Multivariate analysis term paper samples

Education, Discipline

Multivariate Analysis or Statistics is a dedicated area in statistics that is mainly concerned with observing, studying, and analyzing basically anything (e. g. a phenomenon, a reaction, etc.) that involves more than one pair of independent and dependent variables . This type of analysis or statistics is typically implemented in studies that aim to observe the type of relationship and or reaction that exists and happens (respectively) between such multiple variables, how they work when combined, how distinct they are from each other, and other types of academic and often quantitative observations . The application of Multivariate analysis encompasses a wide range of disciplines including but not limited to medicine, environmental, biology, sociology, economics, science, linguistics, anthropology, psychology, archaeology, education, and behavioral science . In fact, all if not most of the existing scientific disciplines we know of today are multivariate simply because of the number of factors that can be involved in the reactions and phenomena within such disciplines. Studying and observing these multivariate disciplines using a linear univariate or even bivariate analysis may therefore lead to reliable and erroneous results.

One particular multivariate analytic model of choice is the Factorial ANOVA, which also happens to be the same model I am planning to use in a future quantitative study in the field of behavioral psychology. This statistical test can be of great use in researches in the field of behavioral science because of the multi-factorial nature of this field, and the ability of the tool (Factorial ANOVA) to test the impact of more than one independent variable or factor on one dependent variable, a scenario which is not uncommon in behavioral science. Observing an individual's behavior towards another person, may for

example be influenced by a lot of independent factors (with the behavioral

outcome as the dependent factor) such as environmental, genetic,

psychosocial, emotional, just to name a few.

References

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