

Title of study: Digital Narrative Bibliotherapy as a Scalable Intervention for Suicidal Thoughts

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STATISTICAL ANALYSIS PLAN

We used an intent-to-treat design for all analyses, which were performed in RStudio.

Hypothesis 1: We predicted that the narrative bibliotherapy intervention would lead to lower ratings of the desire to die among participants assigned to the Treatment group, relative to those assigned to the Control group.

- **Analysis:** We used a mixed effects model as implemented in the *lme4* package to test whether participants in the Treatment group reported lower desire to die across the 14-day study period. This model included group (Treatment vs. Control) and day of the survey fixed effects. We also controlled for the effects of previous history of suicidal thoughts by including this measure as participant-level fixed effects.

Hypothesis 2: We predicted that the effect of the treatment would persist two weeks after the conclusion of the trial.

- **Analysis:** We used a *t*-test to examine group differences (Treatment vs. Control) in desire to die at the two-week follow up point.

Hypothesis 3: We predicted that participants who completed more days of the trial would report lower desire to die if they were assigned to the Treatment group (i.e. dose response effect).

- **Analysis:** We used a mixed effects model as implemented in the *lme4* package to tested the effect of the number of days of participation on participants' desire to die across the 14-day study period. This model included group and days of participation as participant-level fixed effects.

Hypothesis 4: We predicted that reductions in the desire to die resulting from reading suicide narratives to die would be attributable to increased feelings of optimism and connectedness.

- **Analysis:** We used mediation analysis as implemented in the *lavaan* package to examine the indirect effect of connectedness and optimism on the association between group assignment and desire to die.