*Post-hoc* power analysis is conducted after a study has been completed, and uses the obtained sample size and effect size to determine what the power was in the study, assuming the effect size in the sample is equal to the effect size in the population.

**Post-hoc Statistical Power Calculation for Multiple Regression**

We wish to determine the observed power for this study, given the observed p-value (0.022), the number of predictors (7) , the observed R2 , (0.193)and the sample size (120).

We calculate the power to be **0.962317**

**Post-hoc Statistical Power Calculation for Hierarchical Regression**

The observed power for a significance test of the addition of a set of independent variables B to the hierarchical model, (i.e. over and above another set of 4 independent variables A) is 0.649341

We wish to determine the effect size for hierarchical multiple regression (f2), given an R2 value for a set of independent variables A, and an R2 value for the sum of A and another set of independent variables B.

The variance accounted for by a set of one or more independent variables *A* is 0.118

The combined variance accounted for by *A* and another set of one or more independent variables *B* is 0.193

|  |  |
| --- | --- |
| The Effect Size attributable to the addition of B: | 0.092937 |