Interaction Effect Between Gender and Year of Study on Adversity Quotient (AQ) For Engineering Students in Polytechnics (SCOPUS)

ABSTRACT

The article reveals whether the Adversity Quotient (AQ) among mechanical engineering students in polytechnics was influenced by their gender and year of study. The study involved 383 respondents of Mechanical Engineering students in five polytechnics according to zone (West, North, East, South, and Borneo) using the clustered multistage stratified proportional sampling. Two-way ANOVA is used to investigate whether there is an interaction between gender and year of study on Adversity Quotient (AQ) amongst mechanical engineering students. IKBAR instrument with 66 items was used with four constructs of CORE model namely, Control, Ownership, Reach and Endurance. The findings confirmed that there was a statistically significant interaction between the effects of gender and year of study on AQ, $F(2, 377) = 4.570$, $p = .011$. There was no statistically significant difference in logit mean of AQ between males and females ($p = .277$), and there were no statistically significant differences of AQ between year of study ($p = .196$). Adjusted R Squared reported that 2.7 percent of the variance in AQ is attributable to gender and year of study. Post Hoc Multiple Comparisons found that there is no statistically significant difference of AQ between all three different years of study ($p > .005$). The analysis revealed that AQ level of female students is increasing according to the year of study, but is different for the male AQ level which decreases by year of study. Further studies are proposed to expand this study through interactions of other variables towards AQ with different setting and perspectives of study.