Computerized Trans-Diagnostic DBT Skills Training for Emotion Dysregulation

Anita Lungu, Chelsey Wilks, Garret Zieve, Andrada Neacsiu, Maya Krek, Hannah Lessing, Aleen Potts, Marivi Navarro, Marsha Linehan

December 8th 2016

GCDP Meeting, Stanford

Current project

Trans-diagnostic treatments	Use of technology as dissemination mechanism

Contribution: Develop & evaluate computerized trans-diagnostic DBT skills training treatment for emotion dysregulation

Study Aims & Design

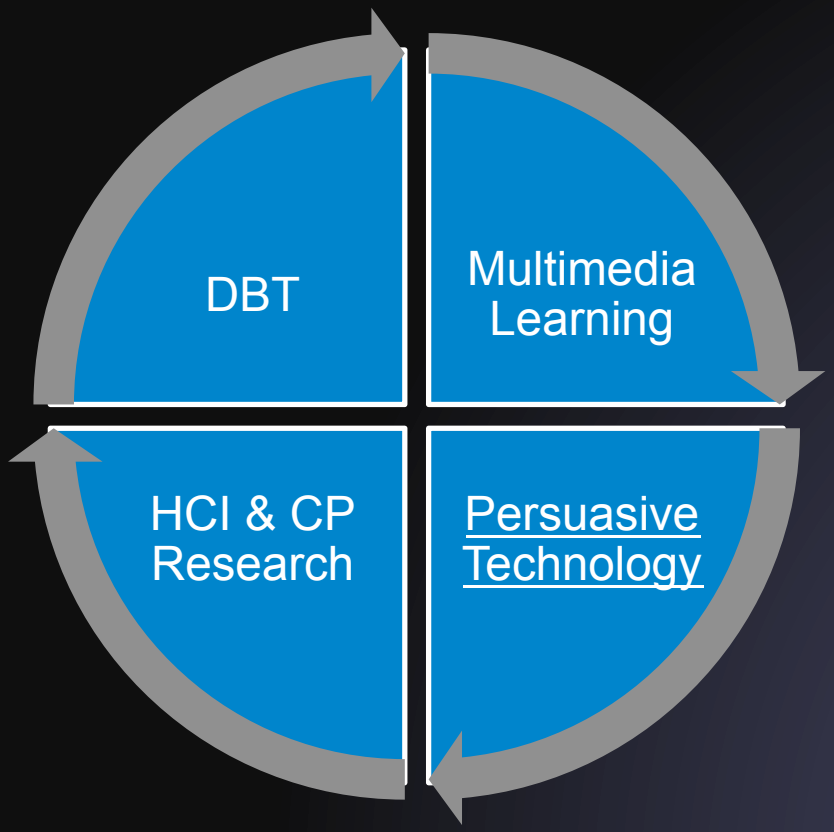
- Phase 1: Iteratively develop iDBT-ER
  - 8-week open trial, 7 individuals, coming to lab
- Phase 2: evaluate efficacy
  - 8-week open trial, 34 individuals, over Internet
- Compare outcomes to historical control

iDBT-ER Description

Number of sessions	**8**
Average length of session	1 hour
Session frequency	1 session / week
Homework assignment	Different skills practice assignments each week
Skills practice prompts	1 skills practice prompt in the morning (email / text message)
Diary card	1 prompt diary card in the evening (email/text message)
Session reminders	<= 2 phone/email reminders for session not completed
DBT Skills Content	DBT mindfulness, emotion regulation, few distress tolerance

iDBT-ER development

- Goal 1: Translate DBT Skills in computerized format while maintaining efficacy and engagement
- Goal 2: Keep therapist out of the loop as much as possible



Inclusion / Exclusion Criteria

- Adult, high emotion dysregulation
- Met criteria for at least one of:
  - Major Depressive Disorder (MDD)
  - Dysthymia
  - Depression NOS
  - Anxiety Disorder NOS
  - Panic Disorder (PD) w or w/o agoraphobia
  - Agoraphobia w/o panic disorder
  - Obsessive Compulsive Disorder (OCD)
  - Generalize Anxiety Disorder (GAD)
  - Social Anxiety Disorder (SAD)
  - Specific Phobia (SP)
  - Post Traumatic Stress Disorder (PTSD)
- Access to email, phone, Internet to use for the study
- Exclusion: prior DBT, cognitive impairment, mandated treatment, imminent risk suicide

Assessments

- Self-report questionnaires
  - pre-treatment, 4 weeks, 8 weeks, 2 month follow-up
  - Emotion dysregulation (DERS), skills use (DBT-WCCL), general distress (OQ-45), mindfulness (KIMS), acceptability of treatment (CSQ)

Phase 2 Participants (N = 34)

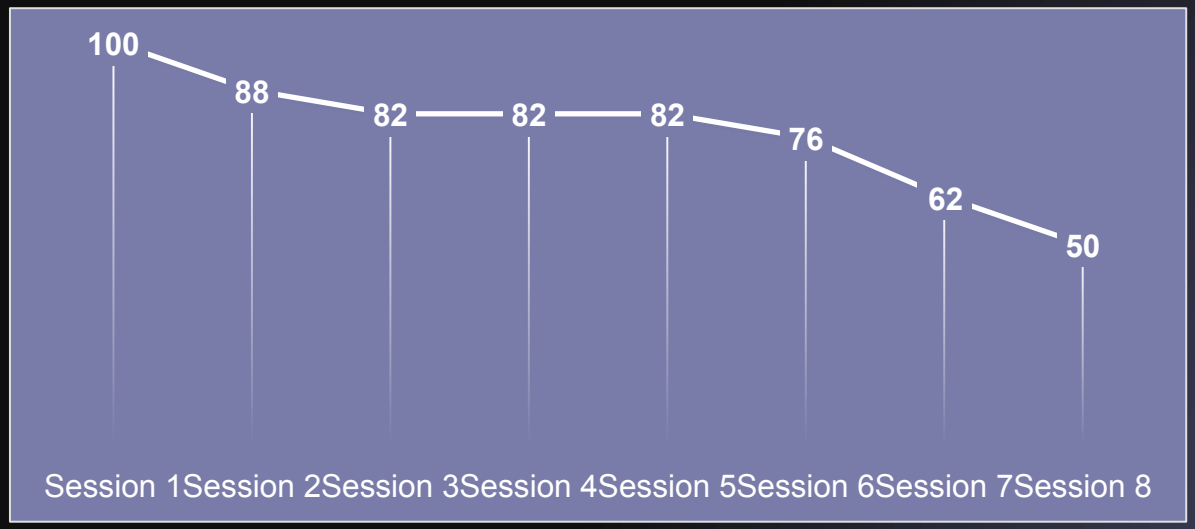
Age: 42.4 (S.D 12.7)
Female: 76%
White: 74%
Employed: 53%

Depression	24 (70%)
Dysthymia	5 (14.5%)
Panic disorder	6 (17%)
Agoraphobia	3 (9%)
Generalized Anxiety Disorder	19 (56%)
Social Anxiety Disorder	10 (30%)
OCD	4 (12%)
PTSD	11 (33%)
Anxiety NOS	5 (15%)
BPD	5 (15%)

Outcomes: Feasibility

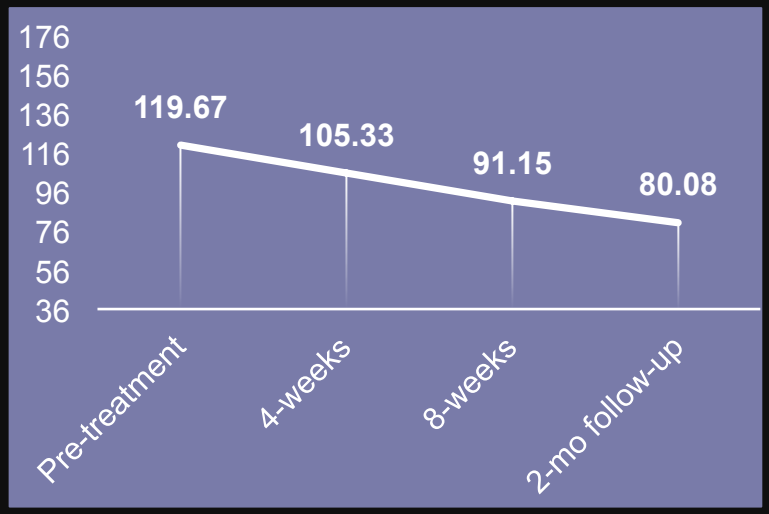
- Client Satisfaction Questionnaire (score 0 to 32)
  - iDBT-ER *M* =25.5
  - TAU community mental health *M*=23.75
- Drop-out
  - iDBT-ER: 6/34 (17.6%)

% Sessions completed

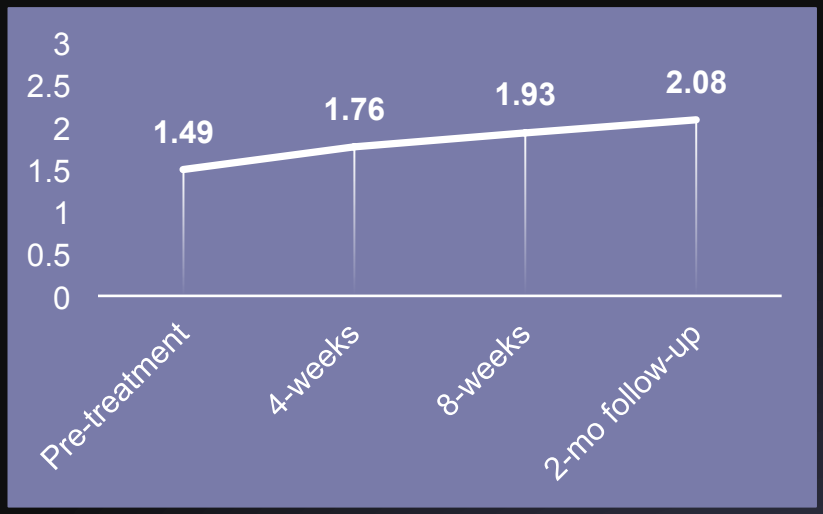


Outcomes

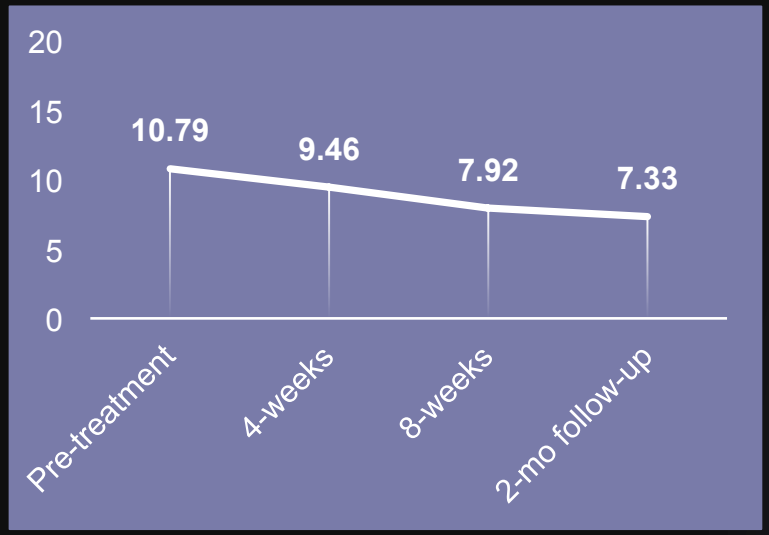
Emotion Dysregulation (DERS)



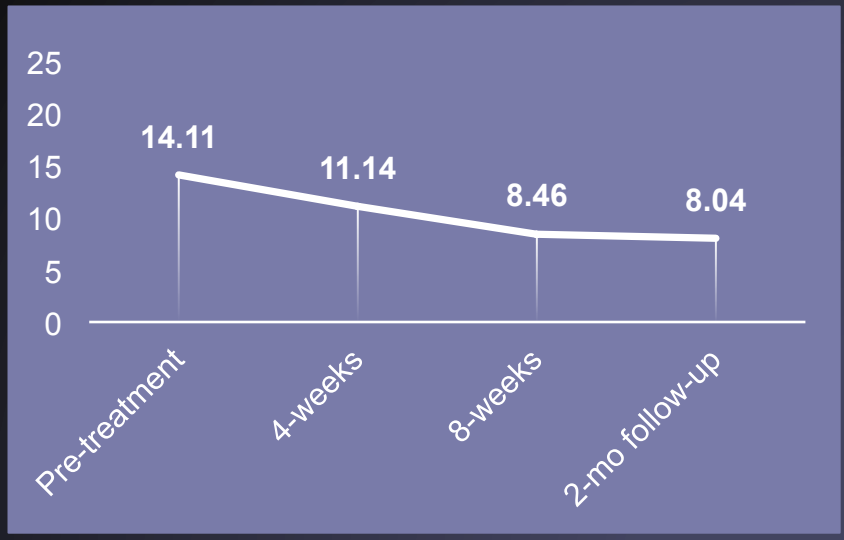
Skills (DBT-WCCL)



Anxiety (OASIS)



Depression (PHQ9)



A. Lungu

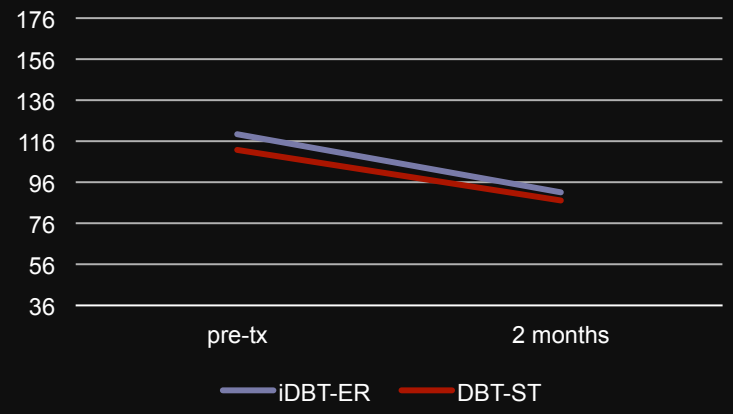
Comparing outcomes with historical control

- Historical control DBT-ST:
  - Same inclusion/exclusion criteria
  - DBT skills in group, in person
  - 2 hours of therapy/week vs 1 hour/week (iDBT-ER)
  - Compare iDBT at 8 weeks with DBT-ST at 2 months

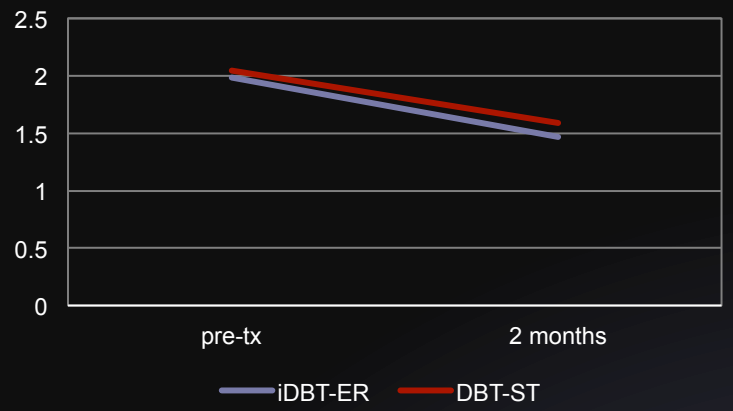
Comparison effect sizes to historical control

	Cohen's d	Cohen's d
DERS (emotion dysregulation)	1.29	1.29
OASIS (anxiety)	1.16	0.67
PHQ9 (depression)	1.53	1
SKILLS (skills practice)	1.11	0.94
OQ (general functioning)	1.24	0.9

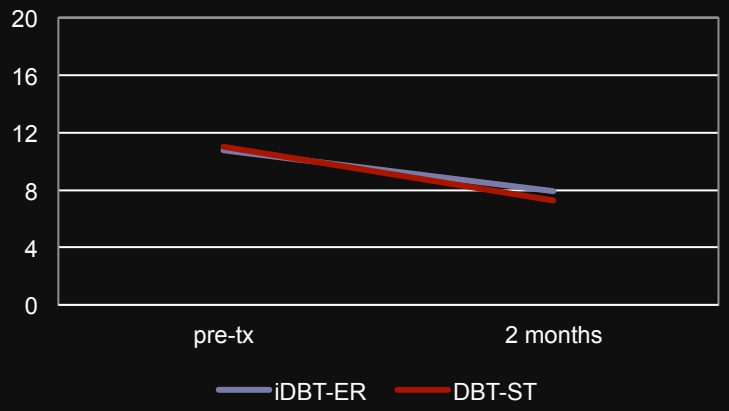
Emotion Dysregulation (DERS)



Skills practice (DBT-WCCL)



Anxiety (OASIS)



Depression (PHQ9)

- Repeated measures ANOVA - No statistical difference between slopes

Implication for depression prevention

- iDBT-ER
  - Effect sizes & drop-out comparable to therapist assisted CT
  - Intervention feasible & acceptable
  - Potential for large scale dissemination (lower cost)
- CT for prevention
  - Less treatment / more product
  - Transition to commercial environment – Key!

Challenges: academic research & industry collaboration

- Open nature of academic science vs. need to protect technology
- Focus on long-term challenges vs. time sensitive product development
- Clinical science as the only voice or one of many (engineering, design, data analysis teams)

Opportunity: academic research & industry collaboration

- Seek alignment in values (science, evidence based therapies)
- Seek alignment in goals (implementation, dissemination)
- Clearly define collaboration to benefit both parties
  - Academic research can contribute valued expertise
  - Industry can (sometimes) fund research, implement & disseminate
- Use pilot projects to test collaboration & develop trust
- Translation of knowledge into practical project value is key
- Seek common ground

Acknowledgements

NIMH

NRSA grant

APA

APA Dissertation Research Award

Society for a Science of Clinical Psychology (SSCP)

Dissertation Award

UW Psychology Department

Bolles Graduate Fellowship

Behavioral Tech Research

Funding for video recording & software

Acknowledgements

The BRTC family

Chelsey Wilks
Eugene Botanov
Andrada Neacsiu
Kathryn E. Korslund
Melanie Korslund
Elaine Franks
Thao Truong
Susan Bland

My students

Garret Zieve
Maya Krek
Aleen Potts
Hannah Lessing
Lily Jiang
Cathy Burgess
Clare Sigler
Beverly Kikuta
Savannah Leavitt
Colby Droullard
Anum Ghazipura
Max Liebowitz
Dmitry Levin

All the clients!

A.Lungu