



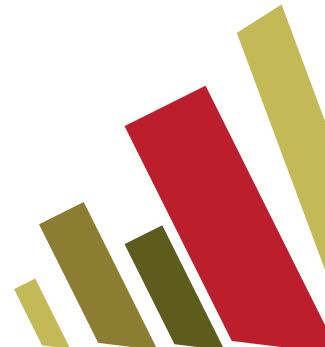
# Responding to Traumatic Stress Post Hurricane María in Puerto Rico: Brief ACT-Informed Group Intervention with School Personnel

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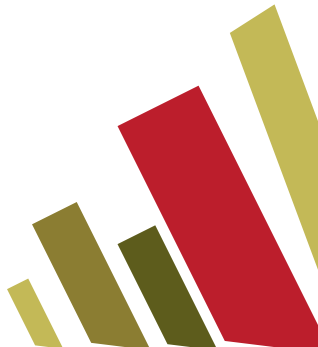
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Rosaura Orengo-Aguayo, PhD

- I have not received and will not receive any commercial support related to this presentation or the work presented in this presentation.
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September 20, 2017

**Hurricane María** Makes Landfall in  
Puerto Rico

- ✓ 155 MPH, Cat 4 Storm
- ✓ Power grid destroyed
- ✓ 4,000+ related deaths
- ✓ 94 billion in damages
- ✓ 100% of the island impacted

# Effects of Natural Disasters on Children's Mental Health

- ✓ Disruption of social support networks
- ✓ Posttraumatic stress
- ✓ Depression and Anxiety
- ✓ Decline in academic functioning
- ✓ At risk behaviors including substance use
- ✓ Increase in bullying
- ✓ Increase in suicidal ideation and attempts

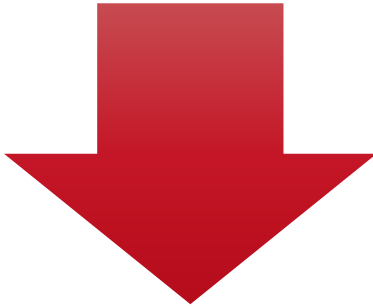


(Bonanno, Brewin, Kaniasty, & La Greca, 2010;  
Kessler, 2000)

# Risk and Protective Factors

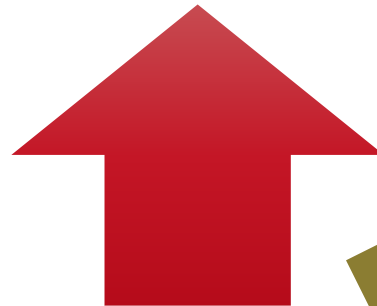
## Risk Factors:

- High hurricane/other life stressors
- Lack of access to basic needs
  - Low social support
  - Poor coping skills



## Protective Factors:

- Social Support
- Access to services, basic needs and routines
- Resiliency/ coping skills



# Puerto Rico Psychological Relief Program

- How it got started...
- Community-Based Participatory Approach (Lurie et al., 2013)



# Puerto Rico Psychological Relief Program

- **Stepped Care Approach** (Watson, Brymer & Bonanno, 2011)

Tertiary  
Intervention



**Trauma-Focused Cognitive Behavioral Therapy (TF-CBT)**- Address mental health concerns resulting from trauma (PTSD, Depression, Anxiety)

Secondary  
Prevention



**Skills for Psychological Recovery (SPR)**- To bolster resilience, prevent mental health concerns, and promote recovery

Primary Prevention

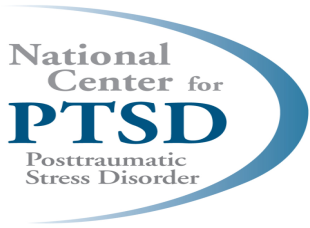


**Psychological First Aid (PFA)**- Address basic needs and provide basic coping skills immediately after a disaster



# Psychological First Aid (PFA)

- Evidence-informed modular approach to help children, teens, and families in the immediate aftermath of disaster.
- Aimed at reducing initial distress caused by traumatic events and to foster short-and-long term adaptive functioning and coping.
- Delivered by lay providers in diverse settings



National  
Center for  
**PTSD**  
Posttraumatic  
Stress Disorder



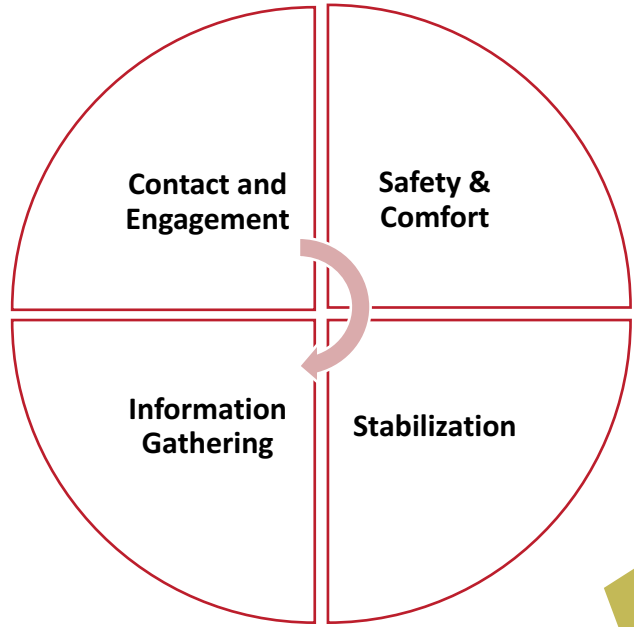
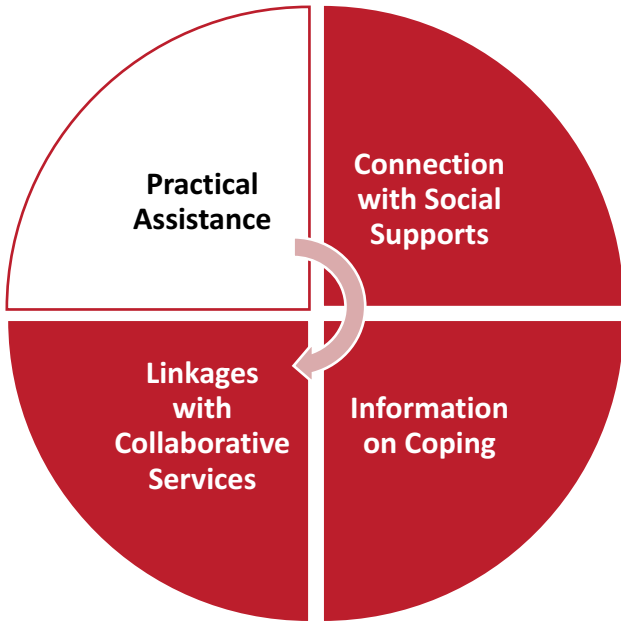
The National Child  
Traumatic Stress Network  
**NCTSN**

(Brymer, Jacobs, Layne, et al., 2006)





# Psychological First Aid (PFA)



# Phase 1: Psychological First Aid

- Conducted **6 workshops** across the island
  - 90 Minute- Teachers/staff only
  - 4 hours- Social Workers (Train-the-trainer)
- **552 attendees** (teachers, social workers, and staff)



# Workshop Components

Topic	Brief Description	ACT Processes	Exercises
<b>Introductions &amp; Needs Assessment</b>	Explored immediate needs and possible solutions. Orient to the here-and-now.	<ul style="list-style-type: none"><li>-Values</li><li>-Committed Action</li><li>-Present Moment Awareness</li></ul>	-5 Senses w Candy



# Workshop Components

Topic	Brief Description	ACT Processes	Exercises
Trauma and Common Reactions	Psychoeducation and group discussion	-Present Moment Awareness -Self as Context	- “Have you noticed this in yourself? Others?” - “Who notices?”



# Workshop Components

Topic	Brief Description	ACT Processes	Exercises
<b>Secondary Traumatic Stress</b>	Psychoeducation and common reactions	-Present Moment Awareness -Self as Context	- Self-Inventory while noticing



# Workshop Components

Topic	Brief Description	ACT Processes	Exercises
<b>Coping Skills for Adults and Children</b>	Experiential exercises and group practice	-Present Moment Awareness -Defusion -Acceptance	-Mindful Breathing -Body Scan & PMR -Turtle Story -The Cloud



# Workshop Components

## Topic

## Brief Description

Application in Schools & Resources

Information on how to apply these coping skills in school & provide resources



DE  
DEPARTAMENTO DE EDUCACIÓN

CAJA DE  
HERRAMIENTAS  
PARA  
EDUCADORES  
PARA EL MANEJO  
DE TRAUMA  
INFANTIL

The National Child  
Traumatic Stress Network  
NCTSN

Administración de Salud Mental y Abuso de Drogas (SAMHSA), Departamento de Salud y Servicios Humanos  
apoyado por el Departamento de Educación y Servicios Humanos (DOE) y el Departamento de Salud y Servicios Humanos (DOH)

NCTSN

The National Child  
Traumatic Stress Network

DATOS SOBRE EL TRAUMA Para Educadores

**HECHO:** Muchos niños que asisten a la escuela han sido expuestos a un evento traumático que puede afectar su aprendizaje y comportamiento. Ejemplos de eventos traumáticos incluyen desastres naturales, abuso físico, abuso sexual, y presencia de violencia.

**HECHO:** El Trauma puede impactar el rendimiento escolar.

- Bajo promedio escolar
- Aumento en la tasa de ausentismo escolar
- Aumento en suspensiones y expulsiones de la escuela
- Disminución en la habilidad de lectura

**HECHO:** El Trauma puede afectar el aprendizaje.

Un evento traumático puede causar el tener sobresaltos, pensamientos intrusivos, sueño interrumpido, pesadillas, enojo y mal humor, y/o retraimiento social—todos los cuales pueden interferir con la concentración y memoria.

**HECHO:** Los Niños traumatizados pueden sentir malestar físico y emocional.

- Síntomas físicos como el dolor de cabeza y problemas estomacales
- Control de emociones inadecuado
- Rendimiento escolar inconsistente
- Comportamiento impulsivo y impredecible
- Reacción exagerada o no acorde al olor, campanas, el contacto físico, porfiatos, sirenas, luces, o movimientos bruscos
- Reacciones intensas a recordatorios del evento traumático
- Pensamientos que otros invaden su espacio personal, por ejemplo, "¿Qué miras tú?"
- Reacción explosiva cuando una persona en posición de autoridad lo corrige o le dice que debe de hacer
- Pelos cuando otros lo critican o fastidian
- Resistencia a la transición y/o al cambio

**HECHO:** Educadores pueden ayudar a un niño/a que ha sido traumatizado/a.

- Siga los procedimientos de la escuela si sospecha abuso
- Trabaje conjuntamente con los cuidadores del niño/a para compartir y a su vez afrontar los problemas escolares
- Refiera a los servicios disponibles si el niño/a demuestra señales de no poder manejar el estrés traumático

**¿Qué se puede hacer en la escuela para ayudar al niño/a traumatizado/a?**

- Mantenga la rutina diaria. El regreso a la "normalidad" transmite el mensaje que el niño/a está fuera de peligro y la vida continúa.
- Ofrezca opciones al niño/a. Frecuentemente los eventos traumáticos se tratan de la pérdida de control y/o caos, así que usted puede



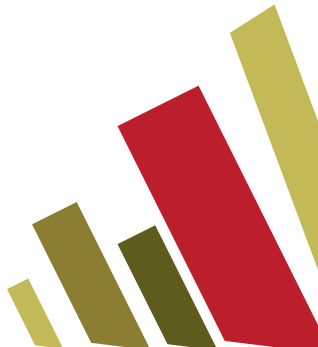
# Results

## **Pre-Post Self-Report Questionnaire**

(5 point Likert scale, “Completely false” to “Completely true”)

1. I’m able to identify common trauma reactions in my students.
2. I’m able to identify common trauma reactions in myself.
3. I have the necessary skills to manage traumatic reactions in the classroom.
4. I have the necessary skills to manage traumatic reactions in myself.
5. I feel capable of managing traumatic reactions in the classroom.
6. I feel capable of managing traumatic reactions in myself.

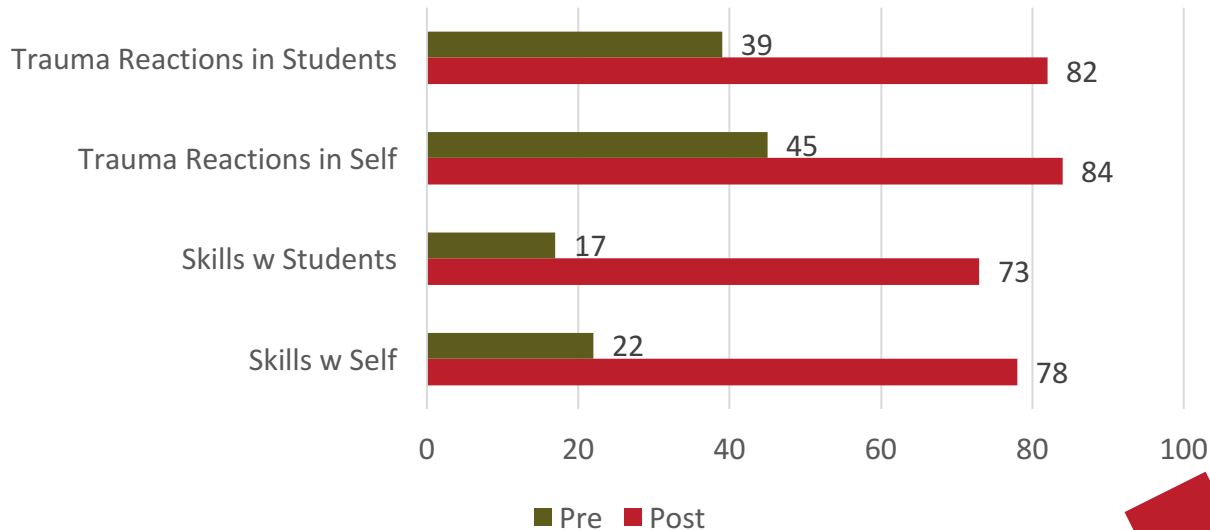
## **Post Survey- 3 additional open ended questions:**

1. My favorite part of the workshop was:
  2. My least favorite part of the workshop was:
  3. I would have liked more information about:
- 



# Results

## Pre-Post Workshop Results




\*\*\* All pre-post changes significant at  $p < .001$



# Results

## **Favorite Parts of the Workshop**

- 66% reported that the ***coping skills*** portion (e.g., mindfulness, deep breathing, progressive muscle relaxation, and visualization exercises) were their favorite part of the training.
  - *“Strategies to face traumatic events. I learned techniques to relax stress, tension, and anxiety both in myself and in others.”*
  - *“Relaxation techniques for the students or young children.”*
  - *“The hands-on activities for Progressive Muscle Relaxation.”*
  - *“The workshop was excellent for being so practical. My favorite part was the one with the chocolate and the technique of the 5 senses and the cloud.”*
- 

# Results

## Least Favorite Part of the Workshop

- 49% reported they **enjoyed every part** of the training and/or that they did not have a least favorite part. *“Everything was very good, I took note of everything to share it with the faculty and my colleagues who could not come.”*
- 21% reported **logistical issues** were the most problematic part of the workshop (e.g., lack of electricity after the hurricane, which resulted in having no air conditioning, limited to no audio and visual equipment, and lack of printed handouts to aid in the delivery of the workshop, time of workshop being inconvenient, disliking the location)

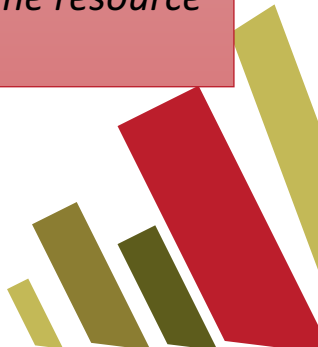


# Results

## Would have liked more information about

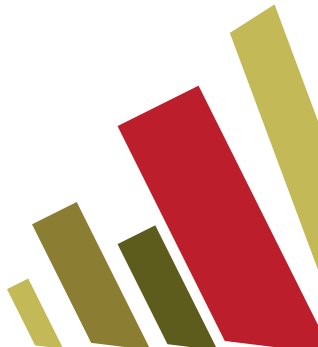
- 58% reported wanting more workshops like this one in the future, more information on trauma in specialized populations, strategies for working with teenagers (older populations), and crisis management techniques.

*“Realized or learned that everything that I am feeling is normal. I acquired tools to work with [my] emotions or reactions. The workshop “liberated” me from feelings of guilt and incompetence. The resource was excellent!”*





# Lessons Learned

- Relationships matter
    - Community-based participatory approach
    - Consultation
  - Follow the need
    - Be here, now
  - Flexibility
    - Grant time lines, material development, travel, experiential exercises, etc.
  - Keep it simple
    - A quick, simple, ACT-based exercise can go a long way
  - Share findings with community partners
    - Data-drive approach that informs next steps
  - Teamwork makes the dream work
    - Including self-care
  - Low cost/low resource – It is possible
    - Leverage existing resources and partnerships
- 

# Puerto Rico Psychological Relief Program: Future Directions

- **Stepped Care Approach** (Watson, Brymer & Bonanno, 2011)



Tertiary Intervention

**Trauma-Focused Cognitive Behavioral Therapy (TF-CBT)**- Address mental health concerns resulting from trauma (PTSD, Depression, Anxiety)

Secondary Prevention


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# Acknowledgments

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- 



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