"Efficacy of ENTREN-F Program: A psycho-family and multidisciplinary intervention for children from 8 to 12 years old with childhood obesity. A controlled and randomized clinical trial"

Statistical Analysis Plan (SAP)

Date of the document: 31/01/2017

Statistical Analysis Plan (SAP)

The statistical considerations for analyzing the data collected in the study are detailed below:

First, analyses will be carried out with the SPSS 26.0 version (IBM, SPSS, 2019).

Descriptive statistics (means, standard deviations, and percentages) of all the socio-demographic, clinical, and psychological variables will be calculated. A Shapiro–Wilk test will be used to check normal distribution.
Participant BMI changes over time by group will be measured using a Kruskal–Wallis test.

To carry out the comparisons, two-way analysis of covariance (ENTREN-F, ENTREN, Control Group) and time (T0,T1, T2 and T3) will be used.
Mixed model repeated measures analyses of covariance models tested whether intervention effects varied for each type of group.
In those cases in which we found significance in the global comparisons, we will carried out pairwise comparisons following asignificant main effect of time (post hoc Bonferroni test).

Finally, the effect size will be measured using partial eta squared ($\eta 2$), which estimates the degree of association for the sample. The guidelines for interpreting this value are as follows: ≥ 0.14, large effect; ≥ 0.06, medium effect; ≥ 0.01, small effect (Cohen, 1988). The value $P<0.05$ was considered as a significant difference.