

Power Analyse Review of Research Articles in Life Science Journals

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ABSTRACT In experimental studies, defining the suitable sample size is one of the important steps for statistical design. Power analysis is used for identifying reliability of the statistical analysis results in scientific researches. Power analysis is implemented in two different ways; in the process prior to the research by defining the suitable sample size and based on the sample size, impact size and type 1 error level for defining the statistical power level. In this study, 716 articles of last year's issues published in journals on life sciences and scanned in the Science Citation Index (SCI) and Science Citation Index Expanded (SCI-EXP.), has been reviewed under the concept of statistical methods, statistical software, sample numbers, error levels and statistical power calculation situation. As a result of the analysis, it was determined that awareness of power analysis is quite low and the number of articles which use power analysis has been found to be only one. However, it was found that statistical power is higher in the parametric tests than non-parametric tests.