

# [Report on psych statistics](https://assignbuster.com/report-on-psych-statistics/)

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Repeated measures experimental designs present investigators with occasions to investigate outcomes whereas controlling for subjects. Such designs present superior arithmetical power compared with sample size. This paper reflects on the multivariate and univariate methods to examining repeated measures data.   
This design is exemplified by containing more than one dimension of no less than one particular variable for each subject. A recognized repeated example is the pretest, posttest experimental design, accompanied with prevailing treatment. Using this design, it gauges the same subjects two times within an interval-degreed variable; furthermore it subsequently employs the interrelated or reliant samples t \_3test within the analysis   
An example of such a design is an experiment that I designed to compare the influence of three drugs on women’s heart rates. Three women were indiscriminately allocated to each drug. The heart rate of each subject was calculated at intervals of 5 minutes following the drug administration. From this experiment, we find out that the subjects in question are three women whose heart rates were to be measured. The main variable in this experiment is thus the influence of the drugs on the women subjects.   
Since the hypothesis of this experiment evaluates the same subjects subjected to numerous diverse treatment, or the fact that it follows performance over time, the best way to analyze the data would be through ANOVA (multiple treatments-by-subjects ANOVA).   
The post hoc comparison is applicable to this particular design since the experiment design entails the use of one way ANOVA with multiple comparisons. This is because as the subjects are subjected to each condition, the dimension of the dependent variable is repetitive. The compute test statistic evaluates if there is a noteworthy dissimilarity between as a minimum one of the settings of repeated measures.