When Problems Persist: Treating Anxiety and Traumatic Reactions in Children and Families

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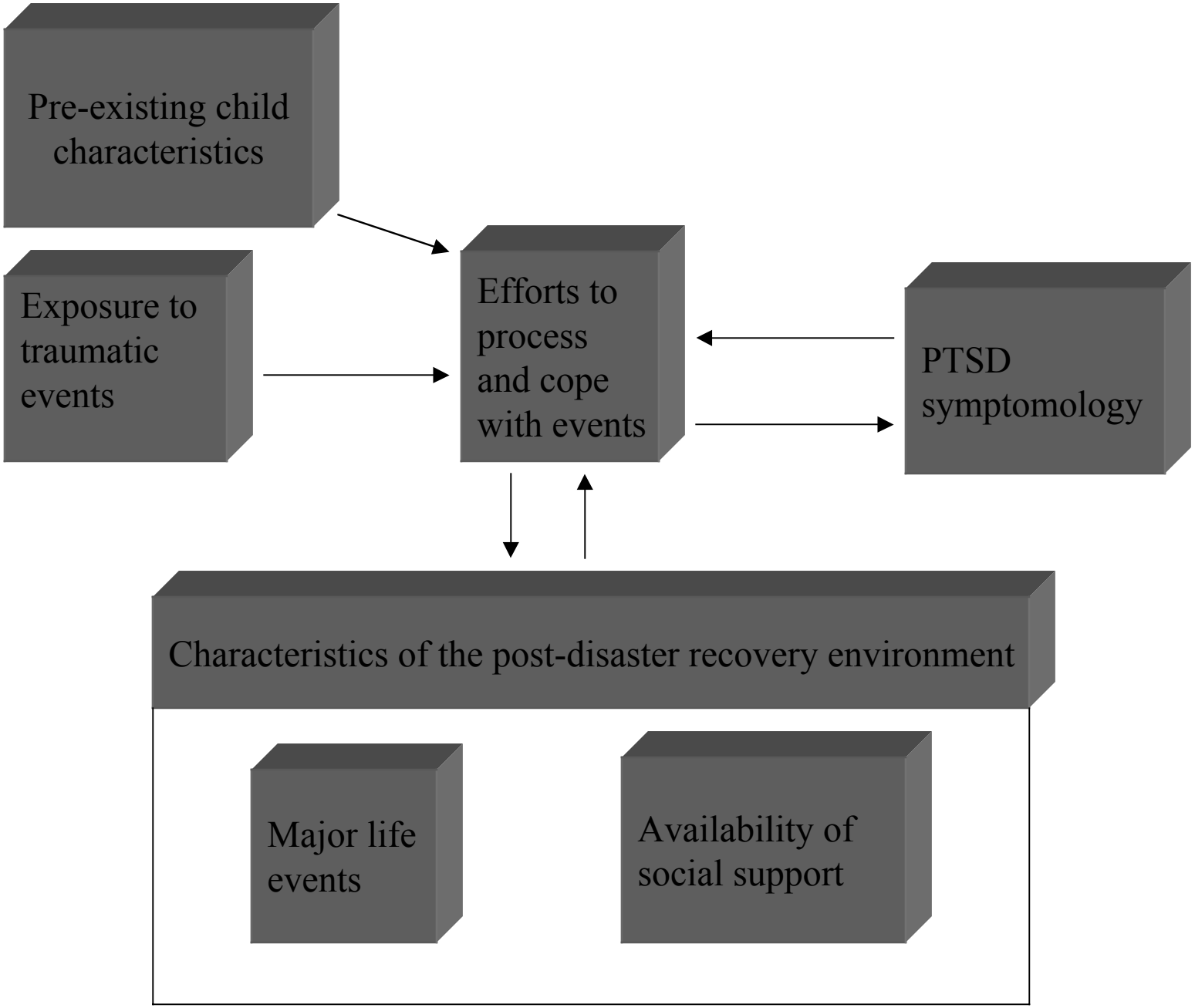
Why Study Persistence?

- To be able to:
  - Identify predictors of persistence in youth at risk for chronic traumatic reactions
  - Develop treatment and prevention intervention programs for these youth

What are Typical Persistent Outcomes?

- PTSD
- Other anxiety and phobic disorders
- Depression
- Substance abuse/dependence
- Externalizing behavior problems



Adapted from La Greca, Silverman, Vernberg, & Prinstein (1996)

Predictors of Persistence for Physical and Sexual Abuse

Study	N	Nature of Trauma	Age at Trauma	Follow-up Interval	Predictors of Psychopathology
Brown et al (1999)	639	Physical/ sexual abuse/ Neglect	Anytime in Childhood	Youth between 18-26 years	■Physical and sexual abuse
Fergusson et al (1996 a,b); Fergusson & Lynskey (1997); Lynskey & Fergusson (1997)	1,019-1,265	Physical/ sexual abuse	Anytime in childhood	Youth at 18 years	■Abuse ■Affiliation with delinquent peers ■Low parental support
Silverman et al. (1996)	375	Physical/ sexual abuse	Anytime in childhood	Youth at 21 years	■Physical and sexual abuse

Predictors of Persistence for Human-Made and Technological Disasters

Study	N	Nature of Trauma	Age at Trauma	Follow-up Interval	Predictors of Psychopathology
Millgram et al (1988); Tyano et al. (1996)	389	Bus accident	13 years old	Youth at age 20	■Level of Exposure ■Pre-trauma Psychopathology
Nader et al (1990); Pynoos and Nader (1989)	100-133	Sniper attack	9.2 years old	14 months after event	■Knowing child who was killed ■Level of Exposure
Yule (1992); Udwin et al. (2000); Yule et al. (2000)	404	Shipping disaster	14.7 years old	5 months and 8 years after event	■Gender (female) ■Level of Exposure ■Pre-trauma Psychopathology
Laor et al. (1996); Laor et al. (1997); Laor et al. (2001)	230-281	SCUD attack	3 - 5 years old	2 and 5 years after event	■Acute Response to Trauma ■Trauma symptoms in mothers ■Displacement ■Family disruption
McFarlane et al. (1987) McFarlane (1987)	808	Bushfire	5- 12 years old	18 months after event	■Trauma response in mothers

Predictors of Persistence for Natural Disasters

Study	N	Nature of Trauma	Age at Trauma	Follow-up Interval	Predictors of Psychopatholog
Pynoos et al. (1993); Goenjian et al. (1997); Goenjian et al. (1995)	64-218	Earthquake	8-16 years old	1 and 3 years after event	■Level of exposure ■Gender (female)
Green et al. (1991) Green et al. (1994)	207 299	Dam Collapse	2-15 years old	2 and 17 years after event	■Level of exposure ■Gender (female) ■Parental trauma response
La Greca, Silverman et al. (1996) La Greca, Silverman, & Wasserstein (1998)	442 92	Hurricane	8 –12 years old	3, 7 and 10 months after event	■Level of exposure ■Gender (female) ■Ethnicity ■Social support ■Coping ■Pre-trauma psychopathology
Shaw et al. (1995); Shaw et al. (1996)	144 30	Hurricane	6-11 years old	2, 8, and 24 months after event	■Level of exposure

Most Consistent and Strongest Predictors of Persistence are Levels of:

- Exposure
- Social support
- Psychopathology before trauma (especially fear/anxiety)

Less Consistent Predictors of Persistence

- Gender (girls > problems than boys)
- Ethnicity (Hispanic and African American youth > problems than Euro-American)
- Child's coping style (blame/anger and social withdrawal more problems)
- Parental reactions

Influence of Parental Reactions

- Expectant mothers in the designated five-mile evacuation zone near Three Mile Island had more anxious pre-schoolers than controls
- After SCUD missile attacks, pre-school children's PTSD reactions were mediated by mothers' ongoing reactions
- Parents' PTSD reactions to child's serious illness mediates child's PTSD reactions

Implications

- Clinicians should closely monitor children facing high risks for psychiatric symptoms following trauma, especially children who
  - are exposed to particularly high levels of trauma
  - live in conditions characterized by high levels of social disruption and have restrained social support
  - show signs of pre-existing psychopathology or acute reactions to trauma

This would serve to:

- Avert and/or minimize maladjustment and clinical dysfunction in children

- Reduce the number of new cases of a given disorder

Other Potentially Important Risk Factors

- Behavioral Inhibition
- High Genetic Loading
- Anxiety Sensitivity
- Parenting Skills
- Parent-Child Interactions

High Reactive Infant at 4 months

Low Reactive Infant at 4 months

Genetics

- Impact of genes different for different anxiety disorders (e.g., low in Specific phobia; high in SAD; little known about other anxiety disorders including PTSD)
- Impact of genes greater for girls than boys and may increase with age

Anxiety Sensitivity

"Unusual feeling in my body scare me"

"It scares me when I feel I am going to faint"

"It is important for me to stay in control of my feelings"

"I don't want other people to know when I feel afraid"

From Childhood Anxiety Sensitivity Index; Silverman et al. (1991)

Research shows Anxiety Sensitivity predicts Panic Disorder

but…….?

Parenting Skills

Less granting of psychological autonomy (over-controlling) and more likely to encourage avoidant behaviors (over-protective)

Parent-Child Interactions

Characterized as negative and critical

So, although we have information on risk factors, prevention intervention programs targeting risk factors are only beginning to be developed and evaluated now.

What has been done?

Child Sexual Abuse Prevention Intervention Programs (1980s)

- School-based, universal
- Knowledge based
  - information about body ownership
  - touch continuum
- Skills based
  - recognition of abusive situations
  - saying “No”!
  - telling a trusting adult

Main Findings

Children who participated in the universal prevention programs generally perform better on attitude and knowledge-based scales about sexual and physical abuse than child non-participants.

Implications

Although there are gains in attitude and knowledge, we cannot assume that children change their behaviors, thereby reducing the incidence of child sexual abuse.

Implications (cont.)

We also cannot assume that these programs will work for children who might be at risk for exposure to other traumatic events (e.g., physical abuse, natural disasters).

More research is needed.

What about treating youth who show persistent traumatic reactions?

Randomized Clinical Trials (RCTs)

Sexual abuse

- King et al. (2000)
- Cohen and Mannarino (1996)
- Deblinger et al. (1998)
- Celano et al. (1996)
- Berliner and Saunders (1996)
- King et al. (2002)

Physical abuse

- Kolko (1996 a, b, c)
  - Examined parent-child relationships, not PTSD symptoms

Characteristics of RCTs

- Exposure + CBT
- Psychometrically sound measures
- Manualized treatments

Comparison Groups Included:

- Waitlist control
- CBT without exposure
- CBT with family
- Non-directive supportive treatment
- Community care
- Supportive care

DESIGN

	Pre	Treatment	Post	Follow-up
Treatment Group	X	X	X	X
Waitlist	X	O	X	O

Summary and Implications of RCTs

The studies produce strong and consistent evidence that exposure + CBT is the most effective intervention compared to no intervention or other interventions. So exposure + CBT is the treatment of choice when working with traumatized youth.

What about treating youth with other anxiety and phobic disorders?

RCTs

- Kendall (1994)
- Barrett, Dadds, & Rapee (1996)
- Kendall et al. (1997)
- Barrett (1998)
- Cobham, Dadds, & Spence (1998)
- King et al. (1998)
- Last, Hansen, & Franco (1998)
- Mendlowitz et al. (1999)
- Silverman et al. (1999a)
- Silverman et al. (1999b)
- Beidel, Turner, & Morris (2000)
- Flannery-Schroeder, & Kendall (2000)
- Hayward et al. (2000)
- Spence, Donovan, & Brechman-Toussaint (2000)
- Ginsburg, & Kelly (2002)
- Manassis et al. (2002)

Characteristics of RCTs

- All used exposure + CBT
- Used psychometrically sound measures
- Used diagnostic interviews (ADIS-C/P)
- Manualized treatments

Comparison Groups

All used waitlist controls except three studies (e.g., education support; Beidel et al., 2000; Last et al., 1998; Silverman et al., 1999)

Basic Structure and Contents/Goals of Treatment Program

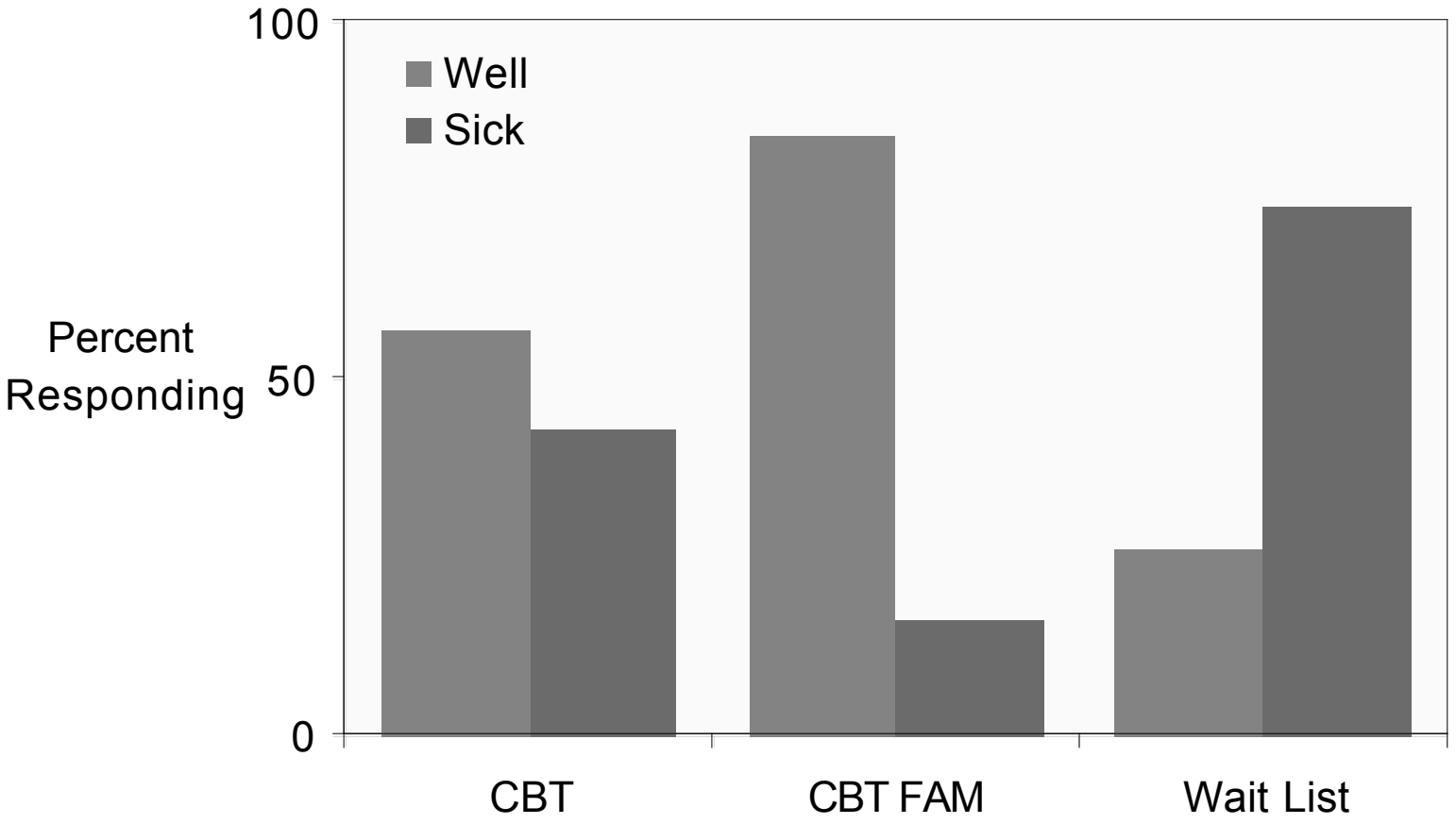
- Education phase
  - Collaborative or joint effort
  - Learning the necessary skills
  - Key change-producing procedure exposure
  - Fear hierarchy
    - Behavior procedures - reinforcement and extinction
  - Cognitive procedures – role of cognitions

Basic Structure and Contents/Goals of Treatment Program

- Application Phase
  - Gradual exposure tasks: in-session and out-of-session
  - Practice and review

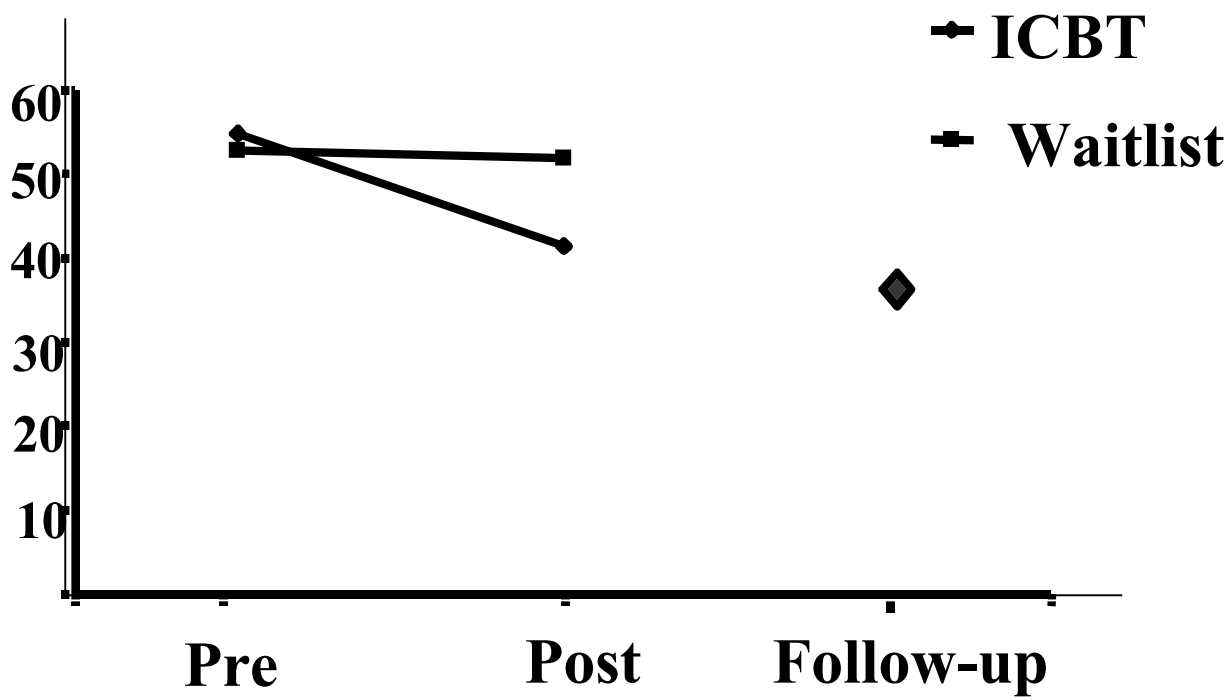
- Relapse Prevention Phase
  - Interpretation and handling of slips

Family Treatment of Childhood Anxiety: Cognitive Behavioral Therapy ± Family Management



Barrett et al. (1996)

Efficacy of ICBT
RCMAS



From Kendall (1994)

Summary and Implications of RCTs

- Strong and consistent evidence that exposure + CBT is more effective than no intervention. Some interesting findings with Education Support.

- More research is needed, but to date, exposure + CBT is the most evidence- based, and therefore, is the treatment of choice.

Conclusions

- Exposure, social support, and pre-trauma symptoms are the strongest and most consistent predictors of persistence of reactions to trauma, particularly PTSD.

- Drawing on anxiety disorders research, there may be other potential risk factors. Research is needed.

Conclusions (cont.)

- Preventive intervention programs targeting risk factors in its infancy.

- RCTs on treating persistent reactions to trauma, particularly symptoms of PTSD and anxiety/fear indicate exposure + CBT treatment of choice.


"Today we're going to explore in paint how we feel
when we're picked up late from preschool."