Addressing Mental Health and Trauma-Related Needs of Sheltered Children and Families with Trauma-Focused Cognitive-Behavioral Therapy (TF-CBT)

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BACKGROUND

- As of January 2020, the Department of Education reported that 1,508,265 children, enrolled in public schools, experienced homelessness (U.S. Interagency Council on Homelessness, 2020). In the U.S., one in every 30 children, or 2.5 million, experience homelessness annually (Bassuk et al., 2014).
- Limited past research has documented that the majority of children experiencing homelessness (78%) suffer from at least one mental health issue (e.g., depression, behavior problems) along with academic/developmental delays (Zina et al., 1994).
- 20% of youth are exposed to at least one potentially traumatic event (PTE; McLaughlin et al., 2013). The prevalence rate of exposure to PTEs is substantially higher amongst youth experiencing homelessness than those in the general population (Cowal et al., 2002).
- Youth experiencing homelessness are up to 3 times more likely to experience PTSD than their homed peers. In fact, 18% of youth experiencing homelessness meet criteria for PTSD (Stewart et al., 2004).
- In addition to increasing the stress of daily living, homelessness increases exposure to Adverse Childhood Events (ACES; Felitti et al., 1998). Approximately 12.5%, or one in every eight youth, experience high levels of ACES (≥ 4; Felitti et al., 1998).
- Youth living in poverty are at substantially greater risk of experiencing high levels of ACES (Halfon et al., 2017).
- In fact, living below the poverty line results in a four hundred percent increase in the risk of exposure to high levels of ACES (≥ 4), as compared to individuals from financially stable homes (Halfon et al., 2017).
- Trauma-Focused Cognitive-Behavioral Therapy (TF-CBT; Cohen et al., 2016) is the gold standard in the treatment of PTSD symptoms in youth.
- Very few studies have examined the feasibility and effectiveness of delivering TF-CBT within a sheltered setting.

RESEARCH QUESTIONS

As part of a larger community-based service driven research project, the current study sought to:

(1) Examine cross informant reports of mental health difficulties, prevalence of exposure to PTEs, and diagnostic status within a large sample of youth experiencing homelessness at entry into a women's homeless shelter,

(2) Determine the feasibility and effectiveness of implementing TF-CBT within the context of a homeless shelter, and

(3) Examine youth-level constructs (i.e., age/grade and number of exposures to PTE types) which may moderate treatment effectiveness.

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METHOD

Participants

- The present study was part of a larger service driven, community-based, research project conducted at the Lotus House, the largest women's shelter in the state of Florida and one of the largest in the nation, with a nightly capacity to shelter over 500 women and youth.
- Data were collected between June of 2017 and July of 2020. All families were offered clinical assessments and therapeutic services based on clinical need promptly upon admission.
- To qualify for the current study, families were required to (a) have a youth between the ages of 5 and 17-years-of-age who (b) spoke English, Spanish, and/or Creole. Although not all youths reported exposure to a PTE, all youth entering the shelter had experienced at least two substantial ACES (i.e., homelessness and poverty).
- As such, all youths were likely to benefit from trauma-informed intervention (i.e., trauma narrative could focus on PTE or ACEs) and no explicit inclusion/exclusion criteria regarding severity of trauma-related symptomology were implemented for this study.
- Sample consisted of 297 youth between the ages of 5 and 17 (Mean age = 10.06, SD = 3.24). 56.4% Males; Black/African Americans (70.1%). The 297 youth included in this study were from 224 families; majority home language was English (72.4%), another 26% spoke Spanish exclusively or were bilingual.
- Mother/guardian age ranged from 23 to 66 years (M = 35.09, SD = 8.31). Only 2% of mothers reported income greater than $25,000 annually.

Intervention

- **Trauma Focused Cognitive Behavior Therapy** (TF-CBT; Cohen, Mannarino, & Deblinger, 2006) is an evidence-based program designed for the treatment of trauma-related symptoms in youth ages three to eighteen years. In TF-CBT youth and their parents are taught coping strategies and face exposures of gradually increasing intensity as they move through treatment. Therapy sessions follow a preset sequence of skills (PRACTICE; Brown et al., 2020; Cohen et al., 2010) utilized across three phases of treatment (see figure below). Traditionally, TF-CBT is traditionally completed within 12–15 sessions, butcan be extended to up to 16–25 sessions (Cohen & Mannarino, 2016).
- For this study, given the transient nature of the sheltered population (Culhane et al., 2007), every effort was made to complete TF-CBT within 10–12 sessions. See outline of sessions below:

Phase 1 Stabilization & Skills (4-5 Sessions)	Phase 2 Trauma Narrative & Processing (4-5 Sessions)	Phase 3 Integration & Consolidation (1-3 Sessions)	Reevaluation & Additional Sessions
• **P**sychoeducation & **P**arenting • **R**elaxation • **A**ffect Expression & Modulization • **C**ognitive Coping	• **T**rauma Narrative & Processing	• **I**n-Vivo Master • **C**onjoint Sessions • **E**nhancing Safety & Future Development	• 10 session or 4 months in, family & therapist met to determine whether treatment goals were met. • If necessary additional sessions were added to protocol (n=46) • Total sessions < 18

Outcome Measures

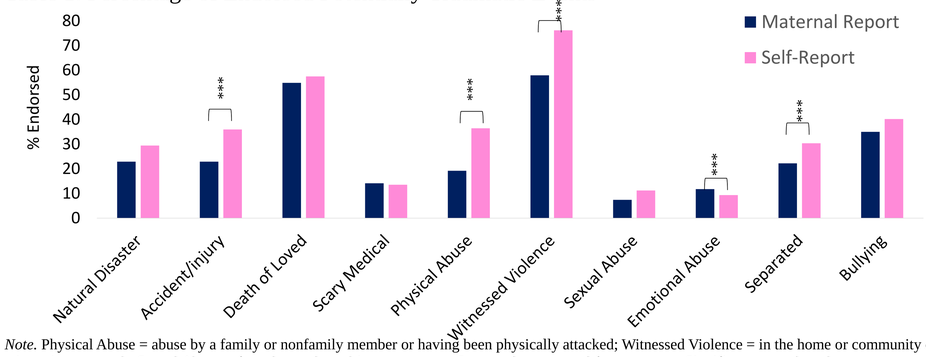
Child and Adolescent Trauma Screen (CATS): All mothers completed the CATS-caregiver and youth ages eight and older completed the CATS-youth, at pre- and post-intervention. The CATS assesses for exposure to 14 PTEs and the frequency of each of the 20 post-traumatic symptoms (only 16 symptoms assessed for children < 7 yr.), based upon the DSM-5 criteria (American Psychiatric Association, 2013).

- *Rate of exposure to PTE types* was calculated by summing the number of PTE types endorsed by the youth or their mother. Scores ranged from 0 to 14. It is important to note that although homelessness and poverty are ACEs/childhood risk factors, these were not included within the total number of PTE types for this study.
- *Symptom Severity:* PTSD symptoms were rated on a 4-point Likert-scale ranging from 0 (never) to 3 (almost always), resulting in a single total severity score, with higher scores indicating greater severity of post-traumatic stress (Parent CAT α = 0.83; Self CAT α = 0.86).
- *Symptomology:* Endorsement rates of (a) reexperiencing, (b) avoidance, (c) negative mood and cognitions, and d) arousal symptoms (criterion B-E of the DSM 5 PTSD symptom criterion) were calculated by summing the number of items within each domain rated as occurring half the time (2) or almost always (3). Higher scores indicate greater presence of symptomology.
- *Diagnostic Status:* was calculated by determining whether endorsement rates of reexperiencing, avoidance, negative mood/cognition, and arousal met or exceeded DSM criteria (i.e., at least 1, 1, 2, 2, and 1 symptom, respectively) for those youth with reported exposure to at least one PTE. Diagnostic status was coded dichotomously based upon meeting or not meeting DSM 5 criteria for PTSD.

Eyberg Child Behavior Inventory (ECBI)
Mothers completed the ECBI (Eyberg & Ross, 1978), a 36-item questionnaire designed to assess externalizing behavior problems in youth ages 2–16 years, at pre- and post-intervention. The raw score from the total intensity scale was used in the present study as a measure of externalizing behavior problems (α = 0.94).

RESULTS

Table 1. Percentage of Endorsed Potentially Traumatic Events

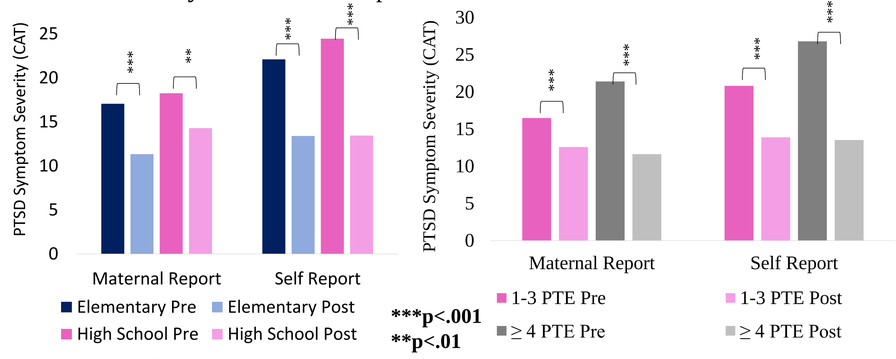


Note. Physical Abuse = abuse by a family or nonfamily member or having been physically attacked; Witnessed Violence = in the home or community or witnessing an attack; Sexual Abuse = forced sexual touching or pressure; Separated = separated from a parent. Significance tests based on t-tests to determine differences in rate of endorsement across informant. Maternal report N = 297; Self-report N = 214. *** = $p < .001$

Results of a series of repeated measures ANCOVAs examining pre-post intervention scores (covarying for age) showed that ***TF-CBT resulted in significant reductions***:

1. Severity of PTSD-related symptoms (Maternal: F = 12.10; $p < .001$ | Self: F = 7.44; $p < .01$).
2. Diagnostic status (Maternal: F = 19.41, $p < .01$ | Self: F = 7.58, $p < .01$).
3. Criterion B (reexperiencing) symptoms (Maternal: F = 7.84; $p < .01$ | Self: F = 7.92; $p < .01$).
4. Criterion E (arousal) symptoms (Maternal: F = 12.87; $p < .001$).
5. Externalizing Behaviors (Maternal: F = 29.48; $p < .01$).

Moderation Analyses: Results of repeated measures ANOVAs



***p<.001
**p<.01

- TF-CBT was equally effective across development in reducing PTSD symptom severity. However, there was a significant time by group effect of treatment on ECBI scores (F = 15.63, $p < .001$) → younger children improved more than adolescents
- Youth experiencing < 4 and ≥ 4 exposures to PTE types demonstrated improvements pre- to post-intervention (CAT & ECBI).
- Youth experiencing ≥ 4 exposure types consistently benefiting more from TF-CBT than youth with <4 (CAT).

DISCUSSION & IMPLICATIONS

- Findings demonstrate both the magnitude of the needs of sheltered youth, the feasibility of providing evidence-based interventions within the context of a homeless shelter, and the value of providing such services to sheltered youth and their families.
- The time limited adaptation of TF-CBT was found to be effective in reducing trauma-related symptomology.
- This study offers a promising blueprint for other shelters and community mental health providers to follow in their provision of clinical services in the future.
- Finally, although TF-CBT resulted in a significant reduction of symptomology across youth, it was more effective at reducing externalizing behaviors in children as compared to adolescents and was more effective at reducing symptomology in youth who had experienced greater PTE exposure types.

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