

# **Statistical Analysis Plan**

**Official title:** Integrative Couple Treatment for Pathological Gambling or Individual Treatment: A Comparison of Efficacy

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This project has been approved by UQTR's research ethics committee (CER-10-156-06.13), the addiction research ethics committee (CÉRT 2010-112) and the research ethics committee at the Centre hospitalier universitaire de l'Université de Sherbrooke (10-171).

## **Statistical Analysis Plan**

To take account for the correlation between observations for the same individual and repeated measurements over time, a series of regression analysis was performed according to the type of variable. For categorical dependent variables, analyzes using generalized estimating equations (GEEs) using PROC GENMOD from the Statistical Analysis System (SAS) software that is a generalization of a traditional logistic regression were performed. For continuous dependent variables, Linear Mixed Models were used with SAS's PROC MIXED which is itself a generalization of a paired data model or even more of repeated measures ANOVA. The treatment group and time variables were our main independent variables. One of the strengths of these models is to take into account the measures relating to an individual, even if some are lacking (missing data, nonresponse, etc.) for a given time whereas the normal procedures eliminated individuals whose the answers were incomplete. Since the analysis take into account the number of valid data because of the structure of the data and not the number of patients, the power of the study will be greater. The data were analyzed using the SAS 9.4 software.