



Original Research Article

Mediating role of contextual elements on adult learners' antecedents of entrepreneurial intention in Tanzania's higher learning institutions

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The study had examined the mediating role of contextual elements on adult learners' antecedents of entrepreneurial intention in Tanzania's higher learning institutions. Using a quantitative research design, it applied the Theory of Planned Behaviour to examine the mediating role. A structured questionnaire was used to gather data from 245 respondents using convenient sampling of adult learners engaged in entrepreneurial programmes at the Institute of Adult Education. The structural equation model facilitated by the Analysis of Moment Structures (AMOS 20.0) software was used to verify the hypothesis relationships. The study found adult learners' antecedents for entrepreneurial intention to have a positive and significant indirect mediating influence on the relationship between each antecedent (personal attitude, subjective norms, perceived behavioural control) and entrepreneurial intention. Overall, these findings suggest that the adult learners' antecedents for enhancing entrepreneurial intention require different contextual elements, among adult learners in the setting of Tanzania. Thus, Adult Learning Institutions, should consider the adult learners' individual values and experiences as contextual elements identified in the curriculum for developing a meaningful entrepreneurial intention among adult learners. Alternatively, the government and other financial interventions may base their decisions on the contextual elements identified for potential entrepreneurs to signal the graduates' desire to venture into business when funds are disbursed for new entrepreneurial ventures.

Keywords: Adult learners, entrepreneurial intention, contextual elements, mediating role, arbitratative.

INTRODUCTION

Many types of academic research have focused on different aspects of entrepreneurship, including Entrepreneurial Intention (EI) in developed and developing countries, especially in emerging economies. Presently, the changes in market structure and economic policies in developing and transitional economies have tremendously expanded the new venture creations and associated entrepreneurial activities (Nguyen, 2021). In this regard, the CE requires

understanding and identifying external factors, as well as mechanisms (antecedents), that influence EI among players, or adult learner's graduates in the context of this paper. Understanding the antecedents of the intentions of adult learners to be entrepreneurs upon graduation can inform the capacity of policymakers and curriculum/module developers to develop viable programmes aimed to push the adult learners'

entrepreneurial motivation up (Mbowe, 2023).

These programmes can influence behaviour by reinforcing the beliefs and perceptions of adult learners, hence leading to changes in attitudes, which in turn can result in the alteration of intention and behaviour (Mbowe, 2023). The association between adult learners' beliefs and EI may be attributable to the inseparability between the entrepreneur in making his/her environment, his/her interpersonal relationships and the resources available to achieve his/her goals (Mbowe, 2023).

EI refers to the effort and encouragement that motivate individuals to embrace entrepreneurial behaviour under favourable conditions (Cantner et al., 2017; Souza, et al., 2016). It also includes the original idea and plan to formulate and start new ventures depending on a given entrepreneurial choice (Obschonka et al., 2018). Thus, EI has become a leading standpoint in the investigation of cognitive factors capable of motivating an individual to act (Fayolle and Liñán, 2014; Krueger, 2017) using theoretical models crucial in entrepreneurship studies. Even though academic researchers have learned a lot about the role of intentions in the entrepreneurial process, we still know little about the impact of entrepreneurship education programs on the antecedents of intention and/or behavior (attitudes, values, skills, etc (Fayolle and Liñán 2014). Lack of know-how represents a significant shortcoming since attitudes are strong predictors of intentions (Ajzen, 1991). The current study focuses on Contextual Elements (CE) orientation such as values, experience in business, self-employment, and unemployment and employment, which influence the choice of becoming an entrepreneur. The Theory of Planned behaviour (TPB) model can predict behaviour or intention by examining the variables with significant effects on behaviour using three predictive determinant factors: Personal attitude (PA), which refers to the favourable assessment to perform or not to perform the behaviour; Subjective Norms (SNs), which have to do with the perceived social pressure to perform the behaviour or not; and Perceived behavioural control (PBC), which denotes the perceived easiness or difficulty in performing a given behaviour based on reflection of the past experiences (Ajzen, 1991; Liñán and Chen, 2009).

Considering the alignment between the learners' values and experience in business, self-employment and unemployment as well as employment, it was imperative to probe the relationship between learners' CE and the constructs of the TPB on EI in a theoretical perspective. Therefore, the current study sought to contribute to the understanding of EI mainly to comprehend the process of entrepreneurship, including the learners' beliefs, aspirations, desire, wishes, and hope that can help them to identify specific business opportunities in addition to motivating them to develop entrepreneurial behavioural traits. The study is grounded in the TPB conceptual framework.

Problem Statement

As a developing country, Tanzania struggles with problems associated with nurturing the perceived appeal in higher

learning institutions and practicality necessary for the antecedents of EI among higher learning graduates. Precisely, much of the academic research has largely focused on different entrepreneurship aspects, including EI in both developed and developing countries, especially in emerging economies. Subsequently, the changes in market structure and economic policies in developing and transitional economies have tremendously expanded the scope of new venture creations and attendant entrepreneurial activities (Nguyen, 2021). Thus, the context is crucial in understanding and identifying antecedents that influence EI among higher learning graduates. The records also indicate that each year about 900,000 Tanzanian graduates compete in the labour market for only 50,000 to 60,000-job openings generated by the government (*The Citizen*, 2017). Preferably, the graduates either lack sufficient entrepreneurial skills or harbour a negative attitude towards EI. This trend partly has to do with the graduates' underdevelopment of some antecedents for EI potentials as personal attributes. In this regard, understanding the antecedents of the intentions of adult learners to be entrepreneurs upon their graduation could make policymakers and curriculum/module developers come up with potentially successful programmes aiming to pushing the adult learners' entrepreneurial motivations up. These programmes can influence behaviour by enhancing the beliefs of adult learners, hence leading to adjustments in attitudes, which in turn engenders changes in intention and behaviour in general. Understanding the role of adult learners' antecedents in boosting motivation, which induces behavioural changes, is also crucial in intention enhancement among adult learners in Tanzania's formal higher learning institutions to produce job-creators instead of job-seekers. The current study, therefore, explored the contribution of TPB antecedents of EI to enhancing the adult learners' EI under a comprehensive conceptual framework of intrinsic and extrinsic factors and their relationships. Intrinsically, the use of TPB antecedents highlighted the better understanding of the adult learners' EI to develop it into a complete integrated model. Generally, the current study intended to enrich TPB in terms of its applicability among adult learners to steer them towards business start-ups after completing their studies in higher learning institutions.

Theoretical Underpinning

The human being is typically rational creature, using available information in systematic manner when planned for decisions making. Subsequently, the TPB model, stipulates that individuals are rational and utilise systematically information available in making informed decisions. According to this model, individual intention is the most accurate predictor of behaviour (Tran et al., 2018). The three key antecedents of TPB that can predict behavioural intention are PA, SNs and PBC. They are capable of enhancing inquisitiveness behaviours leading the adult learners better prepared to face competition in executing entrepreneurial activities. These constructs aid the comprehension of the intention of adult learners'

behaviours in the current study. Nevertheless, all other factors (Sustainable values, experiences in different circumstances and dimensions) affect behavioural intention indirectly through the medium of PA, SNs and PBC as stipulated under the TPB (Chi, et al., 2021). The current study added CE to the TPB model as a mediator affecting behavioural intention indirectly through behavioural attitude. This addition to the TPB was essential in achieving the purpose of the study. Ajzen (1991) posits that intentions can capture motivational factors that influence behaviour because of how hard people try and how much effort they exert in performing a behaviour (Ajzen, 1991 as in Al-Mamun and Fazal, 2018). The latent variable EI needs to be awakened and improved through CE for entrepreneurial behaviour to be effective. Empirical evidence has shown that beliefs, values, and attitudes can affect the decision towards becoming an entrepreneur (Hayton & Cacciotti, 2013). Apparently, the literature review shows that CE is an important factor that strongly influences individuals' behaviours. According to Tran, (2018) Contextual elements are considered as antecedents of personal attitude, and in return it is expected to have influence on entrepreneurial intention.

Mediating Role of Contextual Elements between TPB Antecedents and EI

CE refer to an approach of thinking, just a way to look through individual interface and help out with decisions (Ivan, 2019). They are external factors affecting behavioral intention indirectly through attitude (Tran et al., 2018). Moreover, they have context, predefined responsibilities and do not have neutral behaviour (Ivan, 2019). The CE is one of the environmental factors that contribute to entrepreneurial intention and have a big influence on entrepreneurial decisions than personality factors (Gartner, 1989). The five essential elements or salient features of context are circumstances factors, conditions, values, and patterns (Merriam, 2023). The contextual elements are the most visible influence on entrepreneur decisions (Kirstiansen and Indarti, 2003, 2004).

Arroyo et al. (2017) found indirect significant influence at ($p < .001$) of social innovation on intentions. As such, the study indicated that contextual elements such as experience, self-employment experience, family background, friend and peers could mediate the TPB antecedents of EI. Moreover, Nguyen (2019) found that students with prior self-employment experience show higher level of EI than students without experience of self-employed before. Nevertheless, Tkachev and Kolvereid (1999), confirm a positive relationship between prior experience in self-employment and EI. Previous self-employment experience should be an essential element of entrepreneurship. However, these studies found no relationship between family background and EI of business students. As such, there is inadequate statistical evidence to support the view that children of self-employed parents exhibit higher EI than children whose parents are not self-employed. Some studies (see, for example, Ayalew and Zeleke, 2018; Chaudhary, 2017; and Ohanu and Ogbuanya,

2018, confirmed the relationship between role models and entrepreneurial spirit.

Nevertheless, Arrighetti et al. (2016) found that family support irrelevant to explaining EI amongst students. What is more, Nguyen, (2019) also found other factors, such as individual factors as driving factors from the external environment and factors that wish to improve and innovate could influence the entrepreneurial intention (self-employment) of Vietnamese youth. In addition, since cultural values are part of CE that can mediate TPB antecedents, while the CE being also a part of PA, therefore, Iakovleva et al., (2011) indicated that cultural values can influence personal attitudes. Based on the empirical studies reviewed, none of them indicated the mediating role of CE (combination of cultural values, experience in self-employment and unemployment and employment) between TPB antecedents and EI. The foregoing postulations support the following three hypotheses H_1 , H_2 and H_3 for testing the stated relationships:

H₁: The adult learners' contextual element has a significant arbitrate influence on the relationship between personal attitude and entrepreneurial intention.

H₂: The adult learners' contextual element has a significant arbitrate influence on the relationship between subjective norm and entrepreneurial intention.

H₃: The adult learners' contextual element has a significant arbitrate influence on the relationship between perceived behavioural control and entrepreneurial intention.

Conceptual framework

Empirical evidence attests to how the TPB antecedents constitute one of the most significant predictors of entrepreneurial intention (EI) with CE enhancing EI (Gartner, 1989; Tran et al 2018). The author conceptualised the TPB framework to ascertain the influence of the indirect influence of the TPB antecedents on EI under mediating role of CE. The construct PA influenced the formation of EI (Schaefer et al., 2017). The study adopted PA, SNs, PBC tested and measured them in accordance with Paiva et al. (2020) and EI tested and measured them in harmony with Dinc and Budic (2016). Some studies have reinforced the relevance of TPB in measuring entrepreneurial intention using its antecedents of PA, SNs and PBC (Costa and Mares, 2016; Ferreira et al., 2017; Kautonen et al., 2015; Liñán and Chen, 2009). Finally, Arroyo et al., (2017) study indicated an indirect significant influence of social innovation on intentions, with CE in form of experience, self-employment experience, family background, friend and peers moderating the TPB antecedents of EI. Similarly, CE was used in this study to mediate between TPB antecedents and EI, measured by values, experience in self-employment and unemployment and employment influence, as Figure 1 illustrates:

MATERIALS AND METHODS

This quantitative study was informed by philosophical assumptions of the post-positivism research paradigm,

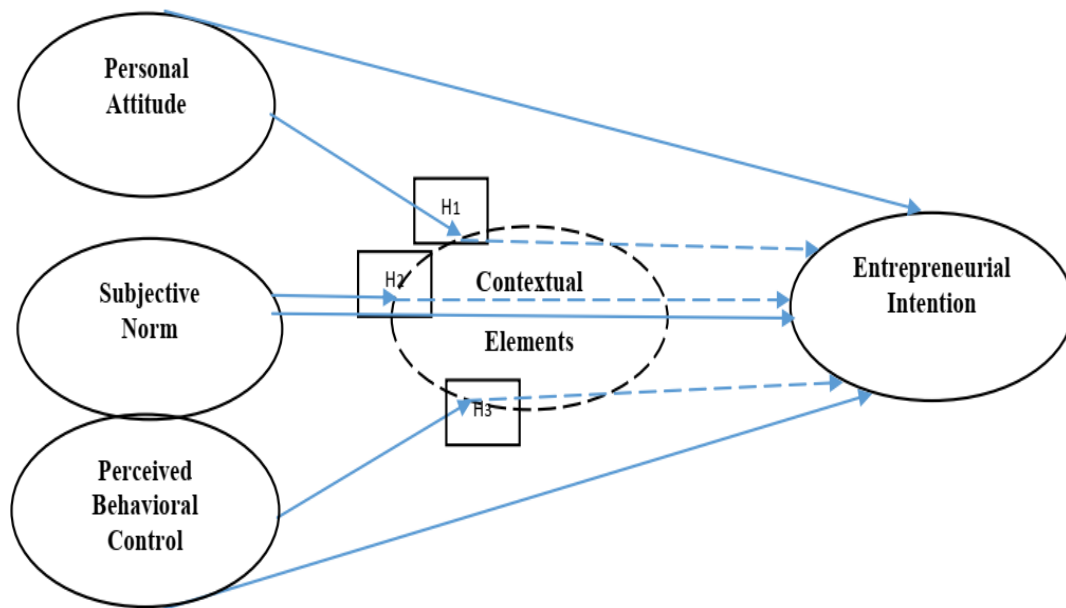


Figure 1: Conceptual Framework on CE Arbitrative Role for EI

Table 1. Distribution of Adult learners' Entrepreneurial Programmes Sample

Gender	Convention Students			ODL-September intake Students		Total
	BACE	BAECD	ODACE	ODACE		
Male	8(0.5)	59(3.4)	53(3.07)	528(30.6)		648(37.5)
Female	5(0.3)	112(6.5)	92(5.3)	869(50.4)		1,078(62.5)
Total	13(0.8)	171(9.9)	145(8.4)	1,397(81.0)		1,726(100)

Source: Field data (2022/2023)

whereby it pointed out the positivism core idea (Empiricism) was faulty, nevertheless, critical realists in contrast to realists of positivism. The philosophy also believes that there are errors in all scientific methods as long as the biases exist. This research applied the quantitative design to measure different types of variables, test hypotheses pertaining to relationships between variables, involving the manipulation of an independent variable and measuring its effect on a dependent variable (McCombes, 2023). Essentially, the study analysed data on the influence of the independent variables (PA, SNs and PBC) on the dependent variable (EI) and arbitrative variable (CE). The objective of the study is to enrich TPB in terms of its applicability among adult learners to steer them towards business start-ups after completing their studies in higher learning institutions, and accordingly test the associated hypotheses (H1, H2 and H3) that sought to determine the relationships based on the TPB model, to which the study sought to add, prove, or disprove.

The study focused on adult learners whose programmes offer entrepreneurship skills as a module, which served as a unit of analysis of IAE aimed to test for the multi-faceted nature of the influence of CE derived from the adult learners' antecedents of EI. This study was conducted at the IAE in Tanzania. The institute has three campuses and 42

centres scattered all over the country. Most of the adult learners at the institute pursue careers in different programmes with a mandatory entrepreneurship skills course not necessary for securing jobs, but for career development. The module taught caters for both conventional and distance learners. The IAE also happens to be the oldest institution offering adult education in Tanzania with adult learners coming from different socio-economic backgrounds. Furthermore, the IAE is an autonomous institution established by Parliamentary Act Number 12 of 1975 under by the then Ministry of National Education, now the Ministry of Education, Science, and Technology. To-date, the Institute remains the premier learning, research and training centre in Adult Education for post-primary education learners to acquire certificate, diploma and degree qualifications. Finally, its services extend to the grassroots level through regional centres established in 26 regions of Mainland Tanzania. Thus, a combination of factors made the IAE ideal for this study in the context of Tanzania.

Using convenient sampling, the study generated a sample of 245 adult learners from a study population of 1,726 IAE learners in programmes with entrepreneurship skill modules. Table 1 presents the sample distribution:

The numbers in parentheses are percentages, BACE: Bachelor in Adult and Continuing Education, BAECD:

Table 2. Search Instrument Items

Construct	Item	Assertive
Entrepreneurial Intention (EI)	EI1	I am ready to do anything to be an entrepreneur
	EI2	My professional goal is to become an entrepreneur
	EI3	I will make every effort to start and run my own firm.
	EI4	I am determined to create a firm in the future.
	EI5	I have very seriously thought of starting a firm
	EI6	I have a serious intention to start a firm someday.
Personal attitude (PA)	PA1	In my opinion, being an entrepreneur implies more advantages than disadvantages.
	PA2	A career as an entrepreneur seems attractive
	PA3	If I had the opportunity and the necessary resources, I would like to start a company
	PA4	Being an entrepreneur would make me very satisfied
	PA5	I would prefer to become an entrepreneur, even if I considered other options.
Subjective norms (SNs)	SNs1	My friends would approve of my decision to become an entrepreneur
	SNs2	My family would approve of my decision to become an entrepreneur.
	SNs3	My college classmates would approve of my decision to become an entrepreneur.
Perceived Behavioral Control (PBC)	PBC1	To start a firm and keep it working would be easy for me.
	PBC2	I am prepared to start a viable firm
	PBC3	I can control the creation process of a new firm.
	PBC4	I know how to develop an entrepreneurial project (a business plan, for example).
	PBC5	I know the necessary practical details to start a firm.
	PBC6	If I tried to start a firm, I would have a high probability of succeeding
Contextual Elements (CE)	CE1	I have experience in business
	CE2	I am employed somewhere
	CE3	I am neither employed somewhere nor self-employed.
	CE4	My values encourage doing a business

Source: Paiva et al. (2017), Dinc and Budic (2016) and Mat et al., (2015)

Bachelor in Adult Education and Community Development, ODACE: Ordinary Diploma in Adult and Continuing Education.

The sample size (n) computed based on Dillman (2000), who suggests computing a sample size from a given population (N) using the following formula:

$$(n) = \frac{[(N)(P)(P - 1)]}{(N - 1) \left(\frac{B}{C}\right)^2 + P(1 - P)}$$

Note: B was set at 0.05, Hence

$$(n) = \frac{[(1,726)(0.5)(1 - 0.5)]}{(1,726 - 1) \left(\frac{0.05}{1.96}\right)^2 + 0.5(1 - 0.5)}$$

$$(n) = 245$$

Instrumentation and Validation

Before field research, a pilot study preceded the main study with 70 questionnaires administered with conventional adult learners at the IAE. In all, 58 duly filled out questionnaires were received, hence an 83 percent return rate. After testing and analysis, the study used the Corrected Item-Total Correlations (CITCs) method to

remove five questions that had accounted for a correlation coefficient of less than 0.5. The final questionnaire comprised 24 closed-ended questions out of the 29 adopted and modified. The five questions that were removed from the questionnaire originated from the researcher (modified) and Mat et al. (2015) include three of them derived from the construct EI ("I will choose to be an employee in a company/an organization", "I prefer to be an entrepreneur rather than to be an employee in a company" the items were adopted from Mat et al. (2015) and "I have strong intention to create a sound business immediate after graduation and By hooks and crooks" The item was modified from Paiva et al. (2017).

The other two questions obtained from the constructs PBC (I will not be the one among the business failures) and CE (Experience earned from family business strengthened my business potentials). Overall, the questionnaire composed six, five, three, six and four questions from the constructs EI, AP, SNs, PBC and CE respectively (Table 2). The study used a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) to measure the model dimensions (see Figure 1). The questionnaire was enlarged based on theoretical framework and validated scales in relevant previous empirical and conceptual

Table 3: Reliability and Validity Coefficients Values

Constructs	AVE	Composite Reliability (CR)	PA	SNs	PBC	EI	CE
Cronbach's α							
PA	0.826	0.628	0.861				
SNs	0.792	0.692	0.412	0.968			
PBC	0.885	0.724	0.168	0.312	0.864		
EI	0.985	0.578	0.652	0.648	0.622	0.941	
CE	0.759	0.594	0.532	0.457	0.564	0.654	0.876

EI: Entrepreneurial Intention, PA: Personal Attitude, SNs: Subjective Norms, PBC: Perceived Behavioural Control, CE: Contextual Elements and Values with diagonals are the square root of AVE, Value under diagonals are correlations: ($p < 0.001$)

Source: Field Data (2023)

literature review. To determine the respondents' reactions to AP, SNs, PBC, CE and IE, the study adapted six, five, three, six and four items, respectively, based on Paiva et al. (2017) except for religious belief construct and Dinc and Budic (2016). This questionnaire was refined using TPB as developed by Ajzen (1991 and 2001) and the instrument by Liñán and Chen (2009).

Conferring to Ajzen (1991), SNs should be approached through an aggregate measure of the kind 'what do reference people think?' In practice, nevertheless, some scholars simply neglect this component from the model (Krueger, 1993; Chen et al., 1998). Alternatively, some researchers have suggested responses to this question with their respective 'motives to comply' (Kolvereid, 1996b; Kolvereid and Isaksen, 2006; Tkachev and Kolvereid, 1999). Nonetheless, Armitage and Conner (2001) found that, in general, the 'subjective norm X motives to comply' measure tends to show weaker predictive power towards intention than the 'multiple-item subjective norms measure. However, its unproven weakness that may not be understood in the specific area of entrepreneurship research. Nevertheless, the researcher used one simpler scale in the validation process, with three categories of 'reference people: family, friends and colleagues. In this manner, the researcher also contributes to keep the Entrepreneurial Intention Questionnaire (EIQ) as stingy as imaginable. For each statement/item, the respondents were required to circle a number within the scale.

A sample items for the construct EI, PA, SNs, PBC and CE have the Cronbach's Alpha (α): 0.985, 0.826, 0.792, 0.885 and 0.759, respectively (see Table 3). For this study, the independent variables identified to influence PA, SNs, and PBC, with CE mediating between TPB antecedents and EI using the SEM in AMOS version 20 offers direct/indirect influence tests using approaches to determining significance. In fact, the variable CE plays a dual role (dependent and independent at the same time). It is a dependent and independent variable relating to the TPB antecedents and EI, respectively. The questionnaire was distributed from August 2022 to January 2023.

The data were collected using both an online survey distributed via e-mail and WhatsApp for Open and Distance Learning adult learners and self-administered surveys for conventional adult learners. This dual application of the method ensured the greatest convenience and response

rate. The researchers applied permission to access the information from adult learners at the IAE. Participation was voluntary, with the adult learners enlightened on anonymity and how their participation was not connected with any material gain. The data collected were initially cleaned, coded and, finally, subjected to quantitative analysis.

During data analysis, the testing of indirect influence of CE in the relationship among the TPB antecedents and EI, the bootstrap test was applied at a 95% confidence interval with 5,000 bootstrap samples using the AMOS 20.0 software that facilitated the testing of the proposed hypotheses. The researcher followed the endorsements by Preacher and Hayes (2008) to calculate the confidence interval of the lower and upper bounds of bias-corrected percentile and percentile method to analyze whether the indirect effect was significant or otherwise. The data were then subjected to confirmatory factor analysis (CFA) and structural equation modelling (SME). The SEM is a multivariate technique for testing this type of conceptual framework (the dual role of the mediator variable CE) because of its ability to simultaneously examine a number of dependent linear relations in a situation where one or more constructs (variables) are both dependent and independent (Agolla and Van Lill, 2016; Mbrokroh, 2016).

RESULTS

The study used AMOS 20.0 to determine the validity and reliability of the five potential variables: AP, SNs, PBC, CE, and EI. The reliability analysis of the constructs in the questionnaire focused on the internal consistency criteria, where the Cronbach's alpha (α) coefficient and composite reliability (CR) of the five constructs, with their respective indices helping to assess whether the sample is free of biases, or even, if the answers – in their group – are reliable (Ringle et al., 2014). In addition, the values of factor loadings and Average Variance Extracted (AVE) serve for the validity test computation (Ringle et al., 2014). Table 3 presents the five construct dimensions and Table 4 presents the confirmatory factor analysis (CFA) entailed using AMOS 20.0.

Moreover, Table 3 shows that five measurement constructs have reasonable reliability results because all

Table 4. Confirmatory Factor Analysis (CFA)

Constructs	Items	Measurements	<i>std.β</i>	SE	Z	P
Entrepreneurial Intention	EI1	I am ready to do anything to be an entrepreneur	0.884	-	-	-
	EI2	My professional goal is to become an entrepreneur	0.863	0.631	20.406	***
	EI3	I will make every effort to start and run my own firm.	0.962	0.681	22.221	***
	EI4	I am determined to create a firm in the future.	0.916	0.511	18.201	***
	EI5	I have very seriously thought of starting a firm	0.814	0.516	19.362	***
	EI6	I have a serious intention to start a firm someday.	0.816	0.481	18.780	***
Personal Attitude	PA1	In my opinion, being an entrepreneur implies more advantages than disadvantages.	0.869	-	-	-
	PA2	A career as an entrepreneur seems attractive	0.919	0.522	17.030	***
	PA3	If I had the opportunity and the necessary resources, I would like to start a company	0.891	0.531	17.871	***
	PA4	Being an entrepreneur would make me very satisfied	0.826	0.042	19.701	***
	PA5	I would prefer to become an entrepreneur, even if I considered other options.	0.860	0.431	21.682	***
Subjective Norms	SNs1					
	SNs2	My friends would approve of my decision to become an entrepreneur	0.924	-	-	-
	SNs3	My family would approve of my decision to become an entrepreneur.	0.982	0.034	22.865	***
Perceived Behaviour Control	PBC1	My college classmates would approve of my decision to become an entrepreneur.	0.866	0.365	19.640	***
	PBC1	To start a firm and keep it working would be easy for me.	0.986	-	-	-
	PBC2	I am prepared to start a viable firm	0.821	0.042	22.615	***
	PBC3	I can control the creation process of a new firm.	0.922	0.056	21.987	***
	PBC4	I know how to develop an entrepreneurial project (a business plan, for example).	0.991	0.069	22.985	***
	PBC5	I know the necessary practical details to start a firm.	0.842	0.043	22.019	***
Contextual Elements	PBC6	If I tried to start a firm, I would have a high probability of succeeding	0.859	0.051	23.801	***
	CE1	I have experience in business	0.870	-	-	-
	CE2	I am employed somewhere	0.874	0.059	20.588	***
	CE3	I am neither employed somewhere nor self-employed.	0.662	0.057	19.534	***
	CE4	My values encourage doing a business	0.904	0.060	20.001	***

*** Significant ($p < 0.001$)

Source: Field Data (2023)

the values of the Cronbach's Alpha (α) and the CR exceeded the 0.70 threshold recommended benchmark (Hair et al.'s (2013, 2020). The results further indicate that the (α) for PA, SNs, PBC, EI, and CE are 0.826, 0.792, 0.885, 0.985, and 0.759, respectively. Similarly, the CR values of the PA, SNs, PBC, EI, and CE variables are 0.853, 0.964, 0.924, 0.898 and 0.950 greater than 0.70, respectively. These results imply satisfactoriness for the research, hence confirming a significant internal consistency to measure the constructs under investigation (Hair et al., 2016). Thus, there is interrelation in all the five constructs making up the model, as Figure 2 illustrates.

In the meantime, the most conventional approach to assessing discriminant validity criterion is Fornell-Larcker (1981) and Ibrahim and Shariff, (2016). The validity test of the values of the average variance extracted (AVE) were satisfactory ($AVE > 0.5$) ranging as they were from 0.578 to 0.724, hence indicating a positive relationship between the variables and their respective constructs (Ringle et al., 2014). In other words, the model has a convergent validity acceptable for the analysis. The evaluation of the discriminant validity of the structural model was done by adopting Fornell and Larcker's (1981) criteria. The square roots of AVE were greater than the values of their

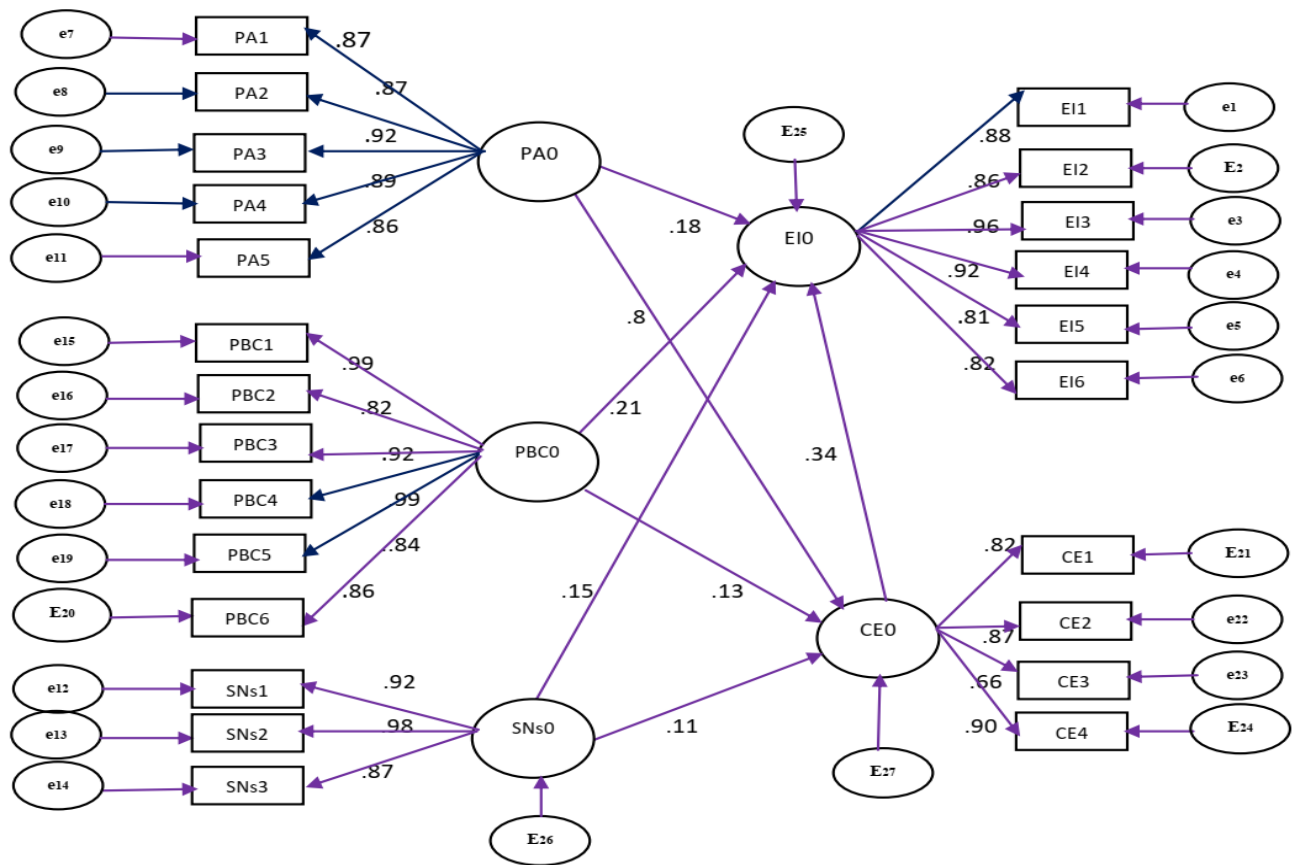


Figure 2: Structural model

$\chi^2 = 876.840$, $\frac{\chi^2}{df} = 2.21$, $GFI = 0.971$, $CFI = 0.968$, $TLI = 0.982$, $NFI = 0.974$,
 $RFI = 0.990$, $NFA = 0.961$, $RMSEA = 0.038$ and $SRMR = 0.040$

Source: Field Data (2023)

corresponding rows and columns. In addition, the entire items factor measured loadings ranged from 0.662 to 0.991 (all $p < 0.001$). As Table 4 further illustrates, the scale has a good convergent validity. The results indicate the scale has a good discrimination validity (see Table 3). Subsequently, all the five variables met the reliability and validity criteria. The following are Tables 3 and 4:

Results for the structural model indicate an acceptable model fit (For the goodness-of-fit index). The results have been presented in Figure 2, where:

$$\chi^2 = 876.840, \frac{\chi^2}{df} = 2.321, GFI = 0.971, CFI = 0.968, TLI = 0.982, NFI = 0.974,$$

$RFI = 0.990$, $NFA = 0.961$, $RMSEA = 0.038$ and $SRMR = 0.041$.

Results for the structural model showed an acceptable model fit for all model fit indices. Nevertheless, RMSEA of 0.05 or less indicates a good fit, and 0.08 or less constitute an adequate fit. Therefore, the values of measurement model constructs were all satisfactory to allow the structural model analysis to proceed.

Structural Model

The assessment of the structural model was based on 95%

confidence interval with 5,000 bootstrap samples using the AMOS 20.0 software that facilitated the testing of the proposed hypotheses. The findings based on the structural model are as presented in Figure 2, which affirms the satisfactoriness of all the results pertaining to reliability and validity of the constructs as well as the model fit index: Subsequently, the researcher tested the proposed hypotheses based on the study findings presented in Table 5 and Figure 2. The p-values of less than 0.05 support the rejection of the null hypothesis.

Arbitrative Influence of Adult Learners' Contextual Element between PA and EI

Consistently, the study tested for the indirect influence of CE in the relationships between PA and EI, SNs and EI, as well as PBC and EI, the Bootstrap test applied at a 95% confidence interval with 5,000 bootstrap samples. The SEM in AMOS version 20 offers indirect influence tests using approaches to determining significance. The researcher followed the guidelines that Biesanz et al. (2010) and Hayes and Scharkow (2013) provide to determine whether the

Table 5: Indirect Effects

Path coefficient and Hypotheses	Std Estimation β	SEM - Bootstrapping 5,000 samples with 95% Confidence interval				P-value
		Bias correlated percentile		Percentile		
		Lower	Upper	Lower	Upper	
Standardised direct Influence PA → EI	0.368*	0.048	0.333	0.032	0.314	0.000
Standardised indirect Influence PA → CE → EI	0.212**	0.031	0.178	0.131	0.178	0.000
Standardized total influence	0.580**	0.140	0.436	0.127	0.424	0.000
Standardised direct Influence SNs → EI	0.124	0.157	0.377	0.157	0.377	0.201
Standardised indirect Influence SNs → CE → EI	0.023**	0.020	0.072	0.001	0.071	0.000
Standardized total influence	0.147**	0.204	0.413	0.204	0.414	0.000
Standardised direct Influence PBC → EI	-0.342	-0.025	0.246	-0.021	0.251	0.062
Standardised indirect Influence PBC → CE → EI	0.0284**	0.027	0.126	0.031	0.131	0.000
Standardized total influence	-1.942**	0.065	0.338	0.070	0.341	0.000

SNs: Subjective Norms, PBC: Perceived Behavioural Control, EI: Entrepreneurial Intention, PA: Personal Attitude, SEM: Structural equation modelling, Standard Significant ** $p < 0.001$, * $p < 0.05$

Source: Field Data (2023)

indirect influence was significant. The results presented in Table 5 indicate that PA indirectly influences EI, based on the mediating role of CE ($\beta=0.212$, $p<0.001$). These results validate H₁: *Adult learners' Contextual element has a significant arbitrate influence on the relationship between Personal Attitude and entrepreneurial intention.*

Arbitrative Influence of Adult Learners' Contextual Element between SNs and EI

The results presented in Table 5 further indicate that SNs indirectly influences EI, based on the mediating role of CE ($\beta=0.023$, $p<0.001$). These results confirm H₂: *Adult learners' contextual element has a significant arbitrate influence on the relationship between subjective norm and entrepreneurial intention.* As such, the hypothesis is valid.

Arbitrative Influence of Adult Learners' Contextual Element between PBC and EI

The results presented in Table 5 indicate that PBC indirectly influences EI, based on the mediating role of CE ($\beta=0.0284$, $p<0.001$). These results validate H₃: *The adult learners' Contextual element has a significant arbitrate influence on the relationship between perceived behavioural control and entrepreneurial intention.*

meanwhile, the correlation is statistically significance at the 5% level (Hair et al., 2013). The β coefficients were also significant. The study interpreted path coefficient values of the structural model as standard least-squares regression coefficients (β). Consequently, the regression coefficients are associated with each of the latent variables (PA, SNs, PBC, and CE) and how they affect the latent variable (IE).

DISCUSSIONS

Besides the TPB construct results of the influence on EI, CE emerged to have a positively mediating indirect influence on the relationship between PA and EI ($\beta=0.212$, $p<0.001$). These results also authenticate H₁: *The adult learners' contextual element has a significant arbitrating influence on the relationship between personal attitude and entrepreneurial intention.* The findings also suggest that, notwithstanding the PA effect on EI of the adult learners, but they are also significantly enhanced with a constructive CE capable of enriching the existing relationship between PA and EI. As such, individuals exposed to a higher level of attached values and experiences in working can be predisposed to have an entrepreneurial mindset that could result in their initiating business ventures.

The current results also indicate that a substantive percentage of the respondents who strongly agreed with the statements on CE arbitrating influence between PA and EI at the IAE. Nevertheless, the results also imply that the more adult learners being employed ($\beta=0.904$), embracing values ($\beta=0.874$), exposed to business experience ($\beta=0.870$), and being neither employed nor self-employed ($\beta=0.862$) improved or impair the adult learners' PA adjustment towards enhancing EI with higher magnitude reported among those who were employed followed by those embracing values of adult learners. This finding concurs with prior researchers such as Arroyo et al. (2017) who found an indirect significant influence $p < .001$ of social innovation pertaining to the intentions stemming from context such as experience, self-employment experience, family background, friends and peers, which could mediate the TPB antecedents of EI. In addition, the

study findings concur with Nguyen, (2019) whose findings indicate that students with prior self-employment experience show greater dependence than students with no experience of prior self-employment experience. Broadly, Nguyen's (2019) study also found that other factors such as contextual factors, driving factors from the external environment and factors intending to improve could induce the entrepreneurial orientation of Vietnamese youth. Nevertheless, the study findings are congruent with those of Ayalew and Zeleke (2018) whose findings confirm prior business experience was found to be significant predictors at 5% level of significance. This factor had positive relationship with self-employment intention at 5% level of significance.

Moreover, the current study findings indicate that CE positively mediating indirect influence of SNs on EI ($\beta=0.023$, $p<0.001$). These results confirm the validity of H₂: *The adult learners' contextual element has a significant arbitrating influence between subjective norm and entrepreneurial intention.* The findings advocate that the SNs managed to increase the EI indirectly under mediating effect of adult learners' CE, moreover, the CE should be treated in a constructive manner to make it capable of furthering the existing relationship between SNs and EI. Thus, individuals exposed to a higher level of attached values and experiences in working can be predisposed to have an entrepreneurial mindset that could initiate new ideas in the form of business venture creation.

This finding concurs with those of previous prior researchers such as Arroyo et al. (2017) who found an indirect significant influence $p < .001$ of social innovation on intentions, regarding the contextual elements such as experience, self-employment experience, family background, friends and peers could moderate the TPB antecedents of EI. In addition, the study findings concur with Nguyen, (2019) who found that students with prior self-employment experience reported greater dependence than those with no such prior experience. Broadly, Nguyen's (2019) study also found contextual factors, driving factors from the external environment and factors that wish to improve and innovate capable of influencing the entrepreneurial intention of Vietnamese youth. Nevertheless, the study findings are congruent with Ayalew and Zeleke (2018) who attested prior business experience was found to be significant predictors at 5% level of significance. This factor had positive relationship with self-employment intention at 5% level of significance. Moreover, the study findings are partly compatible with those of Ambedkar and Dipesh (2019) whose findings confirmed the significance of push factors on entrepreneurial intentions such as unemployment, poverty and present job uncertainty are the most influential factors for generating entrepreneurial intentions among graduates who opened their business.

Finally, the current study indicates that CE mediating positively indirect influence on the relationship between PBC and EI ($\beta=0.0284$, $p<0.001$). These results also validate H₃: *The adult learners' contextual element has a significant arbitrating influence on the relationship between perceived behavioural control and entrepreneurial intention.*

Implicitly, the perceived easiness or difficulty in performing a given behaviour based on reflection of the past experiences can be arbitrated by a constructive CE capable of furthering the existing relationship between PBC and EI.

This finding also partly concurs with Gorgievski et al. (2017) who found Values (one of the CE tested) and TPB constructs partially mediated cross-country differences in entrepreneurial intention. Nevertheless, self-enhancement values (power and achievement) predicted entrepreneurial career intentions with Path coefficients 0.17, $p < .05$. Apparently, individuals exposed to a constructive value are more likely to have higher level of EI. This finding highlighted a new evidence that values are significant factor for EI and career choices. Furthermore, the current findings are congruent in part by Sahinidis, et al., (2021) whose finding confirmed that students with more experience (one of the CE tested) present a higher level of EI. The difference observed nevertheless is not statistically significant.

Conclusion

Overall, the adult learners' antecedents for enhancing entrepreneur Intention (EI) mediated on the applicable CE, which also happen to be particularly successful drivers of entrepreneurial intentions (EI) among adult learners in Tanzania. In this endeavour, the Contextual Elements (CE) play a significant arbitrate role in influencing the relationship between TPB constructs and EI. In essence, understanding the antecedents' contribution levels among adult learners during the teaching and learning process could inform module developers and facilitators to confine themselves to those perspectives, which appear to stimulate their curiosity in EI. As such, this research has highlighted the pivotal role of Ajzen's (1985 and 1991) three TPB antecedents affecting EI: Attitude towards the behaviour (PA), Subjective norms (SNs), and Perceived behavioural control (PBC). Thus, the TPB antecedents can influence an individual's intention directly or under the arbitrate effect of CE related to entrepreneurship, particularly among adult learners.

The study also confirms that TPB antecedents can significantly be applied in other environments in studying entrepreneurial intentions as distinct from Western context, from where most of these theories originated. The findings from current study attained statistically affirm that significance of the variations in EI due to PA, SNs and PBC, which are considered to be enhanced with the arbitrate influence of CE at play.

Significantly, the study signals and affirms the influence of the arbitrate variable CE on the relationship between TPB antecedents and EI. What is more, CE had a positive and significant indirect mediation on the relationship between PA and EI ($\beta=0.212$, $p<0.001$). Meanwhile, CE had a positive and significant indirect influence on the relationship between SNs and EI ($\beta=0.023$, $p<0.001$) and CE had a positive and significant indirect influence on the relationship between PBC and EI ($\beta=0.0284$, $p<0.001$).

Ultimately, the study results underscore the significance of TPB antecedents and CE as predictors of the adult

learners' intention to participate in entrepreneurial venture formation in their post-graduation period. As such, higher learning institutions, specifically adult learning institutions, should consider the adult learners' CE individual values and experience in developing a meaningful EI. Second, the study has refined the Ajzen's TPB by introducing CE as an arbitrate variable between TPB antecedents, particularly as indirect mediator to EI. Yet, the empirical literature reviewed had largely overlooked including CE as moderating variable. Third, the study has applied and tested Ajzen's theory in the context of Tanzania, a developing country from Africa. In fact, this study on entrepreneurship had been conducted in a context (Western) where different values, experience and nature of the people are likely to have different effects on EI. Finally, the study presents some practical and theoretical implications for module developers to design and integrate module content reflecting relevant contextual elements. Moreover, the CE developed (values β : 0.904; Experience β : 0.870) can be valuable in evaluating the prospect of unemployed graduates venturing into entrepreneurial activities with a long-term succession plan. Based on such evaluation, the government and other financial supporters of potential entrepreneurs can make informed decision to fund new entrepreneurial ventures; after all, since not every unemployed graduate will desire to venture into business. Notably, the results supporting hypothesis H₁ H₂ and H₃ imply that CE plays a pivotal arbitrate influence in the relationship between adult learners' entrepreneurial antecedents and their EI.

Study Limitations

The limitations of the study include the data being collected solely from the Institute of Adult Education in Tanzania having homogenous nature of students, hence representing a small sample size considering the expansive nature of the country and its diverse institutions. The target population had focused on adult learners benefiting from entrepreneurial course modules in their respective programmes. Future studies, therefore, could consider other higher learning institution with adult education programmes in Tanzania to broaden the sample size for the generalisability of the results. Additionally, the methodology of the study is purely quantitative data, which precludes establishing the reasons behind the intentions of the adult learners. As such, the study calls for research employing triangulation of data collection and analysis methods, particularly one employing a mixed methods approach to engender an in-depth inquiry to further validate these findings in the context of Tanzania.

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Ethical Considerations

The Institute of Adult Education granted ethical research clearance for the study and the use of the required data vide letter with reference number IAE/CA.462/575/38.

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Data availability

The data used in this study are available from the corresponding author upon reasonable request. However, the data are not available for public use because of the need for anonymity and confidentiality for the sources of information to avoid compromising the privacy and identity of the respondents.

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