Entrepreneurial Self Efficacy, Motivation and Entrepreneurial Intent among Higher Education Students in Addis Ababa, Manaye Adela, St. Mary's University

Abstract

The major intent of this study was to measure the self-efficacy and intrinsic motivation of university students in quest of entrepreneurial intent. The study design was concurrent triangulation with mixed approach of quantitative and qualitative methods. Tabular illustration, descriptive statistics (mean and SD), one-way ANOVA, and regression analysis were employed for data analysis. The population of this study represented university students (public and private universities) from first year to prospective graduates (graduating class). By using stratified sampling technique, from different colleges/schools and year levels, 182 respondents were selected. Questionnaire, interview and FDG were instruments used for gathering data. The study revealed that few students were found to have high entrepreneurial self-efficacy, and the intrinsic motivation for being engaged in entrepreneurship was found to be poor. The self-efficacy is highly influenced by negative stories of previous graduates' record. There was significant difference between students with employed family background and business owning family background. Those students with business owning family had better self-efficacy and intrinsic motivation toward entrepreneurship. Based on the findings, it is recommended that trainings on psychological stamina for entrepreneurship should be given as early as possible even in lower grades. Model entrepreneurial practices should also be shown for students.

Keywords: entrepreneurship, employability, self-efficacy, psychological stamina

Introduction

The rationale behind this research was emanated from increment of graduates from universities and too much in flow of job seekers into the market. The other reason was the gap in investigating psychological aspect of entrepreneurship. Themes such as motivation, family background, and higher education experiences were meticulously diagnosed in pursuit of their impact on the entrepreneurial self-efficacy and entrepreneurial intent.

Entrepreneurs are most imperative contributors to the economy of a country. One of the most significant current discussions in economic development is entrepreneurship. Given government's commitment to entrepreneurship and innovation, higher institutions of learning are faced with the responsibility of curbing inherent challenges in today's graduate education. This is becoming a very big deal. This study was propelled by the tendency of students to have deviant orientation from entrepreneurship as a career choice, particularly when they possess lower entrepreneurial self-efficacy.

Several researchers (Krueger and Dickson cited in Bakar, Ramli, Ibrahim, Muhammad, 2017) argued that, self-efficacy is associated with risk taking and opportunity recognition, The important qualities of entrepreneurs. Targeted education can play an important role in developing levels of self-efficacy.

Self-efficacy is not self-esteem. Efficacy beliefs in a given domain will contribute to my selfesteem only in direct proportion to the importance I place on that domain. Self-efficacy is not a motive, drive, or need for control (Alias &Hafir, 2009). Self-efficacy beliefs are not outcome expectancies (Bandura, 1997) or behavior-outcome expectancies (Maddux, 1999). Behavioroutcome expectancy is my belief that a specific behavior may lead to a specific outcome in a specific situation. A self-efficacy belief, simply put, is the belief that one can perform the behavior that produces the outcome.

Entrepreneurs act on what they believe is an opportunity. Because opportunities exist in (or create and/or generate) high uncertainty, entrepreneurs must use their judgment about whether to act or not. However, doubt can undermine entrepreneurial action. Therefore, a key to understanding entrepreneurial action is being able to assess the amount of uncertainty perceived to surround a potential opportunity and the individual's willingness to bear that uncertainty. The individual's prior knowledge can decrease the amount of uncertainty, and his/her motivation indicates a willingness to bear uncertainty organization (Hisrich, Peters, & Shepherd, 2017).

Statement of the Problem

According to Webb-Williams, (2006), self-efficacy is positively correlated with entrepreneurial intent. Bandura and Schunk, Hackett and Betz cited in Mbathia (2005), came to the conclusion that self-efficacy influences the choice and commitment in a task, the energy spent in performing it, and the level of the performance. One important variable for the prediction of individual's behavior is self-efficacy. Bandura (1997) pointed out that attitude is influential to some extent for some people regardless of their mediating effects on self-efficacy beliefs.

Entrepreneurship can be described in five dimensions, which are: autonomy, innovativeness, risk taking, pro-activeness and competitive aggressiveness. These dimensions characterize the entrepreneurial key processes (Lumpkin and Dess, 1996). Entrepreneurial intention is defined as the state of mind that could lead towards entrepreneurial behaviour. The concept is operationalized as the average number found by answers of a self-assessment in which one is asked to what extent he or she wants to become a corporate, alternative or classical entrepreneur and which are assessed on a 5-point Likert-type scale. Entrepreneurial intention is perceived as a predictor for entrepreneurial behaviour.

The belief system towards one's capability, higher education orientation, and expectation play critical role for entrepreneurial intent, practices, and engagement. Apart from providing evidence of the relationship between these self- beliefs and entrepreneurial intention, it also demonstrates how they are related to actual business start- up.

The purpose of this study was to assess factors that influence entrepreneurial self-efficacy and intent of graduating students from selected higher education institutions.

Significance of the Study

This study has paramount relevance for policy makers, different stakeholders, learners/students and institutions. This study can also support educators, parents and institutions to have view on entrepreneurship orientation. It is important for interventions that prop up new business.

Research Questions

This research was preceded with the following research questions which are allegation of the hypothesized idea.

- What are the key contributors of family background, motivation, and higher education experiences for entrepreneurial self-efficacy?
- How is the motivation of students toward entrepreneurship self-efficacy and intent?
- How does self-efficacy contribute to entrepreneurial intent?
- How does family background influence entrepreneurial self-efficacy and entrepreneurial intent?

Objectives of the Study

This research was designed with the under mentioned objectives:

General Objective

The general objective of the study was to assess family background, motivation, higher education experience, self-efficacy, and entrepreneurial intent of university students (from selected private and public higher education institutions) in Addis Ababa.

Specific Objectives

The specific objectives of this study were to:

- Identify the contributors of entrepreneurial inclination of students in selected universities.
- Show the level of self-efficacy toward entrepreneurship of university students.
- Pin point the relationship among motivation, family background, higher education experiences, self-efficacy, and entrepreneurial inclination.
- Distinguish the relationship between entrepreneurial self-efficacy and entrepreneurial intent.

Delimitation

In terms of theme, the research is restricted with self-efficacy, motivation, family background and entrepreneurial intent. In addition, it is delimited only to students from four higher education institutions in Addis Ababa.

Limitations

The impact of entrepreneurship course was not singled out to study the influence on entrepreneurial intent. Departmental differences were not further analyzed and compared due to the number of students and center of excellence of institutions.

Operational Definition

- **Entrepreneurial Self-efficacy**: the belief in oneself to start new business; the conviction that one can successfully execute the entrepreneurial process.
- **Entrepreneurial Intention**: refers to a desire and inclination towards starting new business; the motivational factors that influence individuals to pursue entrepreneurial outcomes.
- **Perceived desirability**: The degree to which an individual has a favorable or unfavorable evaluation of the potential entrepreneurial outcomes.

Motivation: the desire or interest to start new business by setting goal.

Self-efficacy: is a belief about one's ability to learn and compute.

Research Methods Study area

The location of this study was in Addis Ababa. There were three reasons for selecting the site. The first is for proper budgeting. Secondly, the respondents were relatively easily available for data gathering. Finally, the learners were heterogeneous and diversity in terms of institutions was relatively better met in Addis Ababa than anywhere else. Above all, external validity is better for generalization.

Population, Sample and Sampling

Graduating students of higher education institutions in Addis Ababa city were members of population of the study. From this population of study, respondents were selected using stratified sampling technique as per department and year level from selected institutions. For selecting interviewees and focus group discussion participants, snow ball sampling technique was used. To do so, the samples were selected from St. Mary's University, Unity University, Addis Ababa University and Addis Ababa Science and Technology University.

S. No.	University	n
1	St. Mary's University	56
2	Unity University	35
3	Addis Ababa University	54
4	Addis Ababa Science and Technology University	37
	Total	182

A total of 186 questionnaires were distributed but 182 were properly filled and were found to be feasible for analysis. In addition, 11 interviews and 4 FGDs were conducted for gathering additional information for the purpose of triangulation.

Instrument

In order to gather primary data, standardized test of self-efficacy was adapted by the researcher. Moreover, Focus Group Discussion (FGD) leading questions and interview guide items were constructed by the researcher.

Construction, Validating and Piloting

The independent variables of this study were family background, higher educational experience and motivation which were investigated as factors affecting the dependent variable, that is, self-efficacy. In addition, entrepreneurial intent was also studied as dependent variable with mediation of self-efficacy. In order to the collect data, self-efficacy measurement instrument was adapted and checked for reliability through pilot study.

Administration

For research ethics, informed consent was made a prior. With support of data gathering assistants/data collectors, there was direct administration of data gathering tools. Tape recorder was used at the interview and the FGD sessions supported with note taking by the researcher and the assistant data collectors.

Scoring and Data Analysis Mechanism

After data gathering tools were administered and data were collected, the collected data were coded. Then, the coded data were encoded to excel. Finally, quantitative data were analyzed using SPSS 20 for the variables. Furthermore, data from FGD and interview were analyzed using thematic analysis following repeated reading of the note which was taken from field work during the data collection. Verbal explanation with logical flow was also executed for qualitative data. Descriptive statistics such as tabular and graphic demonstration, mean, standard deviation and correlation were computed. ANOVA and Stepwise Multiple Regression Analysis were used from inferential statistics. As per the analysis, post hoc test was made.

Data Analysis, Results and Discussion Background of the Participants

The intention of the descriptive statistics part is to provide the summary of the analysis of the theme in basic elements of the group(s) that were studied. Tabular presentation of frequencies and percentage were used.

S. No	Demographic Variable	Category	f	%
1	Gender	Male	93	51.1
		Female	89	48.9
		Total	182	100.0
2	Age of the Respondents	Below 19 Years Old	70	38.5
		19 to 22 Years Old	74	40.7
		22 and Above Years Old	38	20.9
		Total	182	100.0
3	University of	St. Mary's University	56	30.8
	Respondents	Unity University	35	19.2
		Addis Ababa University	54	29.7
		Addis Ababa Science and Technology	37	20.3
		University	57	20.5
		Total	182	100.0
4	College of the	Business and Economics	84	46.2
	Respondents	Social Sciences	57	31.3
		Natural Science	5	2.7
		Engineering and Technology	36	19.8
		Total	182	100.0
5	Year Level of the	First Year	35	19.2
	Respondents	Second Year	61	33.5
		Third Year and above	86	47.3
		Total	182	100.0
6	Family Job	Business owner	97	53.3
		Employed	85	46.7
		Total	182	100.0

Table 2: Demographic Variables of Respondents

In terms of age, among the respondents, 38.5% (70) were below the age of 19 years old; 40.7% (74) between 19 and 22; 20.9% (38) were above 22 years old. So long as gender is concerned, 51.1% (93) were male and the rest 48.9% (89) were female. Half of the respondents were from private and half from public universities. 46.2% (84) of the respondents were from "College of Business and Education", 31.3% (57) from Social Sciences, 2.7% (5) from Natural Sciences, and 19.8% (36) were from Engineering and Technology. With respect to their year level, 19.2% (35) of the respondents were first year, 33.5% (61) were second year, and 47.3% (86) were third year and above. Finally, with regard to the job of family, 53.3% (97) of the respondents were from business owning families whilst 46.7% (85) were from families who were employees.

Entrepreneurial Self-efficacy and Family Background

Responses for the Likert-scale are presented by using frequency distribution, mean and standard deviation as follows.

No	Item		Scale							
			SD=1	D=2	N=3	A=4	SA=5			
1	I will be able to achieve most of the goals I set for starting business		3	6	69	90	14	182		
	Bomo I oto Ioi omiting o domitor	%	1.6	3.3	37.9	49.5	7.7	100		
			Ме	an=3.58	}	SD=(0.75			
2	When facing difficult tasks, I am certain I will succeed	F	9	88	70	12	3	182		
		%	4.9	48.4	38.5	6.6	1.6	100		
			Ме	an=2.37	7	SD=().83			
3	In general, I think I can achieve outcomes that are important to me	F	4	11	74	64	29	182		
	in starting new business	%	2.2	6.0	40.7	35.2	15.9	100		
			M	ean=3. 3	5	SD=0				
4	I believe I can succeed at most tasks to which I set my mind	F	12	25	49	96	-	182		
			6.6	13.7	26.9	52.7	-	100		
			М	ean=3.5	2	SD=0.				
5	I believe that I can deal with unexpected challenges	F	5	43	74	46	14	182		
		%	2.7	23.6	40.7	25.3	7.7	100		
			M	ean=3.1	1	SD=0.				
6	I will be able to successfully overcome many challenges	F	17	21	60	71	13	182		
		%	9.3	11.5	33.0	39.0	7.2	100		
			Mean=3.23			<i>SD</i> =1.	06			
7	I am confident I can manage well on my different tasks	F	19	6	72	78	7	182		
		%	10.4	3.3	39.6	42.9	3.8	100		
			M	ean=3.2	6	SD=0.	98			
8		F	14	29	63	51	25	182		

Table 3: Entrepreneurial Self-efficacy

	Compared to other people, I can do most tasks very well	%	7.7	15.9	34.6	28.0	13.7	1	00
			Mean=3.24 SD=1.12		12				
9	Even when things are tough, I can manage quite well	F	6	55	50	38	33	1	82
		%	3.3	30.2	27.5	20.9	18.1	1	00
			M	lean=3.0)6	SD=0.	79		
10	I know I can deliver quality service with quality process	F	10	24	66	64	18	1	82
	with quality process		5.5	13.2	36.3	35.2	9.9	1	00
			N	Iean=3.2	2	<i>SD</i> =1.	16		
11	I believe I am contributing for innovation		-	11	61	97	13	182	
		%	-	6.0	33.5	53.3	7.1	1	00
			Mean=3.6 SD=0.71				71		
12	I am sure that things will be better if I work hard	F	3	89	80	10	-	1	82
		%	1.6	48.9	44.0	5.5	-	10	00
			М	ean=3.5	3	SD=0.63		-	
13	Generally, I am brave of working in		19		58	66	35	4	182
	business/entrepreneurship	%	10.4	1	31.9	36.3	19.2	2.2	100
			Mean=3.29)=0.9 7	_1	
	N=182	I							

For the item which says that 'the respondent will be able to achieve most of his/her goals he/she set for starting business', 4.9% (9) of the respondents disagreed, 37.9% (69) remain neutral, 49.5% (90) agreed, and 7.7% (14) strongly agreed. To item No. 2, on 'their certainty to succeed when facing difficult tasks', 4.9% (9) of the respondents replied that they strongly disagree, 48.4 (88) said they disagree, 38.5% (70) of the respondents were neutral, 6.6% (12) agreed, and the rest 1.6% (3) said they strongly agree.

For 'achieving outcomes that are important to oneself in starting new business', most respondents were neutral i.e. 40.7% (74), while 6% (11) disagree, 2.2% (4) strongly disagree, 35.2% (64) agree, and 15.9% (29) strongly agree. 6.6% (12) of the respondents strongly disagree, 13.7% (25) disagree, 26.9% (49) remain neutral, and 52.7% (96) agreed that they believe to succeed at most tasks to which they set their mind (M=3.52, SD=0.81).

To the opinion that they can deal with unexpected challenges, 2.7% (5) of the respondents replied that they strongly disagree, 23.6% (43) said they disagree, 40.7% (74) were neutral, 25.3% (46) did agree, and 7.7% (14) strongly agreed. Majority of the respondents were neutral on this particular item(M=3.11, SD=0.95).

To the item which says that the respondent will be able to successfully overcome many challenges, 9.3% (17) replied that they strongly disagree, 11.5% (21) said they disagree, 33% (60) chose to be neutral, 39% (71) agree, and 7.2% (13) strongly agree. 13.7% (25) of the respondents indicated that they are not confident that they can manage well on their different tasks; whilst 39.6% (72) were neutral; 42.9% (78) agreed, 3.8% (7) strongly agreed that they are confident as they can manage well on their different tasks (M=3.26, SD=0.98).

To the item which stated that as compared to other people, they can do most tasks very well, 7.7% (14) responded that they strongly disagree, 15.9% (29) disagree, 34.6% (63) indicated as neutral, 28% (51) agree, and 13.7% (25) strongly agree (M=3.24, SD=1.12). For an item indicated as even when things are tough, he/she can manage quite well, 3.3% (6) of the respondents replied that they strongly disagree, 30.2% (55) disagree, 27.5% (50) were neutral, 20.9% (38) agree, and 18.1% (33) said they strongly agree (M=3.06, SD=0.79).

To the item which says they know that they can deliver quality service with quality process, 5.5% (10) said they strongly disagree, 13.2% (24) disagree, 36.3% (66) remain neutral, 35.2% (64) agree, and 9.9% (18) strongly agree (M=3.2, SD=1.16). For the idea which says they believe they are contributing for innovation, 6% (11) replied that they agree, 33.5% (61) chose neutral, 53.3% (97) agree, and 7.1% (13) strongly agree (M=3.6, SD=0.71). 1.6% (3) of the respondents said they strongly disagree, 48.9% (89) said they disagree, 44% (80) appear to be neutral, 5.5% (10) said they agree (M=3.53, SD=0.63) that they are sure that things will be better if they work hard. Generally, 10.4% (19) replied that strongly disagreed, and 31.9% (58) disagreed that they are brave of working in challenges for starting new business/entrepreneurship whilst 36.3% (66) remained neutral, 21.4% (39) agree (M=3.29, SD=0.97).

			Scale					
No.	Item		SD=1	D=2	N=3	A=4	SA=5	Total
1	My family background helps me to be	F	5	15	97	56	9	182
	engaged in entrepreneurial practices	%	2.7	8.2	53.3	30.8	4.9	100
				ean=3.22	7	SD=0	.79	
2	I want to have my own business as my	F	4	35	75	61	7	182
	family does	%	2.2	19.2	41.2	33.5	3.8	100
			Mean=3.18 SD=0.86			.86		
3	My family is teaching me to be	F	15	44	68	51	4	182
	employed than starting new business	%	8.2	24.2	37.4	28.0	2.2	100
		Mean=3.29 SD=0.97						
	N=182							

Table 4: Contribution of Family Background for Starting New Business

As regards to the support of family background for engagement in entrepreneurial practices, 2.7% (5) of the respondents replied that they strongly disagree, 8.2% (15) said they disagree, the majority, 53.3% (97) remain neutral (M=3.27, SD=0.79), 30.8% (56) said they agree, and 4.9% (9) said they strongly agree. In responding to the item on their desire to have one's business as their family does, 2.2% (4) of the respondents responded that they strongly disagree, 19.2% (35) said they disagree, 41.2% (75) chose neutral, 33.5% (61) said they agree, and 3.8% (7) said they strongly agree (M=3.18, SD=0.86). 8.2% (15) of the respondents said they strongly agree, 24.2% (44) said they agree, 37.4% (68) remain neutral, 28% (51) said they agree, and 2.2% (4) said they strongly agree regarding the item which says that their family is teaching them to be employed than starting new business (M=3.29, SD=0.97).

Motivation and Entrepreneurial Self-efficacy

Hereunder, responses towards motivation and entrepreneurial self-efficacy are analyzed and presented.

			Scale						
No.	Item		SD=1	D=2	N=3	A=4	SA=5	Total	
1	I do have internal passion to start	F	19	57	77	24	5	182	
	new business	%	10.4	31.3	42.3	13.2	2.7	100	
			Me	an=2.67	7	SD=	SD=0.99		
2	I am inspired towards innovative	F	1	68	89	18	6	182	
	business idea than being	%	0.5	37.4	48.9	9.9	3.3	100	
	employed		Mean=2.49			SD=			
3	I get afraid of risk to start new	F	8	15	91	65	3	182	
	business	%	4.4	8.2	50.0	35.7	1.6	100	
			M	ean=3.2	2	SD=0.	79		
4	I will start new business for fear	F	-	8	66	81	27	182	
	of unemployment	%	-	4.4	36.3	44.5	14.8	100	
			M	lean=3.	7	SD=0.	78		
	N=182								

Table	5:	Motiva	ation c	ofRes	pondents	toward	Entre	preneur	shir
I uoic		11101111		1100	ponaento	to mara	Linuv	preneur	Sinp

2.7% (5) of the respondents replied that they strongly agree, 13.2% (24) said they agree, 42.3% (77) of the respondents were neutral, 31.3% (57) said they disagree, and 10.4% (19) said they strongly disagree with regard to the item asking whether they have internal passion to start new business (M=2.67, SD=0.99). For the item that says whether they are inspired towards innovative business idea than being employed, 0.5% (1) replied that they strongly disagree, 37.4% (68) said they disagree, 48.9% (89) chose neutral, 9.9% (18) said they agree, and 3.3% (6) replied that they strongly agree (M=2.49, SD=0.72). 37.3% (68) of the respondents agreed that they get afraid of risk to start new business (M=3.2, SD=0.79), whilst 50% (91) remained neutral, and 12.8% (23) said they disagree. Most of the respondents (44.5% (81) agreed that they will start a new business for fear of unemployment (M=3.7, SD=0.78), whereas 4.4% (8) replied that they disagree, and 36.3% (66) appear to be neutral.

Higher Educational Experiences and Entrepreneurial Self-efficacy

Table 6 below, summarizes the respondents' responses regarding higher education experiences and entrepreneurial self-efficacy]

No.	Item		Scale					
			SD=1	D=2	N=3	A=4	SA=5	Total
1	My higher education experience had	F	3	32	68	60	19	182
	made me to start new business	%	1.6	17.6	37.4	33.0	10.4	100
2	I believe that a higher education is an	F	-	8	59	65	50	182
	institution to getting ready for	%	-	4.4	32.4	35.7	27.5	100
	employment		Mean=3.86 SD=0.87				0.87	
3	The courses that I had taken in the	F	7	17	43	74	41	182
	university/college energized me to be		3.8	9.3	23.6	40.7	22.5	100
	entrepreneur		Mean=3.69 SD=1.04			.04		
	N=182							

Table 6: Higher Educational Experiences and Entrepreneurship

To the item asking whether higher education experience had made them to start new business, 1.6% (3) of the respondents replied that they strongly disagree, 17.6% (32) said they disagree, 37.4% (68) of the respondents were neutral, 33% (60) said they agree, and 10.4% (19) said they strongly agree (M=3.33, SD=0.94). With respect to the item which says that higher education is an institution to getting ready for employment, 4.4% (8) of the respondents replied that they disagree, 32.4% (59) were neutral, 35.7% (65) said they agree, and 27.5% (50) said they strongly agree (M=3.86, SD=0.87). 22.5% (41) of the respondents strongly agreed, and 40.7% (74) agreed that the courses that they had taken in the university/college energized them to be an entrepreneur, Whereas 23.6% (43) of the respondents were neutral, 9.3% (17) said they disagree, and 3.8% (7) said they strongly disagree (M=3.69, SD=1.04).

Self-efficacy and Entrepreneurial Intent

This part discusses self-efficacy and its contribution to entrepreneurial intent of university students. For item which asks about their plan to start new business 50% (91) of the respondents were neutral; 15.3% (28) said they disagree; and 34.6% (63) of them said they agree. This implies that most of the respondents remain undecided (M=3.2, SD=0.76). As it is indicated above, the entrepreneurial intent of students was weak. From the interview it was also found out that most of the students learn for employment/ to get job.

Discussion

With little entrepreneurial intention among technical and engineering students primarily due to low entrepreneurial self-efficacy (Yasin et al., 2011), it will be difficult to persuade engineering graduates to make entrepreneurship a career choice. Recent evidence suggests that entrepreneurial intention is largely dependent on entrepreneurial self-efficacy (Bernstein & Carayannis, 2012; Bullough et al., 2013; Yun, 2010).

The findings of this study appear to be similar with that of Kazeem and Asimiran (2016) that family factor plays a crucial role in entrepreneurial self-efficacy of university students, having relatives that are self-employed and perceived supports from members of their family enhance their entrepreneurial self-efficacy (Naktiyok et al., 2010; Sánchez, 2011; Obschonka et al., 2013, 2012; Okhomina, 2010). In addition, their intrinsic motivation also determines whether these students believe in their ability to succeed as an entrepreneur, for those who are innovative, creative and are not afraid of taking calculated risk are born to succeed as Finally, the competencies gained through entrepreneurship entrepreneurs. education/experience have impact on their entrepreneurial self-efficacy. Based on findings of this study, family factor, motivation and higher educational experiences are indispensable and the development of these is crucial in university students for a career choice in entrepreneurship.

Past researches have established the influence of family business on venture creation of potential entrepreneurs and the performance of their firms (Robinson & Stubberud, 2012). Bandura, Selingman and other positive psychologists give emphasis to the power of positive thinking and self-efficacy (how competent we feel on a task) on achievement. Believing in our own competence and effectiveness pays dividends (Bandura & others; Maddux and Gosselin cited in Myers, 2010). Most respondents show that self-efficacy predicts entrepreneurial intent (Stajkovic & Luthans, cited in Myers, 2010) and so does this research.

Entrepreneurship education has been linked to increase in entrepreneurial self-efficacy of potential entrepreneurs (Chell, 2008; Gürol & Atsan, 2006; Wilson, 2007). However, entrepreneurial self-efficacy among engineering and science students is still low compared with those of business students. This may be due to other factors outside entrepreneurship education.

Overall pattern and an analysis of individual student's self-efficacy scores in relation to entrepreneurship were used to identify students with grossly deviated self-beliefs. These findings are presented together with those regarding the optimal level of specificity of selfefficacy measures and those regarding department variability, type of institution, and gender differences. These results are discussed in relation to the educational implications of selfefficacy theory, such as teaching, assessment and training for starting new business. The study concluded that the construct of self-efficacy is influenced by family background, university experiences, and motivation.

Gender differences have been reported in previous self-efficacy researches. For example, Britner and Pajares cited in Webb-Williams (2006), reported that girls had both higher self-efficacy and intent than boys. This pattern was replicated in the current study. On all measures of self-efficacy, girls were found to have higher mean scores than the boys. The girls scored above the overall mean on all self-efficacy instruments whereas the boys' scores fell below the overall mean. An independent samples t-test was used to test the significance of these differences and on all measures the girls scored significantly higher than the boys. Girls have a higher sense of self-efficacy than boys across the measures. In addition, the correlational

analysis shows that both boys and girls self-efficacy scores are highly related to their entrepreneurial intent. This is similar with Webb-Williams (2006).

Summary

A multiple regression analysis was run to predict entrepreneurial self-efficacy from variables such as higher education experience, family factor and motivation. The assumptions of linearity, independence of errors, homoscedasticity and normality of residuals were met. These variables significantly predicted entrepreneurial self-efficacy (F(3, 197) = 98.946, p < .0005, *adj.* $R^2 = .62$). All of the three variables added significantly to the prediction (p < .05). This establishes the predictors of entrepreneurial self-efficacy of university students based on Social Cognitive Career Theory.

Family background, higher education experiences, and motivation were used in a stepwise multiple regression analysis to predict self-efficacy. There was significant mean difference in entrepreneurial intent between private parents (M = 3.44, SD = 0.48) and public (M = 3.31, SD = 0.47) university students; t(180)= 1.89, p = 0.05. In self-efficacy, the independent test revealed that there is statistically significant mean difference between students of business owning parents (M = 3.6, SD = 0.42) and employed parents (M = 3.1, SD = 0.46); t(180)= 5.937, p = 0.00.

Conclusions

In this study, it was found that the mindset has influence on entrepreneurial target. Selfefficacy and entrepreneurial intent were highly interrelated. This study showed that perceived supports from family members positively affects entrepreneurial self-efficacy of students. Students with the belief that family member will support their effort to make entrepreneurship a career choice have the perceived abilities to succeed in the business world. Furthermore, friends and family remain potential sources of financial and social capital. The competencies and connection gained from running family business affect entrepreneurial self-efficacy of students that come from homes with family business. The second major finding was the observed positive relation between entrepreneurship education and entrepreneurial selfefficacy. Entrepreneurship education has also been found to have positive relationship with entrepreneurial intention and opportunity recognition. Additionally, these are positively correlated with entrepreneurial self-efficacy.

Family factors, intrinsic motivation, and entrepreneurial education affect entrepreneurial selfefficacy in the context of this study. The family plays a pivotal role in the formation of motivation through orientation in the family. It is worthwhile to note that the parent's career also affects entrepreneurial intent of university students.

Relationships between family background, as well as entrepreneurship education and entrepreneurial self-efficacy were also explored using Pearson correlation. Results obtained show that there is positive relationship between family business and entrepreneurial selfefficacy. There is positive correlations between family factors and entrepreneurial selfefficacy as well as between entrepreneurship education and entrepreneurial self-efficacy. Furthermore, a multiple regression analysis showed that three variables - entrepreneurship education, family factor and motivation - reliably predicted entrepreneurial self-efficacy among students surveyed. The results of this investigation showed that perceived supports from family, competencies gained via entrepreneurship education and motivation affect entrepreneurial self-efficacy of students. Generally, as they are positively and strongly correlated, self-efficacy and entrepreneurial intent have influence on later performance toward entrepreneurship.

Recommendations

The under-mentioned ways for action are forwarded for any concerned stakeholder to work on learners' motivation, entrepreneurial intent and self-efficacy enhancement.

- Students should look back into earlier induction and employment orientation to take opportunities of starting new business.
- Trainings, seminars, and other mechanisms of excelling entrepreneurial self-efficacy should be prepared in university more than a few efforts being practiced.
- Policy for reinforcing innovation and starting of new business shall be emanated from university community especially from students.
- Researchers on entrepreneurship can conduct a study on the role of self-determination of individual students as variable. Research can also be done in view of collective efficacy as variable.

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