



Statistical model of weight outcome among college students'

Maxwell Seyram Kumah

St. Teresa's College of Education, Ghana

Abstract:

The issue of weight outcome is a common problem across all ages in the world, regardless of being a male or female. According to Laguatra (2004) its cause is more associated with insufficient physical activities due to technological addicts and improper eating habits. However, this study sought to find out whether the predictors by authorities are in existent among college students in this part of the country. A cross sectional survey came out with a cohort study on 308 subjects were predictors like gender, age, eating habits and physical exercise were tested on weight outcome as the dependent variable (DV) that was categorized into two namely normal and abnormal weight, which is dichotomous. The abnormal weight is made up of underweight, overweight and obese. Test of association was computed and Pearson chi - square value was found to be $\chi^2=6.662$ with sig. value of $0.01 < 0.05$. The result revealed that since the sig. value is less than the alpha value, then gender is associated with a weight problem. The logistic regression model (LRM) was used to analyze the epidemiological behaviour of the problem. The Hosmer



and Lemeshow test computed, displayed a significance value of 0.291 which is by far greater than the 5 % significance level and hence affirm that the data used was good to fit the model. It was also maintained that overall 63.0% of the subjects were correctly classified. It was further revealed from the LR table that gender had (p - value 0.014: C.I = 1.288 - 9.292), age (p = 0.001: C.I. = 2.173 - 8.132), eating habits (p = 0.021: C.I = 0.323 - 0.913) and physical exercise (p = 0.001: C.I. = 2.303 - 20.232), this establishes that each of these independent variables IVs is < 0.05 , hence significance to predict weight outcomes (problem).