The Cognitive Behavioural Intervention for Trauma in Schools

The Treatment and Services Adaptation Center for Resilience, Hope and Wellness in Schools

The Cognitive Behavioral Intervention for Trauma in Schools[1]

Region	Global
Country	United States (California, Colorado, Connecticut, District of Columbia, Illinois, Louisiana, Maryland, Montana, New Jersey, New York, Washington and Wisconsin), China, Guyana, Japan
Organization	The Treatment and Services Adaptation Center for Resilience, Hope and Wellness in Schools
Name	The Cognitive Behavioral Intervention for Trauma in Schools (CBITS)
Category	Resilience
Start date	2001
End date	Ongoing
Partners	University of Southern California, RAND Corporation, University of California, Los Angeles and Los Angeles Unified School District
UN involvement	No
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1. Background and description

Violence affects all racial, ethnic and economic groups, but its burden falls disproportionately on poor and minority children[2] – the very children whose mental health needs are least likely to be met by the health care system.[3] Children exposed to violence are at increased risk of exhibiting symptoms of post-traumatic stress,[4] behavioural problems and feelings of depression and anxiety[5] as well as poor school performance and more days of school absence.[6]

In 1997, members of the district crisis intervention teams in the Los Angeles Unified School District (LAUSD) expressed concern regarding the number of students exposed to violence. Many students were from neighborhoods with high levels of poverty, gang activity and drug use and were experiencing distress resulting from exposure to violent events such as the injury or death of a student, teacher or family member. During that period, Marleen Wong was the LAUSD Director of Mental Health, Crisis Intervention and Suicide Prevention Programs. She approached researchers from the RAND Corporation and the University of California, Los

1 Desk Review (May-September 2014); Inquiry Form (22 July 2014); Interview (19 November 2014); Write up (11 December 2014); Internal Validation (11r-18 December 2014); Implementer Validation (17 February 2015); Final validation (October 2015).
2 Christoffel (1990).
3 Kataoka (2002).
4 Berton and Stabb (1996)
5 Farrell (1997).
6 Hurt (2001).

Angeles (UCLA) with two objectives:

(1) To empirically determine the rates of violence exposure for students in the LAUSD;

(2) To develop a strategy for supporting students who have been exposed to violence and are experiencing symptoms of trauma, depression and anxiety.

Under Wong's supervision, the LAUSD Mental Health Unit surveyed over 28,800 sixth graders in order to assess violence exposure rates. Over 90 per cent of the students residing in areas with the highest rates of poverty and crime reported exposure to at least one violent event within the past 12 months, and 40 per cent reported exposure involving a deadly weapon. For Dr. Wong and her research partners, these findings were a call to action. The research team reached out to school stakeholders including administrators, teachers and parents to develop a strategy for addressing this district-wide epidemic. This community-academic partnership aimed to create an intervention for traumatized students that would be both soundly based in research and accepted into the school setting.[7]

The Cognitive Behavioral Intervention for Trauma in Schools (CBITS) is a skills-based, group intervention that is aimed at relieving symptoms of post-traumatic stress disorder (PTSD), depression and general anxiety among children exposed to trauma. Children learn skills in relaxation training, cognitive restructuring, exposure therapy and social problem-solving. In between sessions, children practice the skills they have learned.

Organization profile[8]

The Treatment and Services Adaptation Center for Resilience, Hope and Wellness in Schools (TSA for Schools) is a partnership of faculty and staff from the University of Southern California (USC) School of Social Work, the RAND Corporation, UCLA and LAUSD. The Center's mission is to promote trauma-informed school systems that provide a nurturing environment for trauma-exposed students, and allow for the delivery of best practices in this child-serving setting. The TSA for Schools aims to develop and disseminate school-based, trauma-informed interventions, including CBITS.

7 Wong (2006)

8 Interview with Pamela Vona, Program Manager on 19 November 2014.

2. Goal and objectives

2.1. Goal

CBITS aims to reduce symptoms of PTSD and depression.

2.2. Objectives

- Reduce symptoms related to trauma exposure;
- Build skills and enhance resilience to stress;
- Build peer and caregiver support;
- Enhance students' coping and problem-solving strategies;
- Impact students' academic performance by improving their attendance and ability to concentrate;
- Improve the ability of teachers and parents to support students who have been impacted by trauma.

3.Target group

3.1. Age group

The CBITS programme has been used most commonly for children in grades six to nine (ages 10-15 years) who have experienced events such as witnessing or being a victim of violence, a natural or man-made disaster, an accident or house fire or being physically abused/injured, and who are suffering from moderate to severe levels of PTSD. Preliminary versions of the CBITS programme have been used in children as young as eight years of age.[9]

3.2. Gender considerations

Screening is commonly conducted in a classroom setting with male and female students having equal access to screening and subsequently to the CBITS intervention, based on their screening scores.

3.3. Ethnic / disability considerations

CBITS has been used with ethnically and geographically diverse students. In the first pilot of CBITS, the programme was offered to immigrant students who were originally from Mexico, Central America, Russian Federation, Armenia and Republic of Korea.[10] CBITS has since been implemented in urban communities including in Los Angeles, Chicago and the District of Columbia; following disasters such as in New Orleans after Hurricane Katrina; on Native American reservations in Montana; and in rural and suburban settings in Wisconsin and most recently in Newtown, Connecticut.

Adaptations for special populations or settings

During the development of CBITS, preliminary versions were delivered to recent immigrants who speak primary languages other than English, such as Spanish, Russian, Korean and Western Armenian. While the CBITS manual is available only in English, student handouts have been translated into Spanish. Partners of TSA for Schools who work with Native American students have made adaptations of the CBITS intervention for this population as well. CBITS has been adapted

9 National Child Traumatic Stress Network (NCTSN) CBITS Factsheet.

10 Jaycox (2002).

11 NCTSN CBITS Factsheet.

for use with low-literacy groups and children in foster care.[11]

3.4. Targeting the most marginalized / most at risk

The developers of the CBITS intervention allow for flexibility in terms of how schools and/or agencies identify students who may benefit from the programme. Some schools may choose to use a referral process while others may choose to screen students.

A two-step screening approach is taught during the CBITS training. This method includes distributing the Child PTSD Symptom Scale (CPSS) and Life Events Checklist to students. If a child screens positive, clinicians are trained to conduct a follow-up interview to confirm the results of the screening.

3.5. Human rights programming

One of the primary aims in developing the CBITS programme was to reduce the disparity in access to quality mental health services for minority youth. Providing an evidence-based intervention in the school setting removes barriers in access to care, helping to reach underserved youth who otherwise may not receive treatment from external organizations. For example, in New Orleans following Hurricane Katrina, when students were randomly assigned to receive care either at a school or clinic, 98 per cent of students assigned to school-based CBITS began treatment, compared to only 37 per cent of those assigned to services at a local community clinic.[12]

Furthermore, the intervention employs a human-rights based approach because it strives to meet the needs of the community from the perspective of community stakeholders. The intervention development process included active feedback from school-community stakeholders, so the intervention could be designed to be responsive to the needs of schools and be feasible to deliver in this setting.

3.6. Youth involvement

While youth were not formally involved in the community-partnered process described above, the hundreds of interviews conducted by Dr. Wong and her crisis counselling colleagues served as the primary impetus for the development of CBITS. Additionally, student feedback during the early pilot study provided important input into the development of the final intervention.

4. Strategy and Implementation

4.1. Strategies / theoretical approaches / methodologies

The intervention developers aimed to create an intervention that was based on empirical research and grounded in the 'real world' of schools. Studies have shown that cognitive behavioural therapy (CBT) is effective at reducing anxiety, depression and PTSD. Components of CBT include: psycho-education; relaxation skills; cognitive restructuring; trauma narrative; safety planning; affect modulation; conjoint parent sessions; and in vivo mastery of trauma reminders.[13] Furthermore, the intervention's developers used a participatory approach, engaging parents, teachers, school staff and community members to ensure they were designing an intervention that would be acceptable and feasible to the school community.[14]

12 Jaycox (2010).

13 Cohen, Mannarino & Deblinger (2006).

14 Wong (2006).

Essential components[15]

CBITS teaches the following six cognitive behavioural techniques:

- Education about reactions to trauma;
- Relaxation training;
- Cognitive therapy;
- Stress or trauma exposure/trauma narrative;
- Social problem-solving.

4.2. Activities

The programme consists of 10 group sessions (six to eight children per group) of approximately one hour in length, usually conducted once a week in a school setting. The CBITS intervention has also been delivered in other settings, such as mental health clinics. In addition to the group sessions, participants receive one to three individual sessions during which they discuss and process the traumatic event. CBITS also includes two parent psycho-educational sessions and one teacher education session.[16]

CBITS weekly sessions: overview[17]

Session1: Introduction of group members, confidentiality and group procedures; explanation of treatment using stories; discussion of reasons for participation (kinds of stress or trauma).

Session2: Education about common reactions to stress or trauma; relaxation training to combat anxiety.

Individual session (1-3 sessions): Occurs between sessions 2 and 6.

Session 3: Thoughts and feelings (introduction to cognitive therapy); 'fear thermometer'; linkage between thoughts and feelings; combating negative thoughts.

Session4: Combating negative thoughts.

Session 5: Avoidance and coping (introduction to real-life exposure); construction of fear hierarchy; alternative coping strategies.

Sessions 6 and 7: Exposure to stress or trauma memory through imagination, drawing and writing.

Session 8: Introduction to social problem-solving.

Session 9: Practice with social problem-solving and 'hot seat'.

Session 10: Relapse prevention and graduation ceremony.

CBITS training of trainers programme

The TSA for Schools partnership consists of nine team members from USC, UCLA, RAND and LAUSD. Four additional individuals from separate institutions have been certified as core CBITS trainers.

Onsite implementation staff

CBITS groups typically are run by Masters-level school mental health professionals such as clinically-trained school social workers or school psychologists. Groups can be run by one individual or can be co-facilitated based on the site's preference. In some cases, co-facilitators are interns in the process of completing their advanced degree.

Training requirements

Typically, training is arranged on a specific site-by-site basis to be conducted at the school, district agency or organization interested in being trained:

- The Director of Training of TSA for Schools assesses the needs of the site and matches a member of the training team with the site to follow up with

15 NCTSN CBITS Factsheet.

16 NCTSN CBITS Factsheet.

17 Jaycox (2003).

logistical details via telephone and email communications.

- In advance of training, it is recommended that the site identify a local collaborator who is experienced with CBT to attend the training, provide ongoing consultation and support during implementation and ensure fidelity to core treatment concepts. It is also helpful if this person has experience in treating children with traumatic stress and conducting school-based interventions.
- If access to a local individual is not possible, remote consultation may be provided by a trainer. The level of consultation is based on the need(s) of the site.
- The trainer will provide the site with an agenda, copies of the slide handouts and training worksheets for all participants.
- The site is responsible for purchasing CBITS manuals for its clinicians or school staff from the publisher.
- Trainees can make use of the website following training in order to:
  - o Bolster and review training prior to implementing the programme;
  - o Obtain expert feedback, peer-to-peer guidance and support and materials that support implementation activities.
- Details regarding the content of the training include:
  - o A description of the training packages and prices;
  - o Training outline and slides;
  - o "Trauma 101" slides for sites requiring additional background information prior to CBITS or Support Students Exposed to Trauma (SSET)[18] training;
  - o Pre- and post-training assessments of participants that can be collected in order to measure the impact of the training and guide future trainings;
  - o Assistance with fidelity monitoring (i.e., reviewing taped sessions and completing CBITS/SSET adherence rating forms) for both clinical feedback and research evaluation is also an available option for ongoing consultation support.

4.3. Innovativeness

The CBITS programme is innovative in part because of the model employed during its development. As stated above, the intervention's developers used a community-participatory model during the initial development, implementation and evaluation of CBITS. The team of researchers worked with community members, school staff and parents to develop an intervention that would meet the priorities of the school community. This meant developing an intervention that was: (1) empirically supported; (2) could serve as many children as possible with limited school resources; (3) would be consistent across schools; and (4) would be easy to disseminate if found to be effective.[19]

4.4. Cost and funding

Development of CBITS:

The research team, led by Dr. Marleen Wong, received funding to support the development of CBITS from a variety of sources including programmes for immigrants and crisis intervention in the LAUSD and charitable organizations in the United States such as the Mark Taper Foundation. Other external funding came from RAND and federal and state government grants.

18 An adaption of CBITS.

19 Wong (2006).

CBITS implementation:

The primary costs associated with CBITS are for the training sessions, manuals and the salary of the clinician(s) implementing the intervention. CBITS trainings cost $4,000 for a two-day training of 15 participants enrolled in the training of trainers. In recognition that the cost can be a barrier to training, an online training course is available (www.cbitsprogram.org) for those interested in implementing CBITS. While initially developed to support in-person training, the online course may be used as the primary training source.

Sites implementing CBITS have used a variety of funding sources and strategies including state or Federal government funds, private organizations such as the United Way and in some instances Medicaid (United States government insurance for low-income families).

4.5. Sustainability

Using continuous funding from different sources, CBITS has succeeded in sustaining its activities since 2001. Furthermore, CBITS-trained trainers serve as 'champions' in promoting the intervention in schools and other settings, strongly advocating for its implementation and thus allowing for its expansion.

More significantly, the strong evidence of effectiveness shown by the randomized control trial done in 2003[20] has contributed to sustaining the intervention as more stakeholders support its implementation within their sites. Policymakers and school principals are more encouraged to consider the mental health of the students, especially when they realize that the intervention helps them to improve their grades.[21] Communities are more informed about trauma and the possibility of reducing its effect on youth and thus are more likely to endorse the programme.[22]

Requirements and readiness

Following CBITS training, implementers will need the following to conduct the CBITS intervention:[23]

- Space for weekly group sessions is a key requirement.
- Notebooks containing the programme handouts should be prepared for participants and extra copies made in case children lose them.
- A chalkboard or large writing pad and extra copies of the activity worksheets for each session.
- Active parental consent is usually required for participants.
- Teachers whose students will be impacted by the programme are identified and asked to participate in the teacher education programme.
- Referral paths should be identified for children who require more intensive services in addition to CBITS or who remain symptomatic at the end of the programme.

4.6. Replicability

Because CBITS has gained recognition as an effective and easy-to-implement intervention, it has received requests to train and partner with both national and international organizations. Some of these partnerships have lasted over a decade, i.e., the partnership with LAUSD. Other partnerships were spurred on by traumatic events, e.g., the CBITS partnership with Mercy

20 Stein (2003).

21 Interview with Pamela Vona, Program Manager on 19 November 2014.

22 Interview with Pamela Vona, Program Manager on 19 November 2014.

23 NCTSN CBITS Factsheet.

Family Center in New Orleans developed following Hurricane Katrina.[24] CBITS has been implemented widely across the United States and abroad. Internationally, CBITS has been implemented in China, Guyana and Japan. It is also being actively disseminated through the National Child Traumatic Stress Network operated by the United States Government's Substance Abuse and Mental health Services Administration.[25]

5. Evaluation of effectiveness

CBITS has been studied in a quasi-experimental trial with students from third through eighth grades[26] and in a randomized controlled trial with sixth grade students.[27] School-based social work and school psychology clinicians delivered CBITS in both trials. The studies showed improvements in post-traumatic stress and depressive symptoms among students who had been exposed to violence. CBITS is also associated with improved school performance.[28] The details of the randomized controlled trial published in the Journal of the American Medical Association are outlined in the evaluation section below.[29]

Data from students, parents, and teachers were collected at baseline, three months and six months. These intervals enabled both early- and late-intervention groups to complete the programme and be tested in the same academic year. The evaluation indicated the following results:[30]

Baseline: The 126 students enrolled in the programme had substantial levels of exposure to violence. On average, students reported being a victim of 2.8 violent events and directly witnessing 5.9 violent events in the previous year. The mean CPSS score was 24, indicating moderate to severe post-traumatic stress symptoms. There were no significant differences between the early-intervention and late-intervention groups at the start of the programme.

Three months: At three months, students in the early intervention group had completed the programme; students in the late-intervention group had not yet begun. The early intervention students showed substantial improvement. The magnitude of the difference between the two groups means that 86 per cent of the early-intervention group reported less severe symptoms of post-traumatic stress than would have been expected without intervention. Sixty-seven per cent of the early-intervention group reported less severe symptoms than would have been expected without intervention. In addition, parents of students in the early-intervention group reported that their children were functioning significantly better.

Six months: At six months, both groups had completed the programme. The group that received CBITS after the waiting period also showed substantial improvement in symptoms, and the members of the group that had received CBITS earlier maintained their gains.

Furthermore, teachers assessed each student's shyness and anxiety, learning skills and acting-out behaviour in the classroom and noted slight improvements throughout the study period. Possible explanations include the following:

- a student's classroom behaviour is affected by many factors, not just his/her mental health;

24 Jaycox (2010) and Kataoka (2009).
25 CBITS Factsheets
26 Kataoka (2003).
27 Stein (2003).
28 Kataoka et al. (2011).
29 RAND brief.
30 RAND brief.

- there may be a time lag before improved mental health translates into improved behaviour;
- teachers may be more attuned to disruptive behaviour than to anxiety or depression;
- perhaps the programme simply does not affect classroom behaviour.

Intervention alignment with the objectives

The outcomes of these studies align with many of the aims of the intervention outlined in section 2.2.

Children in the CBITS intervention group had significantly greater improvement in PTSD and depressive disorder. Parents of children in the CBITS intervention group also reported significantly improved child functioning. The improvements in symptoms and functioning in the CBITS group continued to be seen at a subsequent follow-up at six months.[31] Kataoka also found that CBITS had a positive impact on academic performance.[32]

6. Strengths and opportunities

CBITS is a group intervention that can provide specific skills for coping with trauma. Some of the strengths of this intervention are: peer, family and school staff support; it is a brief intervention only lasting 10 weeks; it can be implemented by typical school-based clinician; and detection of trauma-related mental health problems that often are not identified. CBITS is a school intervention that provides the opportunity to detect and intervene early in the course of emotional problems.

7. Challenges

The primary challenge of implementing CBITS is working within the school culture and balancing the need to support students' emotional needs with their academic needs. Because of state and Federal laws, there is a significant emphasis placed on academic standardized tests. Therefore, some administrators and teachers are resistant to students missing instructional classes. To overcome this challenge, when approaching schools, the CBITS team emphasizes the programme's effectiveness in improving the students' academic performance.

8. Next steps and the way forward

The success of the CBITS has provided a foundation to the mission of the TSA for Schools, which is bringing trauma-informed, evidence-based practices to schools. An adaptation of CBITS, SSET, is designed to be implemented by non-clinicians in recognition of the lack of mental health providers in schools. Another intervention developed by TSA for Schools team members, Bounce Back, shares many of the same clinical components as CBITS but is designed to be implemented with elementary-age students. Preliminary studies have demonstrated promising findings for both of these interventions.[33]

The TSA for Schools aims to further the reach of these interventions by developing online training and implementation support platforms. To date, the team has launched www.cbitsprogram.org and www.ssetprogram.org. A website for the Bounce Back intervention is currently under development but will be found at www.bouncebackprogram.org.

31 Stein (2003).

32 Kataoka (2011).

33 Jaycox (2009); Langley (in press).

9. Lessons learned and recommendations

Since the launch of the CBITS intervention, developers have learned a number of lessons and subsequently have developed a list of recommendations to support CBITS implementation.

(1) Obtaining buy-in at the school or agency level is very important to successful implementation. This can be facilitated by stressing the connection between emotional well-being and academic success.

(2) CBITS clinicians ideally should receive in-person training. If this is not feasible due to location and/or resources, clinicians should complete the entire CBITS training at www.cbitsprogram.org.

(3) CBITS clinicians should receive ongoing supervision while implementing the intervention.

(4) It can be helpful to have a co-facilitator, who is often an intern or graduate student in training.

(5) CBITS clinicians should refer to the CBITS website to refresh their knowledge and training.

10. Components to consider for scale-up in MENA

- A contextualized version of the CBITS programme;
- The evaluation methods used.

11. Resources

The TSA for Schools have developed a number of resources including the CBITS website (www.cbitsprogram.org) which allows CBITS clinicians to obtain implementation support. TSA for Schools also developed www.traumaawareschools.org. This website contains information for teachers, administrators and parents which may help with the process of buy-in and helping sites to better understand the needs of traumatized students. The TSA for Schools has also developed a training-of-trainers programme which allows sites to more effectively sustain CBITS. For more information about the training-of-trainers programme, visit www.cbitsprogram.org. In addition, copies of the treatment manual can be ordered and purchased from Sopris West Educational Services (www.sopriswest.com).

Additional Resource:

http://www.cdc.gov/prc/prevention-strategies/intervention-lessen-effects-violence-urban-school-children.htm

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