

**Annotated Bibliography: Empirical Studies Supporting the Effectiveness
of Trauma and Grief Component Therapy for Adolescents (TGCTA)**

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(Ranked by Recency of Publication)

Empirical Effectiveness Studies (ranked by date of publication)	Summary of Study Findings
<p>Grassetti, S. N., Williamson, A. A., Herres, J., Kobak, R., Layne, C. M., Kaplow, J. B., & Pynoos, R. S. (2018). Evaluating referral, screening, and assessment procedures for middle school trauma/grief-focused treatment groups. <i>School Psychology Quarterly</i>, 33(1), 10-20. http://dx.doi.org/10.1037/spq0000231</p>	<p>Study Design: Described and evaluated the sequence of steps used to screen 7th- and 8th-grade students ($N = 89$) referred by school staff as candidates for an open trial of TGCTA, 33 of whom completed a 17-week course of group-based TGCTA. Logistic regressions tested the incremental utility of including measures of both trauma exposure and related emotional and conduct problems (Strengths and Difficulties Questionnaire) in the screening battery.</p> <p>Key Findings: The group screen helped to detect mental health needs. The individual interview further identified students with posttraumatic stress and emotional problems. Conduct problems and trauma exposure predicted attrition among students who qualified for treatment. Maladaptive grief reactions incrementally predicted whether students would advance from the group screening to the individual interview, and trauma exposure incrementally predicted attrition from treatment. Study recommendations include: (1) Reduce false negatives through universal screening and enhanced consent procedures, (2) reduce false positives and improve screening efficiency by enhancing the specificity of PTS symptom and maladaptive grief reaction measures. And (3) consider supplementing TGCTA with targeted treatment engagement, family engagement, and alternative referrals for multiply traumatized youth.</p>

<p>Herres, J., Williamson, A.A., Kobak, R., Layne, C. M., Kaplow, J. B., Saltzman, W. R., & Pynoos, R. S. (2017). Internalizing and externalizing symptoms moderate treatment response to school-based trauma and grief component therapy for adolescents. <i>School Mental Health, 9</i>, 184-193. doi.org/10.1007/s12310-016-9204-1.</p>	<p>Study Design: Internalizing and externalizing problems commonly co-occur with adolescent posttraumatic stress and grief reactions. However, little is known about whether these co-occurring symptoms moderate adolescents' response to sequenced components of trauma- and grief-focused interventions. N = 44 middle school students aged 12-14 participating during a 17-week flexibly-tailored open trial of group-based TGCTA. Youth also rated their self-identified Top Problem, which was coded as primarily internalizing or primarily externalizing. Implementation and evaluation was conducted by an external team.</p> <p>Key Findings: Baseline internalizing and externalizing symptoms were examined as potential moderators of adolescents' response to skills-building (Module 1), narrative construction (Modules 2 and 3), and developmental progression (Module 4) phases of intervention. Adolescents with more internalizing symptoms showed significantly less improvement during the skills-building phase (Module 1), and significantly more improvement during the narrative construction phase.</p> <p>Traumatized and bereaved adolescents appear to show different trajectories of response to different TGCTA components as a function of their assessment profiles (depending on whether internalizing versus externalizing baseline symptoms are more prominent). Assessing self-nominated problems and broad-spectrum internalizing and externalizing symptoms can guide trauma- and bereavement-informed treatment planning and monitoring, including clinical decisions regarding which TGCTA modules a youth is most likely to benefit from.</p>
<p>Olafson, E., Boat, B. W., Putnam, K. T., Thieken, L., & Putnam, F. W. (2016). <i>Journal of Interpersonal Violence, 33</i>(16) 1-21. DOI: 10.1177/0886260516628287</p>	<p>Study Design: N = 69 youth who participated in a multi-year, phased pilot implementation of group-based TGCTA coupled with Think Trauma, a trauma-informed staff training, in four residential juvenile justice (JJ) facilities and completed pre-post measures of symptoms and incident reports.</p> <p>Key Findings: Analysis of pre-post assessment protocols revealed significant reductions in symptoms of posttraumatic stress, depression, and anger, but not anxiety or sexual concerns. A dose-response effect also emerged, in that youth who completed a full course of TGCTA exhibited significantly greater reductions in posttraumatic stress symptoms than youth who received an abbreviated version. Two facilities that tracked incident reports reported marked reductions over the course of the pilot study, with the lowest rates occurring during a period in which youth received a full course of TGCTA in conjunction with Think Trauma training for the staff. No incident reports were filed in connection with participation in TGCTA, providing some evidence that participation by juvenile justice youth in group-based TGCTA does not increase the risk for destabilization.</p>

Grassetti, S. N., Herres, J., Williamson, A., Yarger, H. A., Layne, C. M., & Kobak, R. (2014). Narrative focus moderates symptom change trajectories in group treatment for traumatized and bereaved adolescents. *Journal of Clinical Child & Adolescent Psychology* 44, 933-941. DOI:10.1080/15374416.2014.913249.

Study Design: Pilot study explored whether the specific focus of students' narratives (i.e., focus on trauma vs. focus on loss) as shared by TGCTA group members would predict initial pretreatment levels, as well as pre- to posttreatment change trajectories, of PTSD symptoms and maladaptive grief reactions. Thirty-three adolescents from three middle schools (M age = 13.31 years, 73% female; 61% were non-Latino White, 27% African American, and 12% Latino White) completed a 17-week course of group-based TGCTA. PTSD and maladaptive grief reactions were assessed at pretreatment, twice during treatment, and at posttreatment. The focus (trauma vs. loss) of each student's narrative was coded using transcripts of members' narratives as shared within the groups. Implementation and evaluation conducted by an external team.

Key Findings: Significant pre-post reductions in posttraumatic stress and maladaptive grief reactions were found with medium-large effect sizes for posttraumatic stress ($d = 0.78$) and maladaptive grief ($d = 0.74$). Further, Reliable Change Index values (Tingey et al., 1996) revealed that 61% of treatment completers reliably improved on either PTSD symptoms or maladaptive grief reactions (46% for PTSD, 39% for maladaptive grief); and 24% reliably improved on both outcomes.

Providing evidence that posttraumatic stress and grief reactions are clinically distinct entities that require different intervention components, students' pretreatment levels of PTSD symptoms and maladaptive grief reactions differed by narrative focus. Students who chose to construct trauma-focused narratives reported higher pretreatment levels of PTSD symptoms and exhibited similar rates of decline in PTSD symptoms regardless of whether they chose to construct a trauma- versus loss-focused narrative. In contrast, students who chose to construct loss-focused narratives reported higher pretreatment levels of maladaptive grief reactions and higher rates of decline in maladaptive grief reactions. Providing evidence that the reduction in maladaptive grief reactions was attributable to the narrative task rather than simply the passage of time, the significant decreases in maladaptive grief did not occur until the second half of treatment (*after* the narrative exercise).

<p>Hoagwood, K.E., Layne, C. M., Child and Adolescent Trauma Treatment and Services Consortium (2010). Implementation of CBT for children and adolescents affected by the World Trade Center disaster: Outcomes in reducing trauma symptoms. <i>Journal of Traumatic Stress, 23</i>, 699-707.</p> <p>(Program development described in): Hoagwood, K. E., Layne, C. M., Child and Adolescent Trauma Treatment and Services Consortium (2007). Implementing CBT for Children and Adolescents after September 11th: Lessons from the Child and Adolescent Trauma Treatments and Services (CATS) Project. <i>Journal of Clinical Child and Adolescent Psychology, 36</i>, 581-592.)</p>	<p>Study Design: An implementation study of cognitive-behavioral therapies (CBT) for traumatized youth in a post-disaster context. Study targeted youth (N = 306) aged 5-21 affected by the World Trade Center disaster who received either trauma-specific CBT (TGCTA was prescribed to youth aged 13-21), or brief a CBT skills-based intervention depending upon the severity of trauma symptoms. Clinicians were trained to deliver these interventions and received monthly consultation. A regression discontinuity design assessed optimal strategies for matching need to service intensity.</p> <p>Key Findings: At 6-months post-baseline, both groups had improved. Rate of change was similar despite differences in severity of need. The trauma-specific CBT group (which received individually-based TGCTA for youth aged 13-21) experienced an improvement in clinical symptoms, moving from a probable PTSD diagnosis indicative of moderate to severe trauma to the mild range. The brief CBT skills group, which was a briefer intervention, experienced a change and moved from higher mild to lower mild scores (all in the mild range). Although there was no statistically significant difference between groups, the trauma-specific CBT group, which began treatment with greater trauma exposure and considerable family/environmental adversity, experienced significantly more clinical improvement, losing their probable PTSD diagnostic status and moving into the mild range. It appeared that each group received the type of intervention it needed to experience clinically significant improvement.</p>
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Layne, C. M., Saltzman, W. R., Poppleton, L., Burlingame, G. M., Pašalić, A. Duraković-Belko, E. Čampara, N., Musić, M., Đapo, N., Arslanagić, B. Steinberg, A. M., & Pynoos, R. S. (2008). Effectiveness of a School-Based Group Psychotherapy Program for War-Exposed Adolescents: A Randomized Controlled Trial. *Journal of the American Academy of Child and Adolescent Psychiatry*, 47, 1048-1062.

Study Design: Randomized controlled trial conducted with war-exposed predominantly ethnic Muslim Bosnian secondary school students (N = 127) attending 10 schools in central Bosnia who reported severe symptoms of PTSD, depression, or maladaptive grief, and significant impairment in school or relationships). Students were randomly assigned to either (a) a “Tier 1” intervention who received classroom-based presentations, conducted by trained school counselors, that focused on psychoeducation and coping skills selected from Modules 1 and 4 (active-comparison condition; n = 61, 66% girls, mean age 16.0 years). Or (b) a “Tier 2” intervention consisting of the same classroom-based presentations combined with a full course (17 sessions) of group-based TGCTA implemented by the same school counselors (n = 66, 63% girls, mean age 15.9 years).

Key Findings: Program effectiveness was measured via reductions in symptoms of PTSD, depression, and maladaptive grief assessed at pretreatment, posttreatment, and 4-month follow-up. Analysis of mean-level treatment effects showed significant pre- to posttreatment, and posttreatment to 4-month follow-up reductions in PTSD and depression symptoms in both the treatment and comparison conditions. Significant pre- to posttreatment reductions in maladaptive grief reactions were found only in the treatment condition.

Used the Reliable Change Index to evaluate therapeutic change at the individual case level. The percentages of students in the treatment condition who reported significant ($p < .05$) pre- to posttreatment reductions in PTSD symptoms (58% at posttreatment, 81% at 4-month follow-up) compare favorably to those reported in rigorously controlled treatment efficacy trials with adults, whereas the percentages who reported significant reductions in depression symptoms (23% at posttreatment, 61% at follow-up) are comparable to, or higher than, those found in community treatment settings.

In contrast, the Tier 1 contrast condition (classroom-based dissemination of TGCTA psychoeducation and skills components) produced lower rates of significant improvement and higher (although still low) rates of adverse outcomes.

<p>Cox, J., Davies, D. R., Burlingame, G. M., Campbell, J. E., & Layne, C. M., & Katzenbach, R. J. (2007). Effectiveness of a Trauma/Grief-Focused Group Intervention: A Qualitative Study with War-Exposed Bosnian Adolescents. <i>International Journal of Group Psychotherapy</i>, 57, 319-345. DOI:http://dx.doi.org/10.1521/ijgp.2007.57.3.319</p>	<p>Study Design: Mixed-methods (qualitative and quantitative) field evaluation undertaken by a team of external evaluators across 10 participating secondary schools in post-war Bosnia.</p> <p>Key Findings: Evaluation of focus group transcripts identified general themes of outcomes and impacts perceived by students and group leaders. These included acquisition of coping skills and attitudes, willingness to advocate for peers, improved interpersonal relationships, negative impacts, general positive impacts, impacts in the schools, impacts on the group and logistics of the program, and broader impacts on the perception of mental health in the community. Notably, the evaluation specifically searched for (and found very few) adverse outcomes. A few students identified stigmatization (teasing) of students by peers, family, and teachers, especially when the program was initiated at their schools; whereas group counselors identified difficulties with implementing the program in the schools.</p> <p>In contrast, strong evidence was found of program benefit and widespread dissemination by group members and group leaders, including sharing of information and skills by group members with in some cases hundreds of students and family members at each school. The broad positive impacts of this program suggest that trauma/grief-focused group treatment intervention programs targeting trauma-exposed youth may be effective on multiple levels with war-exposed youth and their communities.</p>
<p>Goenjian, A.K., Walling D., Steinberg, A.M., Karayan I., Najarian, L.M., & Pynoos. R: (2005). A prospective study of posttraumatic stress and depressive reactions among treated and untreated adolescents 5 years after a catastrophic disaster. <i>American Journal of Psychiatry</i>, 162, 2302-2308.</p>	<p>Study Design: Evaluated (1) the natural course of posttraumatic stress and depressive reactions among untreated adolescents from two cities in an earthquake zone (Gumri and Spitak) and one at the periphery (Yerevan) who were differentially exposed to the 1988 Spitak earthquake in Armenia, and (2) the effectiveness of brief trauma/grief-focused psychotherapy among adolescents from Gumri. 125 adolescents were assessed using measures of PTSD and depression symptoms at 1.5 and 5 years postearthquake. At 1.5 years, trauma/grief-focused group and individual psychotherapy was provided over 6 weeks to a group of students in Gumri.</p> <p>Key Findings: Among treated adolescents, improvement in PTSD symptom scores was three times greater than the untreated Gumri comparison group. The treated group also exhibited a mean improvement in depression symptoms, whereas depression symptoms worsened significantly among untreated students. Study results suggest that untreated adolescents exposed to severe trauma are at risk for chronic PTSD and depressive symptoms. Further, brief trauma/grief-focused psychotherapy is effective in reducing PTSD symptoms and halting the progression of depression. Study results support the implementation of mental health intervention programs in schools after disasters to reduce trauma-related psychopathology.</p>

<p>Saltzman, W. R., Pynoos, R. S., Layne, C. M., Steinberg, A., & Aisenberg, E. (2001). Trauma/Grief-Focused Intervention for Adolescents Exposed to Community Violence: Results of a School-Based Screening and Group Treatment Protocol. <i>Group Dynamics: Theory, Research, and Practice</i>, 5, 291-303.</p>	<p>Study Design: The site selected for program implementation consisted of a secondary school cluster (a senior high school and two feeder junior high schools) located within a community characterized by chronic economic disadvantage and violent gang activity. Group participants consisted of 61% boys and 39% girls, ranging from 11 to 14 years of age ($M = 12.58$, $SD = .99$). Racial/ethnic composition of group members was 68% Hispanic, 28% African American, 4% Caucasian.</p> <p>Key Findings: Using a stratified screening procedure, 812 students completed a screening survey; 58 students (7.1% of students surveyed) met criteria for group treatment, and 26 students participated in the group. Raising concern over failures to accurately detect traumatized students, 58 (7.1%) of students surveyed met criteria for inclusion in the treatment program; of these, only 14 (24%) had previously been referred for school-based mental health services.</p> <p>Group participation was associated with significant improvements in posttraumatic stress reactions, maladaptive grief reactions, and academic performance. Further, evidence of differential relations emerged from analysis of change scores: Pre-post reductions in posttraumatic stress reactions ($r = -.48$, $p < .01$), but not depression symptoms ($p > .05$), was associated with pre-post improvement in group member GPA. Results suggest that students exposed to severe levels of community violence often may not be identified or treated. Further, severe PTSD symptoms was associated with impaired school functioning, and pre-post reductions in PTSD symptoms were linked to academic remediation.</p>
<p>Layne, C. M., Pynoos, R. S., Saltzman, W. R., Arslanagic, B., Black, M., Savjak, N., Popovic, T., Durakovic, E., Music, M., Campara, N., Djapo, N., & Houston, R. (2001). Trauma/Grief-Focused Group Psychotherapy: School-Based Post-War Intervention with Traumatized Bosnian Adolescents. <i>Group Dynamics: Theory, Research, and Practice</i>, 5, 277-290.</p>	<p>Study Design: Open-trial study conducted with $N = 55$ severely war-exposed Bosnian secondary school students (81% girls, age range = 15-19 years) from 10 Bosnian secondary schools. Students completed pre- and post-group self-report measures of posttraumatic stress reactions, depression symptoms, and maladaptive grief reactions, and post-group measures of psychosocial adjustment and group satisfaction.</p> <p>Key Findings: Pre-post mean score analyses revealed significant reductions in posttraumatic stress reactions, maladaptive grief reactions, and depression symptoms. A deliberate search for iatrogenic outcomes at the individual-case level identified very few reliable deteriorated cases (between 2%-8%) and far more reliably improved cases (rates ranged from 35% for depression symptoms to 51% for posttraumatic stress reactions).</p> <p>Regarding psychosocial functioning, pre-post reductions in posttraumatic stress reactions were positively correlated with classroom rule compliance, school interest, and positive peer relationships, and inversely correlated with school anxiety/withdrawal (all p's $< .03$). Further, pre-post-reductions in depression symptoms were positively correlated with rule compliance and school interest, and inversely correlated with school anxiety/withdrawal (all p's $< .05$). Last, student satisfaction with the group experience was positively correlated with classroom rule compliance, positive peer relationships, and school interest.</p>

<p>Layne, C. M., Pynoos, R. S., & Cardenas, J. (2001). Wounded adolescence: School-based group psychotherapy for adolescents who have sustained or witnessed violent interpersonal injury. In M. Shafii & S. Shafii (Eds.), <i>School violence: Contributing factors, management, and prevention</i> (pp. 163-186). Washington, DC: American Psychiatric Press.</p>	<p>Study Design: N= 6 (Layne et al. pilot trial) Latino and African-American; Urban low-SES high school students exposed to severe community and gang-related violence.</p> <p>Key Findings: Clinical-descriptive chapter describes the first group-based implementation of trauma and grief-focused treatment for adolescents exposed to community violence in a school-based health clinic. This chapter explores the theme that trauma exposure in adolescence not only induces distress reactions, but also developmental injuries in the form of estrangements in close relationships (e.g., former best friends became trauma reminders), lost developmental opportunities (e.g., gave up one's dream of becoming a soccer player), and restricted future ambitions. Many core elements of TGCTA are described, including outreach/screening/referral efforts, a pre-group clinical interview, use of assessment tools, ranking and selecting traumatic experiences to work on, psychoeducation about distress reactions and reminders, identifying common themes to build group cohesion, trauma narrative construction, identifying lost developmental opportunities, and taking steps to remedy developmental disruptions.</p> <p>Post-group individual assessments revealed marked drops in members' distress (no significance tests were conducted) and positive steps towards developmental progression.</p>
<p>Goenjian, A., Karayan, I., Pynoos R, Minassian, D., Najarian, M., Steinberg, A.M, & Fairbanks, L.A. (1997). Outcome of psychotherapy among early adolescents after trauma. <i>American Journal of Psychiatry</i>, 154, 536-542.</p>	<p>Study Design: Posttraumatic stress and depressive reactions were assessed among treated (n = 35) and non-treated (n = 29) students at pre- and post-intervention, at 1 ½ and 3 years after the earthquake, respectively. Treated students received trauma/grief-focused brief psychotherapy, a prototype to TGCTA that focused on trauma, trauma reminders, secondary stresses and adversities, bereavement and the interplay between posttraumatic stress and grief reactions, and developmental impact.</p> <p>Key Findings: Severity of posttraumatic stress symptoms significantly decreased among the subjects given psychotherapy; in contrast, symptom severity increased significantly among non-treated students. Although there was no change in severity of depressive symptoms among subjects given psychotherapy, depressive symptoms among non-treated students worsened significantly over time, suggesting a preventive effect. Findings demonstrate the efficacy of trauma/grief-focused brief psychotherapy in alleviating PTSD symptoms and preventing the worsening of comorbid depression among early adolescents after a catastrophic disaster.</p>