the remaining 47.1% of sample respondents in DDU have favorable attitude towards self employment. Further 66.2% of students have thought that starting their business sounds unattractive to them.
- The majority 422 (68.8%) of sampled respondents of the university didn't have favorable subjective norm. This means that close friends, the family or associates didn't have a great deal of influence in encouraging students to think or plan for starting their own firms after graduation.
- Only 191(31.2%) of students have expressed they have strong support from parents and close friends.
- The majority 353 (57.6%) of sampled student respondents lack some control over their current behavior to decide in becoming self employed. However, 260 (42.4%) of the students have relatively better internal locus of control and confidence in becoming successful entrepreneurs and consider self employment as their future carrier.
- More than half of (59.3%) of sample respondents didn't have the initiative to excel their skill and knowledge to scan opportunities and also 55.1% of the respondents didn't have the motivation to identify opportunities before others come up with it. Overall 51.4 of sample respondents have low proactive personality where as 48.8% of respondents have high proactive personality.
- 319(52%) of sampled student respondents holds high risk aversion and high fear of failure however the remaining 294(48%) sample of respondents were relatively willing to take risks while doing their business.
- 473(77.1%) of sample respondents perceived the DDU environment isn't conducive in which students are not encouraged to pursue their own ideas and there is no a well functioning infrastructure to support the start-up of new firms by students. Further students who have taken entrepreneurship course [121(93.1%)] in the university assured the way entrepreneurship course delivered in the university didn't well prepare students for entrepreneurial career.
- Among sampled student respondents 317 (51.7%) unfavorable attitude towards Dire Dawa entrepreneurial environment in which 51.7% of respondents discussed private sectors of Dire Dawa administration didn't support students in university based business start ups, 50.1% of respondents mentioned there is no program creating access to finance to student to pursue a business venture after graduation in Dire Dawa.
- In a bivariate analysis conducted it was resulted that DDU students attitude towards entrepreneurship was significantly higher among students who are high risk taking propensity and among students who have high proactive personality [(Exp(B)= 6.465 95% CI=(1.914, 21.836), (Exp(B)= 3.86, 99% (0.639,15.99) respectively.
- In multivariate analysis over all students proactive personality, risk taking propensity, attitude towards entrepreneurship, participation in entrepreneurship course, attitude towards university entrepreneurial environment, perceived behavioral control were significant

predictors of students entrepreneurial intension/self employment intension of DDU students.

Generally, the over level of entrepreneurial or self employment intensions of students in Dire Dawa University is too low. Further students perceived the way entrepreneurship course delivered and entrepreneurial environment created in the university is not satisfactory/ adequate enough to urge students to pursue entrepreneurial career as an option for their future career.

Recommendations

As observed in the findings of the study, the majority of the students of the university lack entrepreneurial intensions and students attitude towards entrepreneurship, their risk taking propensity, their pro-active personality, their perceived behavioral control, their university entrepreneurial environment and their participation in entrepreneurship education were found significant in determining their self employment intension. Therefore the following actions are recommended to be taken by the university in shaping students to stick on entrepreneurship as an option for their future career.

- The university needs a clear policy and guide line to create entrepreneurial podium for students to encourage them to be innovative and creative in their stay in the university via establishing business incubation centers, entrepreneurship clubs, organizing events like entrepreneurship olopyiads. Further the university has to create linkages with successful entrepreneurs/mentors and venture capitalists.
- The university should create a conducive environment in hosting different trainings like self confidence and independence trainings which will boost students perceived behavioral control in general and their internal locus of control and their risk taking propensity in particular.
- Competency based way of delivering entrepreneurship course should be developed in the university since the methodology of conveying the course majorly stick on rendering knowledge regarding entrepreneurship rather than offering skills and shaping the attitude of students to build entrepreneurial mind set.
- Recently, there is a breakthrough in hosting entrepreneurship trainings delivered in the university for graduating students which had some role in creating entrepreneurial intension. However, such mass baptism with a small number of days of entrepreneurship training may not bring adequate result, so that continuous/sustainable competency based trainings has to be launched in collaboration with different stake holders.
- As indicated in the findings of the study the students perceived the way entrepreneurship course were delivered didn't create entrepreneurial intension and the review of the curriculum indicated the major focus it is on delivering knowledge so revision of the curriculum has to get attention

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