

The Influence of Entrepreneurial Education on Adult Learners' Motives for Creativity and Intention: A case of IAE in Tanzania

Mbowe Ramadhani Kabung'a
Institute of Adult Education
P.O.Box 20679, Dar es Salaam, Tanzania.
E- Mail address: mbowe69@yahoo.com

Abstract

The study presents the findings on the Influence of entrepreneurial education on adult learners' motives for creativity and intention in Tanzania. Using a case study research design of the Institute of Adult Education (IAE), the study used a structured questionnaire to collect primary data from 170 respondents selected from 291 IAE adult learners in Tanzania using simple random sampling. Data were subjected to the structural equation model technique facilitated by Analysis of Moment Structures (AMOS 20.0) software to verify the hypothesis relationships. The study found A positive and significant influence of the entrepreneurial education module contents on the motives for creativity ($\beta = 0.61$, $Cr = 2.432$, $p < 0.000$). Moreover, the study found a positive and significant influence of adult learners' motives for creativity on entrepreneurial intention ($\beta = 0.142$, $Cr = 3.302$, $p < 0.001$). The findings further show that entrepreneurial education module contents had a positive and significant influence on adult learner's entrepreneurial intention ($\beta = 0.172$, $Cr = 2.831$, $p < 0.021$). Furthermore, the findings indicate that motives for creativity had a positive and significant indirect effect in the relationship between entrepreneurial education and adult learners' entrepreneurial intention ($\beta = 0.112$, $p < 0.001$). The findings suggest that the individual's subjective attitude towards entrepreneurial intention was affected by discrepancy in the module quality contents. Therefore, promoting entrepreneurial intention among adult learners requires module developers to design module content that reflects quality practical-oriented and conveniently adult learners-centred, including the use of regular presentations by successful entrepreneurs to stimulate their motives for creativity.

Keywords: Adult learners, Entrepreneurship Education, Entrepreneurial Intention, Creativity

Introduction

Responding to the importance of entrepreneurship as the essential driver behind economic growth, entrepreneurial education programs (EEPs) have been booming across the globe in an effort to equip the countries' future entrepreneurs with the necessary skillset to respond to the uncertainties of today's economic realities (Quentin, 2018). Meanwhile, EEPs are generally, considered an effective means to promote entrepreneurial intention among students, Sagie and Elizur (2016). Often, EEPs fail to appropriately address and stimulate creative thinking, the other side of the entrepreneurial intention-coin, thus leaving the curriculum focused on mere knowledge acquisition and the development of hard skills, such as writing a proper business plan (Quentin, 2018).

Entrepreneurial education in the curriculum developed for adult learners in Tanzania's formal learning systems raises a pertinent question on the motives for creativity and the contribution of entrepreneurship education to nurturing entrepreneurial intention amongst adult learners (URT, 2020). This question might be expanded to include its influence on the livelihoods of the adult learners' creativity and entrepreneurial life-skills attained after undergoing such education.

Adult learning institutions have for so long attracted substantial sums with more time devoted developing curricula aimed at stimulating entrepreneurial behaviour and creativity among adult learners (URT, 2020). Creativity can therefore be seen as an important antecedent of entrepreneurial intentions and consequently, individuals with a well-trained creative skillset are more likely to engage in entrepreneurship (Ward, 2014). Thus, the intended entrepreneurial skills taught have to do with the capacity of adult learners to identify opportunities and transform them into gainful propositions. Generally, the enhanced adult learners' motives for creativity should enable them to produce products and services that would facilitate the flourishing of the new businesses they set up (Barth, 2016).

Teaching adult learners to think creatively and acquire efficacious and comprehensive skill could lead to subsequent change (Harding, 2010). Yet, much of creativity research has focused on children despite adult educators deliberately seeking to promote creativity in adult learners (Esslinger, 2011; Knox, 2011; Barth, 2016; Tsai, 2012; Tsai, 2013a, 2013b). Usually, creativity is much more pronounced in young children than in adults because of the alignment of intellectual conformity, which in turn suppresses their creative potential (Sternberg, 2006).

Nevertheless, a significant effort has been directed towards executing entrepreneurship education as module formulated in formal education programmes to stimulates and enhance adult learners' entrepreneurial potentials. These potentials enabled them to apply entrepreneurial skills, knowledge and competencies aimed to manage and start up their own business ventures. The venture creation may help for their survival upon completing the programme. Despite all the exertions (Strategic curriculum development, human resource (lecturers) and material resource (basic and additional books), projects activities etc) made by higher learning institutions including the Institute of Adult Education (IAE) in Tanzania, many graduates progressively continue seeking for white-collar jobs with only a few developing their career by creating jobs opportunities through entrepreneurial venture creation (Okechukwu and Ogbu, 2020).

Previous studies (Ding et al., 2017; Nghia, 2019) have confirmed that unemployment is common among university graduates in both developed and developing countries. In India, one of the largest high education systems in the world (second only to China), only 25 to 30 percent of graduates are employable (Tilak, 2020) meaning that 60 to 75 percent are unemployable. The presented statistics provide sufficient evidence to assume that something went wrong in the curriculum development. In fact, the contents in the curriculum need to provide real-world experience useful in enhancing intentionality through increased perceived desirability and feasibility, (Peterman and Kennedy ,2017). These aspects may bring about the entrepreneurial intention, which eventually minimize the unemployment rate among the higher learning students, specifically adult learners.

Argument on Entrepreneurial Education, Adult Learners' Motives for Creativity and Intention

Tanzania as the one among the developing countries is not isolated from the perceived desirability and feasibility needed for motives for creativity and intention emanating out entrepreneurial education among the higher learning graduates. The data available suggest that 61 percent of graduates from Tanzania's universities are usually unfit for jobs (Nganga, 2014). In other words, the graduates lack skills to employ in their own created ventures or they do lack requisite competences to apply even in existing jobs.

This trend partly has to do with the graduates' grossly underdeveloped cultural aspects such as a risk attitude and motives for creativity potentials relative to the possible ingredients for the entrepreneurial module taught. However, the role of higher learning practices in nurturing and orientating graduates in entrepreneurial intention is of paramount importance to be studied specifically in adult learning institutions. Review has been made towards addressing the limited entrepreneurial establishments especially among adult learners.

It is crucial to determine whether the higher learning students, the adult learners in this case, have any intention to start up their own business. The equally important to understand the way in which higher learning institutions can influence students' attitudes and their knowledge on entrepreneurial intention as affirmed by Wang and Wong (2004). This study, therefore, explored the entrepreneurial education influence on adult learners' motives for creativity and intention in Tanzania. Specifically, the study sought to determine the entrepreneurial intention among adult learners emerging out of the entrepreneurial education taught. Primarily the study sought to test the hypotheses developed to establish the influence of entrepreneurial education on motives for creativity among the adult learners, effect of adult learners' motives for creativity on entrepreneurial intention. Finally, the study analysed the mediating effect of motives for creativity between entrepreneurial education and entrepreneurial intention among adult learners.

Literature Review

Theory underpinning the study

To improve understanding of entrepreneurial behavioral intention, the framework of the theory of planned behavior guides the current study. The Theory of Planned Behaviour (TPB) proposed by Ajzen (1985) through his article entitled "From Intentions to Actions: A Theory of Planned Behavior. According to the TPB Model, there are three attitude variables that affect entrepreneurial intention, which are the attitude toward the behavior, subjective norms and perceived behavioral control. These variables aid to comprehend the intention of adult learners' behaviors in the current study.

According to TPB, there are two major sources of intention: desirability (motivation to act for the intended behaviour) in case of the current study, it refers to the motives for creativity, and feasibility of the given behaviour Krueger et al. (2000).

Precisely, the perceived behavioural control (PBC) stands for feasibility; subjective norms and personal attitude towards entrepreneurial behaviour together define the desirability part of the entrepreneurial intention.

Based on the TPB, entrepreneurial behaviour can be explained in terms of the level of entrepreneurial intention related to the behavioural intention attitudes of entrepreneurs (attitude toward the behaviour); the level of entrepreneurial intention is also related to normative belief and compliance motivation (subjective norms). Lastly, we infer the level of entrepreneurial intention is related to control belief and perceived facilitating conditions (behavioural control). The TPB can effectively be applied to the analysis of an individual entrepreneurial intention. On the other hand, “entrepreneurial intention” is an individual’s subjective attitude towards a willingness to start one’s own business, which includes the “willingness to venture” mental state and behavioural tendencies (Simona et al., 2016).

For example, in the context of entrepreneurial education taught to the adult learners, this theory offers a critical and appropriate framework to explain individual entrepreneurial planned behavior. Given that, the goal of entrepreneurial education is not only the adult learners to start a business but also start planning for new creative ideas.

Entrepreneurial education taught influences attitudes or perceptions toward entrepreneurship (Batanero et al., 2016). The current study employs the theory of planned behavior premises to use motives for creativity as a substitute for behavior, which is relevant instrument for understanding the development of entrepreneurial intention through entrepreneurial education (Simona et al., 2016). Since attitudes can change over time, the acquisition of knowledge can change behavior, entrepreneurial intent can be influenced by learning outcomes (Simona et al., 2016). Learning different behaviors that change attitudes/perceptions will affect entrepreneurial intentions (Ferreira et al., 2017). The variables in theory superimposed to the new model formulation that generates different predictions by attesting to the comprehensiveness of module contents quality taught in adult learning institutions. Moreover, there is a possibility of the adult learners’ entrepreneurial intention and motives for creativity emerging among adult learners after being exposed to such education. The resultant model further attests to the motives for creativity among the adult learner and the degree of

attendant entrepreneurial intention. The formulated model in the current study was also bought ideas from the one used by Hong et al. (2020).

The “entrepreneurship education” in this study describes the scope of curricular or module contents (theoretical and practical activities) that attempt to provide adult learners with necessary entrepreneurial competencies, knowledge and skills in the pursuit of fostering an entrepreneurial career (Ekpoh & Edet, 2011; Keat et al., 2011; Cui et al., 2019; Yuan and Wu, 2020). Furthermore, intention’ constitutes the best predictor of planned behaviour, according to Krueger et al. (2000).

The figure 01 underneath summarises the theoretical framework informing the current study and illustrating moderating role of motives for creativity between entrepreneurship education and entrepreneurial intention. The model also demonstrates the direct influence of the entrepreneurial education and motives for creativity on entrepreneurial intention. The developed model based on this theory (TPB) used to explain the relationship among attitudes, intention and planned behaviour.

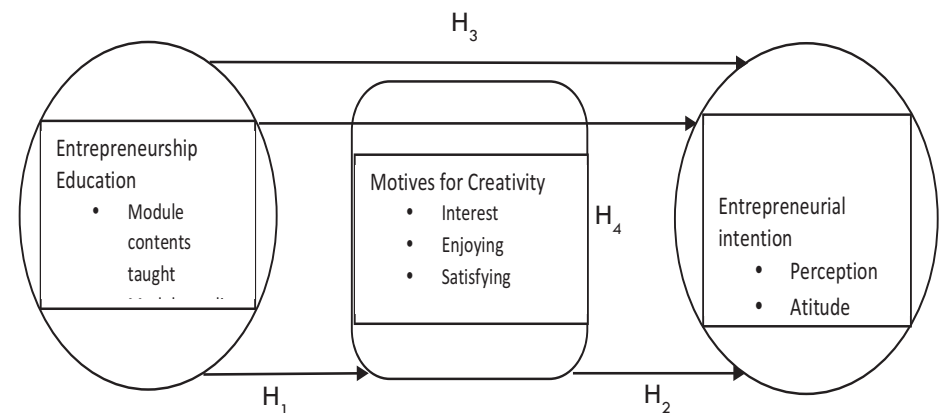


Figure 01: Developed conceptual frame work

Source: Author 2022

Entrepreneurial Education and Motives for Creativity

The term creativity in the current study defined as creation of new and useful ideas (Entrialgo and Iglesias, 2020). Some studies have outlined that individuals with a high level of entrepreneurial education and creativity are more prone to start their businesses (Hu and Ye, 2017; Handayati et al., 2020). The studies confined only on individuals regardless of their educational levels and status core in China context, whereby the current study considered higher learning education level and adult learners' behavioural status in the Tanzania context.

In addition to the aforementioned studies, the study by Chia and Liang., (2016) revealed that, entrepreneurial education, entrepreneurial mind-set, and creativity improve the learning environment of individuals and enhance their confidence level that will be able to solve new and unexpected issues regarding the new business development. The study focused on an individual several personality traits in relation to entrepreneurial education in the context of China. However, the current study focused only on adult learners' motives for creativity in higher learning institutions in relation to entrepreneurial education in the different context of Tanzania.

The study by Machali et al., (2021) on the study entitled "From Teachers to Students Creativity? The Mediating Role of entrepreneurial education" found a significant influence of entrepreneurial education on student creativity at $2.714 > 1.96$. The study restricted on mediating role of entrepreneurial education on ordinary student creativity, whereby the current study is confined on the direct influence of entrepreneurial education on adult learners' motives for creativity in higher learning institutions in the Tanzania context.

In a study by Hui-Chin Chu et al., (2007) found that career development affected learning motivations and satisfactions, and established a relationship between learning motivations and learning satisfactions. The study had focused largely on career development, (learning motivation and satisfaction) as elements of intrinsic motivation but overlooked other elements such as enjoyment and interest, which created a need for conducting the current study to fill the knowledge gap observed. Subsequently, a hypothesis H1 was developed based on theoretical and empirical literature review to guide the current study.

Furthermore, the study by Alejandro and Hector, (2020) on “Evaluation of the influence that higher education boosts on students’ entrepreneurial proclivity: Evidence from Mexico and Spain. The study indicated that students’ inner concerns related to entrepreneurship, and formal entrepreneurial education taught by the institution positively encourage students’ proclivity for entrepreneurial affairs. The study broadly covered general students’ high education in connection to entrepreneurial proclivity in the Mexico and Spain contexts. The current study specifically focused on entrepreneurial education taught in higher learning institutions versa-vis the influence on adult learners’ motives for creativity in the Tanzania context.

Therefore, the relationship of entrepreneurial education and motives for creativity is less studied elsewhere in the world and in the context of Tanzania. Consequently, the objective of this study is to identify the influence of entrepreneurial education on motives for creativity among the adult learners, in the gender perspectives. Based on the theoretical and empirical literature reviewed, the current study proposed the hypothesis H_1 .

H_1 : The comprehensive detailed contents quality in the entrepreneurial education module is positively related to the adult learner’s motives for creativity.

Creativity and Entrepreneurial Intention

The study by Yongchuan et al., (2020) on the Investigation of the Relationship between Creativity and Entrepreneurial Intention: The Moderating Role of Creativity in the Theory of Planned Behaviour, found that entrepreneurial attitude, subjective norm, perceived behaviour control and creativity all have a significant positive influence on entrepreneurial intention ($\beta_1 = 0.387$, $p_1 < 0.001$; $\beta_2 = 0.234$, $p_2 < 0.001$; $\beta_3 = 0.103$, $p_3 = 0.007$; $\beta_4 = 0.136$, $p_4 = 0.001$). The study focused on the relationship between creativity and entrepreneurial intention in higher learning students under the mediating role of creativity based on the theory of planned behaviour in China context.

The current study solely focused on the influence of adult learners’ motives for creativity on entrepreneurial intention in the Tanzania context based on the framework of theory of Planned Behaviour. Furthermore, Zampetakis et al. (2011) studied the relationship between creativity and entrepreneurial intention using undergraduate business students and found that individuals with a higher level of creativity are more likely to become entrepreneurs.

Chia and Liang, (2016) conducted a study to examine the Impact of Creativity on the Entrepreneurial Intention of University Tourism Students in Taiwan and remarked that students who perceived high creativity are more prone to start a new business. The study by Shi et al. (2020) on the Relationship between Creativity and the Theory of Planned Behavior (TPB) on Entrepreneurial Intention using a survey of 523 university students in China, found that individuals with a high level of creativity can obtain a positive attitude and high self-belief in entrepreneurial activities.

Additionally, Miranda et al. (2017) used a sample of 1,178 Spanish university students to identify the influence of attitude, subjective norms, and perceived behavioural control on creativity and entrepreneurial intention and found that individuals with high creative minds are more likely to engage in entrepreneurial activities. Individuals with a strong creativity anchor are therefore inherently motivated to creating something new (Barth, 2016). The study by Wang et al. (2021) on the Impact of Entrepreneurial Education, Mindset, and Creativity on Entrepreneurial Intention: Mediating Role of Entrepreneurial Self-Efficacy, found that creativity had a direct positive and significant effect on entrepreneurial intention (β 0.116, critical ratio = 2.300, $p < 0.021$).

The study by Daniel et al. (2014) on the Entrepreneurship Education indicated that the creativity has a strong and positive effect on entrepreneurial intentions. Creativity can therefore be seen as an important antecedent of entrepreneurial intentions and consequently individuals with a well-trained creative skillset are more likely to engage in entrepreneurship (Ward, 2014). Thus, the intended entrepreneurial skills taught have to do with the capacity of adult learners identifying opportunities and transforming them into gainful propositions.

Generally, the enhanced adult learners' motives for creativity should enable them to produce products and services that would facilitate the flourishing of the new businesses they set up (Barth, 2016). Generally, most of the presented empirical literature reviewed focused on the influence of creativity among the higher learning students on entrepreneurial intention in various contexts. The current study focused on the influence of adult learners' motives for creativity on entrepreneurial intention in Tanzania context.

Based on the presented theoretical and empirical literature reviewed, most of the previous studies found a positive correlation between creativity and entrepreneurial intention. Thus, we believed that motives for creativity ought to positively lead toward entrepreneurial intention. Therefore, the current study proposed the hypothesis H_2

H_2 : The adult learners' motives for creativity are positively related to entrepreneurial intention

Entrepreneurial Education and Entrepreneurial Intention

The study by Wang et al. (2021) on the Impact of Entrepreneurial Education, Mindset, and Creativity on Entrepreneurial Intention: Mediating Role of Entrepreneurial Self-Efficacy indicated that entrepreneurial education had a direct positive and significant influence on entrepreneurial intention ($\beta = 0.185$, critical ratio = 3.671, $p < 0.001$). The study focused on triple impact of independent variables including creativity on an independent variable entrepreneurial intention under the mediating effect of entrepreneurial Self-Efficacy in China context. The current study confined on direct and mediating (dual) effects of the variable creativity (motives for creativity) on entrepreneurial intention and mediating between entrepreneurial education and entrepreneurial intention in Tanzania context.

The study by Hanieh et al. (2020) entitled "Do entrepreneurial education and big-five personality traits predict entrepreneurial intention among universities students? The study found a direct relationship between Entrepreneurial education and Entrepreneurial Intention, path coefficient value is 0.359; CR is 6.441 with a p-value 0.000. Thus, Entrepreneurial education positively influences Entrepreneurial Intention.

The study by Yangchuan et al. (2020) indicate the moderating effect of creativity between entrepreneurial attitude and entrepreneurial intention. The results showed further that the interaction between creativity and entrepreneurial attitude is not significant ($\beta = -0.136$, $p > 0.05$), indicating that creativity has no moderating effect between entrepreneurial attitude and entrepreneurial intention. The study also indicated the moderating effect of creativity between subjective norms and entrepreneurial intentions.

Additionally, the results revealed that the interaction between creativity and subjective norms is significantly positive ($\beta = 0.372$, $p < 0.001$), indicating that creativity plays a significant and positive role in moderating subjective norms and entrepreneurial intentions. A study by Tae et al. (2014) found that entrepreneurship education was positively associated with entrepreneurial intentions.

Furthermore, the study carried by Daniel et al. (2014) on the Entrepreneurship Education indicated that entrepreneurship education groups has a strong positive effect on entrepreneurial intention. Typically, the most presented studies focused on impact or influence of independent variables including creativity on an independent variable entrepreneurial intention under the mediating role of certain entrepreneurial variable in different contexts for some reviewed studies. The current study confined on direct and mediating (dual) effects of the variable creativity (motives for creativity) on entrepreneurial intention or moderating role between entrepreneurial education and intention in the Tanzania context. Thus, based on the empirical and theoretical literature reviewed, the current study proposed the hypotheses, H_3 and H_4

H_3 : The comprehensive detailed contents quality in the entrepreneurial education module is positively related to the adult learners' entrepreneurial intention.

H_4 : The relationship between comprehensive detailed contents quality in entrepreneurial education module and adult learners' entrepreneurial intention will be mediated by motive for creativity.

Material and Methods

This study was conducted at the Institute of Adult Education (IAE) in Tanzania, comprising three campuses and 42 centres scattered throughout the country. The IAE was chosen for its merits including being the oldest institution having many adult learners from different socio-economic backgrounds in all dimensions. IAE is an autonomous Institution established by Parliamentary Act Number 12 of 1975 under then Ministry of National Education, currently, the Ministry of Education, Science and Technology. To-date, the Institute has become a centre for Learning, Research and Training in Adult Education arena for Certificate, Diploma and Degree courses and post-Primary education learners. Its services have been extended to the grassroots level through regional centres established in 26 regions of Mainland Tanzania.

The study chose adult learners whose programmes offered entrepreneurship skills as a module, as the object of the study, which used a case study research design to generate an in-depth, multi-faceted understanding of an adult learners' entrepreneurial intention catalysed by the entrepreneurial education (content related to entrepreneurial knowledge, skills and competence) they received during the course. The case study method is appropriately used in design research to analyze a phenomenon, generate hypotheses, and to validate a method (Sudhakar, 2009).

The study used a questionnaire with both closed- and open-ended questions to collect data from the participants. Some items in the questionnaire were adapted from existing instruments, including three items from the prior study by Wardana et al. (2020). Previous researchers to predict the entrepreneurial education of students (Handayati et al., 2020) used this scale. A sample item "I believe that entrepreneurial education in the Institute of Adult Education drives adult learners to be entrepreneurs." The Cronbach's α for entrepreneurial education was 0.824 (Table 01).

Using simple random sampling, the study generated a sample of 170 adult learners from a study population of 291 IAE learners whose programmes offered entrepreneurship skill modules (Ordinary Diploma in Distance Learning [ODL] - September intake of 197 students and bachelor's degree – Conventional students amounting to 92). This sample implies a ± 2.55 percentage sampling error with a confidence level of 95 % $Z_y = 1.96$ based on the formula: $MOE_y = Z_y \sqrt{\frac{\sigma^2}{n}}$ where MOE:Margin of error or sampling error,

γ :Confidence level, Z_y :Z-Score value based on the confidence interval,

σ :Population standard deviation, n :Sample size.

This implies that a deviation in sample value versus the true population value is very small, hence suggesting a very good representative of the population. In the current study, "entrepreneurship education" stands for independent variable, which targeted understanding how much the entrepreneurship education module offered to adult learners influenced adult learners' motives for creativity to trigger entrepreneurial intention at the end of course. Dependent variable is Entrepreneurial intention depicting adult learners' attitude or perceptions of whether they are eager to be engaged in entrepreneurship ventures - creating own business in the future (after learning completion).

The study used to measure the entrepreneurial intention of adult learners by six modified items from the study by Liñán et al. (2011). Several researchers to evaluate the student entrepreneurial intention (Mahmood et al., 2019; Wang et al., 2021) applied this scale. A sample item “I am determined to start a new business in the future.” The Cronbach’s α for the entrepreneurial intention was 0.912 (Table 01). The last variable was mediating variable: Motives for Creativity, as the mediating variable, mediated between entrepreneurial education and entrepreneurial intention with a Cronbach’s α 0.792 (Table 01).

The variable motives for creativity play a dual role (dependent and independent), it is a dependent and independent variable when relates to entrepreneurial education and entrepreneurial intention respectively (figure 01). The variable was measured using two modified items drawn from Miranda et al. (2017) instrument as well as the two modified items from Biraglia and Kadile (2017). There were five dimensions on the Likert scale used in the current study. The questionnaire was distributed from September 2021 to February 2022. Data collected were analysed using a quantitative approach facilitated by the structural model assessed through the 5,000 bootstrapping method using the AMOS 20.0, software package helped to test the proposed hypotheses. The software was used to cater for the dual role of the moderator variable (motives for creativity).

Results

The confirmatory factor analysis (CFA) was performed by utilizing the AMOS 20.0, software and findings were presented in Table 1. Moreover, results from the reliability and validity analysis of the questionnaire show that the Cronbach α coefficient of the three dimensions is between 0.792 and 0.912, which are all greater than 0.7 and the composite reliability ranged from 0.86 to 0.982 exceeded the recommended benchmark of 0.60 (Bagozzi et al., 1991). The results indicating that the three dimensions of the scale all have good internal consistency reliability. In the meantime, the values of the average variance extracted (AVE) were satisfactory (greater than 0.5) and ranged from 0.623 to 0.721 the square roots of AVE were greater than the values of its corresponding rows and columns (Table 01). Furthermore, factor loadings ranged from 0.42 to 0.921 (all $p < 0.001$) for all the measured items (Table 02), indicating that the scale has a good convergent validity.

Table 01 | Reliability and Analysis

	Cronbach's a	AVE	Composite reliability	EE	EI	MC
EE	0.824	0.679	0.921	0.784		
EI	0.912	0.721	0.982	0.381	0.771	
MC	0.792	0.623	0.860	0.316	0.298	0.861

EE: Entrepreneurial Education, EI: Entrepreneurial Intention, MC: Motives for Creativity, Values with diagonals are the square root of AVE, Value under diagonals are correlations: ($p < 0.001$)

Source: Author' field data 2022

For the goodness-of-fit index, the results were presented as follow: $X^2 = 812.612$, $X^2 / df = 2.61$, GFI = 0.840, CFI = 0.920, NFI = 0.921, RMSEA = 0.058, and SRMR = 0.046 (Figure 02). Thus, all the values of measurement model constructs were acceptable and allowed the analysis of the structural model

Table 02: Confirmatory Factor Analysis (CFA)

Constructs	Items	Measurement	std. β	SE	Z	P
Motives for Creativity	MC ₁	I often interested with module Contents and quality taught	0.768	-	-	***
	MC ₂	I am satisfying with module Contents and quality taught	0.742	0.042	18.376	-
	MC ₃	I often interested with module Contents and quality taught	0.856	0.040	19.376	***
Entrepreneurial Education	EE ₁	the entrepreneurial education Module in adult learning promote Interest for creativity	0.892	-	-	-
	EE ₂	the learning module at IAE Provides the required knowledge Toward entrepreneurship	0.921	0.041	21.780	***
	EE ₃	the entrepreneurial education Drives skills and ability related To entrepreneurship	0.844	0.037	22.702	***
	EE ₄	the education activities incorporate Entrepreneurship matters and allow Opportunities to adult learners to Create a business venture	0.783	0.037	22.801	***
	EE ₅	I believe that entrepreneurial Education taught at the IAE derives The learners to be entrepreneurs.	0.901	0.043	20.801	***
Entrepreneurial Intention	EI ₁	I am ready to anything to be entrepreneur	0.862	-	-	-

El ₂	My professional goal is to become an Entrepreneur	0.872	0.050	18.78	***
El ₃	I will make every effort to start and run My own firm	0.881	0.060	18.431	***
El ₄	I am determined to create a firm in the Future	0.785	0.050	18.891	***
El ₅	I have a strong intention to start a business Someday.	0.8976	0.062	19.181	***

*** Significant ($p < 0.001$)

Source: Author's field data 2022

Structural Model

Entrepreneurial Education and Motives for Creativity

The structural model was assessed through the 5,000 bootstrapping method using the AMOS 20.0, software package. The findings of the structural model are expressed in Figure 03, which presented that all the results are satisfactory. Moreover, the proposed hypotheses were tested and the findings are shown in Table 03 and Figure 03. The study revealed that comprehensive detailed contents quality in entrepreneurial education module had a direct positive and significant influence on the motives for creativity ($\beta = 0.61$, $Cr = 2.432$, $p < 0.000$). Therefore, H_1 was accepted. The findings imply that the variables tend to vary directly (i.e., the more comprehensive the contents quality of the entrepreneurial education taught is increases with a higher chance for adult learners' motives for creativity) as Table 03 illustrates.

Creativity and Entrepreneurial Intention

Furthermore, results indicate that adult learners' motives for creativity had a direct positive and significant influence on entrepreneurial intention ($\beta = 0.142$, $Cr = 3.302$, $p < 0.001$) (Table 03). Thus, H_2 supported. The findings suggest that the variables tend to vary directly (i.e., the higher motives for creativity among the adult learners is associated with an increasing probability in entrepreneurial intention (venture formation)).

Entrepreneurial Education and Entrepreneurial Intention

Meanwhile, findings illustrate that comprehensive contents quality in entrepreneurial education module had a direct positive and significant influence on adult learner's entrepreneurial intention ($\beta = 0.172$, $Cr = 2.831$, $p < 0.021$) (Table 03). Therefore, H_3 was also accepted. The findings imply that these variables tend to vary directly (i.e., As the comprehensive contents quality of the entrepreneurial education taught is increases resulting in development for adult learners' entrepreneurial intention – venture formation).

Table 03 | Direct Effects

Hypotheses	Relationships	Unstandardized estimate	SE	Critical ratio	P-value	Standardized estimates
H ₁	EE → MC	0.164	0.038	2.432	0.000	0.161***
H ₂	MC → EI	0.152	0.041	3.202	0.001	0.142***
H ₃	EE → IE	0.182	0.035	2.831	0.002	0.172*

EE: Entrepreneurial Education, EI: Entrepreneurial Intention, MC: Motives for Creativity,
SE: Standard error, Significant *p < 0.05, ***p < 0.001

Source: Author' field data 2022

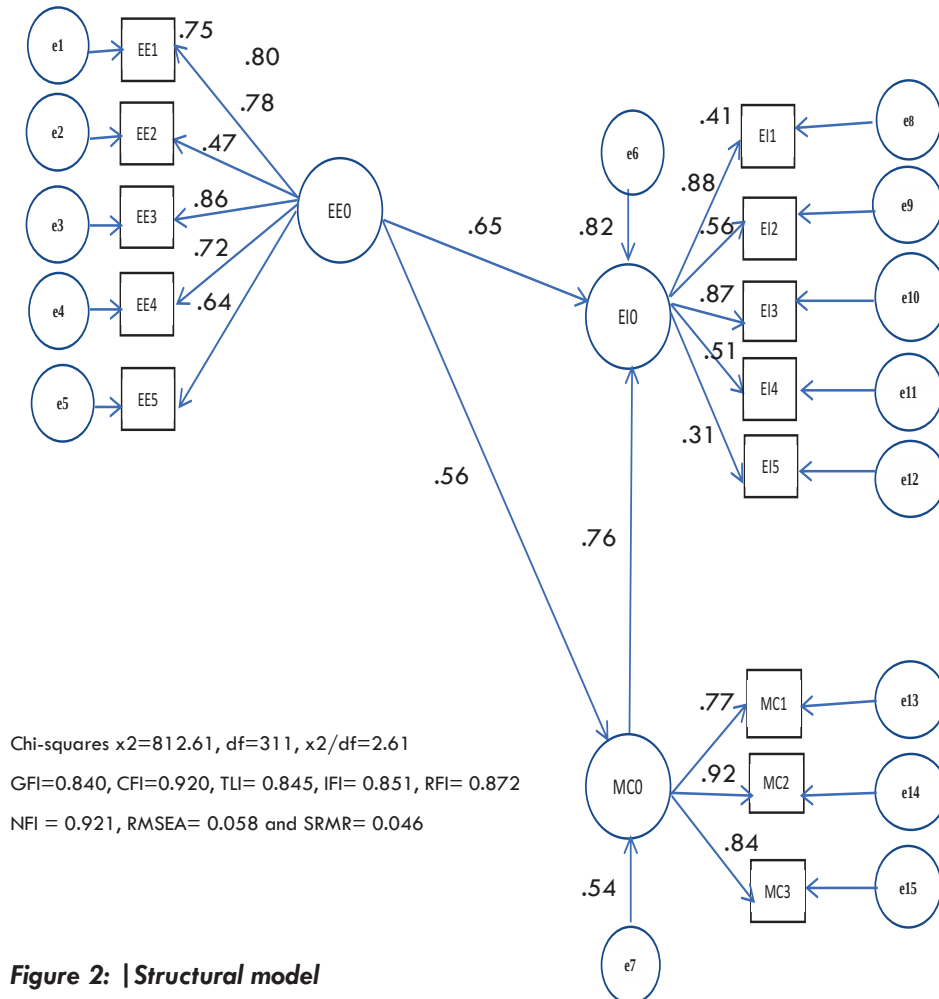


Figure 2: | Structural model

Mediating effects between Entrepreneurial Education and Entrepreneurial Intention

Bootstrap test applied at a 95% confidence interval with 5,000 bootstrap samples. The study method used to analyse whether the indirect effect was significant or not. The results in table 04 indicate that motives for creativity had a positive and significant indirect effect in the relationship between comprehensive contents quality in entrepreneurial education and adult learners' entrepreneurial intention ($\beta = 0.112$, $p < 0.001$). Thus, H4 was also accepted. The findings imply that these variables tend to vary indirectly (i.e., the adult learner's motives for creativity proves indirect significant influence between entrepreneurial education and adult learners' entrepreneurial intention).

Table 04 | Indirect Effects

Path coefficient and Hypotheses	Standard estimation	Bootstrapping 5000 samples with 95% confidence interval				P-value
		Bias-correlated percentile		Percentile		
		Lower	Upper	Lower	Upper	
Standardized direct effects						
EE → EI	0.172*	0.059	0.310	0.042	0.302	0.001
Standardized indirect effects						
EE → MC → EI	0.112*	0.042	0.056	0.042	0.056	0.001

EE: Entrepreneurial Education, EI: Entrepreneurial Intention, MC: Motives for Creativity, SE: Standard Significant ** $p < 0.001$

Source: Authors' field data 2022

Discussion

The study has revealed that comprehensive detailed contents quality in the entrepreneurial education module positively influence the motives for creativity among the adult learners ($\beta = 0.61$, critical ratio = 2.432, $p < 0.000$). The direct positive influence of the entrepreneurial education introduced in the AEI programme in terms of the quality of ingredients (competencies, knowledge and skills) tend to raise the intrinsic motives for creativity among adult learners. Based on the findings the module ingredients quality in the entrepreneurial education is a prime contributory factor for intrinsic motivation (satisfaction, interest and enjoyment) resulting into entrepreneurial intention. The presented findings support the hypothesis H₁.

The findings also suggest that an individual's subjective attitude/perceptions towards entrepreneurial education depends on the module contents' quality. Indeed, the better the module content, and quality the better the adult learners' motives for creativity; otherwise, a discrepancy in the module content quality resulted in poor adult learners' motives for creativity. Furthermore, the findings of the current study concur with those of Machali et al. (2021) to the effect that entrepreneurial education has significant influence on student creativity.

The result of this study is also in line with prior researchers (Alejandro & Hector, 2020) who found that students' inner concerns related to entrepreneurship, and formal entrepreneurial education taught by the institution positively encourage students' proclivity for entrepreneurial affairs. The results of the current study provide new insights into adult learning institutions entrepreneurial education, which supports adult learners to acquire knowledge and skills on how to create business ventures. Moreover, the study findings support the previous research, which found that entrepreneurship education can efficiently develop creativity, which can successfully nurture entrepreneurial intentions (Shahab et al., 2019).

This finding also supports the theoretical contribution of the theory of Planned Behaviour (Ajzen, 1985) which argued that the entrepreneurial behaviour can be explained in terms of the level of entrepreneurial intention related to the behavioural intention attitudes of entrepreneurs (attitude toward the behaviour); the level of entrepreneurial intention is also related to normative belief and compliance motivation (subjective norms). In this case, Entrepreneurial education taught influences attitudes or perceptions toward entrepreneurial intention. Since attitudes of the adult learners seemed to change over time, as the acquisition of knowledge change behavior, entrepreneurial intent influenced by learning outcomes (Simona et al., 2016).

Furthermore, the study has indicated that adult learners' motives for creativity had a direct positive and significant influence on entrepreneurial intention ($\beta = 0.142$, Cr ratio = 3.302, $p < 0.001$). The study findings, supported hypothesis H2. The findings suggest a positive impact of the adult learners' intrinsic motivation as a component for fostering creativity on entrepreneurial intention. To promote entrepreneurial intention among adult learners their intrinsic motivation (interest, enjoyment and satisfaction) should be reflected in the quality of the module content taught. Specifically, lecturers and module developers should understand the needs of their learners (adult learners-centred).

The current study findings are also congruent to those found with several previous studies (Wang et al., 2021; Hu et al., 2018; Anjum et al., 2021). Therefore, motives for creativity can be well thought-out as a wealthy aspect endowed by individuals, which can arouse the growth of entrepreneurial intention among adult learners by enhancing the skills and knowledge about venture formation and management.

These findings support also the study by Yongchuan et al. (2020) who found that creativity has a positive influence on entrepreneurial intention. In addition, the current study findings concur to Zampetakis et al. (2011) whose findings indicated that individuals with a higher level of creativity are more likely to become entrepreneurs. Moreover, the current study findings are also congruent to the study by Wang et al. (2021) whose results indicated that that creativity had a direct positive and significant effect on entrepreneurial intention. Furthermore, the study findings are in line with the one conducted by Shathees et al. (2021) that came up with mixed results on the significance of the relationship between intrinsic motivation and franchising entrepreneurial start-up intentions.

Broadly, the current study findings highlighted the TPB and entrepreneurship event models, Zhao et al. (2005) concepts. The concepts explained the logic of the impact of creativity on entrepreneurial intentions as, people with high creativity could maintain a positive attitude and high self-confidence in entrepreneurial activities.

Meanwhile, the findings illustrate that comprehensive contents quality in entrepreneurial education module had a direct positive and significant influence on adult learner's entrepreneurial intention ($\beta = 0.172$, $Cr = 2.831$, $p < 0.021$). The result was in favour of hypothesis H_3 . Furthermore, this finding is similar to previous researchers in the context of Asian and Western studies (Wang et al., 2021; Westhead and Solesvik, 2016; Sun et al., 2017) who argued that entrepreneurial education effectively drives the entrepreneurial intention of students to become entrepreneurs.

The findings also suggest that an individual's subjective attitude/perceptions towards willingness to start one's own business depends on the module contents quality. Indeed, the better the module content, the better the adult learners' entrepreneurial intention; otherwise, a discrepancy in the module content quality

resulted in poor adult learners' entrepreneurial intention. The current study findings concur with Tae et al. (2014), whose study found that entrepreneurship education was positively associated with entrepreneurial intentions.

Finally, the current study indicates that motives for creativity had a positive and significant indirect effect in the relationship between comprehensive contents and quality in entrepreneurial education and adult learners' entrepreneurial intention ($\beta = 0.112$, $p < 0.001$). Based on this result, H4 was also accepted. This finding agrees with prior researchers (Yang, 2014; Wardana et al., 2020). The results suggest that higher learning institutions, specifically adult learning institutions facilitate adult learners regarding entrepreneurship education and brands them skilful in handling business activities as well as developing an entrepreneurial environment that eventually leads to entrepreneurial intention. Therefore, individuals who acquired a higher level of motives for creativity (interest, enjoying and satisfying) are easily prone to business opportunities, creating an entrepreneurial mindset and contemplate more creatively to initiate new and realistic ideas in the form of venture creation.

Conclusively, Entrepreneurial Education to Entrepreneurial Intention used on comprehensive module contents quality to cultivate the motive for creativity of the adult learners. This would stimulate a broad range of diverse learning experiences, different from classroom teaching methods, which are particularly successful drivers in the entrepreneurial intention within the adult learners' mindsets in the Tanzania context. Therefore, increasing the adult learners' motives for creativity (interest, satisfying and enjoying) levels shall attract more adult learners in entrepreneurial education and, consequently, entrepreneurial intention. This research has successfully, highlighted the role that Ajzen's (1985) three TPB attitude variables that affect entrepreneurial intention, which are the attitude toward the behavior, subjective norms and perceived behavioural control. Based on this research, the implication of TPB in the current study is such that entrepreneurial education change an individual's intention under the mediating effect of motives for creativity (interest, enjoying and satisfying) related to entrepreneurship, particularly among adult learners.

The findings suggesting: First, the higher learning institutions, specifically adult learning institutions need to support learners in developing an entrepreneurial mindset through empowering in motives for creativity. Secondly, based on the study findings, the study offered some practical suggestions for the module developers to design module content that reflects quality practical-oriented and conveniently adult learners-centred. The module developer should further consider including individual and group projects related to fostering the entrepreneurial competence base. Thirdly, the adult learning institutions could continue to enhance the quality contents of entrepreneurial education taught by expanding the teaching materials frontiers in entrepreneurship.

Moreover, more invitations of successful entrepreneurs could help to stimulate the adult learners' interest, enjoying and satisfying. Subsequently, enhanced interactions pertaining to entrepreneurial education could boost their interest, enjoying and, to some extent, satisfaction. Finally, the government should create a better entrepreneurial environment for higher learning institutions, specifically adult learning institutions, for instance setting up a social entrepreneurship support program, organising, soliciting and granting business capital, and allocating free business zones where they can easily start unconditionally their new businesses.

References

- Alejandro P & Hector G (2020) "Evaluation of the influence that higher education boosts on students' entrepreneurial proclivity: Evidence from Mexico and Spain <https://doi.org/10.1016/j.ijme.2020.100404>Get rights and content
- Anjum, T., Farrukh, M., Heidler, P., & Díaz T. (2021). Entrepreneurial intention: creativity, entrepreneurship, and university support. *J. Open Innov. Technol. Mark. Complex.* 7:11. doi: 10.3390/joitmc7010011
- Atitsogbe, K., Moumoula, I., Rochat, S., Antonietti, J., & Rossier, J. (2018). Vocational interests and career indecision in Switzerland and Burkina Faso: cross-cultural similarities and differences. *J. Vocat. Behav.* 107, 126–140. doi: 10.1016/j.jvb.2018.04.002
- Bagozzi, R., Yi, Y., & Singh, S. (1991). On the use of structural equation models in experimental designs: Two extensions. *Int. J. Res. Mark.* 8, 125–140. doi: 10.1016/0167-8116(91)90020-8
- Baraka, M., & Makewa. N. (2014) Student Voice in Curriculum Change: A Theoretical Reasoning, DOI: 10.6007/IJARPED/v3-i3/949 URL: <http://dx.doi.org/10.6007/IJARPED/v3-i3/949>
- Barbaranelli, C., Paciello, M., Biagioli, V., Fida, R., & Tramontano, C. (2019). Positivity and behaviour: the mediating role of self-efficacy in organisational and educational settings. *J. Happiness Stud.* 20, 707–727. doi: 10.1007/s10902-018-9972-
- Barth T (2016) Career Anchor Theory. DOI: <http://dx.doi.org/10.1177/0734371X9301300403>
- Beghetto, R. (2006). Creative self-efficacy: Correlates in middle and secondary students. *Creativity Research Journal*, 18(4), 447-457. http://dx.doi.org/10.1207/s15326934crj1804_4
- Beghetto, R., & Kaufman, J. (2010). Nurturing creativity in the classroom: How to discourage creative thinking in the classroom. New York: Cambridge University Press. <https://www.frontiersin.org/articles/10.3389/fpsyg.2019.01557/full#ref13>
- Biraglia, A., & Kadile, V. (2017). The role of entrepreneurial passion and creativity in developing entrepreneurial intentions: Insights from American homebrewers. *J. Small Bus. Manag.* 55, 170–188. doi: 10.1111/jsbm.12242

- Brown, T., & Ulijn, J. (2004). "Innovation, entrepreneurship and culture: the interaction between technology" in *Progress and economic growth*. London: Edward Elgar Publishing. <https://www.frontiersin.org/articles/10.3389/fpsyg.2019.01557/full#ref19>
- Brown, D. & Ryan-Crane, N. (2000) Four (or five) sessions and a cloud of dust: Old assumptions and new observations about career counselling, In: Brown, S.D & Lent, R.W (eds) *Handbook of Counselling Psychology*. New York: John Wiley.
- Carey, J., & Harrington, K. (2010a) The impact of school counselling on student educational outcomes in high schools, University of Massachusetts.
- Chia, C., & Liang, C. (2016). Influence of creativity and social capital on the entrepreneurial intention of tourism students. *J. Entrep. Manag. Innov.* 12, 151–168. doi: 10.7341/20161227
- Cui, J., Sun, J., & Bell, R. (2019). The impact of entrepreneurship education on the entrepreneurial mindset of college students in China: The mediating role of inspiration and the role of educational attributes. *Int. J. Manag. Educ.* 19:100296. doi: 10.1016/j.ijme.2019.04.001
- Daniel Y., Karl W., & Henrik B. (2014) Creativity in entrepreneurship education: <https://www.researchgate.net/publication/5093331>. DOI: 10.1108/14626000810871691
- Ding, X., Yu, H., & Yu, Q. (2017). Research on returns on education at all levels and changes for urban residents in China: 2002-2009. In H. Chen & W. J. Jacob (Eds.), *Trends in Chinese education* (pp. 73–84). Routledge
- Ekpoh, U., & Edet, O. (2011). Entrepreneurship education career intention of tertiary education students in Akwa Ibom and cross river states Nigeria. *Int Educ*, 4, 172-178. <http://www.ccsenet.org/ies>
- Entrialgo, M., & Iglesias, V. (2020). Entrepreneurial intentions among university students: The moderating role of creativity. *Eur. Manag. Rev.* 17, 529–542. doi: 10.1111/emre.12386
- Fellnhöfer, K (2015) Examining attitudes towards entrepreneurship education: a comparative analysis among experts *International Journal of Entrepreneurial Venturing*, 2015, vol. 7, issue 4, 396-411, <http://www.inderscience.com/link.php?id=73648>
- Franke, N., & Lüthje, C. (2004). Entrepreneurial intentions of business students: a benchmarking study. *Int. J. Innov. Technol. Manag.* 01, 269–288. doi: 10.1142/S0219877004000209

- Frost, J. (2017). How to interpret R-squared in regression analysis. Retrieved from <http://statisticsbyjim.com/regression/interpret-r-squared-regression/> Accessed on 02 June 2018.
- Handayati, P., Wulandari, D., Soetjipto, B., Wibowo, A., & Narmaditya, B. (2020). Does entrepreneurship education promote vocational students' entrepreneurial mind set? *Heliyon* 6:e05426. doi: 10.1016/j.heliyon.2020.e05426
- Hanieh A., Low H., ock H., Noor U., Roselina A., & Raja Suzana R (2020) "Do entrepreneurial education and big-five personality traits predict entrepreneurial intention among universities students? <https://doi.org/10.1080/23311975.2020.1801217>
- Harding, T. (2010). Fostering creativity for leadership and leading change. *Arts Education Policy Review*, 111(2), 51-53. <http://dx.doi.org/10.1080/10632910903455827>
- Harkema & Popescu (2015) Entrepreneurship Education for Adults: A Case-study, *Procedia - Social and Behavioural Sciences* 209:213-220, DOI:10.1016/j.sbspro.2015.11.218
- Hu, R., & Ye, Y. (2017). Do entrepreneurial alertness and self-efficacy predict Chinese sports major students' entrepreneurial intention? *Soc. Behav. Personal. Int. J.* 45, 1187–1196. doi: 10.2224/sbp.6356
- Keat, Y., Christopher S., & Denny M. (2011) Inclination towards entrepreneurship among university students: An empirical study of Malaysian University students *International journal of business and social science* vol.2 No 4 2011; <http://www.ijbssnet.com>
- Kim, T., Hon, A. Y., & Deog-Ro, L. (2010). Proactive personality and employee creativity: The effects of job creativity requirement and supervisor support for creativity. *Creativity Research Journal*, 22(1), 37-45. <http://dx.doi.org/10.1080/10400410903579536>
- Kolvereid, L (1996) Prediction of employment status choice intentions. *Entrep. Theory Pract.*, 21, 47–57.
- Krueger, N., Reilly, M., Carsrud, A. (2000) Competing models of entrepreneurial intention. *J. Bus. Ventur.*, 15, 411–432. [Google Scholar]
- Liñán, F, Rodríguez-Cohard, J., & Rueda-Cantuche, M. (2011). Factors affecting entrepreneurial intention levels: a role for education. *Int. Entrep. Manag. J.* 7, 195–218. doi: 10.1007/s11365-010-0154-z

- Machali I., Wibowo A., Murfi, A., & Narmaditya, B. (2021) "From Teachers to Students Creativity? The Mediating Role of entrepreneurial education" <https://doi.org/10.1080/2331186X.2021.1943151>
- Mahmood, T., Al Mamun, A., Ahmad, G., & Ibrahim, M. (2019). Predicting entrepreneurial intentions and pre-start-up behaviour among Asnaf millennials. *Sustainability* 11:4939. doi: 10.3390/su11184939
- Miranda, F., Chamorro-Mera, A., & Rubio, S. (2017). Academic entrepreneurship in Spanish universities: An analysis of the determinants of entrepreneurial intention. *Eur. Res. Manag. Bus. Econ.* 23, 113–122. doi: 10.1016/j.iedeen.2017.01.001
- Nganga, G. (2014). Survey finds most East African graduates "half-baked". <http://www.universityworldnews.com/article.php?story=20140523130246934>
- Nghia, T. (2019). Building soft skills for employability: Challenges and practices in Vietnam. Routledge.
- Noble, H., & Smith, J. (2015). Issues of validity and reliability in qualitative research. *Evidence Based Nursing*, 18(2), 34–35.
- Okechukwu, B., & Ogbu, C (2020) Entrepreneurship for Self-employment in the Face of Unemployment and White-collar Job among Nigerian Graduates. DOI: 10.13140/ijyeed.08.2020.147.158 ©LIFEYEAD Education
- Peter A., Theophilus, I., Daniel, L., Komla, T., & Bunmi., S. (2018) A Systematic Review of Factors That Influence Youths Career Choices – the Role of Culture. <https://www.frontiersin.org/articles/10.3389/feduc.2018.00058/full>.
- Quentin, L. (2018) Inspiring Entrepreneurship through Creative Thinking DOI:10.18502/kss.v3i10.2890
- Sagie, A., & Elizur, D. (2016) Achievement motive and entrepreneurial orientation: A structural analysis - DOI: [http://dx.doi.org/10.1002/\(SICI\)1099-1379\(199905\)20:3<375::AID-JOB884>3.3.CO;2-P](http://dx.doi.org/10.1002/(SICI)1099-1379(199905)20:3<375::AID-JOB884>3.3.CO;2-P)
- Peng, Y., & Long, L. (2001). College student self-efficacy of entrepreneurial decision-making. *Appl. Psychol.*, 2, 38–43. <https://www.mdpi.com/2227-7102/10/9/257/pdf>; doi: 10.3390/educsci10090257
- Shahab, Y., Chengang, Y., Arbizu, A., & Haider, M. (2019). Entrepreneurial self-efficacy and intention: do entrepreneurial creativity and education matter? *Int. J. Entrepren. Behav. Res.* 25, 259–280. doi: 10.1108/IJEBr-12-2017-0522

- Shi, Y., Yuan, T., Bell, R., & Wang, J. (2020). Investigating the relationship between creativity and entrepreneurial intention: the moderating role of creativity in the theory of planned behavior. *Front. Psychol.* 11:1209. doi: 10.3389/fpsyg.2020.01209
- Sternberg, R. (2006). The nature of creativity. *Creativity Research Journal*, 18(1), 87-98. http://dx.doi.org/10.1207/s15326934crj1801_10
- Sudhakar T., Summers J., & Gregory, M. (2009) Case Study Method for Design Research: A Justification. <https://doi.org/10.1115/DETC2008-49980>
- Sun, H., Lo, C., Liang, B., & Wong, Y. (2017). The impact of entrepreneurial education on entrepreneurial intention of engineering students in Hong Kong. *Manag. Decis.* 55, 1371–1393. doi: 10.1108/MD-06-2016-0392
- Tae J., Shanshan, Qian Chao, M., & James, O. (2014). The relationship between entrepreneurship education and entrepreneurial intentions: A meta-analytic review [http:// DOI: 10.1111/etap.12095](http://DOI:10.1111/etap.12095)
- Taylor, K.; Betz, N. (1983) Applications of self-efficacy theory to understanding the treatment of career indecision. *J. Vocat. Behav.*, 22, 63–81.
- Tilak, J. (2020). Dilemmas in reforming higher education in India. *Higher Education for the Future*, 7(1), 54–66. [https:// doi.org/10.1177/2347631119886417](https://doi.org/10.1177/2347631119886417)