



School-based Trauma Treatment: Reaching Parents Using a Texting App

Sheryl Kataoka, M.D., M.S.H.S.
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Treatment and Services Adaptation Center
for Resiliency, Hope, and Wellness in Schools

Disclosures of Potential Conflicts

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Collaborators

LAUSD:

Kimani Norrington-Sands, PhD

Alejandra Acuna, PhD

Pia Escudero, L.C.S.W.

UCLA:

Armen Arevian, MD, PhD

Joe Mango

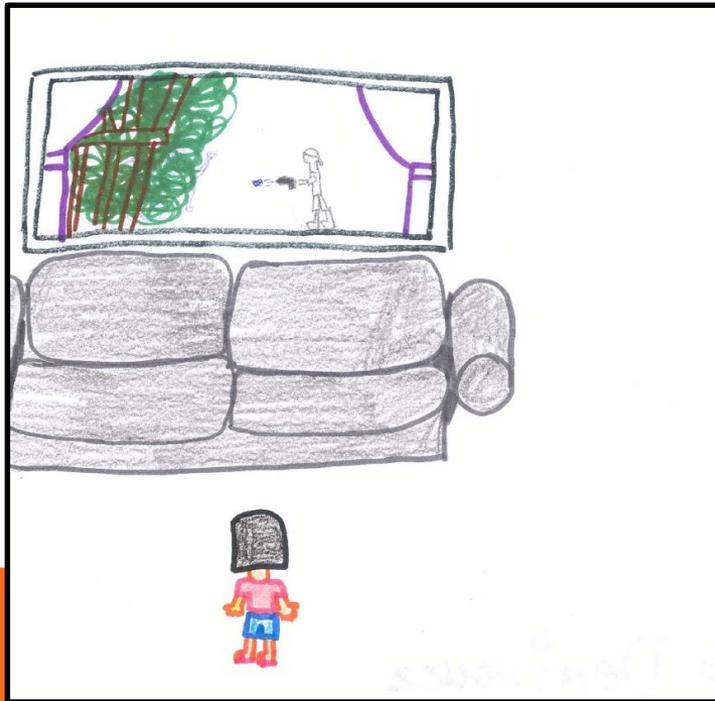
Antonella Santostefano

Roya Ijadi-Maghsoodi, MD

Sheryl Kataoka, MD, MSHS

PTSD IN CHILDREN

24-34% of youth exposed to urban violence



75% with PTSD have additional mental health problems

POST-TRAUMATIC STRESS DISORDER

First recognized as disorder in DSM III (1980)

Landmark cases described childhood PTSD

- L. Terr (1979, 1983); Pynoos (1987)

Child manifestations of PTSD described in DSM III-R (1987)



RISK FACTORS FOR PTSD

Three main risk factors in youth

- Severity of the event
- Parental reaction to the trauma
- Proximity to the event
- Past exposure to trauma

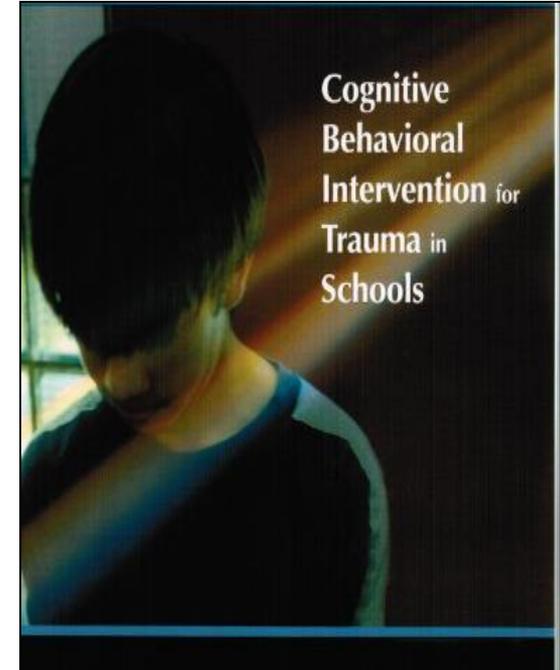
**Family support and less parental distress
result in lower levels of PTSD symptoms**

CBITS (COGNITIVE BEHAVIORAL INTERVENTION FOR TRAUMA IN SCHOOLS)

Began in LAUSD 1999-2000 school year as part of immigrant student outreach

Evaluations

- Quasi-experimental design
- Randomized Controlled Trial
- Currently RCT being replicated in SF Unified
- Adaptations:
 - Special Education
 - Child Welfare
 - Disasters (New Orleans)
 - Native Americans (Montana)
 - Teacher implementation (SSET) in English and Japanese



EFFECT OF TRAUMA ON LEARNING

Decreased IQ and
reading ability

(Delaney-Black et al.,
2003)

More suspensions
and expulsions

(LAUSD survey, 2006)

Decreased rates of
high school
graduation

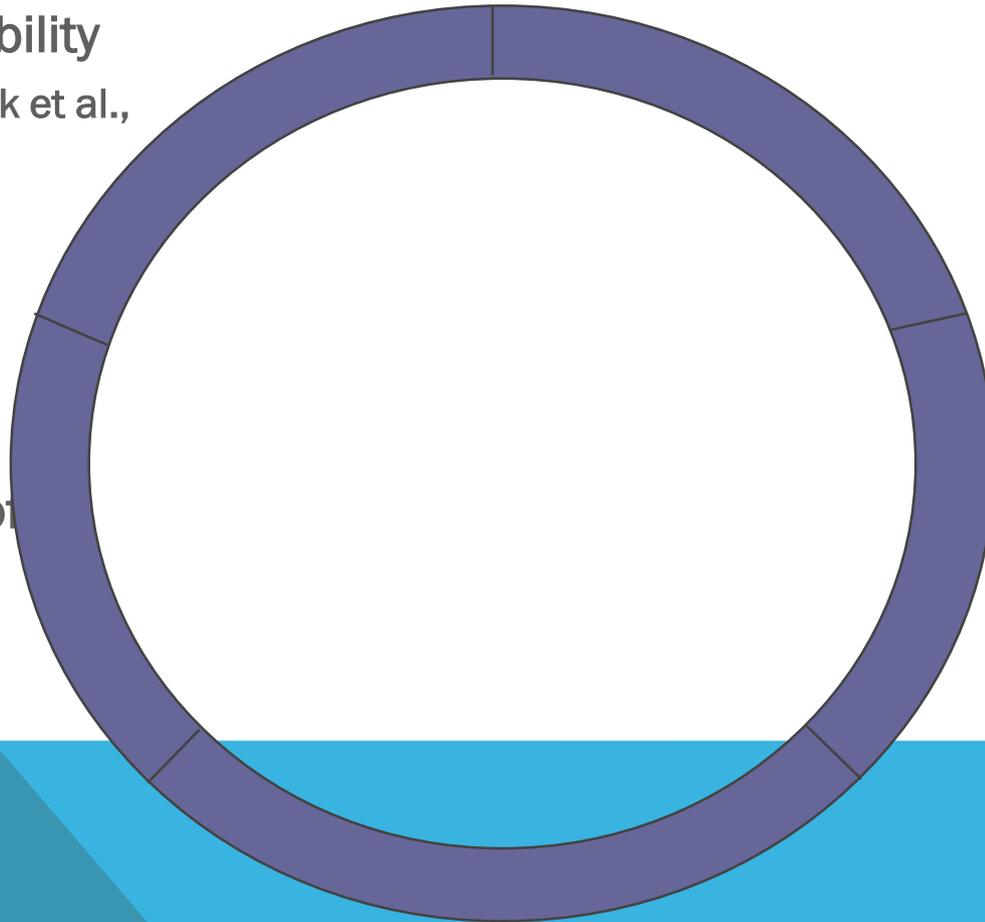
(Grogger, 1997)

Lower grade
point average

(Hurt et al., 2001)

More days absent from school

(Hurt et al., 2001)



COMMON MANIFESTATIONS OF PTSD IN THE CLASSROOM

Nightmares

- Fatigue during the day
- Falling asleep in class

Avoidance

- Absenteeism
- Resistance to doing certain things for no obvious reason

Feeling Shame

- Withdrawal from peers
- Negative self-statements
- Poor eye contact

CBITS: COGNITIVE BEHAVIORAL INTERVENTION FOR TRAUMA IN SCHOOLS

Goals

- Provide early detection and intervention in schools
- Screening in general population
- Symptom reduction
- Academic support
- Peer and parent support

Build resilience

Skills

- Education about trauma and common effects on students
- Relaxation training
- Cognitive therapy
- Learning to face the trauma (exposure)
- Problem-solving in social situations

CBITS AND IMPLEMENTATION IN SCHOOLS

Trauma Screening + 10 CBITS Group Sessions for Students

- *Coordination with teachers/ principals
- *Pull-out from class
- *6-8 students/group
- *1-3 individual sessions for trauma narrative work

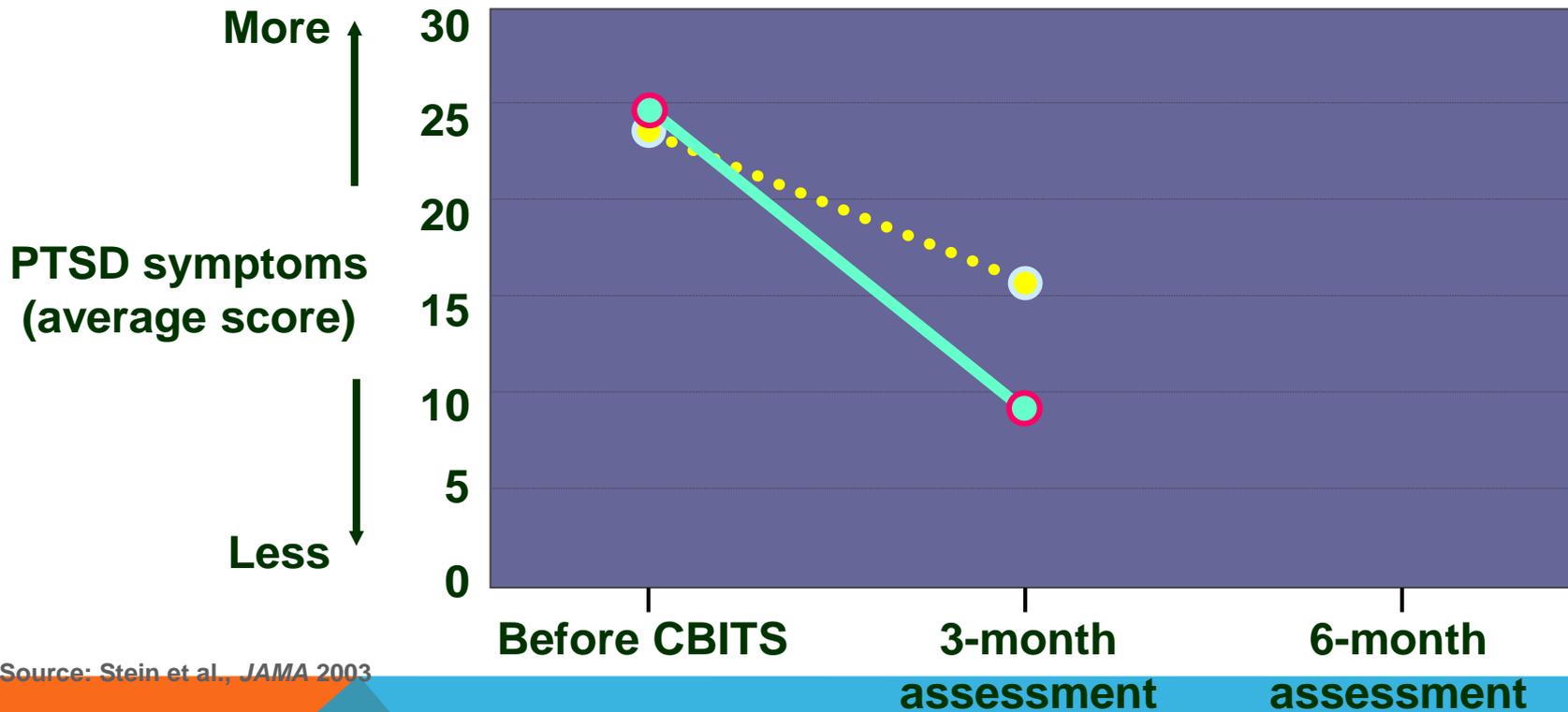
Trauma Education for Teachers

- *During regular teacher in-service
- *Hand-out for teacher's

Trauma Ed for Parents

- * Parent Educational Sessions offered in groups
- *Hand-out for parents

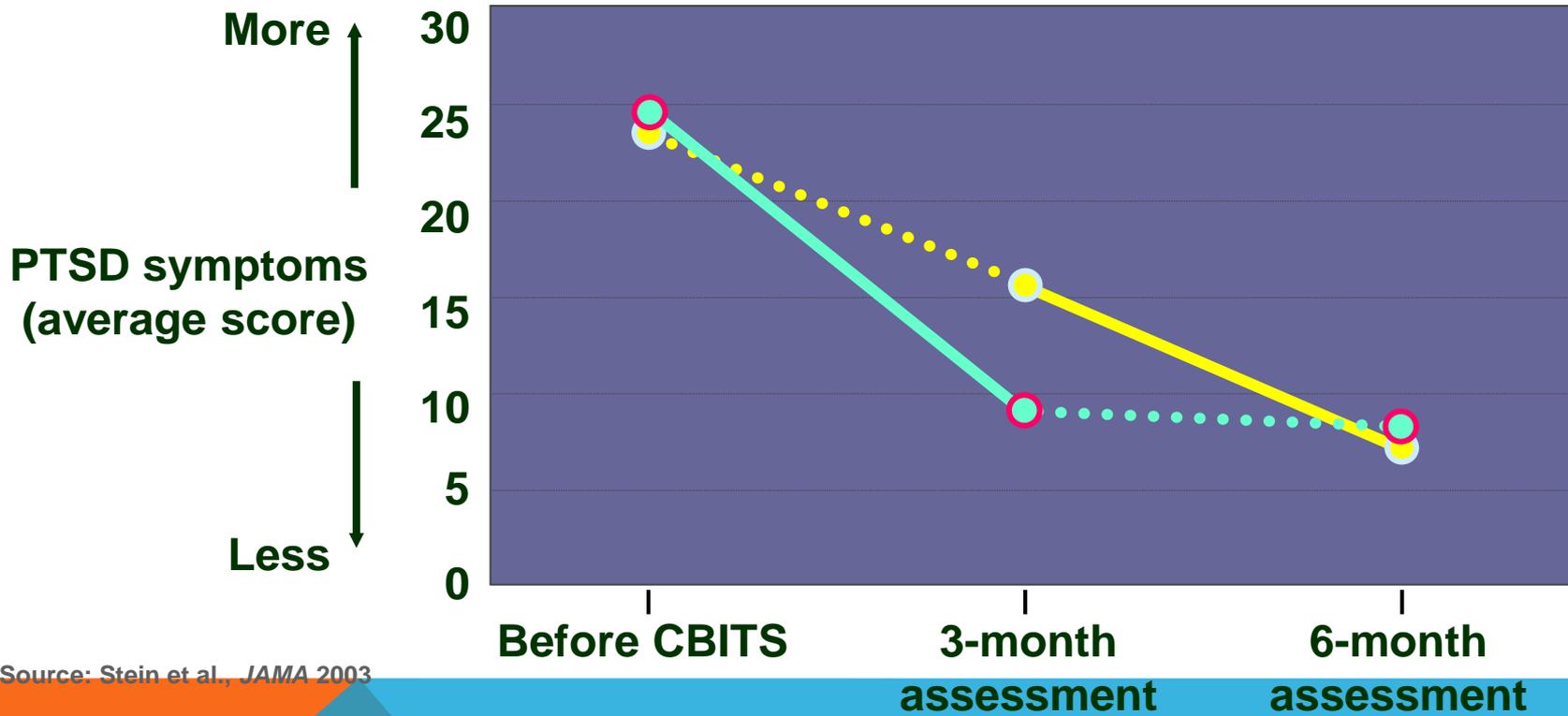
CBITS REDUCED SYMPTOMS OF TRAUMA



Source: Stein et al., JAMA 2003

● Group treated immediately ● Group treated later
Solid line = Receiving CBITS Dotted line = Not receiving CBITS

THE IMPROVEMENT IN SYMPTOMS LASTED

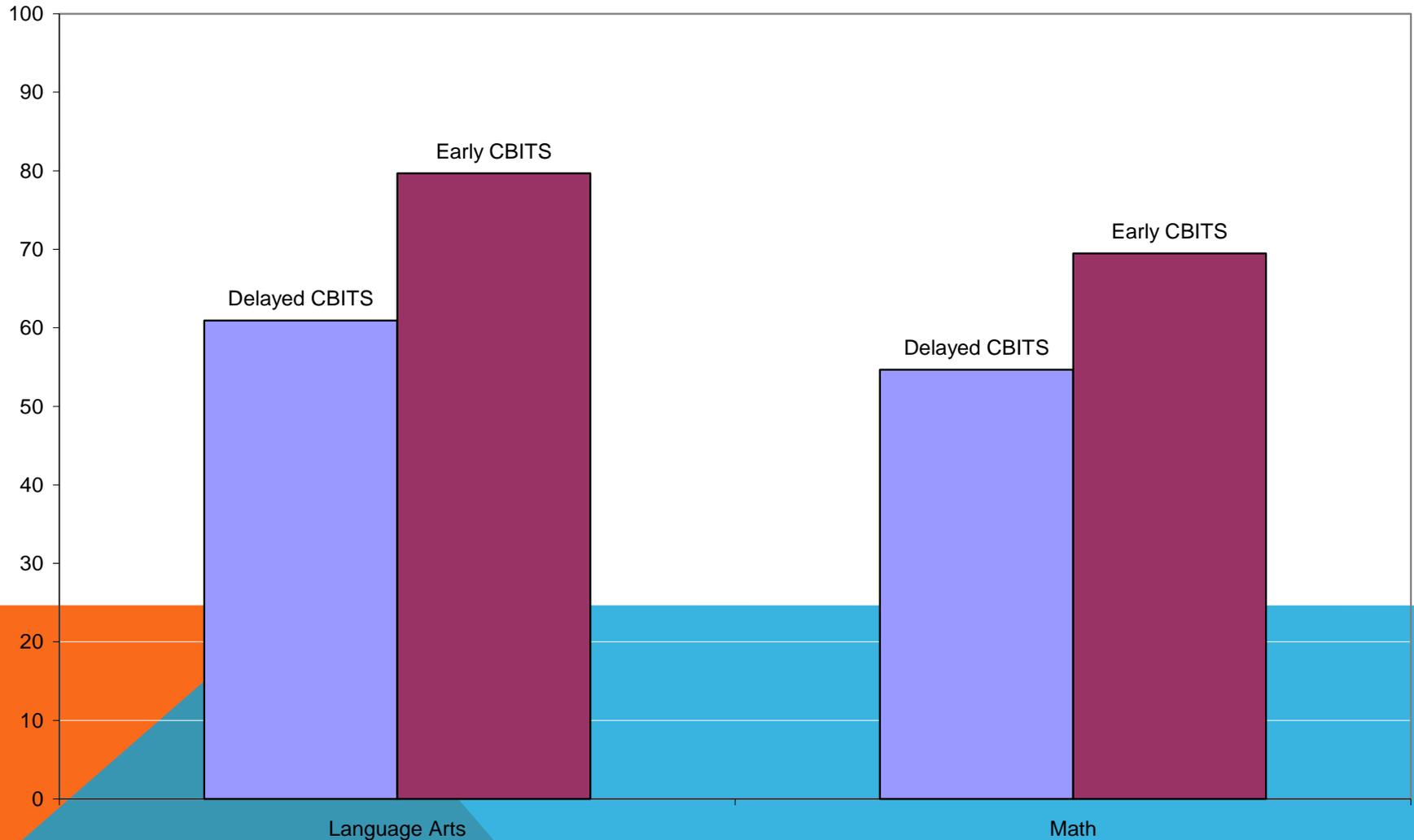


Source: Stein et al., JAMA 2003

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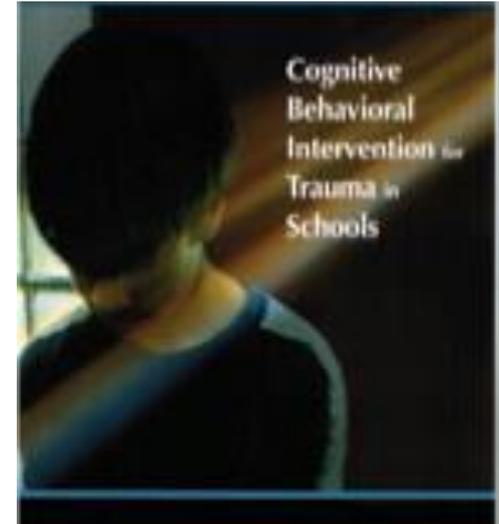
CBITS IMPROVES GRADES

% of Grade C or above in Spring Term by Treatment Groups



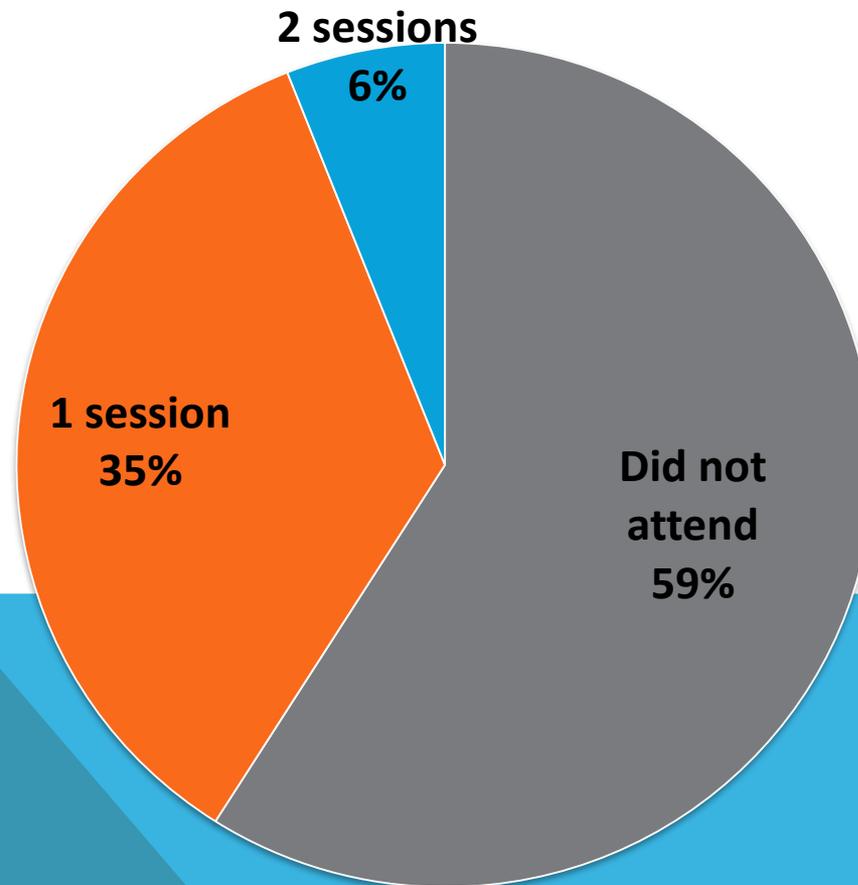
CBITS Parent Sessions

- **CBITS is primarily a child group CBT**
- **Parent sessions optional, not a mandated part of treatment**
- **2 CBITS parent sessions**
 - Common reactions to trauma
 - Supporting child with use of cognitive and problem-solving skills
 - Helping with real-life exposures
- **Phone contact to mobilize parent support and plan for any at home practices of skills or exposures**



PAST FINDINGS: CBITS AND PARENTS

When 2 parent psychoeducation sessions offered, more than ½ don't attend any sessions



Importance of Parent Engagement in Trauma Treatment

- In treating youth exposed to trauma, one clinical recommendation is parent engagement and involvement in treatment (JAACAP Practice Parameters, PTSD 2010).
- Studies have shown that parents involved in their child's trauma treatment have improved:
 - Parental depression
 - Greater support for the child
 - More effective parenting (Cohen 2004).



Barriers to Parent Engagement

- Although schools can be an ideal place to provide trauma treatment for students, it can be challenging to engage parents in school interventions.
- Barriers to engagement as reported by parents
 - Scheduling conflicts, high cost, lack of transportation and child care
 - Perceptions that provider is judgmental, lacks empathy
- Risk factors for lower rates of engagement:
 - Single-parent status
 - Low SES, poverty
 - Parent psychopathology
 - Ethnic minority status



What is Known about Overcoming Barriers to Parent Engagement

- Training staff in specific parent engagement strategies leads to improved parent participation (McKay 1996)
- Strategies to improve engagement (Alameda-Lawson 2010):
 - Outreach
 - Persistence
 - Responsiveness
 - Resource linkages

History of CBITS Parent Engagement

Experience from 3 Different States, 11 Schools (Santiago 2013)

- Not all schools offer parent sessions due to:
 - Limited school-based clinician time
 - Limited resources
 - Challenges with outreach to parents generally
- Parents who attended, welcomed CBITS sessions
 - Requested additional sessions (managing family stressors, parent-child communication)
 - Parent barriers: long work hours, transportation, childcare

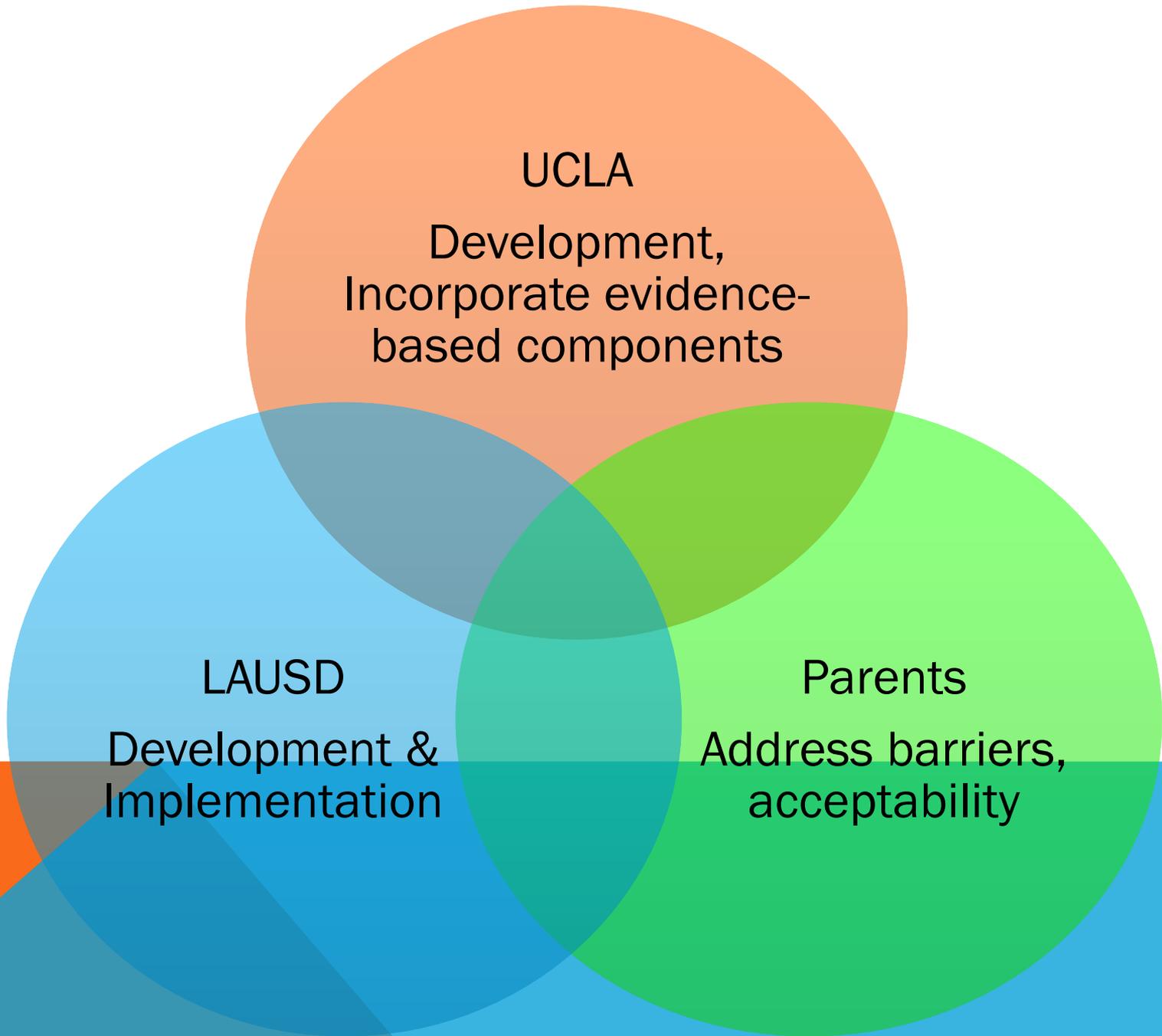
Purpose of a Trauma-Informed Mobile Texting App for Parents

- To improve engagement of parents in school-based trauma treatment
- To provide trauma education to parents who can't attend in-person sessions
- To reinforce knowledge and skills learned during in-person sessions



Community-Partnered Participatory Research

- Mutual transfer of expertise and insights, sharing in decision-making, and mutual ownership
- More rapid and effective improvement in community health outcomes
- Interventions have the potential to become more permanent fixtures in the community (Wells et al., 2006)



UCLA

Development,
Incorporate evidence-
based components

LAUSD

Development &
Implementation

Parents

Address barriers,
acceptability

participatory mobile intervention development



Chorus is a website that allows anyone (researchers, community members, clinicians) to create their own automated mobile interventions

- Text messages (SMS)
- Interactive Voice Response (IVR)

ENABLING PARTICIPATORY MOBILE INTERVENTION DEVELOPMENT

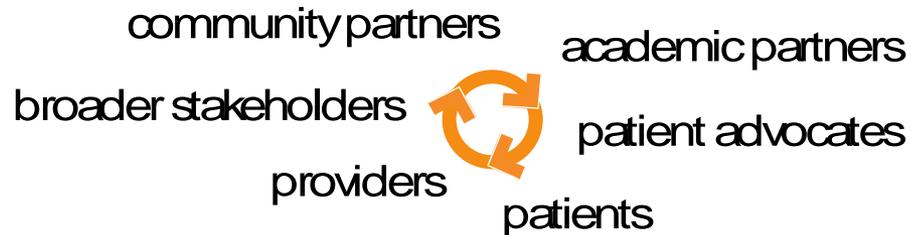
***Non-techie* people can create their own mobile interventions**

Everyone's voice can be heard. Because no programmers or servers are required, people can create their own mobile health interventions directly

Fast and easy development allows for *real-time and iterative co-design*

Stakeholders can create their apps in real-time together (during a workshop for example) and then mobilize those apps to test and improve the same day. **Real-time** development also enables creating apps for evolving needs (i.e. disasters, health emergencies)

This allows *direct and participatory engagement* of broad stakeholders



traditional application development

creation

*"expert"
+"IT"*



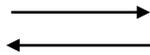
output

"beta app"



output

"final app"

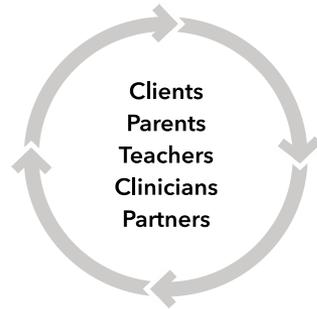


feedback

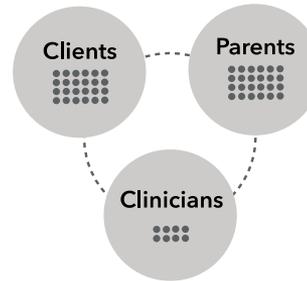
"users"

participatory mobile intervention development

Stakeholder Engagement + Participatory Design



Person-Centered Customization



Feedback



Outcomes

**Iterative
Development**

Brief Texts Pushed Out Weekly to Parents

- 160 character texts that can be pushed out following child sessions
 - Messages can tell parents what was covered that day and how they can support their child at home
 - Content can be expanded through video links
 - Parents can decide when they receive texts

Chorus x UCLA

https://chorus.semel.ucla.edu/#/me/apps/86/composer/creator/interactions/998

COMPOSE HISTORY REACH OUT ALL CHANGES SAVED.

chorus MENU Start Text INTERACTIONS VARIABLES OVERVIEW

Welcome to the Parents CBITS App! (Bienvenidos a CBITS app) Text/Envie: 1 - for English 2 - for Spanish

We're here to help you learn along with your child. This is an automated texting app. For non-emergencies please contact your child's PSW.

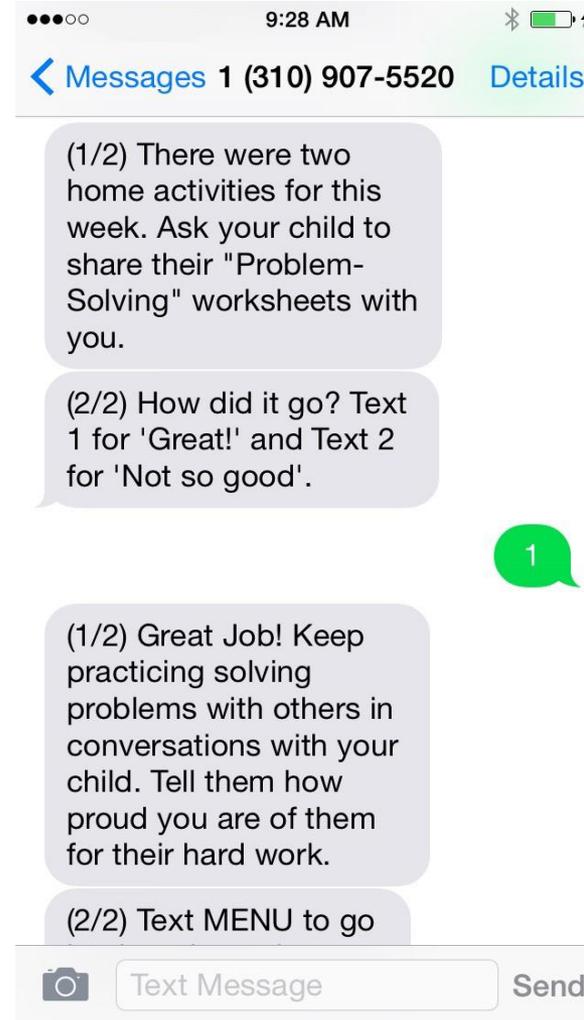
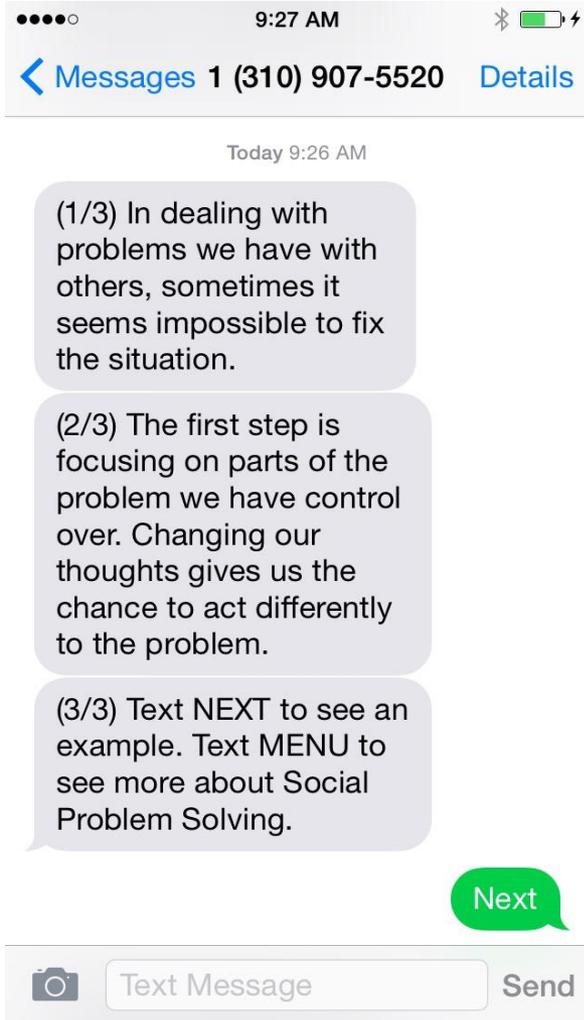
For emergencies, dial 911. If at any point you choose to stop receiving these texts please text STOP. You can restart or resume by texting START.

S1: English/Spanish...

Add new response set

CLIENTS

The image shows a web browser window displaying the Chorus app composer interface. The browser's address bar shows the URL: https://chorus.semel.ucla.edu/#/me/apps/86/composer/creator/interactions/998. The Chorus logo is in the top left, and 'UCLA' is in the top right. Below the logo are navigation tabs: 'COMPOSE' (highlighted), 'HISTORY', and 'REACH OUT'. A status message 'ALL CHANGES SAVED.' is on the right. A secondary navigation bar includes 'MENU', 'Start Text' (with a plus icon), 'INTERACTIONS' (highlighted), 'VARIABLES', and 'OVERVIEW'. The main content area features a large white smartphone mockup with three text messages in speech bubbles. To the right of the phone is a response set labeled 'S1: English/Spanish...' with a dashed orange box below it containing the text 'Add new response set'. At the bottom center, there is a 'CLIENTS' button with a group icon.



CBITS Parent App:

- Parents receive brief text messages to let them know what their child learned in CBITS that week (10 sessions)
- Content:
 - What is stress and trauma and common reactions
 - Relaxation exercises
 - Coping with thoughts and feelings about trauma
- Parents receive 2-3 texts per week or can view text on website

CBITS Parent App: Results

- **61 parents pilot tested the CBITS Parent Texting App**
- **Feedback:**
 - Learned something new
 - Texts were helpful
 - Would recommend texting app to a friend
- **Dissemination:**
 - Parent texting app part of routine school consent for CBITS
 - Can be easily modified to adapt for specific community needs

THANK YOU!

SHERYL KATAOKA, M.D.

**CONTACT ME AT:
SKATAOKA@MEDNET.UCLA.EDU**

