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# Assessment of Entrepreneurship Education on Entrepreneurial Intentions: Evidence from University of Cape Coast

By Christina Appiah-Nimo, Daniel Ofori & Keren Naa Abeka Arthur

*University of Cape Coast*

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**Keywords:** entrepreneurship course, entrepreneurship intention, university students.

**GJMBR-A Classification:** JEL Code: L26



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*Strictly as per the compliance and regulations of:*



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Christina Appiah-Nimo <sup>α</sup>, Daniel Ofori <sup>σ</sup> & Keren Naa Abeka Arthur <sup>ρ</sup>

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**Research Limitations/Implications:** The study sampled only non-business entrepreneurship students of the University of Cape Coast. The questionnaire was also administered after the students had gone through a semester course in entrepreneurship. Future research could look at a comparative study on entrepreneurial intention between the business and non-business students. A further research could also do a pre-assessment of the students' knowledge and entrepreneurial intentions and another after the course to give any distinct change in attitude if there be any in the form of longitudinal study.

**Practical Implications:** The introduction of the course has created the required entrepreneurial intentions in students to start a new venture in line with the Theory of Planned Behaviour. Overall, results of the study revealed that the introduction of the entrepreneurship course had created the required behavioral intention in students to start a new venture. Through the knowledge gained from the course, students have reshaped their perception of entrepreneurship.

**Social Implications:** This study contributes to the literature on entrepreneurial education and intentions of students in the Ghanaian tertiary education sector. It also serves as a source of reference for similar studies to be replicated. The study also provides policy - makers a step in reducing graduate

unemployment, through the introduction of entrepreneurship education at all higher educational institutions.

**What is the Original/Value of Paper:** This research fulfills the need to analyze the entrepreneurship course introduced to non-business students.

**Keywords:** entrepreneurship course, entrepreneurship intention, university students.

## 1. INTRODUCTION

Countries within Sub-Saharan Africa are faced with challenges in the area of governance, human resource development and unemployment (especially graduate employment). The issue of graduate unemployment is dominant in Ghana. In its 2011 report, the Institute of Statistical, Social and Economic Research (ISSER) indicated about 50% of graduates might wait up to 2014 without finding jobs. In effect, the issue of graduate unemployment is a key problem in the country. Meanwhile, one of the strategies suggested in the literature for reducing graduate unemployment is entrepreneurship. But how well is entrepreneurship incorporated into the curricula of universities to bring about the needed behavioral change in graduates?

Entrepreneurship education is one of the most effective means of enhancing entrepreneurial capacities and therefore self-employment of graduates and economic development. In Ghana, the vast and ever-increasing gap between the supply of, and demand for jobs has widened due to the influx of private tertiary institutions. Unfortunately, while job opportunities from the government or public sector have virtually scaled down, private sector growth has not been able to adequately absorb the increased number of graduates (Baah-Boateng, 2013). According to Owusu-Ansah (2012), some of the reasons often cited for the high unemployment rates among the youth include unskilled graduates, the mismatch between skills demand and supply, poor technical skills, constrained SME's sector, slow expansion and growth, of the private sector. Given the dwindling job prospects from the public sector and the slow rate of job creation within the private sector, the only viable option for graduate youth lies in creating their jobs. Indeed, for a developing country like Ghana, Small and Medium-Sized Enterprises (SMEs) play a vital role for new venture creation and account for over 80-90% of

**Author <sup>α</sup> σ:** Department of Marketing and Supply Chain Management, School of Business, University of Cape Coast, Cape Coast. e-mails: cappiah-nimo@ucc.edu.gh, dofori@ucc.edu.gh

**Author <sup>ρ</sup>:** Centre for Entrepreneurship and Small Enterprise Development, School of Business, University of Cape Coast, Cape Coast. e-mail: keren.arthur@ucc.edu.gh

all job openings (Mutambi, Byaruhanga, Trojer, & Buhwezi, 2010).

Entrepreneurship education in the country's tertiary institutions have been touted as one of the most effective means to enhancing entrepreneurial capacities and therefore self-employment, job creation (Ansah, 2012) and economic development (Napiers, 1972). Ansah (2012) asserts that tertiary education can provide some insights into the challenges of entrepreneurship and therefore encourage skills development and self-reliance. Education is critical to the development of Ghana's economy. However, the current curricula in Ghana's education system prepare the average graduate to seek for employment not create employment. There would numerous calls and emphasis on the quality of education administered to bridge the gap between academia and industry. Tertiary institutions in Ghana have made efforts to improve their curricula to motivate graduates entrepreneurially. It is against this background the University of Cape Coast introduced a compulsory course in entrepreneurship and new venture creation in the 2014/2015 academic year. By the end of the 2015/2016 academic year, a total of 2,971 students had gone through the course. The aim of this course was to expose students to the entrepreneurial climate and to build the entrepreneurial capacity and skills. This study was therefore conducted to assess the perception and the influence the course has had on their entrepreneurial intentions. Through the application of the theory of planned behavior by Ajzen (1991), this study explored the influence these cognitive factors: subjective norms, perceived behavioral control and attitude formation towards behavior have on entrepreneurial intentions of students undertaking the course.

The rest of the report is organized as following: the first section comprises a review of Ajzen's theory of planned behavior and associated empirical studies, followed by the methodology consisting of the study design, population, sampling procedure, instruments, data collection and data analysis procedures. Results and discussion are presented in the next section and finally, conclusions and recommendations for the study.

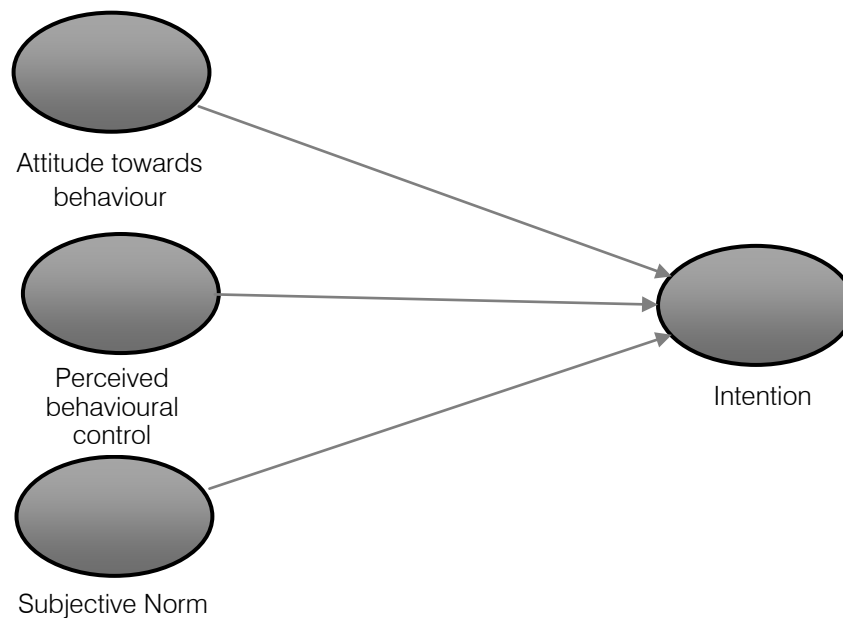
## II. LITERATURE REVIEW

### a) *The Theory of Planned Behavior (TPB)*

The theory of planned behavior describes and forecasts human behaviour of their intentions to perform an action. TPB constructs include attitude, subjective norm, and perceived behavioral control. Attitude towards entrepreneurial aim deals with an individual's favorable and unfavourable evaluations of the behavior. Subjective norm refers to the perceived social pressure from society. The third construct, perceived behavioral control is the perceived ease or difficulty in performing behaviour (Ajzen, 1991). According to Ajzen, behavioral

achievement depends on the availability of resources and opportunities.

TPB predicts intentions from an individual's attitude towards behavior, subjective norms, and perceived behavioral control. In the context of entrepreneurship, intentions are defined in the literature as one's desire to own one's business. Thompson (2009) provides a working definition of intention as an acknowledged conviction by a person that he/she intends to set up a new business venture and consciously plans to do so at some point in future. Thus, once the formation of intentions occurs, actual behavior is expected. According to Ajzen (1991) the attitudes toward the intended behavior, social norms with respect to the behavior and perceived control over the behavior are usually found to predict behavioral intentions with a high degree of accuracy. It is inferred in relation to entrepreneurial education that the more favorable the attitude and subjective norm, and the more the perceived control, the stronger should be the student's entrepreneurial intention. This study, therefore, adopts this theory to help explain the entrepreneurial intentions of undergraduate students of the University of Cape Coast.



Source: Ajzen (1991)

Figure 1: Theory of Planned Behavior

## b) Empirical Review

### i Attitude and entrepreneurial intention

According to Fishbein and Ajzen (1975) attitude is a learned predisposition to respond in a consistently favorable or unfavorable manner concerning a given object. Thus, attitude towards a behavior reflects the individual's global positive or negative evaluations of performing a particular behavior (Armitage & Conner, 2001). Armitage and Conner further affirm that, the more favorable the attitude towards the behavior, the stronger the individual's intention to perform or act on it. This affirmation clearly explains that attitude and entrepreneurial intention relation are well established in the theory of planned behavior. Thus, the extant literature on attitude and entrepreneurial intention by applying TPB is recognized widely. Studies such as that of Indirti et al. (2010) noticed that students' attitude, behavior, and knowledge tend to stimulate their intentions and willingness to start a new venture in the future. Attitudes are open to change and can be influenced by educators and by an environment (teaching) that foster entrepreneurial activity (Florin, Karri, & Rossiter, 2007; Schwarz, Wdowiak, Almer-Jarz, & Breitenecker, 2009). Furthermore, Geissler & Zanger (2011) in a review also regard attitude as a reliable predictor of entrepreneurial intention. From those above, it was hypothesized:

$H_1$ : attitude has a positive influence on entrepreneurial intentions.

### ii Perceived Behavioural Control (PBC) and Entrepreneurial Intention

Perceived behavioral control has an impact on intentions and actions as it deals with an individual's perception of the ease or difficulty of performing a

particular behavior. Ajzen's (1991) study explores that perceived behavioral control improves intention about positive attitudes and subjective norms. According to Maes et al., (2014), PBC is a tenet of the person's perceived personal ease or difficulty in performing an entrepreneurial behavior. Thus, PBC is an antecedent to entrepreneurial intention. Perceived behavioral control is differentiated by internal beliefs and control beliefs. As Maes et al. (2014) explain the internal control beliefs relate to the personal capabilities of a person (self-confidence, creativity and risk-taking) while external control is related to situational control. Many studies including that of Souitaris et al. (2007) and Mumtaz et al. (2012) have found that behavioral control had a positive relationship with entrepreneurial intention. Hence it was hypothesized:

$H_2$ : Perceived behavioral control has a positive influence on entrepreneurial intentions.

### iii Subjective norms and entrepreneurial intention

The third component of the theory of planned behavior is the subjective norm, defined as the individual's perception of the social pressures to engage or not to engage in behavior (Ajzen, 1991). This social pressure can come from peers, family, society or the workplace. The influence or effects of subjective norms on forming intention proved to be generally weak in some studies. Studies by Krueger, Reilly, & Carsrud (2000) showed that subjective norms do not correlate with entrepreneurial intentions.

Ajzen (1991) tried to explain this weak relationship to the fact that intentions are influenced by personal factors, such as attitudes and perceived behavioral control. These conflicting results in the significance of the subjective norms variable have also



been explained by Susetyo & Lestari, (2014) as because a part of the information that this variable contains is already present in the desirability of undertaking a particular behavior variable. Although some studies did not find a significant influence of subjective norms on entrepreneurial intentions (including Fini et al. 2007; Li, 2006), others found that subjective norm has a positive influence toward entrepreneurial intention (Sequeira et al., 2007; Li, 2007; Linan, 2008 and Basu & Virick, 2009). Similarly, studies by Arteaga Sánchez and Duarte Hueros (2010) showed that subjective norms have a significant impact on behavioral intention.

Cheung and Vogel (2013) in their acceptance of collaborative technologies, obtained mixed results. In their study, they looked at subject norms from three distinct subjective norms and how each influenced behavioral intention. They found that subjective norms represented by peers are found to significantly moderate the relationship between attitude and intention toward the technology. However, their results do not show a significant effect of subjective norms represented by instructors and mass media on students' intentions to use the technology. Hence, it was hypothesized:

$H_{3a}$ : Subjective norm has no positive influence on entrepreneurial intentions.

$H_{3b}$ : Subjective norm has positive influence on entrepreneurial intentions.

### III. METHODS

The purpose of this study was to analyze the perception of students about the course and assess the impact of the course on their entrepreneurial intention using Ajzen's Theory of Planned Behaviour. Hence, the study employed a descriptive research design. By the end of the 2015/2016 academic year, a total of 2,971 non-business students (arts, social sciences, education and physical sciences) had gone through the university-wide entrepreneurship course. Based on the consecutive sampling technique, a sample of 1,200 students participated in the study. This sampling technique is chosen because it considers all available subjects (even if the sample size is achieved) to make the sample a better representation of the population. The questionnaire contained some negatively worded items to trace and reduce response bias. Reliability and validity tests were performed and presented in the results and discussion section of the paper. Data collection took place when the students were writing their end of semester examinations. The questionnaires were attached to exam questions. The questionnaires were self-administered and had a response rate of 87.58%.

The statistical technique used was Partial Least Squares-Structural Equation Modelling (PLS-SEM). The data is analyzed with Smart PLS3 by Ringle, Wende, &

Becker (2015) and Statistical Package for Social Science (SPSS 22). The SPSS was used for initial data cleaning including: recoding negatively worded items into positive items, checking for outliers among others (Hair et al., 2014). An exciting aspect of SEM is that both structural and measurement equations are modeled pictorially to enable clear conceptualization of the theory under study (Wong, 2013). PLS-SEM is, as the name implies operates much like multiple regression that minimizes the residual variances of the endogenous constructs (Hair et al., 2011).

#### a) *Structural Model and Estimation Procedure*

The structural model in PLS-SEM depicts the relationships among the latent variables based on the theoretical framework. The latent variable estimates are linear aggregates of their observed indicators, whose weights are obtained via the PLS estimation procedure as specified by the inner and outer models. Entrepreneurial Intentions represents the endogenous variable while the cognitive factors: subjective norms (SN), perceived behavioral control (PBC) and attitude towards behavior (ATT) represent the exogenous variables. As a measure of the entire goodness of fit of the structural equation, an overall coefficient of determination,  $R^2$ , was used to calculate the stability of the model. In PLS, re-sampling procedures are used to assess the significance of PLS parameter estimates (hypothesis testing). The bootstrapping procedure in Smart PLS was used to measure the impact of the path coefficients.

#### b) *Research Method*

##### i Measures

Primary data was employed adapting a questionnaire from Liñán, Rodríguez-Cohard, and Rueda-Cantuche, (2011) with some modifications. The questionnaire included items on the four main cognitive construct variables of the TPB. These were: subjective norm, perceived behavioral control, attitude towards behavior and intention. The items were measured on a 5-point Likert scale ranging from weak agreement to very strong agreement.

##### ii *Assessment of goodness of measures*

The two main criteria used for testing the goodness of measures were reliability and validity. Calculation of reflective measurement models was necessary because the significance of path coefficients is weakened if data does not meet these quality criteria. In this study, we examined composite and individual reliabilities. The average variance extracted was also presented. Other advanced tests such as Fornell Larcker criterion, cross-loadings and Heterotrait-Monotrait Ratio were also carried out.

Assessing the reliability and validity in PLS-SEM is particularly imperative when the measurement model is reflective (See figure 2). Reliability refers to the degree

to which a set of indicators are internally consistent, and the extent to which an instrument yields the same results upon repeated tests on the same population. In PLS-SEM, each indicators' reliability is displayed in the measurement model. So, it is easy to see indicators that have values below the standardized loading of 0.7, which become candidates for removal. However, caution and more judgment are taken. Hair, et al. (2014) outlines two key considerations; indicators with loadings

between 0.40 and 0.70 should only be considered for deletion if removing them will boost the overall composite reliability above the suggested threshold of 0.7; and the extent to which deletion affects validity especially regarding content. From figure 2, indicators that achieved reliability value above 0.7 was retained and those below was deleted. In table 3, the reliability coefficient, both Cronbach's Alpha, and the composite reliability were all above 0.7 for all the latent constructs.

*Table 3: Construct Validity and Reliability*

	Cronbach's Alpha	Rho_A	Composite Reliability	Average Variance Extracted (AVE)
Attitude towards behaviour (A)	0.715	0.753	0.839	0.636
Intention (I)	0.850	0.850	0.900	0.693
Perceived Behavioural Control (PBC)	0.765	0.782	0.865	0.682
Subjective Norm (SN)	0.810	0.825	0.886	0.723

*Source: Field work, 2016*

### iii Construct Validity

The construct validity was explored by investigating its relationship with other constructs, both related (convergent validity) and unrelated (discriminant or divergent validity).

#### iv Convergent Validity

It measures constructs that are supposed to be related. In other words, convergent validity assesses whether indicators measure only the underlying constructs and nothing else. In measuring convergent validity, each measurement item should have loadings above 0.708 and average variance extracted (AVE) of 0.50 or higher (Hair et al., 2011). The reason being that the construct should be able to explain at least 50% (0.5) of the variance of its indicators. AVE represents the average of the sum of squares of the individual loadings. Thus, for one to achieve AVE of 0.5, the minimum indicator loading should be 0.708. From

table 3, the examination of the AVE showed that all the constructs had more than 50% of the variance in the indicators, and this is because indicator loadings were above 0.708.

#### v Discriminant Validity

Discriminant validity tests the degree to which perceived constructs are unrelated. In this study, the Fornell Larcker criteria (Fornell & Larcker, 1981), Heterotrait-Monotrait Ratio (HTMT) and the cross-loadings were examined for possible discriminant conditions. The Fornell Larcker criterion was checked on the basis that the square root of the AVE should be bigger than the correlations between the constructs and other constructs. The cross loading approach (see Table 5) to discriminant validity, according to Henseler et al., (2014) is determined when a construct indicator shows weak correlation with all other constructs except for the one to which it is theoretically associated.

*Table 4: Discriminant Validity-Fornell Larcker Criteria*

	Attitude towards behaviour (A)	Intention	Perceived Behavioural Control (PBC)	Subjective Norm (SN)
Attitude towards Behaviour (A)	0.797			
Intention (I)	0.585	0.832		
Perceived Behavioural Control (PBC)	0.559	0.634	0.826	
Subjective Norm (SN)	0.452	0.301	0.278	0.850

*Source: Field Work, 2016*

With the Fornell Larcker criteria, the square root of the AVE should be larger than the correlation between the underlying construct and other constructs. Put differently, the AVE should be greater than the squared correlation between the underlying construct and the other constructs in question. For example, from table 4, the AVE for attitude (A) is 0.636. The square root of 0.636 gives 0.797, which is bigger than 0.585, 0.559, and 0.452, the correlations between attitude and intention, perceived behavioral control and subjective norms respectively.

Table 5: Discriminant validity from Cross loadings

	Attitude towards behaviour (A)	Intention	Perceived Behavioural Control (PBC)	Subjective Norm (SN)
ATT1	0.781	0.434	0.473	0.339
ATT3	0.875	0.564	0.481	0.373
ATT4	0.730	0.373	0.379	0.381
INT5	0.521	0.743	0.536	0.288
INT6	0.505	0.877	0.520	0.243
INT7	0.483	0.863	0.540	0.248
INT8	0.425	0.840	0.508	0.216
PBC2	0.453	0.563	0.864	0.207
PBC3	0.483	0.554	0.874	0.218
PBC4	0.456	0.446	0.732	0.276
SN1	0.380	0.211	0.212	0.825
SN2	0.392	0.291	0.245	0.849
SN3	0.381	0.254	0.246	0.876

Source: Field Work, 2016

Table 6: Heterotrait-Monotrait Ratio

	Attitude towards behaviour (A)	Intention	Perceived Behavioural Control (PBC)	Subjective Norm (SN)
Attitude towards behaviour (A)				
Intention (I)	0.731			
Perceived Behavioural Control (PBC)	0.757	0.782		
Subjective Norm (SN)	0.599	0.354	0.357	

Source: Field Work, 2016

From table 5, the indicators loaded higher on their corresponding constructs than other constructs. Thus, discriminant validity was achieved. Henseler et al., (2014) argue, however, that the Fornell Larcker criteria and assessment of cross-loadings are not sufficient to determine the discriminant validity of constructs. They proposed the use of Heterotrait-Monotrait ratio of correlations (HTMT) as a new approach to assess discriminant validity in variance-based SEM. In the HTMT, which is considered more robust, a final value

close to one shows lack of discriminant validity. In effect, discriminant validity will exist if value less than 0.85 (Kline, 2011) or 0.9 (Gold, Malhotra & Segars, 2001) is obtained. Thus, the smaller the HTMT ratio, the better.

## IV. RESULTS

### a) Respondents' Demographics

Tables 1 and 2 provide a brief description of the respondents' demographic characteristics.

Table 1: Age of Students

AGE					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 - 22	416	39.6	40.3	40.3
	23 - 27	530	50.4	51.4	91.8
	28+	85	8.1	8.2	100.0
	Total	1031	98.1	100.0	
Missing	System	20	1.9		
Total		1051	100.0		

Source: Field Work, 2016

The age breakdown is shown in table 1. The university is generally made up of students between the ages of 18 to 27. Thus, this table is a reflection of the age structure that is found in Ghana's tertiary institutions. From the table, 51.4% were between ages 23 - 27 because, in the third year of their studies, one can expect this development. In Ghana, most people enter Universities between ages 18 to 20, and that is why 51.4% fell in that category.

Table 2: Sex

SEX					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Males	582	55.4	64.7	64.7
	Females	318	30.3	35.3	100.0
	Total	900	85.6	100.0	
Missing	System	151	14.4		
Total		1051	100.0		

Source: Field Work, 2016

From table 2, 582 of the respondents are males, representing 55.4%. On the other hand, we have 318 (30.3%) being females. Surprisingly, 151 (14.4%) respondents did not indicate their sex.

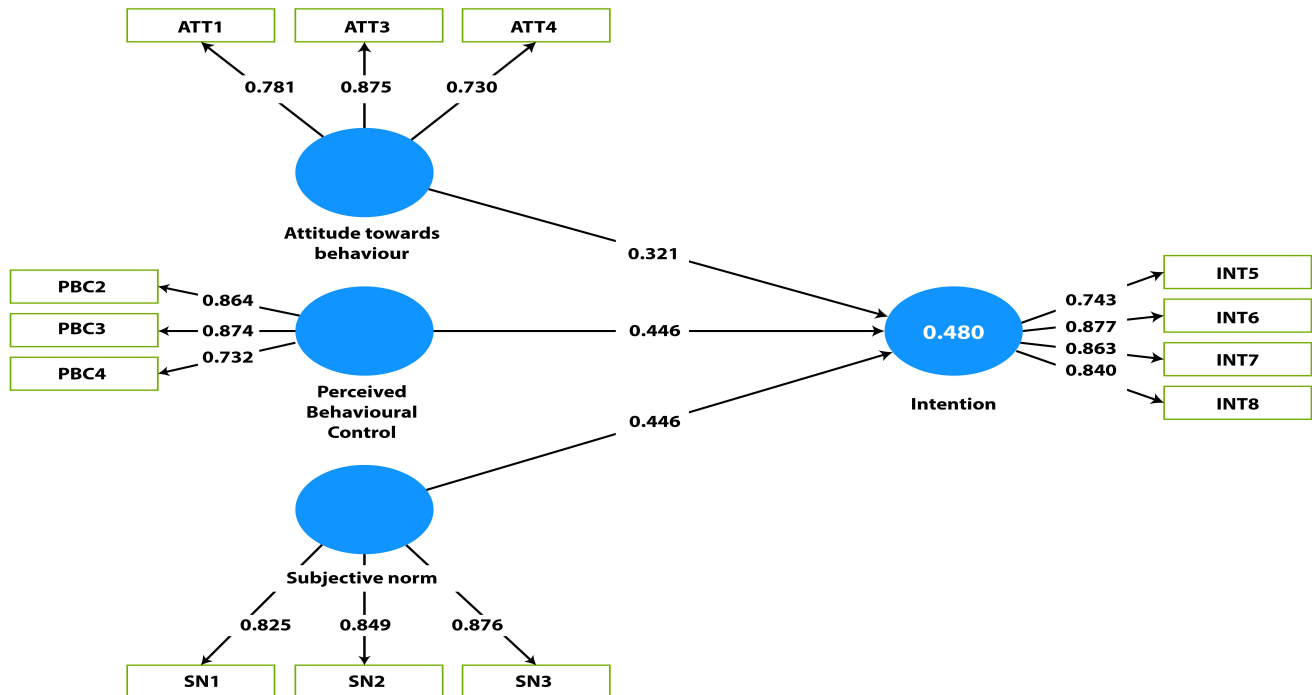
#### b) Attitude, Perceived Behavioural Control, and Subjective Norms among Respondents

Using 1,050 valid respondents, findings from the study showed that most students (83%) agreed that entrepreneurship as a career option would give them great satisfaction. As a result, 86.4% of respondents reported being determined to create their ventures in the future with 81.1% feeling optimistic about their chances of being successful. Therefore, it appeared that most students in our sample had a positive attitude towards entrepreneurship regarding their perceived level of satisfaction, determination to pursue entrepreneurial ventures and chances of succeeding as entrepreneurs. Regarding subjective norms, most of the students sampled perceived that family would be more supportive of their entrepreneurial engagement than colleagues and friends. While 77.6 % agreed that family

members would approve their decision to start a business, only 66.3% and 68.5% agreed that colleagues and friends respectively would support their entrepreneurial intentions. Concerning perceived behavioral control, a little above half of the respondents, specifically, 56.8%, 56.4%, and 57.9% agreed that entrepreneurship was a professional goal for them, they were ready to make any sacrifices to become entrepreneurs and had control over the creation process of a new firm respectively. Overall, findings showed high entrepreneurial intention among most of the respondents with about 72.7%, 75.3%, 81.2%, and 82.5% reporting not only to have a firm intention to start a business someday but also to have seriously thought about this, become determined to see it happen and willing to put in the necessary efforts to realize their dream to start their business and run respectively.

#### c) Hypotheses Testing

Hypotheses for the study were tested using the path analysis approach (See figure 2).



Source: Field Work, 2016

Figure 2: Path Model based on Ajzen's TPB



The path coefficients are the standardized beta of the independent variables. The bootstrapping procedure was used to test the significance of the path coefficients. The path coefficients show the direct effect of the independent variables on dependent variables in a path model. In table 7, the structural model path coefficients were depicted. These coefficients show the direction and strength of the relationship between the

cognitive factors of the TPB and intention. A unit change in the construct 'Attitude towards the behavior' for example, leads to 0.321 change in entrepreneurial intention. Similarly, a unit change in the perceived behavioral control leads to 0.446 change in the variation of entrepreneurial intention and finally that of subjective norms achieved 0.032 change in intention.

Table 7: Path coefficient and hypothesis test

	Coefficient	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Attitude towards behaviour (A) -> Intention	0.321	0.321	0.037	8.651	0.000
Perceived Behavioural Control (PBC) -> Intention	0.446	0.444	0.029	15.520	0.000
Subjective Norm (SN) -> Intention	0.032	0.033	0.026	1.207	0.228

Source: Field Work, 2016

The path coefficients were all positive; however, its significance was depicted by the p-values. The relationship between attitude and intention was positive and significant at 1%. Thus, the hypothesis ( $H_1$ ) failed to be rejected. The relationship between perceived behavioral control and intention is also positive and significant at 1%, consequently, the hypothesis ( $H_2$ ) also failed to be rejected. However, the relationship between subjective norm and intention was positive but not statistically significant.

The coefficient of determination ( $R^2$  value) is a measure of the predictive ability and accuracy of the research model. The constant of the R-square depicts the combined effect of the exogenous latent variables on the endogenous constructs. In other words, the  $R^2$  value shows the amount of variance in the endogenous construct explained by the exogenous constructs. In table 9, the adj.  $R^2$  of 0.479 shows that attitude, perceived behavioral control and subjective norms jointly contribute to 0.48 ( $p < 0.01$ ) variance in intention.

Table 8: R-Square

	R-Square	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Intention	0.480	0.481	0.029	16.495	0.000

Table 9: Adj. R-Square

	Adj. R-square	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Intention	0.479	0.479	0.029	16.397	0.000

Source: Field Work, 2016

The F-square ( $f^2$ ) represents the size of the effect of each of the exogenous constructs (attitude, subjective norms and perceived behavioral control) on the endogenous construct. In table 11, the effect size of attitude, perceived behavioral control and subjective norms are 0.117 ( $p < 0.01$ ), 0.263 ( $p < 0.01$ ) and 0.002

( $p > 0.05$ ) respectively. The test of whether the size was small, medium, and large is guided by Cohen's (1988) threshold for interpreting effect size. Consequently, the effect size of attitude (ATT) was medium, that of perceived behavioral control (PBC) was big and subjective norm (SN) was small.

Table 10: F-Square

	F-Square	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Attitude towards behaviour (A) -> Intention	0.117	0.120	0.030	3.841	0.000
Perceived Behavioural Control (PBC) -> Intention	0.263	0.262	0.040	6.507	0.000
Subjective Norm (SN)-> Intention	0.002	0.003	0.003	0.478	0.633

Source: Field Work, 2016

## V. DISCUSSION OF RESULTS

The main purpose of this study was to assess the impact of a university-wide entrepreneurship course

introduced at the University of Cape Coast on the entrepreneurial intentions of non-business students using the theory of planned behavior. Results indicate (as shown in Table 7) that there was a significant

relationship between attitude ( $\beta = 0.321$ ,  $p < 0.01$ ) as well as perceived behavioral control ( $\beta = 0.446$ ,  $p < 0.01$ ) and entrepreneurial intentions; while the subjective norm dimension ( $\beta = 0.032$ ,  $p > 0.05$ ) showed a weak positive relationship with the endogenous construct, entrepreneurial intentions. These mean that students generally demonstrated strong positive attitudes and perceived behavioral control which translated into stronger entrepreneurial intentions. According to the study perceived behavioral control was found to have the highest impact on intentions and as Maes et al. (2014) explain, these include internal control beliefs which relate to the personal capabilities of a person (self-confidence, creativity and risk-taking) while external controls linked to situational control. The notion that attitude and perceived behavioral control is a good predictor of entrepreneurial intentions, as found in this study, mirrors findings in other studies conducted among students in other contexts (Souitaris et al., 2007; Shook & Bratianu, 2010; Mumtaz et al., 2012; Naia et al. 2017). Further, while Indirti et al.(2010) suggest that students' attitude, behavior, and knowledge tend to stimulate their intentions and willingness to start a new venture in the future, Geissler & Zanger (2011) in their review regard attitude as a strong and reliable predictor of entrepreneurial intention.

The generally weak influence of subjective norms on entrepreneurial intention is not surprising. This is because, studies by other researchers on the topic have found either a weak and non-significant positive relationship like in our case (Stone, Jawahar, & Kisamore 2010; Iqbal, Melhem & Kokash, 2012), a negative correlation (Shook & Bratianu, 2010) or no relationship at all (Krueger, Reilly & Carsrud, (2000). The inconsistencies in the significance of the subjective norms variable may be because a part of the measurement items that measure the variable is already present in the desirability of undertaking a particular behavior variable (Susetyo & Lestari, 2014). To this end, Shook & Britiany (2010) explain that such non-significant relationship results between subjective norm and entrepreneurial intention may be due to specific characteristics associated with transitional and post-communist economies. Nevertheless, their argument is opposed by Naia et al. (2017) who report similar results but in a market-based economy with no history of communism. Thus they suggest that factors leading to these results are embedded in the individual respondents who may have a high locus of control that makes them not easily influenced by what society thinks. It is important to note that in our case, all of these reasons could apply. Overall results from the path model shown in figure 2 were significant, and the hypothesized antecedents (attitude, perceived behavioral control, subjective norms) explain 48% of the variation in entrepreneurial intentions.

## VI. CONCLUSION

The purpose of this study was to examine the impact of the entrepreneurship education on the entrepreneurial intentions of non-business students of the University of Cape Coast. From the literature review and based on the Ajzen (1991) Theory of Planned Behavior, three research hypotheses guided the study. Findings that attitude has a positive relationship with entrepreneurial intention suggests that the approach of the University of Cape Coast to focus its entrepreneurship program for non-business students on building entrepreneurial mind-sets is laudable. However, although findings from the study show that perceived behavioral control have the highest impact on entrepreneurial intention, the current program for non-business students does not aim to teach the development of internal control beliefs and personal characteristics that are compatible with entrepreneurship. Overall, the results revealed the introduction of the entrepreneurship course had created the required behavioral intention in students to start a new venture in line with the planned behavior theory. Through the knowledge gained from the course, students had reignited the motivation and reshaped their perception of entrepreneurship. Based on the Theory of Planned Behaviors and the results obtained thereof, entrepreneurial intentions of students will eventually result in venture creation behavior. However, for this entrepreneurial intention to be strong enough to transition to entrepreneurial activity, it is recommended that in-class activities aimed at fostering the development of personal characteristics such as self-confidence and risk-taking propensity should be part of the delivery of the program.

This study contributes to the literature on entrepreneurial education and intentions of students in the Ghanaian tertiary education. It also serves as a source of reference for similar studies to be replicated in other universities who may have introduced entrepreneurial education to non-business students for the first time. The study also provides policy-makers a step to reducing graduate unemployment. Thus, introducing entrepreneurial education in all higher institutions will eventually increase graduates entrepreneurial intentions with the right policies and systems to support graduate start-ups.

The study sampled only non-business entrepreneurship students of the University of Cape Coast because it was a novel course introduced to such group as compared to the business students who already offered the entrepreneurship course. The questionnaire was administered after the students had gone through a semester course of entrepreneurship.

Future research could look at a comparative study on entrepreneurial intention between the business and non-business students. A further research could

also do a pre-assessment of the students' knowledge and entrepreneurial intentions and another after they have gone through the course to give any distinctions in attitude change if there be any.

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