KIU Journal of Education (KJED)

Volume 3 Issue 2 Page 142 - 155 October – November 2023 https://www.kjed.kiu.ac.ug

Entrepreneurial inclinations among student-teachers in the School of Education, University of Dar es Salaam, Tanzania.

Eutychus Ngotho Gichuru ¹ https://orcid.org/0000-0002-5363-5443 Email: <u>ngothogichuru@gmail.com</u> George Leonard Kahangwa (PhD)² https://orcid.org/0000-0002-4510-0916 Email: georgekahangwa@gmail.com

^{1,2} School of Education, University of Dar es Salaam, Tanzania

Abstract

The aim of this study was to investigate whether there is a statistically significant mean difference in various entrepreneurial tendencies (including the need for achievement, need for autonomy, creative tendency, calculated risk-taking, and internal locus of control) between student-teachers who have received university entrepreneurship education (Bachelor of Education in Commerce) and those who have not (Bachelor of Education in Adult and Community Education) at the School of Education, University of Dar es Salaam. The study focused on a total sample size of 36 participants, utilizing an independent sample t-test (two-tailed) to compare mean differences. Given the limited sample size, the study's findings are applicable only to student-teachers at the Bachelor's degree level at the School of Education, University of Dar es Salaam, Mwalimu Julius Nyerere Mlimani Campus. Except for the need for autonomy, no statistically significant mean difference was observed among the target population. The study recommends further research to investigate the reasons behind the statistically significant mean difference in terms of the need for autonomy between recipients and non-recipients of university entrepreneurship education at the study location.

Keywords: need for achievement, need for autonomy, creative tendency, calculated risk taking, internal locus of control

Introduction

Entrepreneurship education plays a pivotal role in cultivating motivation and accomplishment. Engaging in entrepreneurial programs amplifies the drive for success, leading graduates who study entrepreneurship to exhibit a greater need for achievement compared to their non-studious counterparts. Nevertheless, there are no substantial differences in the desire for achievement between those who receive the education and those who do not. University students immersed in entrepreneurship studies show a heightened inclination toward autonomy, attributable to the program's influence. While recipients of entrepreneurship education express a strong pursuit of performance, they also underscore their desire for autonomy.

Contrary to the findings of Garavan and Cinneide (1994), university entrepreneurship education is not seen to foster a creative mindset. However, Mangasini (2015) identified a statistically significant contrast in creative tendencies between those benefiting from entrepreneurship education and those who don't, with the former demonstrating significantly higher creativity. Graduates of entrepreneurial education exhibit high levels of innovation and a propensity for taking calculated risks. Surprisingly, the entrepreneurship education program seems to have no discernible impact on encouraging calculated risk-taking.

Entrepreneurship education leaves a lasting imprint on graduates' motivation and resolve. Involvement in entrepreneurship programs diminishes the external locus of control among participants, resulting in a marked reduction in their external reliance. Students with an entrepreneurial mindset exhibit a more internal locus of control compared to their nonentrepreneurial counterparts. Recipients of entrepreneurship education convey a strong belief in their capacity to shape their own destinies, as highlighted by Gurol and Atsan (2006) and Kirby (2004).

1.1 Purpose of the study

To determine if there is a statistically significantcorrelationbetweenuniversityentrepreneurshipeducationand

entrepreneurial intentions of unit of analysis and context.

1.2 Hypotheses of the Study

The study was guided by the following five null hypotheses:

- The mean of need for achievement for student-teachers at SOED who receive university entrepreneurship education are not significantly different from that of non- recipients.
- The mean of need for autonomy for student-teachers at SOED who receive university entrepreneurship education are not significantly different from that of non-recipients.
- The mean of creative tendency for student-teachers at SOED who receive university entrepreneurship education are not significantly different from that of non- recipients.
- 4. The mean of calculated risk taking for student-teachers at SOED who receive university entrepreneurship education are not significantly different from that of non- recipients.
- 5. The mean of internal locus of control for student-teachers at SOED who receive university entrepreneurship education are not significantly different from that of non- recipients.

2. Theoretical Arguments

Various theories have been explored to understand entrepreneurial education, such as the Dunkin and Biddle model, Shapero and Sokol's 1982 Theory of Entrepreneurial Event, Fayolle and Gailly Teaching Model Framework for Entrepreneurship Education Teaching, and Ajzen's Theory of Planned Behavior. The Dunkin and Biddle model underscores the significance of teacher characteristics and student experiences in the effectiveness of entrepreneurial education. Shapero and Sokol's Theory of Entrepreneurial Event emphasizes the impact of peers, culture, and educational experiences on entrepreneurial intentions, where a high intent is achieved when perceived feasibility and desirability are both high. Fayolle and Gailly's framework for teaching entrepreneurial education suggests that diverse approaches can fulfill various objectives, and a structured framework aids in comprehending the elements of a successful

In examining intentional behaviors, especially in entrepreneurship, this study employs Icek Ajzen's theory of planned behavior. Entrepreneurship serves as a clear illustration of deliberate planned behavior, with intentions acting as the driving force. The stronger the intention, the more likely individuals are to engage in a specific behavior.

program.

2.1 Empirical Studies of Entrepreneurial Tendencies in Developed and Upper Middle-Income Countries

In 2016, Din et al. investigated the influence of entrepreneurship education programs on Malaysian university students. Their findings indicated a significant association between business strategy, risk thinking, and selfefficacy with the program's effectiveness. Holienka et al.'s 2015 survey revealed noteworthy distinctions in students' aspirations for success, willingness to take calculated risks, and internal locus of control, although no significant differences were observed in terms of autonomy and creativity. Berglund and Wennberg's 2006 psychometric examination demonstrated a high potential for creativity among both business school and engineering university students. Osterbeek et al.'s 2010 study in the Netherlands compared students participating in Junior Achievement Young Enterprise's student mini-company program to those who did not. The study concluded that traits and skills such as market awareness, creativity, feasibility, flexibility, and entrepreneurial intentions did not yield the anticipated effects.

A survey conducted by Gurol and Atsan in 2006, involving 400 fourth-year Turkish students in Türkiye, analyzed the entrepreneurship profiles of Turkish university students and contrasted them with those of nonentrepreneurial students. The study revealed students inclined that towards entrepreneurship exhibited higher levels of all entrepreneurial qualities compared to their non-inclined counterparts, except for uncertainty tolerance and self-confidence. Overall, these studies underscore the significance of entrepreneurship education in augmenting students' entrepreneurial skills and motivation.

2.2 Empirical Studies of Entrepreneurial Tendencies in Developing Countries Except Tanzania

In a study conducted by Ndofirepi in 2020, a survey involving 308 vocational education students in Zimbabwe aimed to investigate whether psychological factors such as the need for achievement, inclination towards risktaking, and internal locus of control played a moderating role in the connection between entrepreneurial aspirations and the perceived impact of entrepreneurship education. The findings revealed that the desire for achievement acted as a partial mediator in the relationship between the effects of entrepreneurship education and entrepreneurial objectives. This suggests that entrepreneurship education has a substantial impact on the need for achievement.

2.3 Empirical Studies of Entrepreneurial Tendencies in Tanzania

Research conducted by Mangasini (2015) indicated a substantial elevation in creative inclination among 308 alumni from the University of Dar es Salaam's business school and faculty of arts and social sciences who underwent entrepreneurship education. The study further revealed that entrepreneurship education had a positive impact on graduates by augmenting their desire for achievement, autonomy, as well as their internal locus of control or determination. This outcome contradicted initial expectations, as graduates with exposure to entrepreneurship courses demonstrated higher scores compared to their counterparts without such education, underscoring the pivotal role of entrepreneurship education in nurturing creativity and success.

2.4 Research Gap

The examination of existing literature highlights a gap in research within the School of Education at the University of Dar es Salaam Mwalimu Julius Nyerere Mlimani campus concerning variations in the aspirations for achievement, autonomy, creative inclination, calculated risk-taking, and internal locus of control between student-teachers who undergo university entrepreneurship education and those who do not. Additionally, the study identifies distinctions in creative tendency, calculated risk-taking, and internal locus of control among the students.

3. Research Methodology

The researcher employed a positivist approach in this study, relying on existing theories related to the subject and minimizing interaction with respondents. The quantitative research approach was chosen at the University of Dar es Salaam (UDSM), where the first entrepreneurship course in Tanzania was introduced in 2000. The study focused on SOED student-teachers as the unit of analysis.

The participants were students from the University of Dar es Salaam Mlimani main campus, specifically those pursuing Bachelor of Education in Commerce and Bachelor of Education in Adult and Community Education. This target population was selected due to their exposure to various entrepreneurship courses. Basic random sampling was employed, defining the target and accessible populations, enumerating individuals, and drawing a random sample. A total of 36 respondents participated.

Secondary data on SOED student-teachers undergoing university entrepreneurial education was collected through а documentary review. А questionnaire, featuring dichotomous questions, gathered personal information and entrepreneurial tendencies. Sixty questionnaires were distributed to responders from a target population of 70, with a 60% response rate (36 out of 60 respondents).

The study utilized the General Enterprising Tendency Test (GET₂) to record the dependent variable and obtained entrepreneurship education teaching details from the Office of the Director of Undergraduate Studies. The independent variable was confirmed by the same office, and entrepreneurial intentions were processed using tools proposed by Caird (2013). SPSS was employed to analyze data using the independent sample t-test two-tailed.

Caird's (2013) General Enterprising Tendency Test demonstrated content and face validity, with criterion and construct validity in the GET2 test. To ensure external validity, the researcher refrained from generalizing findings beyond the sample size.

The GET and GET2 tests were chosen for their comprehensive, accessible, simple, and reliable nature, having been frequently used in previous entrepreneurship studies. Ethical considerations were prioritized, with the researcher providing information about the study and respecting respondents' rights to withdraw or not complete specific items. No coercion or deception occurred.

The researcher safeguarded respondents' privacy by not sharing information with third parties and encrypting raw data. Research authorization was obtained from the UDSM Vice Chancellor's office, followed by permits from regional and district authorities. Permission was also secured from the School of Education at UDSM, where all student-teacher respondents were associated.

4. Data Presentation, Analysis and Discussion of Findings

Mean Difference in The Entrepreneurial Tendencies Between Recipients and Non-Recipients of University Entrepreneurship Education At SOED.

Need for achievement

The research revealed that there is no statistically significant difference (α = 0.05; P>0.05) in the need for achievement between student-teachers engaged in university entrepreneurship education and those who are not, as depicted in Table 2. The calculation of mean and standard deviation for the study participants was conducted using SPSS, as demonstrated in Table 1.

Table 1: Group statistics for need forachievement

Group Sta	ntistics				
	Need For Achievemen t	Ν	Me an	Std. Deviation	Std. Error Mean
Total Score	BED ACE STUDENTS	18	8.5 0	1.249	.294
	BED COM STUDENTS	18	8.0 6	1.474	•347

Independent sample t-test two tailed was conducted for participants of this study so as to compare their means in terms of need for achievement as illustrated in Table 2

Table 2: Independent sample t-test for needfor achievement

Independent Samples To	est				
	Levene ^r for Ec of Varia	quality	t-test Mean		quality of
	F	Sig.	Т	df	Sig. (2- tailed)

Tot	al	Equal	.057	.813	.976	34	.336	r
Sco	re	variances						s
		assumed						а
		Equal			.976	33.1	.336	e
		variances not				03		S
		assumed						ir

The average score for students in the BED Adult and Community Education (BED ACE) program regarding the 'need for achievement' (M=8.50, SD=1.249) did not show a significant difference (t=0.976, df=34, two-tailed p=0.336) compared to BED Commerce (BED COM) students (M=8.06, SD=1.474), as outlined in both Table 1 and Table 2.

An independent sample t-test, two-tailed, was conducted on BED ACE (Years 1, 2, 3) and BED COM (Years 1, 2, 3) to assess any significant difference in their need for achievement. The observed t-value was 0.96, lower than the critical t-value of 2.032. The p-value was 0.336, greater than the alpha value of 0.05 specified for this study, as demonstrated in Table 2. Consequently, there was no significant difference in the need for achievement between those undertaking universitv entrepreneurship education and those who are not. Therefore, the first null hypothesis was retained.

This study's results contradict Hansemark's (1998) finding that participation in an entrepreneurial program enhances the need for achievement among participants. Additionally, they differ from Gurol and Atsan's (2006) discovery of a significant difference in the achievement need for between entrepreneurially inclined and non-inclined students, with the former exhibiting a higher need for achievement. Furthermore, the findings contrast with Mangasini's (2015)

esearch, which identified a statistically ignificant difference in the need for achievement between graduates studying entrepreneurship and those who do not, uggesting that entrepreneurship education ncreases the need for achievement. In contrast, Soomro and Shah (2021) found a correlation strong positive between entrepreneurship and the need for achievement, contradicting the conclusions of this study.

Eutychus Ngotho Gichuru & George Leonard Kahangwa

On the other hand, the study's results align with Gerba's (2012) findings, indicating no statistically significant differences in entrepreneurial intentions between entrepreneurship education recipients and non-recipients. Similarly, the results correspond with Din et al.'s (2016) discovery that the demand for achievement is unrelated to entrepreneurial programs.

Need for autonomy

This research identified statistically а significant distinction (α = 0.05; P<0.05) in the need for autonomy between student-teachers undergoing university entrepreneurship education and those who are not, as depicted in Table 4. Mean and standard deviation calculations, conducted through SPSS, were employed to assess their need for autonomy. Group statistics are provided in Table 3.

Table 3: Group statistics for need for autonomy

Group Statistics									
	Need For Autonom y	N	Mean	Std. Deviation	Std. Error Mean				
Total Score	BED ACE Students	18	1.89	.583	.137				

BED COM	18	2.61	1.145	.270
Students				

Independent sample t-test two tailed was calculated so as to compare the means in terms of need for autonomy between the participants in this study as illustrated in Table 4.

Table 4: Independent sample t-test for need for autonomy

Independent Samples Test								
		Levene's Test for Equality of Variances		t-test Means	for Equ	ality of		
		F	Sig.	t	Df	Sig. (2- tailed)		
Total Score	Equal variances assumed	8.408	.007	-2.385	34	.023		
	Equal variances not assumed			-2.385	25.262	.025		

Independent Samples Test									
		t-test for Equality of Means							
		Mean	Std.	95%	Confid	ence			
		Differ	Error	Interva	l of	the			
		ence	Differ	Differe	nce				
			ence	Lowe	Upper				
				r					
Total Score	Equal variances assumed	722	.303	-1.338	107				
	Equal variances not assumed	-,722	.303	-1.346	099				

The average score for students in the BED Adult and Community Education (BED ACE)

program concerning the 'need for autonomy' (M=1.89, SD=.583) did exhibit a significant difference (t= -2.385, df=34, two-tailed p=0.023) compared to BED Commerce (BED COM) students (M=2.61, SD=1.145), as illustrated in both Table 3 and Table 4. An independent sample t-test, two-tailed, was conducted on BED ACE (Years 1, 2, 3) and BED COM (Years 1, 2, 3) to assess any significant difference in their need for autonomy. The observed t-value (2.385) exceeded the critical t-value (2.032) for this study, while the p-value (0.007) was smaller than the alpha value (0.05) specified for this study, as indicated in Table 4. Consequently, there was a significant difference in the need for autonomy between those pursuing university entrepreneurship education and those who are not. Therefore, the second null hypothesis was rejected.

These findings contrast with those of Holienka et al. (2015), who identified no significant differences in the need for autonomy between recipients and non-recipients of entrepreneurship education. Holienka et al. argued that such differences did not exist because there were no notable distinctions in average values between business administration students and students from other fields studied. In contrast, the current study's results align with Mangasini (2015), who uncovered that graduates studying entrepreneurship at the undergraduate level exhibit a higher mean need for autonomy than non-recipients, and differs this mean significantly.

Creative tendency

This research revealed that there is no statistically significant difference (α = 0.05; P>0.05) in terms of creative tendency between student-teachers undergoing university

entrepreneurship education and those who are not, as depicted in Table 6. Mean and standard deviation calculations were performed using SPSS to assess the creative tendency of participants, as illustrated in Table 5.

Group S	itatistics				
	Creative Tendency	N	Mean	Std. Deviati on	Std. Error Mean
Total Score	BED ACE Students	18	7.78	1.309	.308
	BED COM Students	18	7.78	1.309	.308

Table 5: Group statistics for creative tendency

Independent sample t-test two tailed was administered to participants in this study so as to compare their means as illustrated in Table 6.

Table 6: Independent sample t-test forcreative tendency

Indepe	Independent Samples Test									
		Leven	e's	t-test for Equality of Means						
		Test	for							
		-	ity of							
		Variar	ices		1	1				
		F	Sig.	t	df	Sig. (2- tailed)				
Total Score	Equal variances assumed	.008	.930	.000	34	1.000				
	Equal variances not assumed			.000	34.000	1.000				

The average score for students in the BED Adult and Community Education (BED ACE) regarding 'creative tendency' program (M=7.78, SD=1.309) showed no significant difference (t=0, df=34, two-tailed p=1) when compared to BED Commerce (BED COM) students (M=7.78, SD=1.309), as presented in both Table 5 and Table 6. Regarding creative tendency, there is no significant difference between those undergoing university entrepreneurship education and those who are not, as the observed T-value (0.000) was smaller than the critical T-value (2.032) for this study, and the P-value (1) was greater than the alpha value (0.05) specified for this study. Therefore, the third null hypothesis was retained.

These results align with those of Holienka et al. (2015) and Berglund and Wennberg (2006), who found no significant changes in creative propensity between recipients and nonrecipients of entrepreneurship education. However, the findings contradict Mangasini's (2015) discovery of a statistically significant difference in the creative tendency of entrepreneurship education beneficiaries compared to non-recipients, with the former exhibiting a much higher creative tendency. Additionally, the results oppose Liu et al.'s (2020) report of a positive association between entrepreneurship education and increased entrepreneurial impulses in both male and female students compared to those who did not study entrepreneurship.

Calculated risk taking

This research revealed that there is no statistically significant difference (α = 0.05; P>0.05) in terms of calculated risk-taking between student-teachers undergoing university entrepreneurship education and

not assumed

illustrated in Table 8.

those who are not, as indicated in Table 8. Mean and standard deviation calculations were performed using SPSS to assess the participants' calculated risk-taking, as illustrated in Table 7.

Table 7: Group statistics for calculated risk taking

Group	Group Statistics										
	Calculate d Risk Taking	N	Mean	Std. Deviation	Std. Error Mean						
Total Score	BED ACE Students	18	7.17	1.790	.422						
	BED COM Students	18	6.89	1.745	.411						

Independent sample t-test two tailed was administered to participants in this study so as to compare their means in terms of calculated risk taking as illustrated in Table 8.

Table8:Independentsamplet-testforcalculated risk taking

Independ	lent Samples ⁻	Test				
		Levene's Test for Equality of Variances		t-test Means	for Equa s	ality of
		F	Sig.	t	df	Sig. (2- tailed)
Total Score	Equal variances assumed	.092	.764	.471	34	.640
	Equal variances			. 471	33.978	.640

The average score for students in the BED Adult and Community Education (BED ACE) program regarding 'calculated risk-taking' (M=7.17, SD=1.790) showed no significant difference (t=0.471, df=34, two-tailed p=0.64) when compared to BED Commerce (BED COM) students (M=6.89, SD=1.745), as depicted in both Table 7 and Table 8. An independent sample t-test, two-tailed, was conducted on BED ACE (Years 1, 2, 3) and BED COM (Years 1, 2, 3) to assess any significant difference in their calculated risk-taking. The observed T-value was 0.471, and the P-value was 0.64, as

In terms of calculated risk-taking, there is no significant difference between those undergoing university entrepreneurship education and those who are not because the observed T-value (0.471) is smaller than the critical T-value (2.032), and the P-value (0.64) is greater than the alpha value (0.05) specified for this study. Therefore, the fourth null hypothesis was retained.

These findings contradict those of Mangasini (2015), who suggested that undergraduate beneficiaries of entrepreneurship education took significantly more calculated risks than non-recipients. They also oppose Liu et al.'s (2020) observation that students who studied entrepreneurship education took more calculated risks than those who did not.

The results are in contrast to Holienka et al.'s (2015) report of a significant difference in calculated risk-taking between university entrepreneurship education recipients and non-recipients, with the former having higher creative propensity scores than the latter. However, the findings align with those of

Oosterbeek et al. (2010), who observed no significant difference in calculated risk-taking between recipients and non-recipients of entrepreneurship education.

Internal locus of control

This research determined that there is no statistically significant difference (α = 0.05; P>0.05) between student-teachers undergoing university entrepreneurship education and those who are not, in relation to internal locus of control, as demonstrated in Table 10. Mean and standard deviation calculations for participants in this study were conducted using SPSS to evaluate their internal locus of control, as presented in Table 9.

Table 9: Group statistics for internal locus of control

Group Statistics									
	Locus Of Control	Ν	Mea n	Std. Deviati on	Std. Error Mean				
Total Score	BED ACE Students	18	6.56	1.756	.414				
	BED COM Students	18	6.28	1.274	.300				

Independent sample t-test was conducted so as to compare the means of the participants of this study in terms of internal locus of control as illustrated in Table 10.

Table 10: Independent sample t-test forinternal locus of control

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2- tailed)
Total Score	Equal varianc es assume d	1.280	.266	·543	34	.591
	Equal varianc es not assume d			·543	31.01 6	.591

The average score for students in the BED Adult and Community Education (BED ACE) program regarding 'internal locus of control' (M=6.56, SD=1.756) showed no significant difference (t=0.543, df=34, two-tailed p=0.591) when compared to BED Commerce (BED COM) students (M=6.28, SD=1.274), as illustrated in both Table 9 and Table 10. An independent sample t-test, two-tailed, was conducted on BED ACE (Years 1, 2, 3) and BED COM (Years 1, 2, 3) to assess any significant difference in their internal locus of control. The observed T-value was 0.543, and the P-value was 0.266, as demonstrated in Table 4.3.5(b).

In terms of locus of control, there was no significant difference between those undergoing university entrepreneurship education and those who are not because the observed T-value (0.543) was smaller than the critical T-value (2.032), and the P-value (0.591) was greater than the alpha value (0.05) specified for this study. Therefore, the fifth null hypothesis was retained.

These findings are in contrast to Mangasini (2015), who discovered a substantial impact of entrepreneurship education on graduates' motivation and determination. They also contradict Hansemark's (1998) observation that participating in an entrepreneurship program reinforces locus of control by significantly reducing external locus of control among recipients, resulting in a significant decrease when compared to non-recipients of entrepreneurship education.

On the other hand, Gurol and Atsan (2006) found a significant difference in locus of control between entrepreneurially inclined and non-inclined students, suggesting that entrepreneurially inclined students have a higher locus of control. The current study's results align with Oosterbeek et al.'s (2010) findings, indicating that entrepreneurship education has no statistically significant influence on entrepreneurial abilities and attributes.

Summary of Research Findings

Mean of entrepreneurial tendencies

Regarding the need for achievement, the first null hypothesis was maintained as there was no statistically significant difference (α = 0.05; P>0.05) between student-teachers who underwent university entrepreneurship education and those who did not. Concerning the need for autonomy, the second null hypothesis was rejected due to a statistically significant difference (α = 0.05; P<0.05) between student-teachers exposed to university entrepreneurial instruction and those who were not.

In terms of creative inclination, the third null hypothesis was upheld as there was no statistically significant difference (α = 0.05;

P>0.05) between student-teachers exposed to university entrepreneurial instruction and those who were not. Regarding calculated risktaking, the fourth null hypothesis was sustained as there was no statistically significant difference (α = 0.05; P>0.05) between student-teachers exposed to university entrepreneurship instruction and those who were not. Regarding internal locus of control, the fifth null hypothesis was retained as there was no statistically significant difference (α = 0.05; P>0.05) between studentteachers exposed university to entrepreneurship instruction and those who were not.

Conclusion

The average achievement need was 8.28, indicating a moderate motivation to succeed. Respondents generally preferred contemplating tried-and-true entrepreneurial ideas aligned with their lifestyle.

The average autonomy need was 2.25, with a preference for guidance in handling work rather than taking on the responsibility of running a business.

The average for creative proclivity was 7.78, indicating a preference for easily adoptable entrepreneurial ideas.

The computed mean for risk-taking was 7.03, suggesting a preference for less risky or partner-involved business ideas.

The cumulative mean of locus of control was 6.42, indicating an external locus of control among the majority, with a belief in fate and luck determining life outcomes over personal effort and determination.

Recommendations for action

The administration of the School of Education at Mwalimu Julius Nyerere Mlimani campus should initiate an investigation to identify suitable measures for enhancing the entrepreneurial inclinations of studentteachers at SOED. This study should focus on improving the need for achievement, the need for autonomy, creative tendencies, calculated risk-taking, and internal locus of control among the student-teachers.

Recommendation for further studies

- (i) Additional research is warranted among student-teachers at SOED in UDSM to ascertain the reasons behind the lack of a significant mean difference in various entrepreneurial tendencies, such as the need for achievement, creative tendency, calculated risk-taking, and internal locus of control, between recipients and non-recipients of university entrepreneurship education.
- (ii) Further investigations are needed among student-teachers at SOED in UDSM to explore the reasons behind the significant mean difference observed in the entrepreneurial tendency of the need for autonomy between recipients and non-recipients of university entrepreneurship education.
- (iii) This study was conducted at the undergraduate level at SOED.
 Additional research should be undertaken at the postgraduate level at SOED.

Original Contribution to Body of Knowledge

This study generated novel insights into the nature and extent of the connection between

university entrepreneurship education and student-teachers at SOED in UDSM, Tanzania.

References

Berglund, H., & Wennberg, K. (2006). Creativity among entrepreneurship students: comparing engineering and business education. International Journal of Continuing Engineering Education and Life Long Learning, 16(5), 366-379.

Din, B. H., Anuar, A. R., & Usman, M. (2016). The effectiveness of the entrepreneurship education program in upgrading entrepreneurial skills among public university students. Procedia-Social and Behavioral Sciences, 224, 117-123. https://doi.org/10.1016/j.sbspro.2016.05.413

Caird, S. (2013). General measure of Enterprising Tendency test.

Garavan, T. N., & O'Cinneide, B. (1994). Literature review of problems associated with entrepreneurship education and training programmes. Journal of European industrial training, 18(8), 3-12.

Gerba, D. T. (2012). Impact of entrepreneurship education on entrepreneurial intentions of business and engineering students in Ethiopia. African Journal of Economic and Management Studies. Doi: 10.1108/20400701211265036

Gürol, Y., & Atsan, N. (2006). Entrepreneurial characteristics amongst university students: Some insights for entrepreneurship education and training in Turkey. Education+ training.doi 10.1108/00400910610645716

Hansemark, O. C. (1998). The effects of an entrepreneurship programme on need for achievement and locus of control of

reinforcement. International Journal of Entrepreneurial Behavior & Research.

Holienka, M., Holienková, J., & Gál, P. (2015). Entrepreneurial characteristics of students in different fields of study: a view from entrepreneurship education perspective. Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis, 63(6), 1879-1889.

http://dx.doi.org/10.11118/actaun201563061879

Kirby, D. A. (2004). Entrepreneurship education: can business schools meet the challenge?. Education+ training.

https://doi.org/10.1108/00400910410569632

Liu, T., Walley, K., Pugh, G., & Adkins, P. (2020). Entrepreneurship education in China: Evidence from a preliminary scoping study of enterprising tendency in Chinese university students. Journal of Entrepreneurship in Emerging Economies. 12(2), 305-326. https://doi.org/10.1108/JEEE-01-2019-0006

Mangasini, A. (2015). Entrepreneurship education and business start-up: assessing entrepreneurial tendencies among university graduates in Tanzania (Doctoral dissertation). Sokoine University of Agriculture, Morogoro.

Ndofirepi, T. M. (2020). Relationship between entrepreneurship education and entrepreneurial goal intentions: psychological traits as mediators. Journal of Innovation and Entrepreneurship, 9(1), 1-20. https://doi.org/10.1186/s13731- 020-0115-x

Oosterbeek, H., Van Praag, M., & Ijsselstein, A. (2010). The impact of

entrepreneurship education on entrepreneurship skills and motivation. European Economic Review, 54(3), 442-454.