

# Treatment of depression via interactive media: A program for NASA

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# Research Team

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# Some requirements...

- Modular
- Updateable
- Secure
- Evidence-based
- Self-directed
- Brief
- Useable
- Credible
- Ethical
- Relevant
- Interrelated
- Engaging

# Depression Treatment Demo

# Pilot Study

## Participants:

- Similar to astronauts
  - Mean age 50 (SD = 9)
  - 4+ years college
- Minor depression (2 – 4 depression criteria)
- No other treatment
- R/O Substance Abuse; Antisocial PD
- N=14

Collaborating study:

Massachusetts General Hospital Study  
(2008 - 2012) PI: Gary Strangman, PhD

- Infrared and MRI brain imaging of depression patients
- Revise depression treatment
- Randomized controlled clinical trial:  
Self-treatment vs. antidepressants

# Participant Retention

- Experimental:
  - 0 dropouts, but 2 lapsed for >3 week interval between session 3 and 4
  - 0 no-shows for PST sessions
- Waitlist control:
  - 1 dropout (6 completers)

# Study Setting



# Pretreatment Depression

	Hamilton Depression Inventory
Experimental N=7	15.61 (9.64)
Control N=7	18.71 (6.65)

$t = -0.700$

$p \leq 0.25$

# Posttreatment: Hamilton Depression Inventory

	Pre HDI	Post HDI	% Chg.
Experimental (5 completers)	15.12 (11.33)	5.68 (3.06)	52.65 (28.28)
Experimental (7 completers)	15.61 (9.64)	8.81 (5.91)	35.86 (40.16)
Control (6 completers)	18.71 (6.65)	17.78 (7.52)	11.12 (18.70)

# First Follow-up: Percent Change on Hamilton Depression Inventory (Wilcoxon test for pre-post % Change)

% change Exper (N = 5) vs. % change Control (N = 6)	$p \leq .044$	$d = 1.73$ $r = .65$
% change Exper (N = 7) vs. % change Control (N=6)	$p \leq .253$	n/a

(p based on Kruskal – Wallis Chi Square)

Thank you

clinical trial website: [BIDstudy.org](http://BIDstudy.org)

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