

Do aptitude tests predict competencies required to excel academically in law school? An empirical investigation

Abstract

Prospective students of law are required to demonstrate competence in certain disciplines to attain admission to law school. The grounding in the disciplines is expected to demonstrate competencies required to excel academically in law school. This study investigates the relevance of law school admission test to predicting the competencies. The assessment is based on administrative records of 815 students admitted at Makerere University's law school on the basis of their performance in the test. Grades obtained in Advanced Level (A-Level) of secondary education subjects namely Literature, History, Divinity and Economics were adopted as a measure of competence in the disciplines. The outcome of the test was modeled by performance of enrollees in the subject, their characteristics (gender, nationality, entry scheme and academic qualifications at enrollment) and first year grade point average using a quantile regression. With the exception of enrollees' characteristics, no significant variations in the outcome of the test were noted in the results between students who did not do the subjects at A-Level and those who obtained grade A ($p > 0.05$). Similar findings in performance were noted between students who obtained grade A and those with other grades in the disciplines. These findings confirm that the outcome of the test does not predict academic ability of prospective students of law.

Keywords: Admission tests, law school, academic achievement.

INTRODUCTION

Prospective students of law are required to possess certain skills that would enable them excel academically in law school. The requirements for admission to law school in various academic and/or related institutions demonstrate this argument. For example, the requirements for admission to law school at the University of Texas (UTSA) stipulate that enrollees should demonstrate competence in four major areas: (i) communication – writing in English, critical proficiency in oral and graphical communication as well as ability to identify, formulate problems and draw conclusions; (ii) conceptual approaches and history of arts – ability to comprehend factual concepts and human creativity; (iii) political and economic dimensions of a society; and (iv) cultural diversity, including nature as well as limits of knowledge and academic fields (UTSA, 2013). The guidelines according to the Alabama State Bar, an association of lawyers in the United States of America (USA), do not show otherwise with regard to the competencies. Their emphasis is made to grounding of enrollees in analytical writing, English and Literature, Political science, Economics and Accounting, History, Philosophy, Logic, Scientific methods and Public speaking (Alabama State Bar, 2013). Literature elsewhere (e.g., John Hopkins University, 2013; Nalukenge, Wamala & Ocaya, 2014; University of Canterbury, 2013) affirm the relevance of these disciplines in demonstrating competencies required by prospective students of law. While the parenting hand book of John Hopkins University stipulates that competence in the disciplines namely Economics, History, Political thoughts and Mathematics provides a basis for knowledge in resolving disputes, Nalukenge et al.'s (2014) demonstrate that competence in History, Divinity and Literature predicts academic achievement in law school. However, the guidelines for admission at the University of Canterbury stipulate that enrollees with science, mathematics, music or art background can only succeed in law school if they possess good language and writing skills (University of Canterbury, 2013). Indeed

, a more recent study undertaken in Uganda documents that competence in Literature undertaken at A-Level of secondary education has been associated with high academic achievement in law school (Nalukenge et al., 2014).

Other than the academic achievement, these competencies provide insights into professional skills required for lawyer effectiveness. In citing Shultz and Zedeck (2003), Shultz and Zedeck (2011) present writing, speaking, analysis and reasoning, problem solving, ability to see the world through the eyes of others and fact-finding as some of the factors important for lawyer effectiveness. These aspects are to a great extent in-line with the competencies required by prospective students of law. Therefore, it would not be a surprise to conclude that grounding in the disciplines associated with the proficiencies of studying law demonstrates competencies required for lawyer effectiveness.

On one hand, the grounding for these competencies is assumed to be obtained from enrollees' prior studies (Nalukenge, Wamala & Ocaya, 2014; Wamala, 2013; UTSA, 2013). On the other hand, the relevance of prior studies in demonstrating competencies required by prospective students of law to excel academically is questioned (Emedot, 2011; Makerere University, 2011). It is from this background therefore that admission tests were introduced as a measure of assessing the aforementioned competencies among candidates to law school. Although a pooled index of the academic achievement of enrollees in their prior studies – usually Advanced Level (A-Level) of secondary education - is a requirement for undertaking the test, admission to law school is mainly determined by the outcome of the test. A questionable aspect however is whether the test predicts competencies required to excel academically in law school. This study provides an understanding of this issue using the disciplines identified with the aforementioned

competencies of studying law. Particularly, this study investigates whether the admission test predicts performance of enrollees in the disciplines undertaken in their prior studies.

Overview of law school admission tests

The idea of administering admission tests for consideration to law school goes way back to the early 2000s in the United Kingdom (UK) with the introduction of The National Admissions Test for Law (LNAT). The LNAT, developed in 2004, is viewed by many academic and related institutions as an essential part of admission to a Bachelors' of law (LNAT Consortium, 2010). The main objective of the test is to assess verbal reasoning skills of prospective students of law rather than their educational or academic ability. Verbal reasoning skills comprise aspects namely, comprehension, interpretation, analysis, synthesis, induction and deduction. However, to provide a more accurate and rounded impression of a candidate's abilities, the admission guideline according to LNAT consortium stipulate that the outcome of the test should be considered alongside standard methods of selecting students for consideration to undergraduate programs. Methods of selection comprise, however are not limited to, advanced level (A-Level) of secondary education results, university applications and admission interviews. Contrary to other academic endeavors, the admission test cannot be revised although prospective students of law could benefit from familiarizing themselves with the format of the test.

Similar to the LNAT, The Law School Admission Test (LSAT) is an admission test given to prospective students of law in the United States, Canada, China, Armenia, Hungary, India and Australia (Law School Admission Council, 2013). The objective of administering the test is to "provide some check upon the validity of enrollees' attainment in prior studies and to furnish a common denominator of educative promise" (Law School Admission Council, 2001, p.1). Specifically, the test is intended to assess competence in four major areas: (i) logical reasoning –

candidate's ability to dissect and analyze arguments; (ii) reading comprehension – relates to law, arts and humanities, physical sciences and/or social sciences; (iii) analytical reading – ability to analyze a range of possibilities embedded in a set of rules; and (iv) writing sample - requires the candidates to write an essay favoring one of the two options that require a decision to be made. The content and scoring of the LSAT and LNAT is ideally similar although the structuring of the tests may differ. Although the use of standardized tests goes way back to the mid 1920s, the LSAT - a collective measure for determining the competence of candidates to law school in the USA- was first administered in 1948 (Law School Admission Council, 2001). Similar to the requirements for admission in the UK, the outcome of the LSAT is assessed alongside prior academic achievement of enrollees – usually undergraduate GPA - for consideration to law school. In affirming to the relevance of enrollees' academic achievement in prior studies, the Law School Admission Council (LSAC) in the USA writes: "all those who discussed these tests in print, however, acknowledged that they were not and neither could nor should, be the sole criteria by which admissions decisions were made" (Law School Admission Council, 2001, p.2). Further, the LSAC cites Henry Witham of the University of Tennessee in the argument of poor performance of law school students who do poorly on the test. Witham affirms that the predictive value of the test should be assessed alongside a candidate's desire and ability to work. Applicants' under ability to work is explained, according to LSAC by: "health and prior education, work outside of law school such as newspaper work, college annual, college sports, social activities, and any number of outside distractions which might claim the student's time and thought. A student has ability to work in direct proportion to perfect health and prior education and in inverse proportion to his interest in outside distractions" (Law School Admission Council, 2001, p.2).

In Uganda, an admission tests to a Bachelors of Laws (LLB) was introduced in 2009 at Uganda Christian University with the goal of improving the quality of students admitted to law school (Emedot, 2011). Two years later, Makerere University, one of the oldest and most prestigious institutions of higher learning in Africa, introduced the test for consideration to law school (Makerere University, 2011). This was as a result of poor academic performance in law school despite the impressive grades obtained by enrollees in prior studies i.e., A-Level of secondary education. The poor performance in law school was mainly attributed to shortfalls in the areas of comprehension, communication, analysis and knowledge in legal principles (Makerere University, 2012, p.1). In light of these shortfalls, it is not surprising therefore that the University considered the option of introducing the test for consideration to law school. The questionable aspect however is relying heavily on the outcome of the test as a measure of determining competence of candidates for consideration to law school. Particularly, the aspect of relying solely on grades obtained in the test to determine admissions on government sponsorship (Makerere University, 2012, p.5) undermines the relevance prior studies in predicting competencies required to excel academically in law school.

In a review of literature, Shultz and Zedeck (2011) argue that a combination of LSAT and Undergraduate Grade Point Average (UGPA) has statistical support with regard to predicting first-year academic achievement of enrollees in law school (Anthony, Harris & Pashley 1999; Dalessandro, Stilwell, & Reese 2005; Powers, 1982; Evans, 1984; Schrader 1977; Norton, Suto, & Reese, 2006; Wightman 1993). The fact that Stilwell, Dalessandro and Reese (2003) arrive at the same conclusion using a two-year period suggests that a combination of the test and attainment in prior studies would reliably predict the academic achievement of law school graduates. In other words, it would not be surprising that the outcome of an admission test alone

would not predict the academic achievement of law school graduates since the structure of the test is different from that of eventual law school examinations. Thus, Shultz and Zedeck's (2011) argument of a likely relationship between academic achievement and outcome of the admission test when assessed on criteria similar to that of the test would have substantial support. Nevertheless, establishing the true state of affairs regarding these arguments can only be achieved through research in the subject area.

DATA AND METHODS

Data source

The investigations were based on administrative records of 815 LLB enrollees of Makerere University's School of Law in the 2012 and 2013 cohorts. The students were admitted to law school on the basis of their performance in the admission test. The data pertaining to the students were obtained from the Academic Registrar Information System (ARIS). The ARIS is a sub-system of Integrated Tertiary System (ITS), an information system used by the University at the time of the study. Data on the outcome of the test were obtained from administrative records of the students available with the University's academic registrar.

Variables and measurements

The academic achievement was assessed using the Cumulative Grade Point Average obtained by the enrollees in the first year of study (FYGPA) in law school. Performance in prior studies was assessed by the grades obtained in selected subjects undertaken at the A-Level of secondary education. The subjects are literature, history, divinity, economics, and geography. These subjects predict to the academic achievement of students in law school (Nalukenge et al., 2014). The characteristics of students considered in the assessment were Nationality, gender, entry scheme and prior academic qualifications at enrollment.

Data analysis

The analysis was undertaken at three stages: First, a descriptive summary of enrollees' performance in the admission test and FYGPA was assessed using summary statistics. Further, a descriptive summary of enrollees' characteristics was made using frequency distributions. Second, association between performance in the admission test and characteristics of enrollees was established using the Analysis of Variance (ANOVA) test. Third, predictors of enrollees' performance in the admission test were investigated using two models. In the first model (Model I), performance in the admission test was made by enrollees' characteristics and attainment in selected A-Level subjects done at A-Level of secondary education. In model II, performance in the test was made by enrollees' characteristics, performance in selected A-Level subjects and FYGPA. The analysis in Model II was made using data relating to enrollees in the 2012 cohort. The analysis in Model II was however made using the 2012 enrollment cohort since complete results of academic achievement in their first year of bachelor's study in law school were available.

The analysis in both models was undertaken using robust regression. The choice of the robust regression, adopted at the third stage of the analysis, was based on the fact that the Ordinary Least Squares (OLS), in a Multiple Linear Regression (MLR), was not appropriate because of the violation of its fundamental assumptions i.e. outliers, non-normality, influential points, and/or missing data, among others (Ho & Naugher, 2000). However, the robust regression is able to cope with or detect outlying observations in the direction of both the dependent and explanatory variables (Berk, 1990; Birkes & Dodge, 1993; Alma, 2011). In particular, the Quantile or median regression was applied in both models. The functional format of FYGPA – a

continuous variable – was determined in the analysis using Multivariable Fractional Polynomials (MFP). The computational formula for the analysis in both models is:

$$Y_i = \beta_0 + \beta_1 X_i + \beta_2 X_i + .. + \beta_k X_k + \varepsilon_i$$

Where Y_i is the performance (score) in the admission test; i represents students, X_i and β_i are the independent variables (student's characteristics and FYGPA) and their corresponding coefficients respectively; β_0 is the constant while ε_i denotes error terms. The subsequent sections present results based on the aforementioned analysis plan.

RESULTS

The results of the study are arranged according to four major themes: student's characteristics, academic achievement, attainment in selected subjects undertaken at A-Level of secondary education and outcome of the admission test. The predictors of attainment in the test were investigated using the rest of the variables. The subsequent sections present results based on these themes; a summary of the results is made subsequently.

Characteristics of Students

Table 1 presents descriptive summary of enrollees by their characteristics of gender, year of enrollment, nationality, entry scheme and academic qualification at enrollment.

Table 1: Descriptive summary of students' characteristics

| Students' characteristics | | N | Percentage (%) |
|---|-------------------|------------|-----------------------|
| Gender | | | |
| | Female | 253 | 31.0 |
| | Male | 562 | 69.0 |
| | Total | 815 | 100.0 |
| Enrollment cohort | | | |
| | 2012 | 461 | 56.6 |
| | 2013 | 354 | 43.4 |
| | Total | 815 | 100.0 |
| Nationality | | | |
| | Non-Ugandan | 17 | 2.1 |
| | Ugandan | 798 | 97.9 |
| | Total | 815 | 100.0 |
| Entry scheme | | | |
| | Government | 156 | 19.1 |
| | Private (Day) | 511 | 62.7 |
| | Private (Evening) | 148 | 18.2 |
| | Total | 815 | 100.0 |
| Prior qualification ^a | | | |
| | A-Level | 612 | 75.1 |
| | Bachelors' degree | 102 | 12.5 |
| | Others | 101 | 12.4 |
| | Total | 815 | 100.0 |

^a Academic qualifications at enrollment

The students assessed are characterized as predominantly Ugandan by nationality (97.9%), male (69.0%) and enrolled on private entry scheme (80.9%); slightly over five-in-every nine (56.6%) were enrollees in the 2012 cohort. With regard to academic qualifications at enrollment, about three-in-every four (75.1%) were graduates of A-Level; 12.5% were bachelors' degree holders while the rest were either diploma holders in Law, other diploma holders with at-least a Second Class award or mature age entrants following an examination conducted by the University's Institute of Adult and continuing Education.

Academic achievement

Table 2 presents summary statistics regarding the academic achievement of the students based on the first year GPA (FYGPA). As earlier indicated, assessment is made for only enrollees in the 2012 cohort.

Table2: Descriptive summary of students' FYGPA

| Enrollment cohort | N | Mean (95% CI) ^a | Min. | Max |
|-------------------|-----|----------------------------|------|------|
| 2012 | 379 | 2.65(2.59 - 2.69) | 0.60 | 3.90 |

Note. A variation in totals is due to incomplete records or data

^a 95% Confidence Interval of FYGPA

The mean first-year grade point average of enrollees was 2.65. This figure implies a “Lower Second” class of degree obtained by a considerable number of students in law school.

Performance in the test and prior studies

Tables 3 and 4 present summary statistics on attainment in the admission test and selected subjects undertaken by the enrollees in their A-Level of secondary education.

Table 3: Descriptive summary of students' attainment in the admission test

| Enrollment cohort | N | Mean (95% CI) | Min | Max |
|-------------------|-----|-------------------|-----|-----|
| 2012 | 446 | 59.2(58.6 - 59.8) | 50 | 83 |
| 2013 | 348 | 67.1(66.4 - 67.8) | 50 | 89 |

Note. Variations in totals was due to missing data

^a 95% Confidence Interval of the mean

Table 4: Attainment in selected subjects done at A-Level of secondary education

| A-Level subjects | N | Percentage (%) |
|-------------------|------------|----------------|
| Literature | | |
| N/A ^a | 504 | 61.8 |
| A | 99 | 12.2 |
| B | 140 | 17.2 |
| C | 63 | 7.7 |
| D+ | 9 | 1.1 |
| Total | 815 | 100.0 |
| Divinity | | |
| N/A | 378 | 46.4 |
| A | 130 | 16.0 |
| B | 158 | 19.4 |

| | | | |
|------------------|--------------|------------|--------------|
| | C | 99 | 12.2 |
| | D+ | 50 | 6.1 |
| | Total | 815 | 100.0 |
| Economics | | | |
| | N/A | 230 | 28.2 |
| | A | 77 | 9.5 |
| | B | 148 | 18.2 |
| | C | 172 | 21.1 |
| | D+ | 188 | 23.1 |
| | Total | 815 | 100.0 |
| Geography | | | |
| | N/A | 610 | 74.9 |
| | A | 51 | 6.3 |
| | B | 73 | 9.0 |
| | C | 59 | 7.2 |
| | D+ | 22 | 2.7 |
| | Total | 815 | 100.0 |
| History | | | |
| | N/A | 238 | 29.2 |
| | A | 112 | 13.7 |
| | B | 333 | 40.9 |
| | C | 112 | 13.7 |
| | D+ | 20 | 2.5 |
| | Total | 815 | 100.0 |

Note. N/A denotes student who did not do a subject at A-Level

The mean scores in the tests for enrollees in 2012 and 2013 cohorts were 59.2 and 67.1, respectively. Further, results in Table 3 show a significantly higher performance of enrollees in the 2012 cohort when compared to those in 2013. With regards to attainment in secondary education in Table 4, the main A-level subjects undertaken by enrollees were Economics, History and Divinity. The subjects were undertaken by 71.8%, 70.8% and 53.6% of the enrollees, respectively. In other words, majority of the enrollees did not do Literature (61.8%), and Geography (74.9%). The highest proportions of students who took the subjects at A-Level obtained grade B, followed by those with grade A.

Differentials in outcome of the test

Tables 5 and 6 present differentials in the outcome of the admission test by students' characteristics and performance in the subjects done at A-Level of secondary education, respectively. A summary of the results is made subsequently.

Table 5: Differentials in outcome of the test by students' characteristics

| Students' characteristics | | Mean | F | p-value |
|----------------------------------|-------------------|-------|--------|---------|
| Gender | | | | |
| | Female | 61.58 | 7.38 | 0.0067 |
| | Male | 63.15 | | |
| Enrollment cohort | | | | |
| | 2012 | 59.18 | 293.46 | 0.0000 |
| | 2013 | 67.11 | | |
| Nationality | | | | |
| | Non-Ugandan | 55.31 | 15.66 | 0.0001 |
| | Ugandan | 62.81 | | |
| Entry scheme | | | | |
| | Government | 69.80 | 131.56 | 0.0000 |
| | Private (Day) | 63.89 | | |
| | Private (Evening) | 60.11 | | |
| Prior qualification ^a | | | | |
| | A-Level | 62.71 | 11.39 | 0.0000 |
| | Bachelors' degree | 64.88 | | |
| | Others | 59.68 | | |

Note. Analysis is made on all enrollees in the 2012 and 2013 cohorts using ANOVA test

^a Academic qualification at enrollment

Table 6: Differentials in outcome of the test by selected subjects done at A-Level

| A-Level subjects | | Mean | F | p-value |
|------------------|------------------|-------|-------|---------|
| Literature | N/A ^a | 62.02 | 6.05 | 0.0001 |
| | A | 65.16 | | |
| | B | 63.84 | | |
| | C | 61.82 | | |
| | D+ | 56.88 | | |
| | Divinity | N/A | | |
| A | | 61.10 | | |
| B | | 61.96 | | |
| C | | 63.46 | | |
| D+ | | 64.73 | | |
| Economics | | N/A | 62.35 | 1.69 |
| | A | 64.46 | | |
| | B | 62.99 | | |
| | C | 61.89 | | |
| | D+ | 62.71 | | |
| | Geography | N/A | 62.70 | |
| A | | 64.46 | | |
| B | | 63.80 | | |
| C | | 59.94 | | |
| D+ | | 61.00 | | |
| History | | N/A | 62.94 | 9.18 |
| | A | 66.31 | | |
| | B | 61.87 | | |
| | C | 61.17 | | |
| | D+ | 60.60 | | |

Note. Analysis is made on all enrollees in the 2012 and 2013 cohorts using ANOVA test

^a Denotes student who did not take a subject at A-Level

In the results according to Table 5, significant variations in outcome of admission test were noted by all the students' characteristics ($p < 0.05$). With the exception of economics, significant variations were noted in the outcome of the test by attainment of students in Literature, Divinity, Geography and History ($p < 0.05$). However, an assessment of the mean scores for the various disciplines shows no particular logical order in performance between students who did the

subjects at A-Level and those who did not. Nevertheless, the significant variations in the results point to the need for further analysis to establish the net-impact of the variables using the aforementioned multivariable tool.

Predictors of performance in the admission test

The outcome of the admission test was modeled at the first stage using the MLR. The diagnostic assessment of the results in Models I and II yielded the following results when the MLR was applied:

In Mode I

- a) The homoscedasticity assumption, assessed using the Cook-Weisberg test ($\chi^2 = 34.2, p = 0.000$), was not supported ($p < 0.05$). In other words, a significant result ($p < 0.05$) indicated presence of unequal variance of the residuals along the predicted line i.e. heteroskedasticity.
- b) The normality assumption of residuals, investigated using the Smirnov-Kolmogorov test, was not supported ($p < 0.05$).
- c) In an assessment of the existence of outliers and/or influential points, conducted using standardized residuals, few values were found to be in excess of 3.5 or -3.5 (absolute values of the residuals were less than 3.5); thus, confirming the existence of outliers and/or influential cases.

In Mode II

- a) The homoscedasticity assumption, assessed using the Cook-Weisberg test ($\chi^2 = 177.6, p = 0.000$), was not supported ($p < 0.05$). In other words, a

significant result ($p < 0.05$) indicated presence of unequal variance of the residuals along the predicted line i.e. heteroskedasticity.

- b) The normality assumption of residuals, investigated using the Smirnov-Kolmogorov test, was not supported ($p < 0.05$).
- c) In an assessment of the existence of outliers and/or influential points, conducted using standardized residuals, five values were found to be in excess of 3.5 or -3.5 (absolute values of the residuals were less than 3.5). The influence of these values was considered negligible to confirming the existence of outliers and/or influential cases.

In light of violations of the assumptions of MLR, the outcome of the test was modeled using the quantile or median regression. Worth noting is that the estimates made using the quantile regression are more robust against such violations in the response measurement (Wei, Pere, Koenker & He, 2006; Angrist & Pischke, 2009). Table 7 presents an analysis of the outcome of the examination by the independent variables.

Table 7: Regression estimates of performance in the admission test

| Independent variables | Model I ^a | | | Model II ^b | | |
|----------------------------|----------------------|----------|---------|-----------------------|----------|---------|
| | Coef. | Std. Err | p-value | Coef. | Std. Err | p-value |
| Gender | | | | | | |
| Male [†] | 0.00 | . | . | 0.00 | . | . |
| Female | -1.09 | 0.204 | 0.000 | -1.24 | 0.666 | 0.062 |
| Enrollment cohort | | | | | | |
| 2012 [†] | 0.00 | . | . | . | . | . |
| 2013 | 7.72 | 0.206 | 0.000 | . | . | . |
| Nationality | | | | | | |
| Non Ugandans [†] | 0.00 | . | . | 0.00 | . | . |
| Ugandans | 5.18 | 0.963 | 0.000 | 2.28 | 2.667 | 0.291 |
| Entry Scheme | | | | | | |
| Government [†] | 0.00 | . | . | 0.00 | . | . |
| Private -evening | -10.00 | 0.244 | 0.000 | -10.36 | 0.859 | 0.000 |
| Private-day | -5.27 | 0.294 | 0.000 | -4.59 | 1.044 | 0.000 |
| Prior qualification | | | | | | |
| A-Level | 0.00 | . | . | 0.00 | . | . |
| Bachelors' degree | 3.36 | 0.835 | 0.000 | -1.03 | 2.040 | 0.612 |
| Others | -3.90 | 0.840 | 0.000 | -5.49 | 2.035 | 0.007 |
| Literature | | | | | | |
| A [†] | 0.00 | . | . | 0.00 | . | . |
| B | -0.18 | 0.482 | 0.585 | -0.24 | 1.129 | 0.826 |
| C | 0.54 | 0.607 | 0.197 | 0.40 | 1.331 | 0.760 |
| D++ | -0.72 | 1.243 | 0.401 | -1.63 | 2.246 | 0.467 |
| N/A ^c | -0.27 | 0.499 | 0.431 | -0.54 | 1.225 | 0.657 |
| Divinity | | | | | | |
| A [†] | 0.00 | . | . | 0.00 | . | . |
| B | 0.09 | 0.308 | 0.768 | 0.39 | 0.873 | 0.649 |
| C | -0.36 | 0.365 | 0.321 | -0.11 | 1.188 | 0.920 |
| D++ | 0.18 | 0.450 | 0.687 | 0.24 | 2.121 | 0.909 |
| N/A | 0.90 | 0.329 | 0.006 | 0.54 | 0.997 | 0.582 |
| Economics | | | | | | |
| A [†] | 0.00 | . | . | 0.00 | . | . |
| B | -1.45 | 0.353 | 0.000 | -2.11 | 1.144 | 0.066 |
| C | -1.36 | 0.354 | 0.000 | -2.01 | 1.171 | 0.086 |
| D++ | -1.27 | 0.368 | 0.001 | -1.91 | 1.258 | 0.130 |
| N/A | -1.18 | 0.690 | 0.088 | -2.76 | 2.281 | 0.226 |
| Geography | | | | | | |
| A [†] | 0.00 | . | . | 0.00 | . | . |
| B | 0.18 | 0.462 | 0.694 | 0.95 | 1.769 | 0.589 |
| C | 0.18 | 0.500 | 0.717 | 0.78 | 1.812 | 0.666 |
| D++ | 0.27 | 0.642 | 0.671 | 1.42 | 2.159 | 0.510 |
| N/A | 1.09 | 0.418 | 0.009 | 0.75 | 1.616 | 0.640 |

| | | | | | | |
|-----------------|----------------|-------|-------|-------|-------|-------|
| History | | | | | | |
| | A [†] | 0.00 | . | . | 0.00 | . |
| | B | -0.54 | 0.287 | 0.058 | -1.65 | 1.284 |
| | C | -1.09 | 0.362 | 0.003 | -2.05 | 1.415 |
| | D++ | 1.00 | 0.630 | 0.113 | 0.49 | 1.962 |
| | N/A | -0.63 | 0.600 | 0.290 | 3.50 | 2.649 |
| FYGPA | | . | . | . | 0.70 | 0.522 |
| Constant | | 61.90 | 0.919 | 0.000 | 66.15 | 3.000 |

Note. Analysis is based on quantile (median) regression

[†]Reference categories adopted

^aPseudo R² = 0.4479, Minimum sum of deviations = 2643.4 and raw sum of deviations = 4788

^bPseudo R² = 0.3771, Minimum sum of deviations = 1157.3 and raw sum of deviations = 1858

^cDenotes students who did not do the subject at A-Level

Results in Model I show significant variations in outcome of the admission test by student's characteristics as well as performance in Economics, History, Geography and Divinity. The findings are summarized as follows:

- Males obtained higher scores in the test compared to the females ($p < 0.01$).
- Enrollees in the 2013 cohort obtained higher scores in the test compared to their counterparts in 2012 ($p < 0.01$).
- Ugandan nationals obtained higher scores in the test compared to the non-Ugandans ($p < 0.01$).
- Privately sponsored day and evening students obtained lower scores in the test compared to their counterparts on government entry scheme ($p < 0.01$).
- The outcome of the test was higher among bachelor's degree holders at enrollment compared to those with A-level of secondary education ($p < 0.01$). Those admitted with other academic qualifications had low scores in the test compared to those with A-Level ($p < 0.01$).
- Enrollees who did not do Literature at A-Level obtained higher grades in the test compared to those who obtained grade A in the subject ($p < 0.05$). No significant

variations in performance were noted for enrollees with the rest of the grades attained in the subject compared to those with grade A.

- Enrollees who did not do Geography in A-Level had higher grades in the test compared to those who obtained grade A in the subject ($p < 0.05$). No significant variations in performance were noted for enrollees with the rest of the grades attained in the subject.
- Enrollees who obtained grade C in history obtained lower score in test compared to those who obtained grade A in the subject ($p < 0.01$). No significant variations in performance were noted for enrollees with the rest of the grades attained in the subject.
- Enrollees who obtained grades A in Economics at A-Level had higher score in the test when compared to those with the rest of the grades in the subject ($p < 0.01$).

Results according to Model II show significant variations in the outcome of the test by entry scheme ($p < 0.01$) and academic qualifications at enrollment ($p < 0.05$). The findings are summarized as follows:

- Privately sponsored day and evening students obtained lower scores in the test compared to those admitted on government entry scheme ($p < 0.01$).
- Students admitted on the basis of other qualifications had lower scores in the test compared to enrollees with A-Level of secondary education. No significant variations in the outcome of the test were noted between enrollees admitted on the basis of bachelor's degree and those with A-Level.

Overall, no significant variations in the outcome of the test were noted between students who obtained grade A and those who did not do the subjects at their A-Level of secondary education ($p > 0.05$). Further, the outcome of the test did not vary significantly by enrollees' attainment in the first year of study in law school ($p > 0.05$).

DISCUSSION

Overall, competence in the disciplines is not required by prospective students of law to excel in the aptitude test. This is demonstrated in the results by the non-significant variations in the outcome of the test between enrollees who did not do the subjects at A-Level of secondary education and those who obtained grade A. Further, non-significant variations in the outcome of the test were noted between students who obtained grade A and other grades in the disciplines investigated. These findings support the argument that admission tests are intended to assess mental rather than educational or academic ability of prospective students of law (LNAT Consortium, 2010; Law School Admission Council, 2013; 2001). In citing Henry Witham of the University of Tennessee regarding the tests, the LSAC writes: “the tests discover inherent mental ability (as applied to law), but do not show the will to work nor the capacity for work” (Law School Admission Council, 2001, p.2). On the contrary, Witham’s argument of poor performance of students who do poorly on the aptitude test does not have statistical support since attainment in the test was not significantly associated in the results with grades obtained in the A-Level disciplines. Nevertheless, idea of enhancing the predictive value of the test by combining it with applicants’ ability to work, demonstrated by their academic achievement in prior studies (Law School Admission Council, 2013; 2001), is highly supported.

Although the requirements for admission to law school in various academic and/or related institutions underscore the importance of enrollees’ grounding in Literature (e.g., Alabama State Bar, 2013; Nalukenge et al., 2014; University of Canterbury, 2013), the findings in this study were otherwise. The outcome of the test was not associated in the results with grades obtained in the discipline at A-Level. This evidence implies that the outcome of the test is limited in providing competencies in the area of analytical writing in English, critical proficiency in oral

communication as well as ability to identify, formulate problems and draw conclusions. Basing on the FYGPA of enrollees who were admitted to law school at the University on the basis of their attainment at A-Level (Nalukenge et al., 2014), it should not be a surprise that the performance of the students enrolled in law school using the admission test - in this study - is significantly lower. This is because the admission test is meant to assess inherent mental or reasoning skills rather than competencies required to excel academically in law school (LNAT Consortium, 2010; Shultz and Zedeck, 2011). As a matter of fact, the highest proportion of the students admitted on the basis of the admission test obtained grade B in the A-Level disciplines. Certainly, the academic ability of these students does not compare favorably to that of their counterparts admitted on the basis of their impressive grades in the disciplines (Nalukenge et al., 2014). Thus, poor performance in law school should not come as a surprise when admission is based mainly on the outcome of the test.

In addition to the impact on the academic achievement, a shift in admission requirements - from enrollees' attainment in prior studies to the outcome of admission tests – brings about variations in characteristics of students admitted to law school. With regards to the gender distribution, majority of the enrollees admitted on the basis of the admission test - in this study - were males. This is contrary to the gender distribution of law enrollees at the University who were admitted on the basis of their attainment in A-Level of secondary education (Nalukenge et al., 2014; Wamala, 2013). As earlier indicated, the highest proportion of students admitted on the basis of their attainment in A-Level obtained grade A in the subjects. On the contrary, the highest proportion of students enrolled on the basis of the admission test – in this study - obtained Grade B in the subjects. Thus, it is highly probable that the argument of variations in the characteristics

of students admitted to law school and their attainment in prior studies will hold across institutions when admission requirements are revised accordingly.

In conclusion, the outcome of the admission test does not predict competencies required by enrollees to excel academically in law school. Thus, to obtain the most academically competent candidates for consideration to law school, the outcome of the test should be assessed alongside the academic achievement of enrollees in their prior studies. In particular, emphasis should be made on performance of enrollees in the disciplines identified with proficiencies of undertaking law rather than a pooled index of grades obtained in A-Level of secondary education. However, this argument may not be applied to candidates in countries where a bachelor's degree is a requirement for admission to law school. Nevertheless, the idea of assessing the outcome of admission tests alongside the academic achievement of enrollees in prior studies holds irrespective of whether or not a bachelor's degree is a requirement for admission to law school.

REFERENCES

- Alabama State Bar (2013). Law as a career: What you should know before applying to law school. Retrieved July 2013 from <http://www.alabar.org/brochures/Law-as-aCareer-before.pdf>
- Angrist, J.D., & Pischke, J. (2009). *Quantile Regression. Mostly Harmless Econometrics: An Empiricist's Companion*. Princeton University Press. ISBN 978-0-691-12034-8
- Anthony, L.C., Harris, V.F., & Pashley, P.J. (1999). *Predictive Validity of the LSAT: A National Summary of the 1995–1996 Correlation Studies*. Newtown, PA: Law School Admission Council.

- Berk, R. A. (1990). *A Primer on Robust Regression*. In J. Fox & J. S. Long (Editors), *Modern Methods of Data Analysis* (pp. 292-323). Newbury Park, CA: Sage Publications, Inc.
- Birkes, D. & Dodge, Y. (1993). *Alternative Methods of Regression*. New York, NY: John Wiley & Sons, Inc.
- Diamond-Dalessandro, S., Stilwell, L.A., Reese, L.M., & Council, L.S.A. (2005). *LSAT performance with regional, gender, and racial/ethnic breakdowns: 1997-1998 through 2003-2004 testing years*. Law School Admission Council.
- Emedot, J. (2011). Over 300 sit Law pre-entry interviews. *The Standard*. Retrieved from <http://www.ucu.ac.ug/thestandard/news/1-latest-news/1122-over-300-sit-law-pre-entry-interviews.html>
- Evans, F. R. (1984). *Recent Trends in Law School Validity Studies*. Newtown, PA: Law School Admission Services.
- Ho, K. & Naugher, J. (2000). Outliers Lie: An Illustrative Example of Identifying Outliers and Applying Robust Models. *Multiple Linear Regression Viewpoints*, 26(2), 2-6.
- John Hopkins University (2013). *Parents Advising Handbook*. How to be a successful Law School Applicant. Retrieved July 2013 from <http://web.jhu.edu/parentsadvisinghandbook/prepro/law/success>
- Law School Admission Council (2001). A History of the Law School Admission Council and the LSAT. Retrieved from <http://www.lsac.org/docs/default-source/publications-%28lsac-resources%29/history-lsac-lsat.pdf>
- Law School Admission Council (2013). Law School Links. Retrieved January 2013 from <http://www.lsac.org/jd/choosing-a-law-school/law-school-links>

- LNAT Consortium (2010). About the Test. National Admissions Test for Law (LNAT). Retrieved January 2014 from <http://www.lnat.ac.uk/lnat-exam.aspx>
- Makerere University (2011). Pre-Entry Exams for LL.B Entrants introduced by the School of Law. Press Release. Retrieved January 10 2013 from <http://vc.mak.ac.ug/pressrelease/2011/10/Pre-EntryExamsforLL.BEntrants.pdf>
- Makerere University (March, 2012). Introduction of Pre-Entry Examination to the Bachelor of Laws [Letter to Minister of Education and Sports].
- Nalukenge, B., Wamala, R., & Ocaya, B. (2014). Proficiencies of studying law and academic achievement: Relevance of prior studies. *Quality assurance in education*,
- Norton, L.L., Deborah, A.S., & Lynda, M.R. (2006). *Analysis of differential prediction of law school performance by racial/ethnic subgroups*: based on 2002-2004 entering law school classes. Newtown, PA: Law School Admission Council.
- Powers, D.E. (1982). Long-Term Predictive and Construct Validity of Two Traditional Predictors of Law School Performance. *Journal of Educational Psychology*, 74, 568–76.
- Schrader, W. B. (1977). *Summary of Law School Validity Studies, 1948–1975*. Princeton, NJ: Law School Admission Council.
- Shultz, M., M., & Zedeck, S. (2011). Predicting Lawyer Effectiveness: Broadening the Basis for Law School Admission Decisions. *Law and Social Inquiry*, 36(3), 620-660.
- University of Melbourne (2013). About the LSAT. Retrieved January 2013 from <http://www.law.unimelb.edu.au/jd/future-students/how-to-apply/about-the-lsat>
- UTSA (2012). *Undergraduate Catalog 2012-2014*. The University of Texas at San Antonio (UTSA). Retrieved July 2013 from http://utsa.edu/ucat/UTSA_2012-14_Catalog.pdf

- Wamala, R. (2013). Relevance of Prior Academic Qualifications To Predicting The Academic Achievement Of Undergraduate Students: An Analysis Of Law Enrollees At Makerere University. *Journal of College Teaching and Learning*, 10(2), 143-152
- Wei, Y., Pere, A., Koenker, R., He, X. (2006). Quantile Regression Methods for Reference Growth Charts. *Statistics in Medicine* **25** (8): 1369–1382. doi:10.1002/sim.2271.
- Wightman, L. F. (1993). *Predictive Validity of the LSAT: A National Summary of the 1990–1992 Correlation Studies*. Newtown, PA: Law School Admission Services.