

Utilizing Stepped-Care Models of Self-Paced Interactive Websites to Reduce Burden on Clinician-Delivered Behavioral Therapy for Children and Adolescents with Behavioral Concerns

Rosanna Breaux, PhD

Associate Professor, Virginia Tech

Director, Child Study Center

Licensed Clinical Psychologist



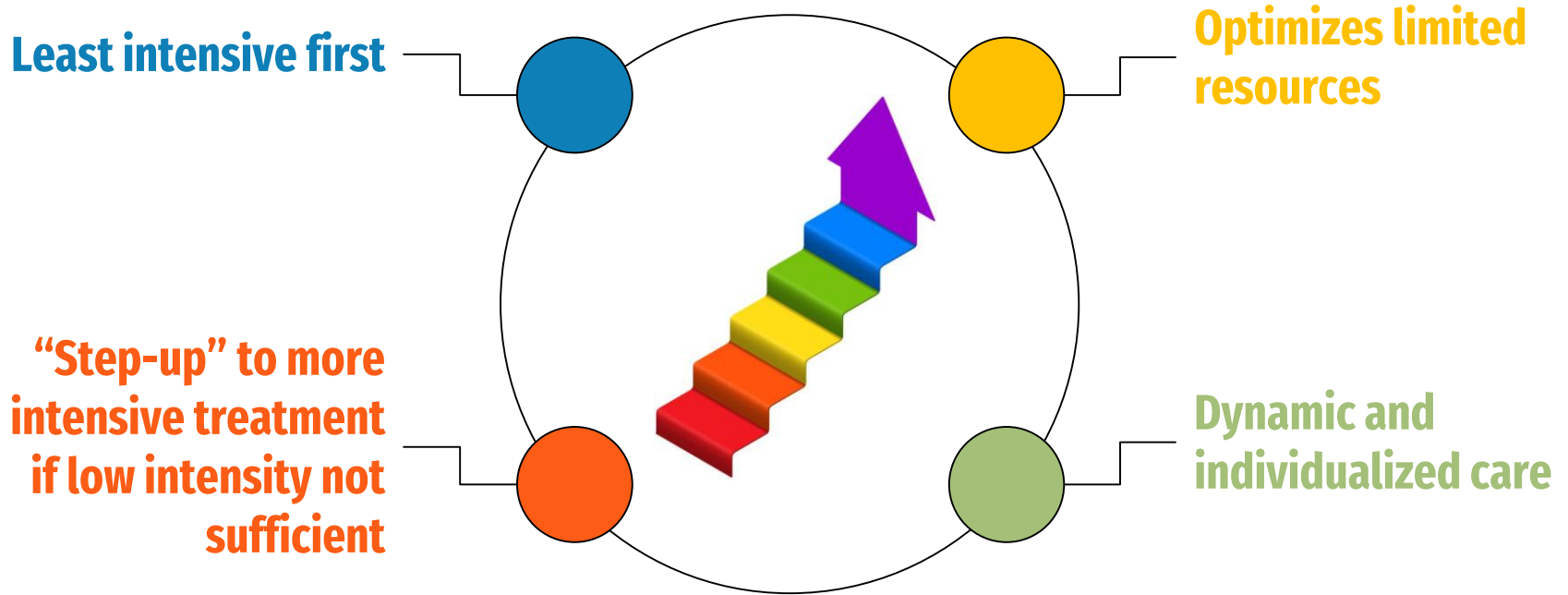
What is Mobile and Telehealth?

- **Mobile or m-Health** = leveraging wireless technology like smartphones, tablets, and wearable sensors to deliver healthcare
- **Telehealth** = virtual visits or consultations with health providers through video conferences or secure messaging



M-Health and telehealth date back to the late 1990s, but have really increased in popularity since the global surge in smartphone usage after 2007, with a spike in usage and peer-reviewed publications on the topic during the COVID-19 pandemic.

What is a Stepped-Care Model?



Example Stepped-Care Models in Action

RELAX Coping Program During COVID-19

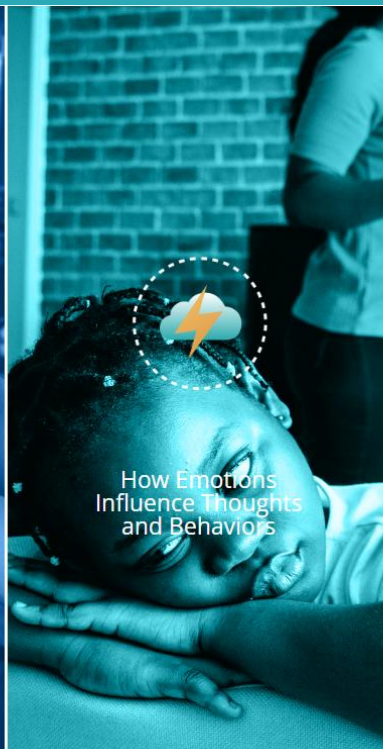


Support BRANCH Parenting Program



RELAX

Regulating Emotions Like An eXpert



Module 2: My Coping Skills



➤ My Coping Skills Challenge



➤ Deep Breathing Practice



➤ Progressive Muscle Relaxation Practice



➤ Mindfulness Guided Imagery Practice



Module 5: Perspective Taking and Communicating



➤ How Managing Emotions Can Reduce Conflict



➤ How Our Brain Reacts During Strong Emotions



➤ Conflict Problem Solving Activity Quiz

➤ How Our Brain Reacts During Strong Emotions



RELAX Coping Program Pilot Study

Implemented with middle school students in our surrounding community during the COVID-19 pandemic



168 users (759 page views)

- 60% female, 30% male, 10% other
- 11-13 years ($M = 11.70$, $SD = 0.82$)
- 50% 6th grade, 40% 7th grade, 10% 8th grade
- All White/Non-Hispanic
- Family Income = US\$15,000 - \$175,000 (Median = \$80,000)
- Number of Children in Household = 1-7 ($M = 3.00$, $SD = 2.26$)

Benefits Based on Parent Report

Homework Performance	n.s.
Hyperactivity/ Impulsivity	1.11
Inattention	0.31
Depression	0.27
Anxiety	1.20
Family Conflict	0.40
Emotion Dysregulation	1.97
Cohen's <i>d</i>	

Cohen's d can be interpreted such that $d = 0.2$ is considered a 'small' effect size, 0.5 represents a 'medium' effect size, and 0.8 or larger represents a 'large' effect size.

Benefits Based on Adolescent Report

	Emotion Dysregulation	Family Conflict	Anxiety	Depression	Aggression
Cohen's <i>d</i>	0.31	n.s.	n.s.	0.32	0.31

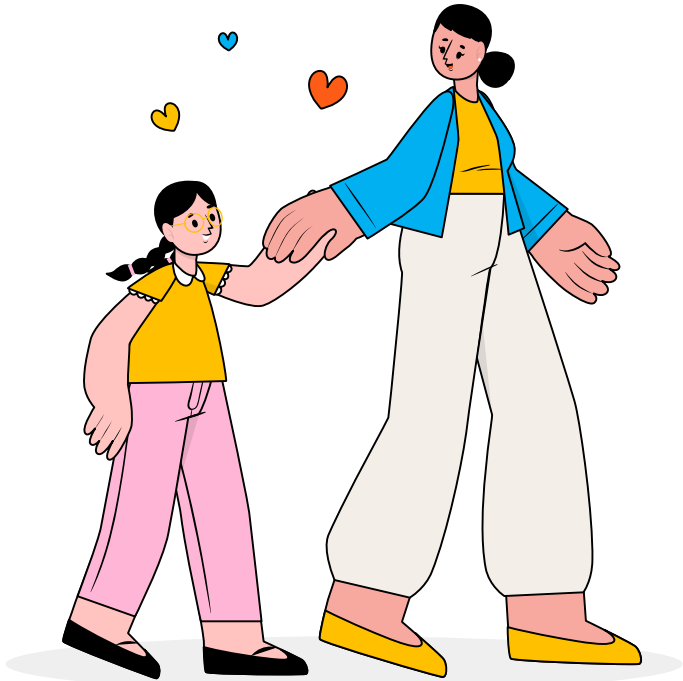
Cohen's d can be interpreted such that $d = 0.2$ is considered a 'small' effect size, 0.5 represents a 'medium' effect size, and 0.8 or larger represents a 'large' effect size.

Benefits Based on Teacher Report

	Inattention	Hyperactivity/ Impulsivity	Homework Performance
Cohen's <i>d</i>	0.41	0.62	n.s.

Cohen's d can be interpreted such that $d = 0.2$ is considered a 'small' effect size, 0.5 represents a 'medium' effect size, and 0.8 or larger represents a 'large' effect size.

Takeaways and Limitations



Support for the feasibility and potential efficacy of RELAX Coping Program to improve emotion dysregulation and reduce psychopathology symptoms in adolescents via a brief, self-paced interactive website.

- **No control group**
- **Informant reporters were aware of adolescent participation**
- **Only 50% of adolescent participants had teachers who provided ratings**
- **Very homogeneous sample**

The RELAX Intervention

- Group-based psychosocial intervention grounded in CBT
- 8 weekly, 1.5 hour sessions with 2 booster sessions (1 and 6 month follow-up)
- First 60 minutes caregiver and adolescents meet separately; last 30 minutes combined problem-solving discussion activity





Account Settings

Log out

Support BRANCH





Daily Check-in

How **CONFIDENT** are you in your ability to manage your child's behaviors today?

- ☐ Not at all
- ☐ Not very
- ☐ Somewhat
- ☐ Very
- ☐ Extremely

How **PREPARED** are you to use the skills you've learned to manage your child's behaviors today?

- ☐ Not at all
- ☐ Not very
- ☐ Somewhat
- ☐ Very
- ☐ Extremely

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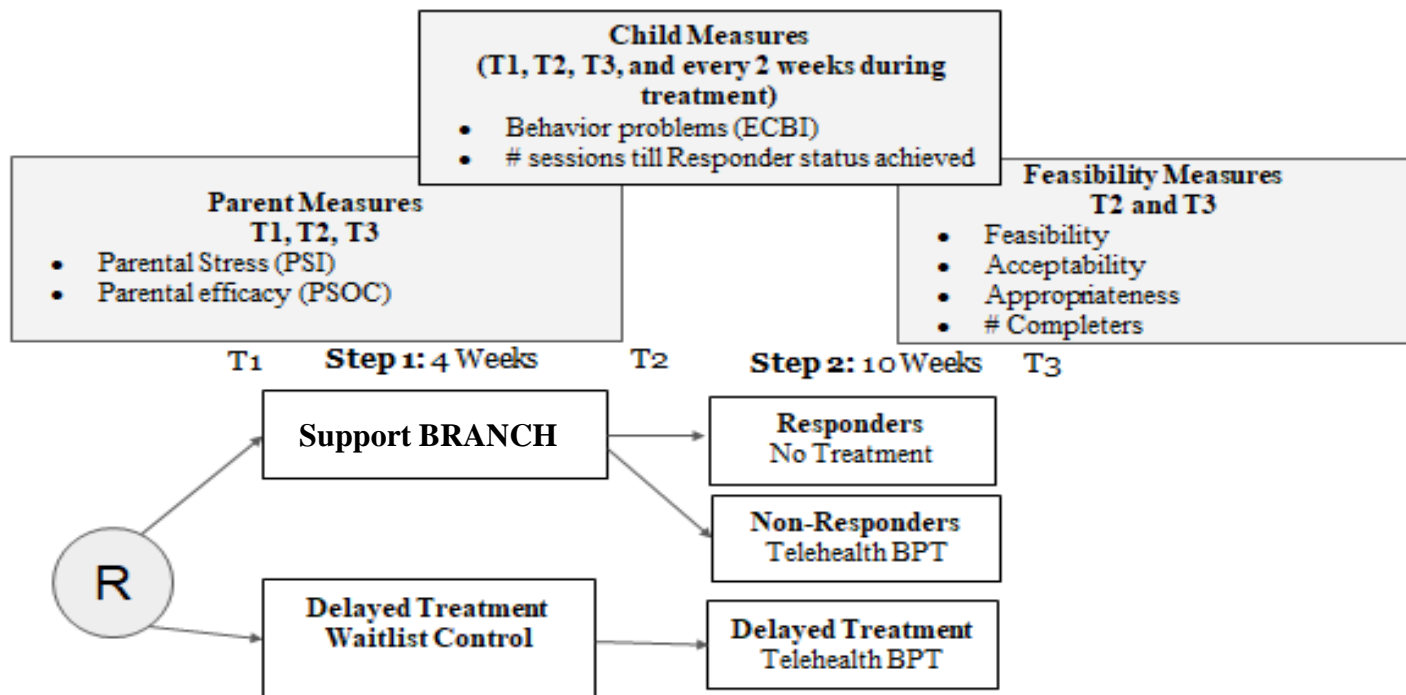
How **STRESSED** have you felt in relation to your child's behaviors in the last 24 hours?

- ☐ Not at all
- ☐ Not very
- ☐ Somewhat
- ☐ Very

Feedback from Pilot Study

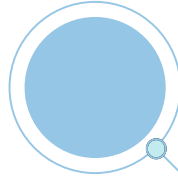
- Preference for more flexibility and accessibility
 - Mobile app companies can go bankrupt or be non-responsive
 - Website preferred over mobile app
- Need for online content to be maintained and monitored
 - Public videos going offline or becoming private
 - Created our own videos and host on our YouTube

Support BRANCH RCT

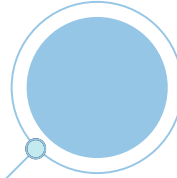


Support BRANCH RCT

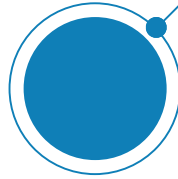
Parenting Stress Index (PSI)



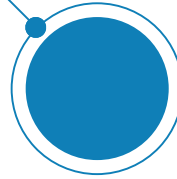
Parenting Sense of Competence Scale



Eyberg Child Behavior Inventory (ECBI)



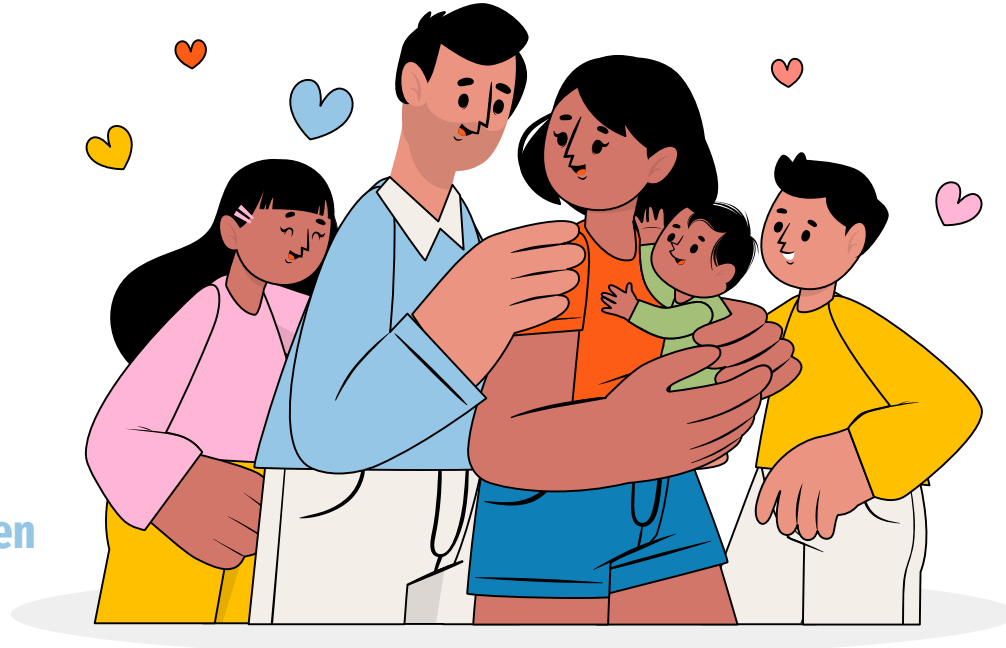
Intervention Usability Scale



Conclusions

mHealth can help increase access to evidence-based mental health care

Stepped-Care Approaches can help reduce burden on clinicians and families



Adolescents and parents seem happy with and utilize self-paced mental health websites

Promotion of/awareness about websites is a challenge



Contact Me:
rbreaux@vt.edu

Twitter: [@CALMERLab](https://twitter.com/CALMERLab)
Website: calmerlab.com