Correlation between Entrepreneurship Education and Students' Entrepreneurial Intentions: A Case of the University of Dar es Salaam, Tanzania

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Abstract

Tanzania's government has instituted measures to foster entrepreneurship training and business initiatives, such as the National Entrepreneurship Training Framework. Despite attempts to instill entrepreneurial skills at the university level, there has been a decline in self-employment among graduates. This research aimed to explore the connection between university-level entrepreneurship education and the entrepreneurial intentions of student-teachers at the University of Dar es Salaam. Utilizing correlation research methodology, the study took place at the University of Dar es Salaam, which comprises various colleges, schools, institutes, and centers. The chosen UDSM includes two constituent colleges, seven on-campus colleges, seven schools, seven institutes, and thirteen centers. Entrepreneurship education primarily occurs at UDSM through UDBS, with coordination in SOED for Bachelor of Education in Commerce student-teachers. Simple random sampling, involving 36 respondents from each target population, was employed for probability sampling. The findings revealed no statistically significant association between university entrepreneurship education and entrepreneurial intentions among student-teachers at the University of Dar es Salaam. The null hypothesis was accepted due to the absence of a statistically significant correlation between studying university entrepreneurship education and possessing high entrepreneurial intentions among student-teachers at the School of Education, University of Dar es Salaam Mwalimu Julius Nyerere Mlimani campus. These results warrant further exploration of the study's focus to attain a definitive and undeniable perspective. Future research should delve into the reasons behind the statistically significant correlation between university entrepreneurship education and entrepreneurial intentions among student-teachers at SOED in UDSM, examining both undergraduate and post-graduate levels at SOED.

Key words: Entrepreneurship education, Entrepreneurial intentions, General enterprising tendency, Higher education, Tanzania

1.0 Introduction

Entrepreneurship education has drawn unprecedented attention among policymakers, scholars' and higher learning institutions (HLIs). The attention is mainly due to efforts that are made to ensure education is made relevant by producing graduates who are either unquestionably employable or those who are capable of creating their own employment. For the latter, entrepreneurship knowledge is taken to be the way out. In line with such outlook, literature has shown that lack of business skills is one of the factors preventing Tanzanian university graduates from starting their own businesses (Ntare & Ojwang, 2021) despite the fact that universities are meant to provide entrepreneurship education that can help recipients to start their own businesses (Amos & Alek, 2014). It can therefore be anticipated that university students develop interest in creating entrepreneurial business particularly after graduating, hence their intentions to do so.

As assumed in Icek Ajzen's theory of planned behaviour, intentions are the result of three antecedents: attitude change, social norms and perceived behaviour control. University entrepreneurship education is intended to foster positive attitude toward entrepreneurship, to assist recipients in overcoming negative subjective norms that may interfere with their entrepreneurial journey and view entrepreneurship as a simple rather than difficult task to complete (Mangasini, 2015).

Despite the fact that entrepreneurship education is available up to the university level, unemployment remains a problem in many countries. For instance, in Canada, as of 2020, unemployment among those with a tertiary education aged 25-64 was 6.7% (OECD, 2022). Unemployment is also prevalent among the well-educated in the Kingdom of Saudi Arabia (Harvard Kennedy School, 2018) despite the fact that higher education institutions in the kingdom work very hard to develop graduates with skills in entrepreneurship and innovation (AlSharie & El-Gohary, 2016). In Chile, recipients of entrepreneurship education have no greater likelihood of becoming entrepreneurs than non-recipients (Pobleto & Amoros, 2013). Similarly, 13.0% of South African tertiary education graduates aged 25-64 were unemployed in 2020, which is higher than the OECD rate of 4.6% and the G-20 rate of 4.8% (OECD, 2022).

In Tanzania, despite efforts to teach entrepreneurship at the university level, graduates' self-employment is on the decline trend (Mwasalwiba et al., 2012). Across years, the central government of the United Republic of Tanzania enacted policies to promote entrepreneurship training and business venture among Tanzanian citizens and residents (Kalimasi, 2018). The National Entrepreneurship Training Framework is a good example of such policy. Despite the aforementioned policy and entrepreneurship education being offered by universities in the country, entrepreneurship venturing of recipients remains low, owing to Tanzania's high levels of graduate unemployment (Ntare & Ojwang, 2021).

Since the country's independence, youth unemployment has been a major concern (Kiaga, 2016; Ntare & Ojwang, 2021). Every year, approximately 900,000 young Tanzanians enter the labour market, though there is creation of 50,000 to 60,000 jobs annually (Mwita, 2019; Ntare & Ojwang, 2021). Thus, the majority of graduates remain unemployed (Ntare & Ojwang, 2021). In response, it is claimed that increasing entrepreneurial education is an important way to combat the unemployment problem (Mangasini, 2015). It is against this background that this study was undertaken to establish the link between university entrepreneurship education and entrepreneurial intentions among student-teachers at the University of Dar es Salaam. Developing entrepreneurial education is an important solution to unemployment (Mangasini, 2015). The study's major hypothesis was that there was no correlation between university entrepreneurship education and high entrepreneurial intentions. This is because there was conflicting empirical literatureof both developed and developing countries as evidenced in the literature review section of this study.

1.1 Hypotheses of the Study

1. There is no correlation between university entrepreneurial education and entrepreneurial intentions of year one student-teachers at SOED, in UDSM, Tanzania.
2. There is no correlation between university entrepreneurial education and entrepreneurial intentions of year two student-teachers at SOED, in UDSM, Tanzania.

3. There is no correlation between university entrepreneurial education and entrepreneurial intentions of year three student-teachers at SOED, in UDSM, Tanzania.
4. There is no correlation between university entrepreneurial education and entrepreneurial intentions of university students at SOED, in UDSM, Tanzania.
5.

2.0 Literature Review

2.1 Relationship between Entrepreneurship Education and Entrepreneurial Intentions

Duong's findings in 2021 suggest that entrepreneurship education, while not directly influencing entrepreneurial intentions, can enhance these intentions by shaping students' attitudes towards entrepreneurship and their perceived control over their behaviour. Liu et al. (2020) argue that the effectiveness of entrepreneurship education in promoting students' entrepreneurial inclinations hinges on the quality of the learning environment for entrepreneurship education. In line with this, Possaro et al. (2018) propose that university-based entrepreneurship education is more likely to foster entrepreneurial intentions when it includes hands-on, practice-oriented entrepreneurial courses.

Boahemaah et al. (2020) contend that entrepreneurship education can effectively equip undergraduate students with the skills and knowledge needed for entrepreneurial endeavours, as it directly contributes to a positive impact on their entrepreneurial intentions. Hattab (2014) supports the idea that exposure to courses like marketing, accounting, and management can effectively teach entrepreneurship by providing students with valuable knowledge and practical skills for launching and growing businesses. Additionally, Dickson et al. (2008), as cited by Hattab (2014), assert that entrepreneurship education positively reinforces students' attitudes toward pursuing entrepreneurial careers, especially in developing countries.

Afriyie and Boohene (2014) find that entrepreneurship education substantially enhances university students' ability to initiate their businesses, steering them away from seeking salaried employment, as there exists a positive association between entrepreneurship education and an orientation toward entrepreneurship.

Duong's 2021 study indicates that entrepreneurship education significantly contributes to the development of entrepreneurial intentions among students majoring in economics and business management. Enrolling in business management fields is thus considered a means to acquire the requisite entrepreneurship knowledge and skills. Liu et al. (2020) stress that a positive relationship between entrepreneurial tendencies and entrepreneurship education exists regardless of gender.

Sun et al. (2017) discovered that the effectiveness of entrepreneurship education in nurturing entrepreneurial intentions lies in its capacity to teach not only the "what" of entrepreneurship but also the "why" and "who" of the entrepreneurial journey. Israr and Saleem (2018) highlight a strong and positive correlation between entrepreneurial education and entrepreneurial intentions, suggesting that universities should prioritize attracting students to entrepreneurship education.

Barba et al. (2018) emphasize the influence of formal learning from entrepreneurship courses on

shaping entrepreneurial intentions. They recommend conveying the message that entrepreneurship training should be about learning, creating, solving, and taking proactive action. Kadir et al. (2012) assert that purposeful entrepreneurship education can heighten students' entrepreneurial intentions by improving their attitudes, knowledge, and skills. They further note that formal entrepreneurship education provides students with valuable experiences, role models, social encouragement, and support through practical activities, business plan development, and running real or simulated small businesses.

Kadir et al. (2012) argue that student participation in entrepreneurship training programs leads to changes in attitudes and intentions, and exposure to proper entrepreneurship education fosters a positive perception of entrepreneurship as a viable career choice. Dogan (2015) identifies a significant positive relationship between entrepreneurship education and entrepreneurial intentions, highlighting the substantial impact of entrepreneurship education on these intentions.

2.2 Disputed Relationship between Entrepreneurship Education and Entrepreneurial Intentions

Ceresia (2018) contends that the entrepreneurial intentions exhibited by individuals after undergoing entrepreneurship education primarily stem from their pre-education entrepreneurial intentions, rather than being a direct result of the entrepreneurship education course itself. Pre-educational entrepreneurial intentions exert a statistically significant influence on post-educational entrepreneurial intentions, whereas the impact of entrepreneurship education on post-educational entrepreneurial intentions is not statistically significant. When we account for pre-education entrepreneurial intentions, the slight and positive relationship between entrepreneurship education and post-education entrepreneurial intention effectively becomes negligible.
Oosterbeek et al. (2010) asserts that entrepreneurship education is falling short of achieving the intended effect in shaping entrepreneurial intentions. This is because students gain a more realistic understanding of the challenges associated with entrepreneurship and the demands it places on individuals. Therefore, entrepreneurship education fails to produce the desired impact on the formation of entrepreneurial intentions.

Amos and Alex (2014) argue that factors such as job security and workload negatively affect students' entrepreneurial intentions. Due to the uncertainties in entrepreneurship and their pursuit of self-actualization, university students are more inclined to seek formal employment rather than entrepreneurship. Students exposed to entrepreneurship education in their final year of study have limited exposure to entrepreneurship and, consequently, exhibit lower entrepreneurial intentions. In developing countries, students often fear that a failed business venture could make it challenging to secure new employment in the government or private sector, thus leading them to prefer formal sector employment.

Bae et al. (2014) emphasizes that there are theoretical and empirical disagreements regarding the relationship between entrepreneurship education and entrepreneurial intentions. They argue that the commonly observed association between entrepreneurship education and entrepreneurial intentions is likely due to a selection effect, both theoretically and practically. Irrespective of the duration or format of entrepreneurship education, there is no significant impact on the relationship between entrepreneurship education and entrepreneurial intentions. Individual differences among entrepreneurship education students, as well as variations in the format of entrepreneurship

education (e.g., semester-based or workshop-based), do not significantly affect this relationship. Despite additional research, theoretical and empirical disagreements persist.

According to Kalimasi (2014), entrepreneurship education is not well integrated into university curricula and is not tailored to enhance skills applicable to various forms of employment. Hussain and Norashidah (2015) found mixed results in empirical research regarding the influence of entrepreneurship education on entrepreneurial intention formation.

Nabi et al. (2018) suggest that entrepreneurship education does not directly increase students' entrepreneurial intentions; instead, it imparts knowledge about entrepreneurship. Entrepreneurship education can have conflicting effects on entrepreneurial intentions, particularly among first-year college students. It can either increase or decrease these intentions. Understanding the theoretical and practical aspects of entrepreneurship can lead to a theoretical comprehension of venture creation. Subsequently, many recipients of entrepreneurship education become aware of the challenges within the field and lose interest in entrepreneurship, opting for less risky career paths. Negative experiences with teaching methods or instructors can diminish the entrepreneurial intentions of some entrepreneurship education recipients. Several factors, including age, nationality, family support, and commitment to entrepreneurship, can cause significant variations in entrepreneurial intentions among first-year students. External barriers such as financial planning and access to bank loans also play a pivotal role in determining entrepreneurial intentions among entrepreneurship education recipients. The relationship between entrepreneurial education and entrepreneurial intentions can be both positive and negative, making it challenging to design a one-size-fits-all entrepreneurship education program that universally boosts students' entrepreneurial intentions.

Ceresia (2018) concludes that pre-educational entrepreneurial intentions heavily influence post-educational entrepreneurial intentions, while entrepreneurship education does not exert a direct influence on these intentions. Many scholars remain sceptical of the link between entrepreneurship education and entrepreneurial intentions, as engaging in entrepreneurial activities necessitates complex entrepreneurial decision-making that can be influenced by various other factors (Passaro et al., 2018).

3.0 Methodology

3.1 Design

This study employed the correlation research design. This study used correlation research design to answer the main research question andsubsidiary questions. Many studies in education are concerned with establishing relationships between variables (Cohen et al., 2018). The type of correlation ofcoefficient that was used in this study was Point Biserial correlation. Mathematically, point Biserial correlation coefficient is calculated just as Pearson bivariatecorrelation coefficient is calculated. In answering contributory questions, descriptive research design was used.

3.2 Population and Sampling

The study was undertaken at the University of Dar es Salaam. According to TCU (2022), Tanzania had 47 registered universities and university colleges as of July 2021. The selected UDSM is constituted by two constituent colleges, seven on campus colleges, seven schools, seven institutes, and thirteen centres. The research was carried out at UDSM because the first entrepreneurship course in Tanzania was offered by this University in the year 2000. (Fulgence, 2015). According

to Mangasini (2015), entrepreneurship education is primarily taught at UDSM through UDBS. In SOED, there are units that are taught to student-teachers in coordination with UDBS. These units are taught to Bachelor of Education in Commerce student-teachers at SOED.

In this study, simple random sampling was used for probability sampling. Six respondents were chosen from each target population, for a total of twelve respondents per subsidiary question. There were 36 respondents in the study because there were three subsidiary questions. According to Ary (2014) Critical Values of the Pearson Product Moment Correlation Coefficient, a minimum of 5 samples were required at the 0.05 level of significance two tailed. This means that the minimum requirement was met for each subsidiary question because the researcher increased the minimum requirement by 2.4, resulting in 12 samples for each subsidiary question. A minimum of 13 samples are required to detect a correlation coefficient of 0.81 with a power of 95% using the G-Power sample size calculator for two tailed point Biserial correlation. The research was carried out at UDSM because the first entrepreneurship course in Tanzania was offered by this University in the year 2000. (Fulgence, 2015).

3.3 Instruments

The questionnaire was administered directly by the researchers. A directly administered questionnaire is given to a group of people who have gathered in a specific location for a specific purpose (Ary et al., 2014). The dependent variable was captured using GET2, which was adapted from Caird (2013) but translated to Swahili using Google Translate to reduce the impact of language barriers on the study's results. According to Aiken (2019), Google Translate from Swahili to English has a BLEU 3 score of 70% in terms of accuracy. Concerning the independent variable, the researcher obtained entrepreneurship education teaching from the Office of the Director of Undergraduate Studies, who confirmed that the constructs used by the researcher to indicate the presence of university entrepreneurial education were 100% applicable among UDSM student-teachers.

3.4 Validity and reliability

Caird's (2013) General Enterprising Tendency Test has both content and face validity (Mangasini, 2015). The test has criterion validity and can distinguish significant differences between different students' entrepreneurial tendencies, implying that the instrument has good validity (Mangasini, 2015). To ensure the external validity of the research findings, the researcher did not generalize the research findings beyond the capacity that the sample size permitted. According to Liu et al. (2019), previous entrepreneurship studies such as those by Johnson and Fan Ma (1995), Cromie and Callaghan (1997), Stormer et al. (1999), Cromie (2000), Wise et al. (2003), Henry et al. (2004), Kirby (2004), Bulsara et al. (2010), Ismail (2010), Nasrudin and Othman (2012), Zahari et al (2018). This popularity may be attributed to the fact that the tests are regarded as comprehensive, accessible, easy to administer, and simple to score, as well as having been thoroughly tested and found to be both reliable and internally consistent (Liu et al., 2019).

3.5 Statistical Treatment of Data

Data was treated through the Pearson Product moment correlational coefficient using the Statistical Package for Social Sciences.

3.6 Ethical considerations

Ethics is based on the contrast between what is good and terrible, right and wrong. Ethical research is concerned with what researchers should and should not do in their research, as well as how their research should be conducted (Cohen et al., 2018). The below mentioned were observed during this study: The researcher did not coerce or deceive the respondents into participating in the study, but instead informed them about it. The researcher included the accessible population in the study who accepted to engage in the investigation in this study. The researcher honoured respondents' rights to withdraw at any time, not complete specific items in the data collection tools, or not return the data collection tools supplied to them by the researcher. The researcher accomplished this by not coercing or bribing respondents to change their minds, by not being disappointed by any of the respondents' acts, and by not attempting to persuade them to change their minds. The researcher did not share the information provided by respondents in this study with third parties who were not required to receive it. This was achieved by the researcher doing data analysis without the involvement of any third party and by ensuring that raw data was always encrypted.

3.7 Data processing and strategies

As for data processing, Caird's (2013) proposed tools were used to process entrepreneurial intentions. SPSS was used to process data for this study's main and subsidiary questions, as well as the second and third contributory questions. The first contributory question of this study was processed using content analysis, as proposed by Calderon (1993). Data interpretation for high entrepreneurial intentions was performed using Caird (2013) criteria, and data interpretation for the strength and direction of correlation was performed using Cohen et al (2018) and Ary et al (2018) criteria (2014).

4.0 Findings and Discussions

This section presents findings and discussions of the research. The section was guided by the following research question: Is there significant relationship between entrepreneurship education and students' intention to become entrepreneurs?

This research question called for testing of the following hypothesis: there is no significant relationship between entrepreneurship education and students' intention to become entrepreneurs. The null hypotheses were tested through Pearson Correlations Statistical tool as appears in table 1 to table 4.

4.1 Year One Results

The study intended to establish the correlation between entrepreneurship education and entrepreneurial intentions among 1st year students as appears in table 1. As the Table 1 shows, the p-value was greater than the critical value (0.05) and therefore the null hypothesis was rejected.

Table 1

Correlation between 1st year students' entrepreneurship education and entrepreneurial intention

Correlations

		University Entrepreneurship Education	Entrepreneurial Intentions
University Entrepreneurship Education	Pearson Correlation	1	-.109
	Sig. (2-tailed)		.736
	N	12	12
EntrepreneurialIntentions	Pearson Correlation	-.109	1
	Sig. (2-tailed)	.736	
	N	12	12

Source: Field Data (2023)

There was no significant relationship between university entrepreneurship education and entrepreneurial intentions among first year target population of this study, r_{pb} (10)= -.109, p=0.736. Null hypothesis 1 was accepted because point biserial correlation = -0.19, P value (0.736) is greater than Alpha value of the study (0.05) asillustrated in Table 1. The observed point Biserial correlation (-0.19) is less than +or – 0.5760 and thus the correlation obtained in this study was not statistically significant at .05 level. This means that this observed correlation coefficient is not as a result of chance in a population where the true correlation in the population is zero. The findings of the study differ from those of Dogan (2015) which discovered a significant positive correlation between entrepreneurship education and entrepreneurial intentions.

Thus, we maintain that there is no significant relationship between entrepreneurship education and first year students' intention to become entrepreneurs.

4.2 Year Two Results

The study intended to establish the correlation between entrepreneurship education and entrepreneurial intentions among 2nd year students as appears in Table 2. As the table shows, the p-value is greater than the critical value (0.05) and therefore the null hypothesis was rejected.

Table 2:

Correlation between 2nd year students' entrepreneurship education and entrepreneurial intention
Correlations

		University EntrepreneurshipEducation	Entrepreneurial Intentions
University EntrepreneurshipEducation	Pearson Correlation	1	.388
	Sig. (2-tailed)		.212
	N	12	12
EntrepreneurialIntentions	Pearson Correlation	.388	1
	Sig. (2-tailed)	.212	
	N	12	12

Source: Field Data (2023)

There was no significant relationship between university entrepreneurship education and entrepreneurial intentions among second year target population of this study, r_{pb} (10)=.388, p=0.212Null hypothesis 2 was accepted because Point Biserial Correlation = .388, P value (0.212) is greater than Alpha value of the study (0.05) as illustrated in Table 2. The observed point Biserial correlation (0.388) is less than + or – 0.5760 and thus the correlation obtained in this study was not statistically significant at .05 level. This means that this observed correlation coefficient is not as a result of chance in a population where the true correlation in the population is zero. The findings are consistent with those of Ceresia (2018) which found out that entrepreneurship education does not influence entrepreneurial intentions among its recipients. Thus, we maintain that there is no significant relationship between entrepreneurship education and 2nd year students' intention to become entrepreneurs.

4.3 Year Three Results

The study intended to establish the correlation between entrepreneurship education and entrepreneurial intentions among 2nd year students as appears in Table 3. As the table shows, the p-value is greater than the critical value (0.05) and therefore the null hypothesis was rejected.

Table 3

Correlation between 3rd year students' entrepreneurship education and entrepreneurial intention

Correlations			
	University EntrepreneurshipEducation		trepreneurialIntentions
University Entrepreneurship Education	Pearson Correlation	1	-.084
	Sig. (2-tailed)		.796
	N	12	12
Entrepreneurial Intentions	Pearson Correlation	-.084	1
	Sig. (2-tailed)	.796	
	N	12	12

Source: Field Data (2023)

There was no significant relationship between university entrepreneurship education and entrepreneurial intentions among third year target population of this study, r_{pb} (10)= -.084, p=0.796. Null hypothesis 3 was accepted because Point Biserial Correlation = -0.084, P value (0.796) is greater than Alpha value of the study (0.05) as illustrated in Table 3. The observed point Biserial correlation (-0.084) is less than + or – 0.5760 and thus the correlation obtained in this study was not statistically significant at .05 level. This means that this observed correlation coefficient is not as a result of chance in a population where the true correlation in the population is zero. The findings disagree with those of Israr and Saleem (2018) which found out that entrepreneurial education has positive relationship with entrepreneurial intentions.

Thus, we maintain that there is no significant relationship between entrepreneurship education and 3rd year students' intention to become entrepreneurs.

4.4 Total Unit of Analysis Results

Table 4

Correlation between university entrepreneurship education and entrepreneurial intentions of student-teachers at University of Dar es salaam, Tanzania

Correlations

		University Entrepreneurship Education	Entrepreneurial Intentions
University Entrepreneurship Education	Pearson Correlation	1	.071
	Sig. (2-tailed)		.681
	N	36	36
Entrepreneurial Intentions	Pearson Correlation	.071	1
	Sig. (2-tailed)	.681	
	N	36	36

Source: Field Data (2023)

The observed point Biserial correlation (.071) is less than + or - .3494 and thus the correlation obtained in this study was not statistically significant at .05 level. Therefore, null hypothesis 4 was retained. The findings of the study are consistent with those of Nabi et al. (2018), who discovered that entrepreneurship education does not increase students' entrepreneurial intentions; rather, it informs them about entrepreneurship.

The study findings are differed with those of Bae et al. (2014), who discovered that entrepreneurship education has a statistically significant but small positive relationship with entrepreneurial intentions. The findings of the study are consistent with those of Nabi et al. (2018), who discovered that participants in university entrepreneurship education programs demonstrate greater entrepreneurial learning and inspiration than their non-EE counterparts. The average change in entrepreneurial intentions from the beginning to the end of the year, on the other hand, does not differ significantly between EE and non-EE participants.

Based on the findings in table 1 to table 4 above, there is no significant relationship between the education provided and the students' entrepreneurial intentions. was no correlation between studying university entrepreneurship educational having high entrepreneurial intentions among student-teachers at School of Education, University of Dar es Salaam Mwalimu Julius Nyerere

Mlimani campus. This was because r_{pb} (0.071) was not significantly different from zero at 34 degreesof freedom, 0.05 level of significance because it was below +.3494.

5.0 Conclusions and Recommendations

There was no statistically significant correlation between studying university entrepreneurship education and having entrepreneurial intentions amongst student-teachers at SOED in UDSM, both in year one, year two and year three as evidenced by this study, unless other studies that might be conducted at the same unit of analysis and the same foci prove otherwise. The implication of this study is that these findings justify further exploration of the foci of this study, so as to have a conclusive irrefutable position. It would seem appropriate to conduct further research: (i). Further studies should be conducted among student-teachers at SOED in UDSM to determine why there is statistically significant correlation between university entrepreneurship education and entrepreneurial intentions of student-teachers at SOED in UDSM. (ii). Further studies should be conducted among student-teachers at SOED in UDSM who receive university entrepreneurship education so as to determine why they are not highly enterprising. (iii). This study was conducted at undergraduate level at SOED. Further studies should be conducted at post graduate level at SOED.

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