

## Research Article

### Effect of Entrepreneurship Education on the Entrepreneurial Behaviour: The Case of Graduates in the Higher Learning Institutions in Tanzania

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**Abstract:** Entrepreneurship education is so important in shaping and imparting entrepreneurial attitudes among graduates of the higher learning institutions. With this fact several higher learning institutions have decided to either establish entrepreneurship educational programmes or mainstreaming entrepreneurship modules into their curricular. Despite all these efforts few graduates engage on entrepreneurship activities. Therefore the study focused on assessing the effect of entrepreneurship on entrepreneurial behavior. Data were collected by using questionnaire from 233 Institute of Social Work graduates while descriptive statistics i.e., percentages and Mann Whitney U test were used in data analysis. The results indicate the positive effect of entrepreneurship education on entrepreneurial behavior. Additionally, the study recommends that every student must study entrepreneurship and it should be linked to students' academic specializations.

**Keywords:** Entrepreneurship behaviour, entrepreneurship education

## INTRODUCTION

Education plays a very important role in socio-economic development including employment, creation. With this fact, "Sub-Saharan Africa and some African countries have put in place innovative policies to strengthen tertiary education systems. However, there is a limited progress, in comparison with other regions in the world. This may be contributed by insufficient understanding of the positive effect that higher education can have on economic development" (Bloom *et al.*, 2006).

Education is defined as the process of learning to live as useful and acceptable member of society (Farrant, 1964 cited by Ediagbonya, 2013). Thus, the definition of education has two key components, namely usefulness and acceptability. Usefulness may entail the process of converting a person from being non productive to become productive in a particular society and thus an entrepreneurship education may serve the purpose.

Entrepreneurship education is defined as all activities [stipulated in the curriculum] aimed at fostering entrepreneurship mindset, attitudes and skills as well as covering a range of aspects such as idea generation, start-up, growth and innovation (Ediagbonya, 2013). However in this study, entrepreneurship education is defined as the process of imparting and shaping personality traits that will enable a person to establish a business venture.

Even though, there are various forms of entrepreneurship, the most obvious form of it is starting businesses (Ihugba *et al.*, 2013; Nwafor, 2007). Other researchers (e.g., Akpomi, 2009; Adejisola and Olufunmilayo, 2009) explained entrepreneurship education in terms of its essence to impart entrepreneurship spirit and culture to students. However for the sake of this study, entrepreneurship is defined as the innovative way of creating and exploiting the business opportunities regardless of whether someone is employed or has established a business, however determined by their entrepreneurial behaviour.

The entrepreneurial behavior is defined as the motive and acts of enabling an entrepreneur to reach decisions in their roles as creators of profitable opportunities and as exploiters of those opportunities (Endres and Woods, 2010). Additionally, need for achievement, need for autonomy and independence, creative tendencies, calculated risk taking and, drive and determination form the entrepreneurship traits to be imparted to graduates because are the key traits that determine the entrepreneurial behavior (Fini *et al.*, 2009; Henderson and Palm, 2011).

Through entrepreneurship education, graduates can be able to acquire the selected entrepreneurial traits and influence their entrepreneurship behavior (Ediagbonya, 2013). Therefore the entrepreneurial tendency [or behavior] including the university graduates can be improved through exposing them to entrepreneurship education (Katundu and Gabagambi, 2014).

Entrepreneurship education can be offered from the pre primary schools to the higher learning institutions.

However, the focus of this study is on the entrepreneurship education offered in higher learning institutions. This is due to the fact that, “more emphasis were given to primary and secondary school rather than higher learning institutions as a means of eradicating poverty. For instance, it is argued that in Africa, higher learning education is relatively neglected compared to primary and secondary education” (Bloom *et al.*, 2006).

In Tanzania, many universities [and other higher learning institutions] (like UDSM, Mzumbe University; Moshi University; SUA; Tumaini University; Zanzibar University; Jordan University College) offer entrepreneurship education (Katundu and Gabagambi, 2014). It is further argued that graduates who have studied at least one entrepreneurship course during their undergraduate studies, have higher entrepreneurial propensity and clear aspiration of becoming entrepreneurs in future than those who studied normal degree programmes (*ibid*). Other studies (e.g., Kilasi, 2011; Nkirina, 2010; Olomi, 2006) have linked entrepreneurship education and the entrepreneurial behavior of graduates in Tanzania and argued for the positive influence of entrepreneurship on entrepreneurial behavior.

Despite the increase in the number of higher learning institutions that offer entrepreneurship education, most graduates from higher learning institutions fail to engage themselves into entrepreneurship (Katundu and Gabagambi, 2014). The Tanzania labour market is characterized by increasing number of graduates who do not find jobs in the formal sectors (URT, 2008). It is argued that formal paid employment [wage employment] opportunities are increasing at far lower rates that the rate at which demand for those job is growing (Nangale, 2012). With this fact several higher learning institutions in Tanzania introduced entrepreneurship education as a means of promoting entrepreneurial behaviour to graduates. Despite the fact that there are several efforts of promoting entrepreneurship among the graduates, there

are still the falling rates of graduates in entrepreneurship (Mwasalwiba *et al.*, 2012).

However, the mentioned studies defined entrepreneurship as an act of establishing a business venture and therefore focused much on creation of business venture and not continued entrepreneurship. However, in entrepreneurship research, there are two phases, namely creation of business venture and continued entrepreneurship (Delmar, 1996). The creation of business venture focuses on the factors that affect the start-up frequency and the survival of the newly established firm. On the other hand, the continued entrepreneurship focus on factors that affecting the expansion of the business and growth and opportunity identification and exploitation can be one of them. Therefore this study focused on continued entrepreneurship and not creation of enterprises.

Additionally several studies like Katundu and Gabagambi (2014) focused the university students and did not consider other higher learning institutions that are non university that recently shifted from Knowledge-Based Education and Training programme (KBET) to Competence-Based Education and Training programme (CBET). Therefore it is important to conduct this study on the effect of entrepreneurship education on the graduates’ entrepreneurial behavior focusing on non university higher learning institutions.

**Significance of the study:** The proposed study is significant on the following grounds: The study contributes to the body of knowledge as it focused on continued education which has not been addressed by the mentioned studies. The study is also likely to inform the Government and other stakeholders on how entrepreneurship education can be imparted to graduates.

The conceptual framework hypothesized that entrepreneurship education has an influence on graduates’ entrepreneurship behavior (Fig. 1). This means that an entrepreneurship education has an influence on the need for achievement, need for autonomy and independence, creative tendencies, calculated risk taking and, drive and determination.

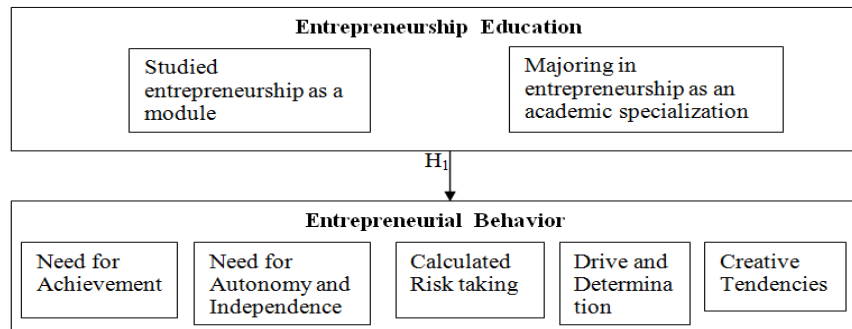


Fig. 1: The conceptual framework; Researchers Construction (2014)

## RESEARCH METHODOLOGY

The study used the positivism paradigm and the cross sectional design was used as the research design while the deductive approach was used as the research approach. The study was conducted at the Institute of Social Work (ISW). The reason of choosing the ISW was due to the fact that majority of its students do not study entrepreneurship courses (Registrar's Office, 2014).

In 2014, the Institute of Social Work had 1,065 graduates. 576 graduates were in the Social Work department, 333 graduates were in the Department of Human Resource Management (Academic) and 156 graduates were in the Labour Studies Department (ibid). The study involved 233 students. 109 students were from the Department of Social Work, 85 students were coming from Human Resource Management (Academic) Department and 39 students were coming from Labour Studies Department. The Taro Yomane's formula and probability of event technique were used to determine the sample size. The Taro Yomane's formula is given as  $n/[1+n(e)^2]$  and the confidence level is 95%. And therefore the unit of observation were only students.

The study employed questionnaires (GET Test) as a data collection method. The GET test is recommended as an effective instrument of assessing the entrepreneurial behaviour of the respondents (Cromie and O'Donoghue, 1992; Kirby, 2002; Cromie, 2000 Cited by Katundu and Gabagambi, 2014). The questionnaire included General Enterprising Tendencies (GETs) that determined graduates entrepreneurial tendencies covered by standardized 54 questions and they were distributed to 340 students.

In data analysis, the study applied the Durham University GET test analysis tool; percentages; Mann-Whitney U test; Kolmogorov-Smirnov D test and Shapiro-Wilks W. test. All normality test revealed that data were non normal since the p-value was less than 0.05 in each category of data related to the specific entrepreneurial attitude. The study applied the Durham University GET test analysis tool in analyzing the collected data together with the descriptive statistics (percentages). The aggregate score between 9 and 10 indicated that a person has high need for achievement; the aggregate score between 4 and 6 indicated that a person demonstrates the need for autonomy/independence. Additionally, the aggregate score between 8 and 12 indicated the creative tendencies while 8 and 12 indicated calculated/moderate risk personality trait. The aggregate score in between 8 and 12 indicated drive and determination trait.

After identifying the scores, the study applied Kolmogorov-Smirnov D test and Shapiro-Wilks W. test to examine whether collected data are non normal or normal. After conducting the normality test, the study

used Mann-Whitney U test to assess the effect of entrepreneurship education on the graduates' entrepreneurial behavior. In arriving to its conclusion, the study categorized the respondents into two groups, namely those who had studied entrepreneurship and those who did not study entrepreneurship.

## RESULTS AND DISCUSSION

**Findings: The demographic characteristics of the respondents:** The study managed to involve 233 graduates from the Institute of Social Work. Out of 233 respondents, 30.9% were male and 69.1% were female. In terms of marital status, 87.1% were single and 12.9% were married. The respondents were also categorized by their academic level. 1.3% of the respondents were graduates at the postgraduate diploma level, 69% were the Bachelor Degree graduates, 15.9% were Ordinary Diploma graduates and 53.2% graduated their certificate. In terms of academic specialization, 46.8% graduates were coming from Social Work Department, 36.5% were coming from Human Resource Department and 16.7% were coming from Labour Studies (Industrial Relations) Department. The larger percentage of graduates from the Social Work Department was contributed by the fact the Social Work Department consisted of the larger number of graduates followed by the Human Resource Department.

Moreover, graduates from Labour Studies Department and Human Resource Management took entrepreneurship modules during their studies. On the other hand graduates from Social Work Department did not take entrepreneurship modules during their studies at the Institute of Social Work. This means that the larger part of graduates did not study entrepreneurship during their studies.

**The attitudes of the graduates:** The analysis is based on the (5) entrepreneurship attitudes, namely need for achievement; need for autonomy; creative tendencies, calculated risks and drive and determination. The descriptive statistics show that 61.2% of the graduates who studied entrepreneurship during their studies have high need for achievement as compared to 34% of the graduates who did not study entrepreneurship. In the case of the need for autonomy, 53.7% of the graduates who studied entrepreneurship demonstrated the high need for autonomy as compared to 23.4% of those who did not study. Additionally 66.9% of the graduates who studied entrepreneurship had high creative tendencies as compared to 39.6% of those who did not study entrepreneurship.

Moreover, 83.5% of the graduates who studied entrepreneurship showed the high level of calculated risk as compared to 30.6% of the graduates who did not

Table 1: The Entrepreneurship Attitudes of the ISW Graduates

Entrepreneurship attitude	Entrepreneurship module	Entrepreneurial tendency				Total %
		High		Low		
		Frequency	%	Frequency	%	
Need for achievement 9-12 = High; <9 = Low	Yes	74	61.2	47	38.8	100
	No	34	30.6	77	69.4	100
Need for autonomy 4-6 = high; <4 = Low	Yes	65	53.7	56	46.3	100
	No	26	23.4	85	76.6	100
Creative tendency 8-12 = High; <8 = Low	Yes	81	66.9	40	33.1	100
	No	44	39.6	67	60.4	100
Calculated risk taking 8-12 = High; <8 = Low	Yes	101	83.5	20	16.5	100
	No	34	30.6	77	69.4	100
Drive and Determination 8-12 = High; <8 = Low	Yes	90	74.4	31	25.6	100
	No	26	23.4	85	76.6	100

Table 2: Entrepreneurship Education and the Need for Achievement

Attitude	Entrepreneurship	N	Mean Rank	Sum of Ranks
Need for achievement	No	111	98.03	10881.50
	Yes	121	133.44	16146.50
	Total	232		

Table 3: Test Statistics<sup>a</sup>

Test	Need for achievement
Mann-Whitney U	4665.500
Wilcoxon W	10881.500
Z	-4.646
Asymp. Sig. (2-tailed)	0.000

a. Grouping Variable: Entrepreneurship

Table 4: Entrepreneurship Education and Entrepreneurial Behavior

Attitude	Studied Entrepreneurship	N	Mean rank	Sum of ranks
Need for Autonomy	No	111	98.17	10897.00
	Yes	121	133.31	16131.00
	Total	232		

Table 5: Test Statistics<sup>a</sup>

Test	Need for autonomy
Mann-Whitney U	4681.000
Wilcoxon W	10897.000
Z	-4.711
Asymp. Sig. (2-tailed)	0.000

a. Grouping Variable: Entrepreneurship

Table 6: The Entrepreneurship Education and Creative Tendencies

Attitude	Entrepreneurship	N	Mean rank	Sum of ranks
Creative tendencies	No	111	99.98	11098.00
	Yes	121	131.65	15930.00
	Total	232		

Table 7: Test Statistics<sup>a</sup>

Test	Creative tendencies
Mann-Whitney U	4882.000
Wilcoxon W	11098.000
Z	-4.158
Asymp. Sig. (2-tailed)	0.000

a. Grouping Variable: Entrepreneurship

study entrepreneurship. Also 74.4% of the graduates had the high level of drive and determination. Only 23.4% of the graduates who did not study

entrepreneurship demonstrated the high level of drive and determination entrepreneurship attitude. However, in the need for autonomy, it was observed that there was slightly difference, in terms of percentages, between the graduates who studied entrepreneurship and those who did not study. Table 1 gives more detailed information:

**The entrepreneurship education and need for achievement:** The study compared the Means of two different samples, namely those who studied entrepreneurship and those who did not study it. It was found that there was significant different between the two groups since the p-value was less than 0.05 and therefore the null hypothesis was rejected. This implies that entrepreneurship education had the positive influence on the graduate's need for achievement as shown in Table 2 and 3.

**Entrepreneurship education and need for autonomy:** The study also assessed whether there is any difference in terms of entrepreneurship attitudes between the mentioned categories of graduates. It was found that there was a significant difference between the two and the null hypothesis was rejected. This was due to the fact that the p-value was less than 0.05. Therefore entrepreneurship education increases graduates' need for autonomy. Table 4 and 5 present more details as follows:

**The entrepreneurship education and creative tendencies:** Moreover, the study wanted to see if the two groups, namely the graduates who studied entrepreneurship and those who did not study differ or not. The results show that the two groups significantly differ because the p-value is less than 0.05. Therefore the null hypothesis was rejected and found that entrepreneurship education increases the graduates' creative tendencies as shown in Table 6 and 7.

**The entrepreneurship education and the calculated risk taking:** The study also looked at the influence of

Table 8: The Entrepreneurship Education and the Calculated Risk Taking

Attitude	Entrepreneurship	N	Mean Rank	Sum of Ranks
Calculated risk	No	111	83.88	9310.50
	Yes	121	146.43	17717.50
	Total	232		

Table 9: Test Statistics<sup>a</sup>

Test	Calculated risk
Mann-Whitney U	3094.500
Wilcoxon W	9310.500
Z	-8.287
Asymp. Sig. (2-tailed)	0.000

a. Grouping Variable: Entrepreneurship

Table 10: Entrepreneurship Education and Drive and Determination

Attitude	Entrepreneurship	N	Mean rank	Sum of ranks
Drive and Determination	No	111	85.67	9509.50
	Yes	121	144.78	17518.50
	Total	232		

Table 11: Test Statistics<sup>a</sup>

Test	Drive and determination
Mann-Whitney U	3293.500
Wilcoxon W	9509.500
Z	-7.738
Asymp. Sig. (2-tailed)	0.000

a. Grouping Variable: Entrepreneurship

entrepreneurship education on calculated risks between the mentioned two groups of graduates. The results show that the two groups differ since the p-value is also less than 0.05. This means that graduates who studied entrepreneurship modules demonstrated the high level of calculated risk bearing as compared to those one who did not study entrepreneurship. Therefore the null hypothesis was rejected since entrepreneurship education has a positive influence on the graduates' calculated risk taking. Table 8 and 9 give more information on the results:

**Entrepreneurship education and drive and determination:** Furthermore, the study assessed the influence of entrepreneurship education on graduates' drive and determination attitude. The results showed the significant different between the Means of the two groups (those who studied entrepreneurship and the ones who did not study entrepreneurship). The Mean of those who studied entrepreneurship was 144.78 and the Mean of those who did not study was 85.67. This is supported by the fact that the p-value was less than 0.05 and therefore the null hypothesis was rejected. The significant different in the Means of the two groups shows that entrepreneurship education has a positive influence on the graduates' drive and determination attitude. Table 10 and 11 give more information:

## CONCLUSION AND DISCUSSION

The study focused on assessing the effect of entrepreneurship education on entrepreneurial behavior, focusing on the graduates in the higher learning institutions. The study developed the hypothesis that

entrepreneurship education has an influence on entrepreneurial behavior. The results therefore show that entrepreneurship education has a positive effect on graduates' entrepreneurial behavior. The results are in line with the findings of other studies (i.e., Katundu and Gabagambi, 2014; Kilasi, 2011; Nkirina, 2010). The results further showed that the difference in the percentages of graduates who demonstrated the high need for autonomy and the ones who demonstrated the low need for autonomy among the graduate who studied entrepreneurship is very small.

## RECOMMENDATIONS

The higher learning institutions are required to ensure that all students regardless of their academic specialization study entrepreneurship. However entrepreneurship education must be linked to their academic specializations to empower students on the way they can use their knowledge and skills to identify, create and exploit the opportunities.

**Area of further study:** The study recommends for the further study to be conducted in order to explore why the relatively significant number of graduates who studied entrepreneurship have the low need for autonomy. Despite the fact that the percentage of the graduates who studied entrepreneurship and demonstrated the high need for autonomy is greater than those who fail to demonstrate, the difference is very small.

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