

NCT03709472

Computer Assisted Family Intervention to Treat Self-Harm Disparities in Latinas and Sexual/Gender Minority Youth

Statistical Analysis Plan 8/21/24

Data were analyzed using SPSS Version 29 (IBM, 2023). We began our analyses by documenting the number of session and hours of treatment to assess CIFTA's feasibility and acceptability. We conducted logistic regressions to examine whether baseline characteristics predicted those participants who successfully reached termination and T2 assessments. To examine whether changes in adolescent symptoms of depression over time differed by treatment, a mixed ANOVA was used with depression scores as the within-subjects variable and treatment condition as the between-subjects variable. We used the same analytic strategy to determine whether changes in emotion regulation and family connectedness differed over time by treatment. A series of mixed ANOVAs were used with the Total scores from the PHQ-9, the Difficulty with Emotion Regulation Scale and the Family Connectedness Scale as the within-subjects variables and treatment condition as the between-subjects variable. When effect sizes are reported, cutoffs for partial eta-squared effect sizes are small .01, moderate .06, large .14. Additionally, Chi-Square Tests of Association were used to determine whether the proportion of youth endorsing whether they could talk to their parent about problems differed over time. This analysis was conducted by condition examining mothers and fathers separately.

A complementary analytic strategy was used to investigate change in youth who entered the study with presenting problems in the clinical range at baseline assessments based on established clinical cutoffs (i.e., those with at least mild levels of depression at baseline). Descriptive statistics were used to determine the rates of suicidal thoughts and self-harm at baseline and termination by condition. In addition, Chi-Square Tests of Association were used to determine whether the proportion of youth endorsing thoughts of suicide differed by treatment condition.

We also used the Reliable Change Index (RCI) to determine whether the magnitude of change was statistically reliable rather than due to random fluctuations caused by measurement error (Jacobson & Traux, 1991). We examined symptoms of depression.

Lastly, to examine whether changes on the plausible mechanisms of action was associated with the likelihood of engaging in self-harm in the past month at termination in the full sample; after controlling for gender and LGBTQ status, a series of hierarchical logistic regressions were performed. With only two timepoints we could not conduct formal analyses of mediation, but we could explore whether the patterns of change were consistent with plausible mediators. In these models, self-harm in the past month was the binary outcome variable, LGBTQ status and gender were entered in Step 1 as covariates, and the proposed mechanism of action (i.e., depression, parent communication, family connectedness, and emotion regulation) were entered in Step 2.