

**Efficacy of a Group Intervention Grounded in Acceptance and  
Commitment Therapy (ACT) to Address Problem Gambling in Youth: A  
Randomized Clinical Trial**

ID: CEIm25/04

Document date: February 23, 2025

Principal Investigators: Francisco Montesinos, Ph.D.- David Lobato, Ph.D.

**Study Protocol and Statistical Analysis Plan**

## Study Protocol

### Objective

To examine the efficacy of a brief group-based psychological intervention grounded in Acceptance and Commitment Therapy (ACT), aimed at young individuals exhibiting problematic gambling behaviors.

### Design

Randomized clinical trial

### Methods

After being informed about the objectives and characteristics of the study and after all participants have signed the informed consent form, they will be assessed to determine their suitability. Those who meet the criteria will be randomly assigned to one of two groups:

- Immediate intervention group
- Control group (waiting list)

Both groups will be assessed using standardized questionnaires before and after treatment, and at follow-up at three and six months. Participants in the intervention group will receive an online group psychological intervention protocol consisting of eight sessions, each lasting approximately 90 minutes.

Participants in the control group will remain on the waiting list during the intervention period and will receive treatment after completing the eight sessions in the immediate intervention group.

### Intervention Protocol

#### Session 1: Introduction to ACT and Values Clarification

Through metaphors and experiential exercises, such as the “garden” metaphor, participants will explore meaningful life domains (e.g., family, relationships, health, education/work, leisure) that may have been overshadowed by gambling behavior.

#### Session 2: Acceptance and Cognitive Defusion

Participants will be trained in cognitive defusion and acceptance strategies using exercises such as “the mind narrator,” aimed at altering their relationship with automatic gambling-related thoughts.

#### Session 3: Mindfulness

Mindfulness practices focused on present-moment awareness, such as the “body scan” and “conscious breathing,” will be introduced to help participants observe their thoughts, emotions, and bodily sensations without immediate reaction. This skill is expected to enhance recognition of gambling-related impulses and improve emotional regulation.

#### **Session 4: Establishing the Observer Self Perspective**

The session will address how individuals identify with self-labels and narratives that foster hopelessness. Experiential exercises will be used to cultivate a more flexible and expansive perspective, reducing the influence of these narratives on behavior.

#### **Session 5: Committed Action and Goal Setting**

Participants will work on identifying and formulating concrete personal goals aligned with their values. Strategies will be developed to support deliberate action toward these goals, even in the presence of emotional discomfort or gambling urges.

#### **Session 6: The Trap of Experiential Avoidance and Psychological Flexibility**

The session will explore how gambling may serve as an escape from difficult emotions such as sadness, anxiety, or guilt. Through metaphors and experiential exercises, participants will be trained to remain in contact with these complex emotions without avoidance, thereby expanding their repertoire for coping with distress.

#### **Session 7: Committed Action and Overcoming Barriers**

Internal and external barriers to value-consistent action—such as gambling urges, fear of failure, or aversive thoughts (e.g., “there’s no point in trying,” “I’m sure I can’t do it”)—will be identified. Practical exercises will be used to train flexible responses to these barriers.

#### **Session 8: Consolidation and Maintenance Planning**

Key learnings will be reviewed, and an individualized action plan will be developed to sustain commitment to value-driven actions in the medium and long term. Potential risk situations that may trigger gambling urges will be identified, and coping strategies will be practiced.

#### **Statistical Analysis Plan (SAP)**

The demographic and clinical characteristics of the sample in each treatment group will be described, using measures of central tendency (mean and median) and dispersion (standard deviation, range).

The results will be analyzed using nonparametric techniques, comparing the group means at pre-treatment, post-treatment, and follow-up.

An analysis of variance will be performed to estimate the specific weight of each independent variable, as well as potential interactions between factors.

For the comparative analysis between groups, the most appropriate statistical tests will be used depending on the type of variable: Student’s t-test or Wilcoxon signed-rank test for continuous data, and the chi-square test for categorical variables.

The Jacobson and Truax (1991) statistic will be used to estimate the clinical significance of the effect, thus completing the statistical efficacy analyses.