



INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN ACCOUNTING, FINANCE AND MANAGEMENT SCIENCES



How Personal Attribute Affect Students' Performance in Undergraduate Accounting Course. A Case of Adult Learner in Tanzania

Noah J. Masasi

To Link this Article: <http://dx.doi.org/10.6007/IJARAFMS/v2-i2/9912>

DOI:10.6007/IJARAFMS /v2-i2/9912

Received: 10 April 2012, **Revised:** 11 May 2012, **Accepted:** 29 May 2012

Published Online: 22 June 2012

In-Text Citation: (Masasi, 2012)

To Cite this Article: Masasi, N. J. (2012). How Personal Attribute Affect Students' Performance in Undergraduate Accounting Course. A Case of Adult Learner in Tanzania. *International Journal of Academic Research in Accounting Finance and Management Sciences*, 2(2), 177–189.

Copyright: © 2012 The Author(s)

Published by Human Resource Management Academic Research Society (www.hrmars.com)

This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen

at: <http://creativecommons.org/licenses/by/4.0/legalcode>

Vol. 2, No. 2, 2012, Pg. 177 - 189

<http://hrmars.com/index.php/pages/detail/IJARAFMS>

JOURNAL HOMEPAGE

Full Terms & Conditions of access and use can be found at
<http://hrmars.com/index.php/pages/detail/publication-ethics>



INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN ACCOUNTING, FINANCE AND MANAGEMENT SCIENCES



How Personal Attribute Affect Students' Performance in Undergraduate Accounting Course. A Case of Adult Learner in Tanzania

Noah J. Masasi

Associate Director Expenditure and Cost Cutting Measures Open University of Tanzania Dar es Salaam Tanzania

Email: noahma2003@yahoo.com

Abstract

The purpose of this study is to determine whether personal attribute affect students' performance in undergraduate accounting course. It examines the relationship between variable personal attribute (gender, job, employment, marital status, children, relatives and age) and the overall average grade performance. The researcher conducted this study at the Open University of Tanzania, an Open Distance Learning (ODL) university. Using descriptive statistics, person correlation coefficient and regression analysis. Sampling procedures were used during data collection from a population of 1200 students; a sample of 122 students was drawn. Research findings show that students' personal attribute was associated to students' performance. The more children the students had the good performance grades earned. There was a significant negative correlation between students staying with relatives and performance. The male students were more than female students, males' performance was better than female students. There is an association between the types of work a student is engaged outside university with the overall performance. Marital status does not have an association with the overall performance.

Keywords: Personal Attribute, Students' Performance, Undergraduate Accounting Course, Adult learner and Tanzania

Introduction

The Open University of Tanzania is an Open and Distance Learning higher education institution offering its non-degree and degree courses through Distance and Open Learning mode including effective exploitation of Information Communication Technology (ICT) and in particular e-Learning. Such systems of educational delivery involve various means of communication such as broadcasting, telecasting, correspondence courses, and seminars, ICT and in particular e-learning, face to face or a combination of any two or more of such means.

The university in which the researcher conducted this study is an ODL public university located in Dar es Salaam, Kinondoni Bifra along Kawawa road as its headquarters and branches at every

regional centre, and outside Tanzania such as Kenya, Rwanda, Burundi and Namibia. Currently there are 25 Regional Centers, 5 examination centers and 56 registered study centers.

Tanzania faces a shortage of some 2,300 Certified Public Accountants (CPA), according to the National Board of Accountants and Auditors (NBAA).

While there is a demand for some 6,000 certified accountants in the market, only 3,700 are available. (Daily News 21st June 2011).

Various reports have indicated that Tanzania has shortage of qualified accountants compared to other African countries (<http://www.nbaa-tz.org>). There is a high demand for accountants, which owing to the poor examination pass rates is not being met by the indigenous population (<http://docs.google.com>).

It is not known what factors inhibit the young to excel in the undergraduate accounting courses to fill the gap. This gap of knowledge has affected our understanding of what specific factors limit the number of young students joining the profession. There is a need to investigate the contribution of the factors affecting students' performance in undergraduate accounting course.

Literature Review

Overview

There are a number of characteristics of candidates that may affect examination results. Such characteristics are the candidate's age, gender, available study time, first language, job, employment, marital status, children, and relatives

The age of a candidate was found to be a significant variable in determining success in the US CPA examination; older candidates were more likely to pass the examination Brahmasrene and Whitten (2001). At two universities, used age as an indication of maturity and found it to be a significant contributor to success at one university but not at the other Frakes (1977).

However, Gammie, Jones and Robertson- Millar (2003) found age to be an insignificant variable. A Singapore study by Koh and Koh (1999) that investigated university students enrolled for an accounting degree had the opposite result: younger students performed significantly better than older students. In South Africa, Du Plessis, Müller and Prinsloo (2005) and Müller, Prinsloo and Du Plessis (2007) found that students under 30 were more likely to pass a first-year accounting distance education university course than older students.

Gender was a significant variable affecting success in the CPA examination – male students were more likely to pass the examination than female students, Brahmasrene and Whitten (2001). However, studies that focused on university examinations instead of professional accounting examinations yielded mixed results. Black and Duhon (2003) and Bagamery, Lasik and Nixon (2005) found that male students outperformed females in a standardized business examination at US universities, while Koh and Koh (1999) found that males performed better in an accounting degree in Singapore. Du Plessis *et al.* (2005) reported that males substantially outperformed females in a first-year distance education university accounting course in South Africa. In two US studies, however, Mutchler, Turner and Williams (1987); Tyson (1989) found that female students outperformed males in university accounting examinations.

In an open learning university in Australia, De Lange, Waldmann and Wyatt (1997) found that males were more likely to achieve distinctions in undergraduate accounting, while females were more likely to obtain high distinction and credit grades. Females were more likely to fail, and overall,

males tended to outperform females. A US study by Doran, Bouillon and Smith (1991) reported that males performed better in the first-level university accounting course examined, but not in the second-level course. Lipe (1989) found male and female university students enrolled for a management accounting course in the USA to be evenly matched in terms of performance, a finding similar to that of Carpenter, Friar and Lipe (1993) who studied a US introductory accounting course and Gist, Goedde and Ward (1996) who studied minority students' performance in a US introductory accounting course.

In a US study by Nourayi and Cherry (1993), gender appeared to be an insignificant variable, except for one accounting course grade in which males outperformed females. Gammie *et al.* (2003) as well as Gammie, Paver, Gammie and Duncan (2003b) detected no significant indication of a performance differential between male and female students throughout an accounting degree programme in the UK.

In Hong Kong, Gul and Fong (1993) studied a first-year university accounting course that was taught in both English and Chinese, but the text and other course materials were in English. They found that students who had attended an English secondary school outperformed those who had attended a Chinese secondary school. Wong and Chia (1996) found that a lower degree of proficiency in English language was associated with lower performance levels in a first-year financial accounting course at a Hong Kong university. However, in a study of Australian university students registered for a second-year management accounting course, Jackling and Anderson (1998) found that language (in other words, whether or not English was the student's first language) did not significantly affect results. Du Plessis *et al.* (2005) came up with a similar finding in a study involving first-year students registered for an accounting course at a South African distance education university.

Hence at university level, there is evidence to suggest that in some contexts, candidates with a first language other than English perform worse in accounting, while in other contexts they appear not to be at a disadvantage.

Karim and Ibrahim (1992) have compared the performance of male and female students in upper – division accounting course offered during the period of 1985-1989 in a third world university. The findings indicated that the male students performance better than the female students. The results signified that mathematics had no effect on students' performance in accounting courses nor did the female students with mathematics background significantly outperform their male peers in the same group.

African students do not regard English as their first language. In a South African study focusing on the language abilities of university students, Parkinson (2001) speculated that "subconsciously or otherwise" markers that are predominantly English speaking (as the CIMA examiners in London would be), may mark students down for grammatical errors, resulting in students whose first language is not English receiving lower marks. Apart from difficulties with grammar that Parkinson refers to, it is also conceivable that such students may take longer to properly communicate their thoughts in English which costs them time during the examination, or may not be able to properly communicate their thoughts in English at all.

In a move to improve future examination performance, the National Board of Accountants and Auditors of Tanzania (NBAA) commissioned a survey on "Teaching and Learning Environment for Preparing Candidates for the Board's Examinations" (<http://www.nbaa-tz.org>). The survey report was submitted to the Board in March 2011 and has been adopted. The survey revealed a number of key drivers that contribute to poor candidates' performance.

These include: Poor command of the English language which limit majority of candidates to grasp the requirement of the question and to express them-selves adequately when answering discursive questions.

Methodology of Research

Research Design

This is a descriptive research design of the causes for the positive and negative factors that affect performance of undergraduate students. The reason for using descriptive research design is because it offers a snapshot of a current situation or condition. They are the research equivalent of a balance sheet, capturing reality at a specific point in time.

Research Population

The study population is 1,200 students of the open university of Tanzania finalist BBA (Accounting) 2010/2011, obtained from students registers at Open University of Tanzania.

Sample Size

The number of students in the sample of this study is 122 students, representing the total student population majoring in accounting at the Open University of Tanzania.

The population is the number of students taking accounting as a major; the same was obtained from registers of finalist's students at Open University of Tanzania (OUT).

Sampling Procedure

Simple random sampling procedure was used in collecting data from the respective respondents. This procedure is suitable because it provides us with an efficient system of capturing data.

Data Analysis

The data were processed and analyzed as soon as collected. Descriptive statistics was used to analyze quantitative data. The researcher used descriptive statistics to compute the mean, percentages and to construct frequency distribution tables.

Regression analysis and correlation was used to determine the effect of independent variables on a dependent variable. Regression measures the relative impact of each independent variable and is useful in Forecasting. Like correlation, regression analysis assumes that the relationship between variables is linear. The researcher has used regression analysis to measure the relationship between independent variables against the dependent variable GPA.

Correlation is used to measure the similarity in the Changes of values of interval variables but is not influenced by the units of measure. Another advantage of correlation is that it is always bounded by the interval:

A perfect inverse linear relationship -1, i.e. y increases uniformly as x decreases, and 1 indicates a perfect direct linear relationship, i.e. x and y move uniformly together. A value of 0 indicates no relationship.

Findings

Descriptive analysis was used to determine the mean average performance of the variables; frequency distribution tables were constructed for the 122 students comprising the study sample to determine the relationship in percentages. Correlation analysis was analyzed for personal attribute, in order to measure the degree of association of personal attribute as independent variable with students overall GPA earned in the course of study. Linear regression model was used to measure the variables in the personal attribute to answer the research questions because simple plots of the data provided no evidence on the existence of non-linear relationship.

Table 1. Gender

Gender	Frequency	Percent
FEMALE	39	32
MALE	83	68
Total	122	100

Source: Field data (2011)

Of all the students in the sample 32% were female and 68% were male. Male students outperform female students. The more male students in the course the higher performance grades expected. The findings indicated that the male student's performance was better than the female students. This is in consistent with Du Plessis et al. (2005) who found that males' substantially outperformed females in a first-year distance Education University. However numerous studies show conflicting results on gender as a variable affecting performance in accounting examinations. Brahmasrene and Whitten (2001) found that gender was a significant variable affecting success in the CPA examination – male students were more likely to pass the examination than female students.

Table 2. Job Outside University

Type of Job	Frequency	Percent
Accounting	4	3.3
Business	48	39.3
Others	70	57.4
Total	122	100

Source: Field data (2011)

3.3% of the students in the sample were doing accounting jobs, 39% were doing business related jobs and 57.4% were doing other jobs. The data shows that many students are doing jobs other than accounting. The type of job one is doing is not associated with the overall performance of the student. This study does not concur with Brahmasrene and Whitten's (2001) who indicated that CPA candidates with "private accounting experience" performed better in the examination relative to those with "no related work experience".

Table 3. Employment

Nature employment	Frequency	Percent
Part-time	4	3.3
Fulltime	44	36.1
Contract	44	36.1
Temporary	25	20.5
Not employed	5	4.1
Total	122	100

Source: Field data (2011)

3.3% of students in the sample were doing part time jobs, 36.1% were in fulltime employment, 36.1% in contract, 20.5% were employed temporary and 4.1% were not employed.

Employment whether full time, part-time or contract has an association with the overall performance of students. It is in consistency with a Singapore study by Koh and Koh (1999) who indicated that students with work experience performed better in a university accounting degree. Schoroeder (1986) acknowledged that work experience may provide sufficient prior knowledge “to create advantage” but also speculated that employment work hours could be one of the primary factors’ that has a negative impact on the availability of study time. These results did not ultimately indicate that employment work hours were either positively or negatively correlated with examination results. This research suggests that relevant employment is likely to have a positive impact on examination performance.

Table 4. Marital Status

Status	Frequency	Percent
Divorced	5	4.1
Separated	10	8.2
Single	43	35.2
Married	64	52.5
Total	122	100

Source: Field data (2011)

4.1% were divorced, 8.2% separated, 35.2% single and 52.5% married. Marital status has a good mean score of 3.36 out of a range of 4 and a negative of correlation of 0.046 and a beta of -0.141. The findings indicate that marital status does not have an association with the overall performance. However, this is in contrast with Frakes (1997) who found that family commitments could indicate stability and a work life balance that may enhance academic focus. In studying an intermediate university accounting course at two universities in the USA, Frakes (1997) used marital status as an indicator of maturity, and found it to contribute significantly to success at one institution but not at the other. This study found no significant correlation between marital status and performance.

Table 5. Number of Children

Children	Frequency	Percent
1 – 2	33	27
3 – 4	64	52.5
5 – 6	20	16.4
Over 6	5	4.1
Total	122	100

Source: Field data (2011)

The table shows that 27% of the students in the sample had one to two children, 52.5% had three to four children each, and 16.4% had 5 to six children while 4.1% had six and over children. There is a good mean score of 1.064 out of the range of 4 and a positive of correlation of 0.143 and a beta of 0.382. The mean score performance is not strong. There is a direct correlation between number of children and the overall performance. A study of accounting profession in Scotland by Gammie and Gammie (1995) found that women in the profession started families later in life than the norm because “babies and business are equally demanding”. Family commitments could indicate stability and work-life balance that may enhance academic focus, Schroeder (1986). This study has found a strong relationship between students with children and performance.

Table 6. Age

Year	Frequency	Percent
15-20	42	34.4
21-30	75	61.5
31-50	5	4.1
Total	122	100

Source: Field data (2011)

34.4% were in the range of 15 to 20 years of age, 61.5% were between 21 to 30 years and 4.1% were between 31 to 50 years. Majority are between 21 and 30 years. There is an association between age and students’ performance although not very strong. The result is inconsistent with Brahmasrene and Whitten (2001) who found the age of a candidate to be a significant variable in determining success in the US CPA examination. They found that older candidates were more likely to pass the examination. In this research candidates of ages between 21-31 are those who scored highly.

Table 7. Descriptive Statistics for personal attribute (n=122)

	Mean	Std. Error	Std. Deviation Statistic	Variance Statistic
	3.3279	0.04861	0.53694	0.288
Gender	1.6803	0.0424	0.46827	0.219
Job	2.541	0.05093	0.56257	0.316
Employment	1.8607	0.08338	0.92097	0.848
Marital Status	3.3607	0.07275	0.80356	0.646
Children	1.0164	0.08146	0.8998	0.81
Relatives	1.459	0.08486	0.93727	0.878
Age	2.6967	0.04923	0.54378	0.296

Source: Field data (2011)

Table 7 shows the descriptive statistics for personal attribute. Marital status has the highest score with a mean of 3.3607 it indicates that most of the students were married. Age had a mean score of 2.6967 meaning that the majority of students are between 21 and 50 years of age. The mean score of 2.541 for job outside university indicates that most of the students are doing other jobs not related to accounting. The mean score of 1.6803 for gender indicate that the majority of the students are male. The mean score of 1.459 for relatives staying with students indicates that students stay with 3 to 4 relatives. The mean average of 1.0164 for number of children indicates that most of the students have between 3 to 4 children. Marital status outperforms all other variables in terms of mean score.

Table 8. Correlation for personal attribute

	Y	Gender	Job Outside	Employ ment	Marital Status	Relatives	Age
Pearson Correlation	1	0.124	0.147	0.06	-0.046	-0.055	0.004
Sig. (2-tailed)		0.172	0.107	0.513	0.611	0.546	0.968
Sum of Squares and Cross-products Covariance	34.885 0.288	3.787 0.031	5.361 0.044	3.574 0.03	-2.426 -0.02	-3.361 -0.028	0.131 0.001

Source: Field data (2011)

Gender has a positive correlation 0.124 with a positive beta coefficient. The male students were more than female students, males' outperformed female students. Age has a low mean score and a positive correlation of 0.004 and a beta of - 0.096. There is a relationship between age and performance as depicted in Table 8 although a very low relationship.

Number of relatives has a low mean score and a negative correlation of 0.055 and a beta of - 0.397. There is no relationship between relatives staying with students and performance.

Job outside university has a good mean score and a positive correlation of 0.147 and a beta of 0.084, there is an association between the types of work a student is engaged outside university with the overall performance.

Table 9. Regression Analysis for personal attribute

Model		Unstandardized		Standardized		Correlations		
		B	Std. Error	Beta	t	Zero-order	Partial	Part
1	(Constant)	3.483	0.469		7.434			
	gender	0.075	0.108	0.065	0.694	0.124	0.065	0.062
	job outside	0.08	0.097	0.084	0.827	0.147	0.077	0.073
	employment	0.061	0.058	0.104	1.046	0.06	0.097	0.093
	marital status	-0.094	0.072	-0.141	1.303	-0.046	-0.121	-0.115
	children	0.228	0.086	0.382	2.666	0.143	0.242	0.236
	relatives	-0.176	0.069	-0.307	-2.54	-0.055	-0.231	-0.225
	age	-0.095	0.101	-0.096	0.945	0.004	-0.088	-0.084

Source: Field data (2011)

Key:

Y= GPA

X1= gender

X2= job outside university

X3= employment

X4= marital status

X5= number of children

X6= number of relatives

X7= age

Model GPA= a+bXx1+cX2+dX3+eX4+fX5+gX6+hX7

Y= 3.483 + 0.075x1 + 0.080x2 + 0.061x3 – 0.094x4 + 0.228x5 – 0.176x6 – 0.095x7

One percent increase in the gender balance will cause an increase in GPA by 0.075, one percent increase in the job outside university will cause an increase of GPA by 0.080, one percent increase in employment will cause an increase of 0.061 of GPA.

Conclusions

Research findings show that student's personal attribute was associated to students' performance. The more children the students had the good performance grades earned, students with children are motivated to study and therefore earning good results. There was a significant negative correlation between students staying with relatives and performance. Students should be advised not to stay with relatives in order to perform well. The NBAA has conducted an investigation on the effect of some factors affecting students' performance in the profession among them being English and mathematics, this study has found that mathematics had no significant direct association with the overall student's performance however; English had a direct association with performance.

There has been a decline in the number of accounting graduates, which may in part be caused by negative attitude and limited accurate knowledge about accountants. The challenge for the

National Board of Accountants and Auditors (NBAA) for example is to attempt to change this attitude and find new ways of promoting accounting career to the current generation tertiary students.

Recommendations

Future planning and design of the financial accounting subject and the BBA and BCOM programs as a whole are important, that financial accounting is the basic and core course among BCOM and BBA courses, students should be encouraged to master accounting subject as is basic in professional courses.

Our results seem to indicate that well prepared accounting courses may serve to even out the playing field between those with and without prior accounting background. We also investigated the importance of distinguishing between various subjective factors that may influence learning and how they are also important determinants of performance.

More specifically, the study provides evidence that the majority of students who responded that they would like to make high grades in these courses, intention to take CPA examination, intention to continue with further education ended up making high grades.

However, grade in mathematics prior to entering university, hours spend studying per week, marital status, study place and study group does not seem, in this study, to be good motivating factors for students to perform well.

Another general conclusion of the study is that, as shown in the prior academic exposure and work experience with respect to other courses, students with high prior knowledge end up earning high grade than students with low prior knowledge. Specifically, the study provides strong evidence that student performance and their grade in the Main test are strong predictors of student performance.

The place where they conduct their studies or study group, and those who spend more hours of study per week are generally not good predictors of performance in the accounting course.

Generally grade in mathematics, hours spend studying per week, place of study, study group, marital status and number of relatives staying with student had no significant association with student performance. That is, they are not helping the student to earn high grades.

Students need to take personal initiative to improve their mastery of English language. The research shows clearly that there is a correlation between English language and performance. To achieve these students must be encouraged to have a habit of reading newspapers, magazines, and books and through speaking the language.

The researcher recommends that faculty of business management should encourage their students to work hard and try to do well in the course by emphasizing that research shows that students who get high grades in the Main test will most likely get high grades in their overall performance.

References

- Bagamery, B. D., Lasik, J. J., & Nixon, D. R. (2005). Determinants of success on the ETs Business Major Field Exam for students in an undergraduate multisided regional university business program. *Journal of Education for Business*, 81 (1), pp. 55 – 63.
- Black, H. T., & Duhon, D. L. (2003). Evaluating and improving student achievement in business programs: the effective use of standardized assessment tests. *Journal of Education for Business*, 79(2):90-98.

- Brahmasrene, T., & Whitten, D. (2001). Assessing success on the uniform CPA exam: a logic approach. *Journal of Education for Business*, 77(1), pp. 45-50.
- Carpenter, V. L., Friar, S., & Lipe, M. G. (1993). Evidence on the performance of accounting students: race, gender and expectations. *Issues in Accounting Education*, 8(1), pp. 1-17.
- De Lange, P., Waldmann, E., & Wyatt, K. (1997). Personal characteristics and academic achievement of undergraduate accounting students studying through open learning. *Accounting Education*, 6(4), pp. 295-306.
- Doran, B. M., Bouillon, M. L., & Smith, C. G. (1991). Determinants of student performance in Accounting Principles I and II. *Issues in Accounting Education*, 6(1), pp. 74-84.
- Du Plessis, A., Müller, H., & Prinsloo, P. (2005). Determining the profile of the successful first-year accounting student. *South African Journal of Higher Education*, 19(4), pp. 684-698.
- Fig, J. (1999) Accounting Students' drought causes concern. *Internal Auditor*, Vol. 56. p.15.
- Fisher, Taylor (2000) Good Ethics is Good Business. *Chartered Accountant Journal of New Zealand*, Vol. 79, pp. 66 – 69.
- Frakes, A. H. (1977). Introductory accounting objectives and intermediate accounting performance. *The Accounting Review*, 52(1), pp. 200-210.
- Gammie, E., & Gammie, B. (1995). Women Chartered Accountants: progressing in the right direction? *Women in Management Review*, 10 (1), pp. 63-78.
- Gammie, E., Jones, P. L., & Robertson-Millar, C. (2003). Accountancy undergraduate performance: a statistical model. *Accounting Education*, 12(1), pp. 63-78.
- Gammie, E., Paver, B., Gammie, B., & Duncan, F. (2003). Gender differences in accounting education: an undergraduate exploration. *Accounting Education*, 12(2), pp. 177-196.
- Gist, W. E., Goedde, H., & Ward, B. H. (1996). The influence of mathematical skills and other factors on minority student performance in Principles of Accounting. *Issues in Accounting Education*, 11(1), pp. 49-60.
- Gul, F. A., & Fong, S. C. C. (1993). Predicting success for introductory accounting students: some further Hong Kong evidence. *Accounting Education*, 2(1), pp. 33-42.
- Jackling, B., & Anderson, A. (1998), "Study Mode, General Ability and Performance in Accounting: A Research Note", *Accounting Education: An International Journal*, vol. 1, pp. 33-42.
- Karim, R and Ibrahim, M (1992), The performance of male versus female accounting students. *Advances in International Accounting*, Vol.5 No. (7). pp. 255 – 262.
- Koh, M. Y., & Koh, H. C. (1999). The determinants of performance in an accountancy degree programme. *Accounting Education*, 8(1), pp. 13-29.
- Lipe, M.G. (1989). Further evidence on the performance of female versus male accounting students. *Issues in Accounting Education*, 4(1), pp. 144-152.
- Müller, H., Prinsloo, P., & Du Plessis, A. (2007). Validating the profile of a successful first year accounting student. *Meditari Accountancy Research*, 15(1), pp. 19-33.
- Mutchler, J. F., Turner, J. H., & Williams, D. D. (1987). The performance of female versus male accounting students. *Issues in Accounting Education*, 2(1), pp. 103-111.
- NBAA examiners' and performance report 72nd examination session–November (2010) (www.nbaa_tz.org)
- Nourayi, M. M., & Cherry, A. A. (1993). Accounting students' performance and personality types. *Journal of Education for Business*, 69(2):111-115.

- Parkinson, J. (2001). Explicit teaching of grammar and improvement in the grammar of student writing. *Journal for Language Teaching*, 35(4), pp. 278-293.
- Tyson, T. (1989). Grade performance in introductory accounting courses: why female students outperform males. *Issues in Accounting Education*, 4(1), pp. 153-160.
- Wong, D. S. N., & Chia, Y. (1996). English language, mathematics and first-year financial accounting performance: a research note. *Accounting Education*, 5(2), pp. 183-189.