

What influences the course major decision of accounting and non-accounting students?

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Abstract

Purpose – The purpose of this study is to investigate the factors that influence the course major decisions of accounting and non-accounting students.

Design/methodology/approach – A set of questionnaires was developed and administered to 550 undergraduate business students from the University of Ghana Business School. Statistical tests were conducted to examine the mean differences of students' views on the factors that influence course major selection. Logistic regression analysis was employed to investigate the factors that influence the course major selection of students.

Findings – The results demonstrate that students' confidence in their academic strength and abilities to manage academic work are good predictors of their course major decisions. Also, students who major in accounting are driven more by self-interest, while non-accounting students are largely motivated by extrinsic interest. Moreover, students' academic performances were found to be influential on their course major decisions.

Research limitations/implications – This study relied on the views of students from only one university in Ghana, which, in some respect, limits the extent of generalization of the findings.

Practical implications – The paper provides some useful insights into the factors that inspire students to major in accounting. As a means of addressing the supply deficit of accountants globally, policymakers should find the results useful in developing the appropriate strategy that will attract students to the accounting field.

Originality/value – The study provides new insights into the course major selection discourse from a developing-country perspective.

Keywords Accountants, Self-efficacy, Logistic regression, Social cognitive career theory, Course major

Paper type Research paper

Introduction

The choice of a course major remains one of the most important decisions business students are confronted with in their academic life at the university. All over the world, business students usually have the option to specialize in a field of interest at a point in time in their educational journey. While most business schools do offer a wide range of alternative career routes (mostly traditional business disciplines) to their students, empirical studies demonstrate a continuous decline in the number of students who pursue accounting as a course major in many parts of the world (Sugahara and Boland, 2009; Jackling and Keneley, 2009; Tang and Seng, 2016). The continuous reduction in students for the accounting programme has been a major source of worry for stakeholders in the accounting profession, mainly because most countries continue to experience shortages in the supply of professional accountants (Jackling and Calero, 2006; Uyar *et al.*, 2011; Tan and



Laswad, 2006; Porter and Woolley, 2014; Sugahara and Boland, 2009; Malthus and Fowler, 2009; Ng *et al.*, 2017).

As Jackling and Keneley (2009) point out, an important cause for the shortages of professional accountants in many parts of the world is the difficulty in attracting students to pursue a degree in accounting at the university level. While the career choice of individuals is generally believed to be a complex phenomenon that is difficult to predict and comprehend (Özbilgin *et al.*, 2005), Xu (2017) argues that the occupational choices of graduates are usually consistent with their academic majors. By implication, course major selection among students is critical to their career aspirations, and hence its relevance to the supply of accounting professionals cannot be overemphasized. This in part explains why in the field of accounting education, course major decision has been one of the most topical issues that has received significant research attention for years.

According to Paolillo and Estes (1982), knowledge of the possible factors that influence the course major decision of students is essential in developing appropriate strategies to inspire business students to major in accounting. It is on this basis that a number of studies have assessed the factors that influence the course major decisions and career choice of accounting students in different settings. Jackling and Keneley (2009) for instance found interest to be important for students who major in accounting. Similarly, Ng *et al.* (2017) found intrinsic motivation to be an important predictor of accounting students' career choice. Sugahara and Boland (2009) document that accounting students are mostly motivated by intrinsic values in their career decisions, while non-accounting students are influenced largely by career prospects when deciding on their course major. Hoai *et al.* (2016), however, found career opportunities, stability and opportunity for advancement to be the main determinants of accounting students' major decisions. The evidence provided by these studies are indicative of the fact that different factors may account for students' decisions to major in accounting or other business disciplines. Notwithstanding this, studies have examined the factors that influence the course major decision of accounting students in isolation from non-accounting students. The current study, therefore, contributes to the course major debate by assessing the factors that influence the course major decision of accounting and non-accounting students in Ghana. By relying on the social cognitive career theory (SCCT), the study investigates the factors that underpin the course major decision of accounting and non-accounting students.

The empirical analysis in this study is relevant in two important ways. First, given that students' academic majors have implications on their career choices, an understanding of the factors that motivate or discourage students to pursue a degree in accounting is crucial to stakeholders interested in addressing the skill shortages of accountants in many parts of the world. Second, this study provides insights into the course major decisions of students from a developing-country perspective, unlike the many existing studies that focussed on the developed world. Notwithstanding the fact that studies on course major decision of business students exist, the majority of the studies have focussed largely on the developed countries. Against the backdrop that the factors that influence the choice of academic major are believed to be contextual (Watt *et al.*, 2012), there is the need for further research into course major decisions of students from developing countries, which have not received the needed research attention.

The remainder of the paper is organized as follows: the next section looks at existing literature in the research area; the third section explains the research methodology for the study; section four provides an analysis and discussion of the results; and the final section presents a conclusion for the study.

Literature review

Several studies (Arquero *et al.*, 2009; Arquero *et al.*, 2015; Byrne *et al.*, 2012; Byrne and Flood, 2005; Jackling and De Lange, 2009; Samsuddin *et al.*, 2015; Teixeira *et al.*, 2015) have identified different factors, including intrinsic and extrinsic motivation, the influence of important referent group, students' expectations and personal capabilities of students, to be relevant in the course major decision and by extension, career choices of students. Theories, including the trait factor theory, theory of reasoned action (TRA), theory of planned behaviour, behavioural decision theory and SCCT have frequently been used to explain the course major/career-choice decisions of students. This study uses the SCCT to investigate the factors that influence the course major decision of accounting and non-accounting undergraduate students.

Social cognitive career theory

The SCCT has often been used to explain the career choices and career-development process of individuals. Propounded by Lent *et al.* (1994), SCCT is an extension of the social cognitive theory pioneered by Bandura (1986) and basically aims at understanding career interests, career choices and advancement towards career goals. The theory places much emphasis on cognitive, self-regulatory and motivational processes of individuals and its effect on their career decisions (Pajares, 2006). Within the SCCT framework, the academic interests of students are believed to be developed when they have confidence in their abilities to perform in that field (self-efficacy) and when they anticipate positive consequences for engaging in these tasks (outcome expectation).

SCCT postulates that three major factors – self-efficacy, outcome expectations and personal goals – underpin individual choices. It has therefore been argued that people develop goals to pursue academic and career options that are consistent with their interests, self-efficacy and outcome expectation.

By implication, a strong self-efficacy, whether from performance accomplishments or social persuasion, and a positive outcome expectation of an individual regarding a particular course major will help build career interests in that direction and will consequently influence the individual's decision to pursue that course. The next section discusses the three broad concepts of the SCCT and their relevance to course major decisions of students.

Self-efficacy and course major decisions of students

Self-efficacy is the "belief in one's capability to organize and execute courses of action required to achieve a given objective" (Bandura, 1986). It is a measure of an individual's belief about his/her capabilities to exercise control over their own activities. According to Ng *et al.* (2017), individuals with a strong sense of self-efficacy usually put in greater effort in accomplishing tasks, despite the obstacles they encounter. The self-belief of individuals is considered an important determinant of their career choice. The general view in course major decision-making is that the confidence that students have in their abilities to perform is relevant in their course major selection.

According to Pajares (2006), undergraduate students tend to select course majors and careers in areas where they feel more confident to compete and excel. Also, Gushue *et al.* (2006) posit that self-confidence in making career-related decisions gives students a better sense of their abilities, which influences students' likelihood to undertake or engage in activities related to the career they are confident in. Hsieh *et al.* (2007) suggest that students with higher confidence in their abilities are generally willing to persist in the face of adversity, and this influences their choices of tasks. As Chemers *et al.* (2001) surmised, people with confidence in their abilities are resilient, willing to put in extra effort, and have

the ability to cope with the demands associated with the chosen course of action. Hence, the efficacy of students is critical in the selection of cognitive-related courses such as mathematics, accounting and engineering. Bong (2001) posits that students with higher levels of confidence in their abilities are persistent and more willing to undertake challenging tasks and consequently show superior academic performance. Uyar *et al.* (2011) therefore conclude that students who lack confidence in their numeric abilities are less likely to pursue a career in an area such as accounting.

Personal goals and course major decision of students

Personal goals refer to “the determination to engage in a particular activity or to effect a particular future outcome” (Lent *et al.*, 1994). The personal goals of individuals are believed to play a vital role in shaping and guiding behaviour (Lent *et al.*, 2003). According to Hernandez *et al.* (2012), goals inform an individual’s academic behaviour as they provide a clear direction and shape one’s motivation. Consequently, it has been argued that the choice of action by an individual is dependent on his/her personal goals (Lee *et al.*, 2015). Interests and motivation of an individual are believed to be the key determinants of his/her goals. Motivation can be either intrinsic, where students are motivated mainly by personal satisfaction and their interests, or extrinsic, where students are solely motivated by external factors such as rewards, enforcement or pressures (Arquero *et al.*, 2009; Arquero *et al.*, 2015; Byrne and Flood, 2005; Liu, 2010; Samsuddin *et al.*, 2015; Teixeira *et al.*, 2015; Chen, 2014).

Hoai *et al.* (2016) found students’ motivation to be relevant in their decision to pursue a degree in accounting. Arquero *et al.* (2009) also document that both intrinsic and extrinsic factors are important factors students consider when selecting accounting as their course major. Similarly, Byrne and Flood (2005) found both intrinsic and extrinsic factors to be significantly associated with students’ decision to enrol in accounting degree programmes. Several studies (Ng *et al.*, 2017; Samsuddin *et al.*, 2015; Teixeira *et al.*, 2015) have produced results that demonstrate that intrinsic and extrinsic factors are important predictors of students’ decision to major in accounting. However, the evidence provided by other studies (Porter and Woolley, 2014; Uyar, Güngörmüş, and Kuzey, 2011) also suggest that extrinsic factors do not influence students decision to major in accounting. Thus, while there seem to be a general consensus on the influence of intrinsic factors on course major decision of accounting students, the role of external factors appear inconclusive.

Outcome expectation and course major decision of students

Outcome expectation is defined as “personal beliefs about the consequences or outcomes of performing a particular behavior” (Lent *et al.*, 1994). Lent *et al.* (2003) argue that outcome expectation is the belief about the outcomes of courses of action by an individual. Outcome expectation involves the imagined consequence of particular courses of action and is generally considered to play a vital role in guiding the actions of individuals (Lent, 2005; Bandura, 1986). According to Bartol and Srivastava (2002), a favourable outcome expectation leads to a more positive attitude which influences the decisions of individuals to engage in an activity. Therefore, individuals are more likely to engage in a behaviour with high-valued outcomes and avoid those that will result in adverse consequences.

Prior studies reveal that students’ expectation of outcomes has important implications on their course major/career path. According to Byrne *et al.* (2012), students’ expectation of the outcomes of pursuing a course, for instance, influences their decisions to enrol in that course. As their study points out, students usually have the expectation to develop intellectually, personally and socially, which is the satisfaction they derive from pursuing a particular course. Therefore, students who think their expectations may not be met by pursuing a

course are more likely to avoid selecting it as a major. Thus, when students perceive a favourable outcome in terms of their expectations about a particular course major, there is greater motivation to pursue that course.

While the above factors provide a useful basis for examining the course major/career decision of students, social persuasion and the demographic characteristics of students, such as their grade point average (GPA), gender and age, have also been found to be important determinants of course major/career decision. These variables are therefore included in the study model as control variables.

Control variables

Social persuasion

Extant studies suggest that the course major decision and career choices of students can be influenced by other individuals or groups of people, including family members, friends, teachers and career counsellors. [Hoai et al. \(2016\)](#) for instance found the influence of friends, teachers, parents and even acquaintances to be significantly associated with the course major decisions of business students. Specifically, their study reveals that most students who major in accounting are largely influenced by referent groups, compared with the non-accounting students. This finding is also supported by [Tan and Laswad \(2006\)](#), who conclude that most students who select accounting as their course major are largely influenced by their parents, other relatives, friends, career advisors and counsellors. Also, [Umar \(2014\)](#) found parental guidance to be a major influential factor affecting the career choice of students. However, some findings from other studies found third parties to have no significant influence on the course major decisions of students. According to [Kim et al. \(2002\)](#), among the least selected reasons for choosing a course major were the influence of friends and parents. Likewise, findings from [Uyar et al. \(2011\)](#) also suggest the influence of friends and relatives is one of the least important reasons for choosing a course major. Similarly, [Alanezi et al. \(2016\)](#) found advice from friends and family to be the least important factor influencing students' decisions to major in accounting.

Grade point average

The academic performance of students is believed to influence their choices of tasks and the successful completion of these tasks ([Lent et al., 2002](#)). High-performing students usually prefer more challenging courses, especially those that are numeric and quantitative in nature. It is therefore predicted that students with good GPAs are more likely to consider accounting as a course major than those with poor GPAs.

Gender

Prior studies reveal that the gender of individuals can influence the type of careers they pursue. According to [Correll \(2001\)](#), there is a general cultural stereotype that men are more competent than women in performing mathematical tasks. As pointed out by several studies ([Correll, 2001](#); [Nagy et al., 2006](#)), most quantitative professions are male-dominated, and the ratio of females to males continues to decline over the years. By implication, the gender of individuals plays an important role in their career choices.

Age

Extant studies argue that the age of an individual could present a motivation for performance-approach goals and subsequently the activities the individual may engage in ([Pajares and Cheong, 2003](#)). [Theis and Fischer \(2017\)](#) posit that the levels of goal attainment

and interests among students may differ with respect to age. Thus, the age of students may play a role in determining the choice of students' tasks and activities and their career choices.

Methodology

Research design

The current study adopts a quantitative approach, using the survey method of research. Questionnaires consisting of two parts were used as the primary means of data collection. The first part of the questionnaire gathered information on the demographic characteristics of the respondents, including their gender, age, course major, academic level and current GPA. The second part of the questionnaire comprised the factors that influenced course major decisions of students. Based on SCCT, three main factors – self-efficacy, personal goals and expected outcomes – are considered relevant for the course major decisions of students. Self-efficacy is operationalized in this study as students' confidence in their abilities and personal goals are proxied by students' motivation, while the expected outcomes are represented by students' expectations regarding the outcomes of their course major decisions.

Research instrument

The questions used in measuring the proxies for self-efficacy, personal goals and expected outcomes were adopted from the instrument used in the study by [Byrne and Flood \(2005\)](#). While [Byrne and Flood \(2005\)](#) used a five-point Likert scale, this study used a seven-point Likert scale (with 1 representing a strong disagreement and 7 representing a strong agreement to the questions) to give respondents a wider range of likely responses and help reduce the problem of the responses being cluttered at the extreme ends. The specific questions used to measure social persuasion in the study was adopted from the study by [Ng et al. \(2017\)](#). The questionnaires were administered to students in their lecture rooms during the seventh week of the first semester for the 2017-2018 academic year.

Respondents

The study was conducted using business students at the undergraduate level from the University of Ghana Business School (UGBS). UGBS is Ghana's oldest, largest and leading business school and offers sound business training to students who aspire to become business leaders. The course majors run by the school include accounting, finance and insurance, marketing, human resource management, public administration and health service management. Students have the option to pursue one of these disciplines during the third year of study; hence, only third- and final-year students were considered in this study. A total of 600 questionnaires were administered to the respondents, out of which 567 were duly returned. However, 17 of the questionnaires were excluded in the final analysis because respondents failed to fully complete the questionnaires.

Data analyses

Several statistical procedures were applied in analysing the data. First, the characteristics of the respondents were examined descriptively. Second, an exploratory factor analysis (EFA) was conducted on the constructs to examine their dimensionality. Finally, a binary logistic regression analysis was conducted to investigate the factors that influenced the course major decisions of accounting and non-accounting students.

Profile of respondents

Table I presents the statistics for the demographic characteristics of respondents. Most of the respondents were male (56 per cent). A greater portion of respondents was between the ages of 17 and 22 years (68.4 per cent). The sample was dominated by respondents majoring in accounting (62.2 per cent), while only a few of the respondents were majoring in public administration and health service management (2.5 per cent). More than half of the respondents were in the third year of school (65.6 per cent). Additionally, a substantial number of students had GPAs between 3.0 and 4.0, meaning more of the respondents had GPAs in the first- and second-class upper divisions.

Exploratory factor analysis (EFA)

Before proceeding with the main analysis, the study constructs were subjected to factor analysis to examine their dimensionality. Specifically, an EFA was used to explore the dimensions of the constructs and to confirm the appropriateness of the scales adopted for the measurement of the constructs as the scales were adopted in a different context. EFA is a statistical analysis technique for reducing multidimensional variables into smaller sets of variables, which can then be used to represent the larger set of variables (Henson and Roberts, 2006). The technique is efficient in explaining the most shared variance of rather complex variables using the simplest variables (Henson and Roberts, 2006).

Variables	Frequency	(%)
<i>Gender</i>		
Male	308	56.0
Female	242	44.0
<i>Age</i>		
17-21	376	68.4
22-26	169	30.7
27 and above	5	0.9
<i>Course major</i>		
Accounting	342	62.2
Finance and insurance	116	21.1
Marketing	44	8.0
Human resource management	34	6.2
PA and HSM	14	2.5
<i>Level</i>		
Third year	361	65.6
Final year	189	34.4
<i>GPA</i>		
4.0-3.6	131	23.8
3.59-3.0	242	44.0
2.99-2.0	134	24.4
1.99 and below	43	7.8

Table I.
Demographic characteristics of respondents

Note: PA and HSM: public administration and health service management

The principal components of the extraction criterion using the varimax rotation method were used. Tests for model sampling adequacy yielded satisfactory results, as the values of the Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy for each construct was above the recommended 0.7 (Kaiser, 1970; Kaiser and Rice, 1974). Bartlett’s test of sphericity confirms the presence of correlations between the indicators of each construct, and this test yielded statistically significant results. This indicates the appropriateness of the data set for the conduct of factor of EFA. Results of these diagnostics tests for the EFA are shown in Table II.

The principal components analysis revealed the presence of four factors for the construct “students’ motivation”, explaining a total variance of 62.28 per cent. The four factors extracted were labelled *intrinsic motivation*, *career motivation*, *social motivation* and *external motivation*. Two factors were extracted for “students’ confidence in their abilities”, explaining a total 72.30 per cent of the variance. These factors were also labelled *confidence in academic strengths* and *ability to manage academics*. The remaining two constructs (students’ expectation and social persuasion) yielded a single factor solution. Details of the EFA results for each construct are shown in Tables III–VI.

Construct reliability

The internal consistency of the indicators for each construct was assessed using the Cronbach’s alpha coefficient. As shown in Table VII, the alpha scores for each construct were above the 0.70 recommended threshold (Nunnally and Bernstein,1978), an indication that the questions used to measure the study constructs are reliable.

The logistic regression model

The SCCT suggests that self-efficacy, personal goals and expected outcomes are the main factors that influence career choices of individuals. Using these constructs as independent variables while controlling for the effect of social persuasion and the demographic characteristic of respondents on course major decisions, the following logistic regression model similar to Tang and Seng (2016) is used in this study:

$$\begin{aligned} \text{logit}(CMD_i) = & \beta_1SEFEC_i + \beta_2PEGS_i + \beta_3EXOUT_i \\ & + \beta_4SOP_i + \sum_{j=5}^3 \beta_jX_i + \varepsilon \end{aligned} \tag{1}$$

where CMD represents the dependent variable course major decision, a dummy variable measured as “1” for respondents majoring in accounting and “0” otherwise. The variable “SEFEC” represents self-efficacy, measured as students’ confidence in their abilities.

Constructs	KMO	Bartlett’s test of sphericity		
		χ^2	df	p-value
Students’ motivation	0.891	6,224.92	231	0.000
Students’ confidence in their abilities	0.956	8,427.33	120	0.000
Students’ expectations	0.914	3,423.71	21	0.000
Social persuasion	0.818	1,050.158	10	0.000

Table II.
EFA

Students' motivation factors	Intrinsic motivation	Career motivation	Social motivation	External motivation
I was interested in pursuing this course major	0.834			
I really wanted to major in this course	0.820			
This course major will make me develop my mind and intellectual abilities	0.779			
Majoring in this course will make me develop knowledge and skills, which will be useful	0.777			
I majored in this course because I wanted to study it in an in-depth way	0.762			
I want to broaden my horizons and face new challenges, so I chose my course major	0.753			
The opportunity to improve my self-belief and self-confidence is the reason why I chose this course major	0.741			
I want to become a better educated person, so I majored in this course	0.740			
I majored in this course to prove to myself that I can be successful	0.707			
My course major will help me to develop a better understanding of myself	0.697			
This course major will enable me to get a good job		0.856		
My course major will open up new opportunities in the future		0.824		
Completing my course major will increase my earning power		0.814		
I am pursuing this course major to meet the educational requirements for my career		0.728		
This course major will enable me to participate in sports and social activities			0.812	
Pursuing this course major gives me the opportunities for an active social life			0.810	
The chance to meet new people and make new friends motivated me to choose this course major			0.761	
Progressing in education is what others expect of me, so I chose this course major				0.714
Pursuing my course major affords me more years to decide what I want to do				0.675
Majoring in this course seemed like the natural thing to do				0.640
I rather drifted into majoring in this course				0.556
<i>Eigenvalues</i>	6.775	3.436	2.313	1.179
<i>Percentage of variance explained</i>	30.794	15.617	10.512	5.358

Table III.
Rotated component matrix

“PEGS” represents personal goals, defined as students’ motivation, while “EXOUT” represents expected outcomes proxied by students’ expectations. “SOP” represents social persuasion. X is a vector of control variables, capturing the effect of other demographic characteristics of respondents (age, gender and GPA) on the dependent variable. The error term in the regression model is represented by ε .

Based on the EFA analysis, the regression model in equation (1) is extended to incorporate the different dimensions of the constructs as follows:

Table IV.
Rotated component matrix

Students' confidence in abilities	Ability to manage academics	Academic strengths
I am able to take responsibility for my own learning	0.859	
I am able to evaluate my own progress	0.857	
I am able to initiate my own study activities	0.852	
I am confident about completing written assignments	0.838	
I know what is expected of me academically	0.824	
I am able to plan my studies in a time-effective way	0.821	
I am able to work independently	0.819	
I am able to organize my own life generally	0.818	
I am confident about my ability to use a computer	0.752	
I am comfortable working in groups	0.718	
I am able to participate in class	0.675	
I am able to ask for help from my lecturers/tutors	0.673	
I am confident in my ability to pass all my exams at the first attempt		0.835
I am confident in my ability to handle the course material		0.812
I am confident in my ability to perform above average in my studies		0.802
I am confident in my ability to achieve results in the top. 10% of my class		0.781
<i>Eigenvalues</i>	<i>10.060</i>	<i>1.508</i>
<i>Percentage of variance explained</i>	<i>62.874</i>	<i>9.422</i>

Table V.
Rotated component matrix

Students' expectations	Factor loadings
I expect to learn about new ideas	0.915
I expect to experience intellectual growth and stimulation	0.900
I expect to broaden my horizons	0.899
I expect to develop new skills	0.891
I expect to increase my self-esteem and self-confidence	0.869
I expect to have a good time	0.770
I expect to meet new people	0.725
<i>Eigenvalue</i>	<i>5.124</i>
<i>Percentage of variance explained</i>	<i>73.196</i>

Table VI.
Rotated component matrix

Social persuasion	Factor loadings
I was strongly influenced by the media on the choice of my course major	0.856
I was strongly influenced by the public/society on the choice of my course major	0.805
I was strongly influenced by the educators on the choice of my course major	0.793
I was strongly influenced by the career counsellor on the choice of my course major	0.729
My family and friends had a high influence on the choice of my course major	0.701
<i>Eigenvalue</i>	<i>3.033</i>
<i>Percentage of variance explained</i>	<i>60.654</i>

$$\begin{aligned} \text{logit}(CMD_i) = & \beta_1 \text{CONAS}_i + \beta_2 \text{AMAC}_i + \beta_3 \text{INMOT}_i + \beta_4 \text{CARMOT}_i + \beta_5 \text{SOMOT}_i \\ & + \beta_6 \text{EXMOT}_i + \beta_7 \text{EXOUT}_i + \beta_8 \text{SOP}_i + \sum_{j=9}^3 \beta_j X_i + \varepsilon \end{aligned} \quad (2)$$

where “CONAS” represents confidence in academic strengths, “AMAC” represents the ability to manage academics, “INMOT” represents intrinsic motivation, “CARMOT” represents career motivation, “SOMOT” and “EXMOT” represent social and external motivation, respectively.

Deriving the composite scores for the constructs

As all the factors extracted had more than one indicator, a composite score was computed for each factor by constructing a weighted average index. The weighted average index was computed by multiplying the weight of each indicator (the factor loadings) by the respective value of each indicator. This approach accounts for the relative contribution of each indicator to the construct and has been found to be particularly useful in increasing the efficiency of the proposed model and the reduction of random error (Hair *et al.*, 2006).

Regression results

Tests for the overall fitness of the logistic regression was done to ensure the appropriateness of the model. Results of goodness of fit for the logistic regression indicate that the overall model is good. The chi-square statistic was highly significant ($\chi^2 = 326.915, p = 0.000$) while the Hosmer and Lemeshow model fit tests showed a well-fitting model ($\chi^2 = 11.323, p = 0.184$), as expected. The Nagelkerke R^2 also attested to the fitness of the model, as it explained approximately 67 per cent of the total variation in the dependent variable. Likewise, the model correctly classified 87.2 per cent of the cases, which was greater than the beginning proportion of 61.3 per cent of classified cases. Table VIII shows results of the logistic regression analysis.

The results demonstrate that self-efficacy, expected outcomes and personal goals have important implications for course major decisions of business students. The two dimensions of self-efficacy – academic strength and ability to manage academics – had a significant association with course major decision. Specifically, there was a positive relationship between academic strength and course major decisions (at 10 per cent significant level). This finding indicates that students who majored in accounting usually had higher confidence in their academic strength than their peers who pursued other course majors. The exponentiated coefficient of academic strength factor indicates that an increase by one point

Constructs	Cronbach's alpha
Career motivation	0.856
Social motivation	0.816
External motivation	0.719
Intrinsic motivation	0.924
Academic strength	0.879
Ability to manage academics	0.963
Students' expectations	0.960
Social persuasion	0.833

Table VII.
Measures of
construct reliability

Table VIII.
Regression results

Variable	Coefficient	<i>p</i> -value	Wald coefficient	Odds ratio (%)
Academic strength	0.111	0.075	3.161	11.8
Ability to manage academics	-0.121	0.001	10.935	-11.4
Intrinsic motivation	0.111	0.000	24.497	11.7
Career motivation	-0.149	0.001	10.882	-13.8
Social motivation	-0.100	0.026	4.949	-9.5
External motivation	-0.085	0.092	2.834	-8.2
Expected outcomes	0.191	0.000	46.778	21
Social persuasion	0.039	0.147	2.105	3.9
GPA	0.762	0.028	4.815	114.2
Gender	-0.005	0.988	0.000	-0.5
Age	0.177	0.584	0.300	19.4
Constant	-4.266	0.000	15.541	-98.6

of academic strength factor leads to an increase in the odds by 11.8 per cent. By implication, a student who is confident in his or her academic strength is 12 times more likely to be majoring in accounting than pursuing a non-accounting degree. This finding is supported by some prior studies that conclude that the academic abilities of students play an important role in their course major decisions, especially when opting for numerical programmes such as accounting (Lent *et al.*, 2003; Uyar *et al.*, 2011).

The results indicate a negative relationship between ability to manage academics and course major decisions (at 5 per cent significance level). This finding suggests that students who pursue non-accounting courses believe more in their abilities to manage their academics, as compared to their peers majoring in accounting. The exponential coefficient also indicates that for an increase by one point in the ability to manage academics factor, there is a decrease of 11.4 per cent of the odds of majoring in accounting. Thus, a student is 11 times more likely to major in any other course besides accounting, based on the ability to manage academics factor.

The proxy for personal goals – intrinsic motivation, career motivation, social motivation and external motivation – were all found to have a significant association with course major decisions. The result demonstrates a positive and highly significant relationship (coefficient = 0.111, *p*-value < 0.001) between intrinsic motivation and course major decision. As shown in Table VIII, for every unit increase in the intrinsic motivation factor, the odds of having a student majoring in accounting increases by approximately 11 per cent. This implies that personal satisfaction attained from pursuing a course major and self-interests are important to students who major in accounting, compared with non-accounting students. Thus, students who major in accounting are more intrinsically motivated as compared to their peers who major in other courses. Empirically, existing studies in the field of accounting have found intrinsic interest of students to be a key predictor of their decision to pursue a career in accounting (Jackling and Keneley, 2009; Porter and Woolley, 2014)

The results also indicate a negative and highly significant relationship (coefficient = -0.149, *p*-0.001) between career motivation and course major decision. The exponential coefficient value suggests that for every increase in career motivation factor, the odds of majoring in accounting is expected to decrease by 13.8 per cent. By implication, students who attach greater importance to career-related issues such as securing a good job and other opportunities in future are usually not motivated to major in accounting. Conversely, students who major in accounting are less attracted by such external rewards and more driven by intrinsic factors. As

pointed out by [Porter and Woolley \(2014\)](#), extrinsic factors such as better pay and financial stability do not influence students to major in accounting. In addition, [Uyar \(2011\)](#) posits that there exists a significant negative association between expectation of high earnings and the choice of accounting as a career path. A similar result was observed for the external motivation factor (coefficient = -0.085 , $p = 0.092$), reinforcing the point that the higher the level of agreement by a student that external factors are important for his/her course major decision, the greater the likelihood of such a student being a non-accounting student.

In terms of the relationship between social motivation and course major decision, the results indicate a negative and highly significant relationship (coefficient = -0.100 , $p = 0.026$) between the two variables. This finding suggests that the higher the level of agreement by a student that his/her course major decision is influenced by some socially related issues (such as having an active social life), the greater the likelihood of such a student not being an accounting student. As the exponential coefficient indicates, for every increase in social motivation factor, the odds of majoring in accounting is expected to decrease by 9.5 per cent. By implication, students who usually do not want their course major to negatively affect their social life are ten times less likely to be pursuing an accounting major at the university. This evidence is not surprising, given that accountants for years have been stereotyped to be antisocial, boring, unflattering and misfits ([Parker, 2001](#); [Hunt et al., 2004](#)). [Tan and Laswad \(2006\)](#) document that the poor perceptions and image of the public about the accounting profession discourage students from majoring in accounting. Thus, notwithstanding the efforts over the years, the negative perception that people hold about the accounting profession still persists.

Students' expected outcomes were found to be positively related to course major decisions (at 5 per cent significance level). Students who chose their course majors with the expectation to learn new ideas and experience intellectual growth and stimulation, among others, were more likely to be majoring in accounting than in a non-accounting course. The exponential of the coefficient suggests that for every one-point increase in expected outcomes, there is an increase in the odds of majoring in accounting by 21 per cent. By implication, in spite of the negative views some students may have about the accounting profession, it is still regarded highly among students to be a course that is intellectually challenging.

Analysis of the control variables also suggests that academic performance is a critical factor to the course major decision of students. [Xu \(2017\)](#) asserts that academic performance may constrain students' selection of course major as it reflects their self-assessed readiness and competitiveness. As the results demonstrate, students who major in accounting are usually high-performing students, compared with non-accounting students. The age and gender of the respondents were however found not to affect their course major decision. Thus, while the traditional view suggests that female students do not usually find the quantitative profession attractive, between accounting and non-accounting students, gender plays an insignificant role in the course major decision. Likewise, the decision for a student to pursue an accounting or a non-accounting degree does not depend on his/her age.

The social-persuasion factor had an insignificant association with course major decisions of students. This suggests that similar to findings in other disciplines ([Kim et al., 2002](#); [Alanezi et al., 2016](#)) the influence of third parties on course major decisions of accounting and non-accounting students is not substantial.

Conclusion

This study explored the factors that influenced the course major decision of accounting and non-accounting students within a developing country context. The findings of this study indicate that students who choose accounting as a course major have higher confidence in their academic strength, and the decision to pursue accounting is motivated intrinsically. Conversely, non-accounting students tend to be driven more by external rewards such as better pay, financial stability and opportunities for career advancement in their course major selection. The results also reveal that business students who based their course major decisions on some expectations, such as learning about new ideas, developing new skills and developing their self-confidence and worth, mostly ended up pursuing accounting as a course major. Again, the academic performance of students was found to be an important factor in the course major decision of students. High-performing students (students with high GPA) have a preference for the accounting option.

The findings of this study clearly demonstrate that the factors that underpin the course major decision of students vary significantly between accounting and non-accounting students. Given that the number of students who pursue accounting as a course major in many parts of the world continues to decline, an understanding of the dominant factors that inspire students to choose accounting over other disciplines is critical to enhancing the popularity of accounting among university students. The results thus have important implications for policymakers, especially accounting educators, and the various professional accountancy bodies in countries faced with the challenge of attracting university students to pursue a career in accounting.

As highlighted by the results, genuine interest in accounting is key in the selection of accounting as a course major by students. Therefore, to encourage students to pursue a career in accounting, the teaching of accounting, especially at the foundation stage in the university, should focus on developing students' interest in the profession. In particular, efforts should be directed at addressing the negative perceptions and image the public has about the accounting profession at the foundation stage to help develop students' interest in the profession. Again, appropriate measures should be put in place by accounting educators to ensure that students who develop interest in accounting are retained. One way of achieving this is for accounting instructors to adopt modern and innovative ways of teaching, such as using case studies, interactive lecturing techniques and technology-enabled teaching that promotes active participation of students to sustain their interest. As indicated earlier, students who tend to major in accounting usually do so with the expectation of developing new skills, improving their self-confidence and self-esteem and learning about new ideas. These expectations must be properly aligned with the accounting curricula to sustain the interest of students who opt for accounting as a course major.

As the results indicate, students who desire to have an active social life together with their academic work do not find the accounting profession attractive. While this finding may be attributed to the fact that the accounting profession has been stereotyped to be boring and antisocial, it also calls for the need to reassess the manner in which the accounting programme is structured and delivered in institutions. A more flexible approach to teaching that allows students to engage in other social activities without compromising on quality should be given a careful consideration by accounting educators.

The findings of this study are not without limitations. The study focussed entirely on only one public university in the country, while data were gathered at one point in time. This, to a large extent, limits the extent of generalization of the study findings but provides an important avenue for further research in the area.

References

- Alanezi, F.S., Alfraih, M.M. and Haddad, A.E. (2016), "Factors influencing students' choice of accounting as a major: further evidence from Kuwait", *Global Review of Accounting and Finance*, Vol. 7 No. 1, pp. 165-177.
- Arquero, J.L., Byrne, M., Flood, B. and Gonzalez, J.M. (2009), "Motives, expectations, preparedness and academic performance: a study of students of accounting at a Spanish university", *Revista de Contabilidad*, Vol. 12 No. 2, pp. 279-299.
- Arquero, J.L., Fernández-Polvillo, C., Hassall, T. and Joyce, J. (2015), "Vocation, motivation and approaches to learning: a comparative study", *Education + Training*, Vol. 57 No. 1, pp. 13-30.
- Bandura, A. (1986), "The explanatory and predictive scope of self-efficacy theory", *Journal of Social and Clinical Psychology*, Vol. 4 No. 3, pp. 359-373.
- Bartol, K.M. and Srivastava, A. (2002), "Encouraging knowledge sharing: the role of organizational reward systems", *Journal of Leadership and Organizational Studies*, Vol. 9 No. 1, pp. 64-76.
- Bong (2001), "Role of self-efficacy and task-value in predicting college students' course performance and future enrollment intentions", *Contemporary Educational Psychology*, Vol. 26 No. 4, pp. 553-570.
- Byrne, M. and Flood, B. (2005), "A study of accounting students' motives, expectations and preparedness for higher education", *Journal of Further and Higher Education*, Vol. 29 No. 2, pp. 111-124.
- Byrne, M., Flood, B., Hassall, T., Joyce, J., Montano, J.L.A., Gonzalez, G. and Tournia-Germanou, E. (2012), "Motivations, expectations and preparedness for higher education: a study of accounting students in Ireland, the UK, Spain and Greece", *Accounting Forum*, Vol. 36 No. 2, pp. 134-144.
- Chemers, M.M., Hu, L. and Garcia, B.F. (2001), "Academic self-efficacy and first year college student performance and adjustment", *Journal of Educational Psychology*, Vol. 93 No. 1, pp. 55-64.
- Chen, T.T.Y. (2014), *A Comparative Review of the Need for Accounting Education Change in Selected Countries*. Accounting Education, Emerald Group Publishing, Vol. 15.
- Correll, S.J. (2001), "Gender and the career choice process: the role of biased self-assessments", *American Journal of Sociology*, Vol. 106 No. 6, pp. 1691-1730.
- Gushue, G.V., Scanlan, K.R.L., Pantzer, K.M. and Clarke, C.P. (2006), "The relationship of career-decision-making self-efficacy, vocational identity and career exploration behavior in African American high school students", *Journal of Career Development*, Vol. 33 No. 1, pp. 19-28.
- Hair, J., Black, W.C., Babin, B.J. and Anderson, R.E. (2006), *Multivariate Data Analysis*, Pearson Prentice Hall, Upper Saddle River, NJ.
- Henson, R.K. and Roberts, J.K. (2006), "Use of exploratory factor analysis in published research", *Educational and Psychological Measurement*, Vol. 66 No. 3, pp. 11-14.
- Hernandez, P.R., Schultz, P.W., Estrada, M., Woodcock, A. and Chance, R.C. (2012), "Sustaining optimal motivation: a longitudinal analysis of interventions to broaden participation of underrepresented students in STEM", *Journal of Educational Psychology*, Vol. 105 No. 1, pp. 89-107.
- Hoi, V.P., Thi, T.N.K. and Thanh, H.C.T. (2016), "Factors influence students' choice of accounting as a major", *Proceeding of The 10th International Days of Statistics and Economics*, pp. 1471-1481, available at: <http://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=19422504&AN=70096168&h=L0fqumjuDO6WLMjzm0ubKC03E4X6adqOUPtGjOeRDxOjyp1MSXdaoirHF7BBrhzAcnRP5sWpOLWAuKljm5hOhg==&cr1=c%5Cnhttps://www.cluteinstitute.com/ojs/i>
- Hsieh, P., Sullivan, J.R. and Guerra, N.S. (2007), "A closer look at college students: self-efficacy and goal orientation", *Journal of Advanced Academics*, Vol. 18 No. 3, pp. 454-476.
- Hunt, S.C., Falgiani, A.A. and Intrieri, R.C. (2004), "The nature and origins of students' perceptions of accountants", *Journal of Education for Business*, Vol. 79 No. 3, pp. 142-148.

- Jackling, B. and Calero, C. (2006), "Influences on undergraduate students' intentions to become qualified accountants: evidence from Australia", *Accounting Education*, Vol. 15 No. 4, pp. 419-438.
- Jackling, B. and De Lange, P. (2009), "Do accounting graduates' skills meet the expectations of employers? A matter of convergence or divergence", *Accounting Education*, Vol. 18 No. 4-5, pp. 369-385.
- Jackling, B. and Keneley, M. (2009), "Influences on the supply of accounting graduates in Australia: a focus on international students", *Accounting and Finance*, Vol. 49 No. 1, pp. 141-159.
- Kaiser, H.F. (1970), "A second generation little jiffy", *Psychometrika*, Vol. 35 No. 4, pp. 401-415.
- Kaiser, H.F. and Rice, J. (1974), "Little jiffy, mark IV", *Educational and Psychological Measurement*, Vol. 34 No. 1, pp. 111-117.
- Kim, D., Markham, F.S. and Cangelosi, J.D. (2002), "Why students pursue the business degree: a comparison of business majors across universities", *Journal of Education for Business*, Vol. 78 No. 1, pp. 28-32.
- Lee, H.S., Flores, L.Y., Navarro, R.L. and Kanagui-Muñoz, M. (2015), "A longitudinal test of social cognitive career theory's academic persistence model among Latino/a and White men and women engineering students", *Journal of Vocational Behavior*, Vol. 88, pp. 95-103.
- Lent, R.W. (2005), "A social cognitive view of career development and counseling", in Brown, S.D. and Lent, R.W. (Eds), *Career Development and Counseling: Putting Theory and Research to Work*, Wiley, New York, NY, pp. 101-127.
- Lent, R.W., Brown, S.D. and Hackett, G. (1994), "Toward a unifying social cognitive theory of career and academic interest, choice, and performance", *Journal of Vocational Behaviour*, Vol. 45 No. 1, pp. 79-122.
- Lent, R.W., Brown, S.D. and Hackett, G. (2002), "Social cognitive career theory", *Career Choice and Development*, Vol. 4, pp. 255-311.
- Lent, R.W., Brown, S.D., Schmidt, J.A., Brenner, B., Lyons, H.Z. and Treistman, D. (2003), "Relation of contextual supports and barriers to choice behavior in engineering majors: test of alternative social cognitive models", *Journal of Counseling Psychology*, Vol. 50 No. 4, pp. 458-465.
- Liu, J. (2010), "The changing body of students", *Marketing Intelligence and Planning*, Vol. 28 No. 7, pp. 812-830.
- Malthus, S. and Fowler, C. (2009), "Perceptions of accounting: a qualitative New Zealand study", *Pacific Accounting Review*, Vol. 21 No. 1, pp. 26-47.
- Nagy, G., Trautwein, U., Baumert, J., Köller, O. and Garrett, J. (2006), "Gender and course selection in upper secondary education: effects of academic self-concept and intrinsic value", *Educational Research and Evaluation*, Vol. 12 No. 4, pp. 323-345.
- Ng, Y.H., Lai, S.P., Su, Z.P., Yap, J.Y., Teoh, H.Q. and Lee, H. (2017), "Factors influencing accounting students' career paths", *Journal of Management Development*, Vol. 36 No. 3, pp. 319-329.
- Nunnally, J.C. (1978), *Psychometric Theory*, McGraw-Hill, New York, NY.
- Özbilgin, M., Küskü, F. and Erdoğan, N. (2005), "Explaining influences on career 'choice': the case of MBA students in comparative perspective", *International Journal of Human Resource Management*, Vol. 16 No. 11, pp. 2000-2028.
- Pajares, F. (2006), "Self-efficacy during childhood and adolescence", *Self-efficacy Beliefs of Adolescents*, Vol. 5, pp. 339-367.
- Pajares, F. and Cheong, Y.F. (2003), "Achievement goal orientations in writing: a developmental perspective", *International Journal of Educational Research*, Vol. 39 No. 4/5, pp. 437-455.
- Paolillo, J. and Estes, R. (1982), "An empirical analysis of career choice factors among accountants, attorneys, engineers and physicians", *The Accounting Review*, Vol. 57 No. 4, pp. 785-793.
- Parker, L.D. (2001), "Back to the future: the broadening accounting trajectory", *British Accounting Review*, Vol. 33 No. 4, pp. 421-453.

- Porter, J. and Woolley, D. (2014), "An examination of the factors affecting students' decision to major in accounting", *International Journal of Accounting and Taxation*, Vol. 2 No. 4, pp. 1-22.
- Samsuddin, M.E., Khairani, N.S., Wahid, E.A. and Sata, F.H.A. (2015), "Awareness, motivations and readiness for professional accounting education: a case of accounting students in UiTM Johor", *Procedia Economics and Finance*, Vol. 31 No. 15, pp. 124-133.
- Sugahara, S. and Boland, G. (2009), "The accounting profession as a career choice for tertiary business students in Japan-A factor analysis", *Accounting Education*, Vol. 18 No. 3, pp. 255-272.
- Tan, L. and Laswad, F. (2006), "Students' beliefs, attitudes and intentions to major in accounting", *Accounting Education*, Vol. 15 No. 2, pp. 167-187.
- Tang, L.C. and Seng, C. (2016), "Factors influence students 'choice of accounting major in Cambodian universities", *Asian Review of Accounting*, Vol. 24 No. 2, pp. 231-251.
- Teixeira, C., Gomes, D. and Borges, J. (2015), "Introductory accounting students' motives, expectations and preparedness for higher education: some Portuguese evidence", *Accounting Education*, Vol. 24 No. 2, pp. 123-145.
- Theis, D. and Fischer, N. (2017), "Sex differences in the development of achievement goals in Middle school", *Learning and Individual Differences*, Vol. 57, pp. 170-177.
- Umar, I. (2014), "Factors influencing students' career choice in accounting: the case of Yobe state university", *Research Journal of Finance and Accounting*, Vol. 5 No. 17, pp. 59-63.
- Uyar, A., Güngörmüş, A. and Kuzey, C. (2011), "Factors affecting students' career choice in accounting: the case of a Turkish University", *American Journal of Business Education (AJBE)*, Vol. 4 No. 10, pp. 29-38.
- Watt, H.M.G., Richardson, P.W., Klusmann, U., Kunter, M., Beyer, B., Trautwein, U. and Baumert, J. (2012), "Motivations for choosing teaching as a career: an international comparison using the FIT-choice scale", *Teaching and Teacher Education*, Vol. 28 No. 6, pp. 791-805.
- Xu, Y.J. (2017), "Attrition of women in STEM: examining job/major congruence in the career choices of college graduates", *Journal of Career Development*, Vol. 44 No. 1, pp. 3-19.

Further reading

- Lent, R.W., Brown, S.D. and Larkin, K.C. (1986), "Self-efficacy in the prediction of academic performance and perceived career options", *Journal of Counseling Psychology*, Vol. 33 No. 3, pp. 265-269.

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