

An Analysis of the Relationship between Advanced Level Z-Score and Academic Performance of Graduates of the Faculty of Agriculture, University of Ruhuna

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Abstract

Scientific analyses on the factors that influence the undergraduates' academic performance are essential in revising curricula and assessment strategies. The objective of this study was to determine the relationship between University entrance Advanced Level (A/L) Z-score and undergraduates' academic performance indicators including semester grade point average (SGPA) and overall grade point average (OGPA). Z-score, SGPA and OGPA of 402 Agricultural Resource Management and Technology (AT), 136 Agribusiness Management (AB) and 123 Green Technology (GT) graduates of the Faculty of Agriculture, University of Ruhuna (FAUR), who completed their programmes in 2016, 2017 and 2018 were considered for the study. Pearson correlation was used to determine the relationships between Z-score with SGPA and OGPA. The Mean Z-score of the students enrolled at FAUR was 0.9418 and ranged from -0.6458 to 1.5444. Female students had significantly higher Z-score than males. Z-scores of the students of AT, AB and GT were not significantly different. The dropout rate was 6.5%. Dropouts had lower Z-scores at entry and SGPA levels in the exams they sat than those who completed. GT graduates reported a significantly higher OGPA than AT graduates. AB students' OGPA value was not significantly different from those of other two programmes. Female students of all three programs reported higher OGPA value than male students. Those who passed the English Level I examination and who submitted the thesis of the final year research on time had secured higher OGPA than those who had not. The percentages of AT, AB and GT graduates with a class were 50.7%, 69% and 83.5%, respectively. All the first class holders and 77% of the second upper class holders were female. Compared to 34% among males, 75% of the female students had completed the programme with a class. Z score had stronger relationships with the SGPA of 5th (R=0.962), 4th (R=0.954) and 3rd (0.918) semesters. Significant, but weak relationships between Z score and OGPA were reported for AT (R=0.32), AB (R=0.32) and GT programmes (R=0.42). OGPA gave its strongest relationship with first semester GPA (R=0.59; p=000). Z-score is concluded to be a weak predictor of the final performance. Academically, females outperformed male. Need of more effective orientation programmes and, considerations on the high degree of variation in entry-level academic background in revising the curricula and selecting teaching and assessment strategies of the FAUR is highlighted.

Keywords: Academic, OGPA, Performance, Undergraduates, Z-Score

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