

Mindfulness-Based Music and Songwriting:



ANALYSIS OF PILOT DATA FROM A NOVEL TELEHEALTH INTERVENTION FOR PARENTS OF CHILDREN WITH DISABILITIES.

AUTHORS Zoe Crawley, Kate Kelly (MT-BC), Miriam Lense (PhD)

AFFILIATIONS Vanderbilt University | Vanderbilt University Medical Center

INTRODUCTION

BACKGROUND

- BETWEEN 1 IN 6 FAMILIES INCLUDE A CHILD WITH AN INTELLECTUAL OR DEVELOPMENTAL DISABILITY (CDC, 2021)
- PARENTS OF CHILDREN WITH DEVELOPMENTAL DISABILITIES MAY HAVE UNIQUE STRESSORS, AND HIGHER RATES OF PARENTAL DISTRESS, MENTAL DISTRESS, AND NEGATIVE PSYCHOLOGICAL SYMPTOMS (DEPAPE & LINDSAY, 2015; HAYES & WATSON, 2013)
- PARENTS OF CHILDREN WITH DISABILITIES ARE AT HIGHER RISK OF DEVELOPING ANXIETY, DEPRESSION, AND OTHER MENTAL HEALTH ISSUES AS COMPARED TO PARENTS OF TYPICALLY-DEVELOPING CHILDREN (MARQUIS ET AL, 2020; SINGER, 2006)
- SOCIAL SUPPORT, RELATIONSHIP WITH THE CHILD, AND TRAIT RESILIENCE MEDIATE THE HARMFUL EFFECTS OF PARENTAL DISTRESS (HOFFMAN ET AL, 2009; MCCONEL & SAVAGE, 2015; WEISS, 2002)

INTRODUCTION

- PARENTS OF CHILDREN WITH DISABILITIES ARE AT HIGHER RISK OF PARENTAL DISTRESS, LOWER QUALITY OF LIFE, MENTAL HEALTH ISSUES, AND LOWER OVERALL WELL BEING
- A VARIETY OF STRESS-REDUCTION INTERVENTIONS HAVE BEEN PROPOSED TO SUPPORT PARENTS AND INCREASE WELL BEING
- MINDFULNESS INTERVENTIONS HAVE SHOWN PROMISING OUTCOMES AND ARE FEASIBLY APPLIED TO THIS POPULATION (BENN ET AL, 2012; DYKENS ET AL, 2014; FERRAIOLI & HARRIS, 2013; NEECE 2014)
- THERAPEUTIC SONGWRITING HAS ALSO SHOWN PROMISING EFFECTS IN CAREGIVERS, INCLUDING INCREASED ENJOYMENT OF INTERVENTION (BAKER ET AL, 2018; KLEIN & SILVERMAN, 2012)
- THE CURRENT STUDY INVOLVES A NOVEL COMBINATION OF MINDFULNESS AND THERAPEUTIC SONGWRITING IN A TELEHEALTH FORMAT FOR PARENTS OF CHILDREN WITH DEVELOPMENTAL DISABILITIES

METHODS

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MINDFULNESS-BASED MUSIC AND SONGWRITING (MBMS)

- 7-WEEK INTERVENTION
- TELEHEALTH - RUN VIA ZOOM, FACILITATED BY A MT-BC
- WEEKLY MINDFULNESS HOME PRACTICE GOALS

MEASURES

AT BASELINE (WEEK 0), POST-STUDY (WEEK 8), FOLLOW-UP (WEEK 12):

- BECK ANXIETY INVENTORY (BECK ET AL, 1988)
- BECK DEPRESSION INVENTORY (BECK ET AL, 1996)
- RYFF'S WELL BEING SCALE (RYFF, 1989)
- PERCEIVED STRESS SCALE (COHEN, 1994)

BEFORE AND AFTER EACH MBMS SESSION:

- AFFECT REGULATION: POSITIVE AND NEGATIVE AFFECT SCHEDULE (WATSON ET AL, 1988)
- CONNECTION TO MT-BC: INCLUSION OF OTHER IN THE SELF (IOS) SCALE (ARON ET AL, 1992)

PILOT ROUND SAMPLE

- 12 PARENTS INCLUDED IN ANALYSIS
 - MEAN AGE = 38.5(5.6) YRS
 - MEAN CHILDREN IN HOUSEHOLD = 2.6(1.0)
 - MEAN PRIMARY CHILD AGE = 9.4(5.7)

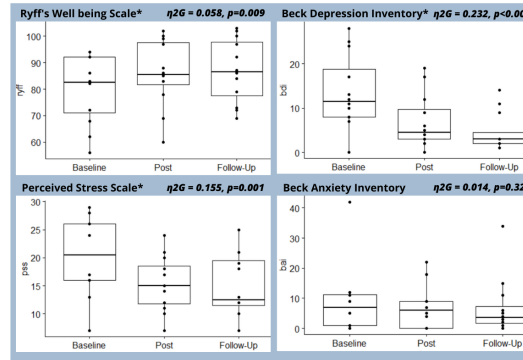
CURRICULUM

- PSYCHOEDUCATION ON MINDFULNESS PRINCIPLES, APPLIED AND PRACTICED THROUGH MUSIC-BASED MEDITATIONS AND SONGWRITING
- SONG 1 (ABOUT CHILD): WHAT DO I NOTICE ABOUT MY CHILD WITHOUT JUDGMENT?
- SONG 2 (ABOUT SELF): HOW DO I APPLY LOVING-KINDNESS TO MYSELF?



RESULTS

ANALYSIS 1: OUTCOME MEASURES ACROSS STUDY



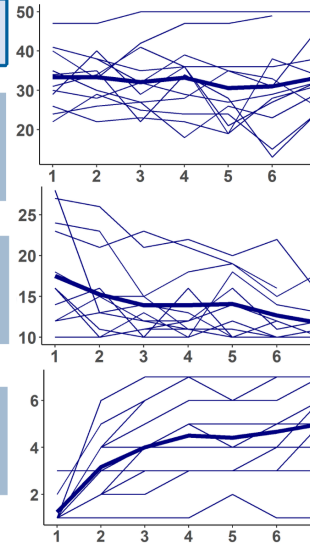
ANALYSIS 2: AFFECT REGULATION AND CONNECTION TO THERAPIST ACROSS ALL SESSIONS

$$f(\text{score}) = \text{score} - \text{session} + (1|\text{Individual})$$

PANAS Positive
 $p = NS$

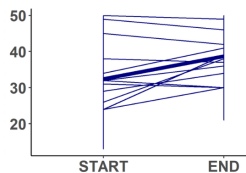
PANAS Negative*
 $p < 0.001$

IOS*
 $p < 0.001$

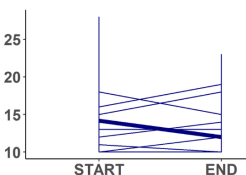


ANALYSIS 3: CHANGE IN AFFECT AND CONNECTION TO THERAPIST FROM SESSION START TO END

PANAS Positive*

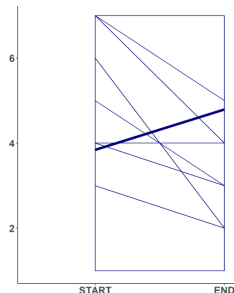


PANAS Negative*



$$f(\text{score}) = \text{score} - \text{time} + (1|\text{Individual})$$

IOS*



RESULTS CONT.

FINDING 1. OUTCOMES

- Parents' scores significantly increased on the Ryff's Well Being Scale and decreased on the Perceived Stress Scale and the Beck Depression Inventory.
- Significant changes on well being, stress, and depression from Baseline to Post were maintained at Follow-Up
- No changes in parents' anxiety perhaps due to mild anxiety levels at baseline

FINDING 2. ACROSS PROGRAM

Linear mixed model with session as a fixed effect:

Across the 7 sessions of the program:

- Parents' PANAS Negative Affect scores significantly decreased across sessions
- Parents' connection to therapist (IOS) significantly increased across sessions.
- No change in parents' PANAS Positive Affect

FINDING 3. CHANGES IN SESSIONS

Linear mixed model with time as a fixed effect:

From start to end of individual sessions:

- Parents' significantly decreased PANAS Negative Affect and increased Positive Affect scores
- Parents' connection (IOS scores) to therapist significantly increased

DISCUSSION

- Parents of children with developmental disabilities have higher levels of stress. This is particularly true during COVID-19.
- MBMS participation associated with changes in measures of parent mental health and well-being within sessions and across program, which were maintained at 1-month follow-up
- Positive within session experiences for both affect regulation and social connection may motivate participants to develop and practice mindfulness skills
- Positive therapeutic rapport developed over telehealth
- Pilot study demonstrates feasibility of telehealth MBMS program using songwriting to support mindfulness practice
- Future directions include expanding sample size, comparisons to no treatment control group, expanding measurement of affect regulation outside of MBMS sessions
- Future directions include analysis of song lyrics in relation to participants' mental health

ACKNOWLEDGMENTS

THIS PROJECT WAS SUPPORTED BY:
The Department of Otolaryngology - Head and Neck Surgery (U/MC)
National Endowment for the Arts Grant: 1863278-38-20
Vanderbilt University Data Science Institute Summer Research Fellowship
aCM Lifting Lives Foundation

THANK YOU TO Miriam Lense, Kate Kelly, Julie Mazzone, Talia Liu, members of the Vanderbilt Music Cognition Lab, and our MBMS study participants.
THANK YOU TO Jesse Spencer-Smith, Thomas Palmeri, Charrae Bell, and my fellow DSI-SRP participants for their advice and support.
THANK YOU TO Adrienne Seiffert, Amy Booth, the Cognitive Studies department, and all those who have supported this Honors Program research.

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