Trauma Affect Regulation: Guide for Education and Therapy (TARGET)

Trauma Affect Regulation: Guide for Education and Therapy (TARGET) is a strengths-based approach to education and therapy for survivors of physical, sexual, psychological, and emotional trauma. TARGET teaches a set of seven skills (summarized by the acronym FREEDOM—Focus, Recognize triggers, Emotion self-check, Evaluate thoughts, Define goals, Options, and Make a contribution) that can be used by trauma survivors to regulate extreme emotion states, manage intrusive trauma memories, promote self-efficacy, and achieve lasting recovery from trauma. TARGET can be adapted to assist men and women from various age groups, cultures, and ethnicities who have had a variety of traumatic experiences. This program can be offered in 10-12 individual or group counseling or psychoeducational sessions conducted by trained implementers (e.g., clinicians, case managers, rehabilitation specialists, teachers).

In the studies reviewed for this summary, TARGET was implemented with adults in outpatient substance abuse treatment clinics (through 8 or 9 weekly sessions), with adult mothers of children under age 5 recruited from residential and community settings (through 12 weekly sessions), and with adolescents in juvenile detention facilities (through 1-4 sessions within the first 2 weeks of detention and up to 10 sessions for adolescents with extended stays).

Descriptive Information

| Areas of Interest | Mental health treatment  
Co-occurring disorders |
|-------------------|-------------------------|
| Outcomes          | Review Date: June 2012  
1: Disciplinary incidents  
2: Disciplinary sanctions  
3: Recidivism |
|                   | Review Date: October 2007  
1: Severity of posttraumatic stress disorder (PTSD) symptoms  
2: PTSD diagnosis  
3: Negative beliefs related to PTSD and attitudes toward PTSD symptoms  
4: Severity of anxiety and depression symptoms  
5: Self-efficacy related to sobriety  
6: Emotion regulation  
7: Health-related functioning |
| Outcome Categories| Alcohol  
Crime/delinquency  
Mental health  
Trauma/injuries  
Treatment/recovery |
| Ages              | 13-17 (Adolescent)  
18-25 (Young adult)  
26-55 (Adult) |
| Genders           | Male  
Female |
| Races/Ethnicities | Black or African American  
Hispanic or Latino  
White  
Race/ethnicity unspecified |
| Settings          | Residential  
Outpatient |
Quality of Research
Review Date: June 2012

Documents Reviewed
The documents below were reviewed for Quality of Research. The research point of contact can provide information regarding the studies reviewed and the availability of additional materials, including those from more recent studies that may have been conducted.

Study 1
Ford, J. D., & Hawke, J. (in press). Trauma Affect Regulation psychoeducation group attendance is associated with reduced disciplinary incidents and sanctions in juvenile detention facilities. Journal of Child and Adolescent Trauma.

Supplementary Materials


Outcomes

### Outcome 1: Disciplinary incidents

**Description of Measures**
Disciplinary incidents were assessed using data abstracted from the daily documentation of behavioral incidents at three separate Connecticut juvenile detention facilities. The facilities' administrative records data were collected on a deidentified basis (i.e., all identifying information, such as name and address, was removed, and youth were assigned unique identification numbers).

**Key Findings**
Data from youth who received TARGET in a juvenile detention facility were compared with data from a matched control group of youth who were in a juvenile detention facility but did not receive TARGET. Controlling for the effects of site (i.e., specific detention center), length of stay, age, gender, ethnicity, type and severity of legal charges, trauma history, behavioral health problem severity, and original versus improved data management system, the study found that each session of TARGET received by youth in the first 14 days of detention was associated with a decrease in the number of reported disciplinary incidents relative to the number of incidents reported for the control group (p < .001).

**Studies Measuring Outcome**
Study 1

**Study Designs**
Quasi-experimental
### Outcome 2: Disciplinary sanctions

**Description of Measures**
Disciplinary sanctions were assessed using data abstracted from the daily documentation of minutes spent in "room time" (i.e., being removed from the community milieu as a consequence of a behavioral incident) at three separate Connecticut juvenile detention facilities. The facilities' administrative records data were collected on a deidentified basis (i.e., all identifying information, such as name and address, was removed, and youth were assigned unique identification numbers).

**Key Findings**
Data from youth who received TARGET in a juvenile detention facility were compared with data from a matched control group of youth who were in a juvenile detention facility but did not receive TARGET. Controlling for the effects of site (i.e., specific detention center), length of stay, age, gender, ethnicity, type and severity of legal charges, trauma history, behavioral health problem severity, and original versus improved data management system, the study found that each session of TARGET received by youth in the first 14 days of detention was associated with a decrease in disciplinary sanctions relative to the sanctions for the control group ($p < .001$).

<table>
<thead>
<tr>
<th>Studies Measuring Outcome</th>
<th>Study 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Designs</td>
<td>Quasi-experimental</td>
</tr>
<tr>
<td>Quality of Research Rating</td>
<td>3.0 (0.0-4.0 scale)</td>
</tr>
</tbody>
</table>

### Outcome 3: Recidivism

**Description of Measures**
Recidivism (defined as an arrest in the 6 months after a youth's release into the community from juvenile detention) was assessed using administrative data extracted from juvenile court records on a deidentified, redacted basis.

**Key Findings**
Controlling for the effects of site (i.e., specific detention center), length of stay, age, gender, ethnicity, type and severity of legal charges, trauma history, behavioral health problem severity, and original versus improved data management system, the study found that after the improved data management system was instituted, participation by youth in TARGET was associated with a lack of recidivism compared with youth in the control group ($p = .03$). However, the number of TARGET sessions attended did not have a significant effect on recidivism.

<table>
<thead>
<tr>
<th>Studies Measuring Outcome</th>
<th>Study 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Designs</td>
<td>Quasi-experimental</td>
</tr>
<tr>
<td>Quality of Research Rating</td>
<td>3.2 (0.0-4.0 scale)</td>
</tr>
</tbody>
</table>

### Study Populations
The following populations were identified in the studies reviewed for Quality of Research.

<table>
<thead>
<tr>
<th>Study</th>
<th>Age</th>
<th>Gender</th>
<th>Race/Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study 1</td>
<td>13-17 (Adolescent)</td>
<td>90.9% Male</td>
<td>43% Black or African American</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9.1% Female</td>
<td>32.5% Hispanic or Latino</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>24.5% White</td>
</tr>
</tbody>
</table>

### Quality of Research Ratings by Criteria (0.0-4.0 scale)
External reviewers independently evaluate the Quality of Research for an intervention's reported results using six criteria:

1. Reliability of measures
2. Validity of measures
3. Intervention fidelity
4. Missing data and attrition
5. Potential confounding variables
Study Strengths
The outcome data for recidivism were abstracted from official juvenile court administrative records, which are likely to be reliable and valid. Efforts were undertaken to ensure that the intervention was implemented with fidelity (e.g., observation of delivery, use of a fidelity checklist). A quasi-experimental design was used, and matching was employed in an attempt to equate the intervention and control groups. The multivariate analysis controlled for variables that were not equated during the matching procedures or were associated with the number of intervention sessions a youth received.

Study Weaknesses
There is no evidence that the administrative records data from the three detention facilities have high reliability, although it is assumed that similar procedures were used at each facility to record disciplinary incidents and sanctions. It is unclear whether the staff who reported disciplinary incidents and determined sanctions were blind to the intervention status of participants. Although intervention fidelity was addressed, only one observer confirmed that sessions adhered to the curriculum. The small number of youth who were arrested in the 6 months after release from detention limited the power of the sample size to detect an association between the number of intervention sessions received and recidivism.

Documents Reviewed
The documents below were reviewed for Quality of Research. The research point of contact can provide information regarding the studies reviewed and the availability of additional materials, including those from more recent studies that may have been conducted.

Study 1

Study 2


Supplementary Materials

Ford, J. D., & Hawke, J. Demonstration of a promising evidence-informed multimodal trauma recovery intervention (TARGET) for girls and boys in juvenile detention programs. Manuscript in preparation.


Ford, J. D., Steinberg, K. L., Moffitt, K. H., & Zhang, W. A randomized clinical trial of affect regulation psychotherapy for delinquent girls:
### Outcomes

#### Outcome 1: Severity of posttraumatic stress disorder (PTSD) symptoms

**Description of Measures**
The severity of PTSD symptoms was measured using the Traumatic Stress subscale of the Global Appraisal of Individual Needs (GAIN), a self-report questionnaire. The 14 items in the subscale assess an individual's perceived problems related to memories of the past. Another measure used was the Clinician-Administered PTSD Scale (CAPS), a structured interview that generates ordinal symptom severity scores for PTSD. The CAPS scores the intensity and frequency of each PTSD symptom.

**Key Findings**
In one study, TARGET participants showed a greater improvement in the severity of PTSD symptoms at posttreatment than participants in the wait-list control group and the patient-centered psychoeducational therapy group. The effect sizes were medium (Cohen's d = 0.75) and very small (Cohen's d = 0.15), respectively.

In another study that compared TARGET with trauma-sensitive usual care, no statistically significant difference was found in the severity of PTSD symptoms between the two groups.

**Studies Measuring Outcome**
Study 1, Study 2

**Study Designs**
Experimental

**Quality of Research Rating**
3.3 (0.0-4.0 scale)

#### Outcome 2: PTSD diagnosis

**Description of Measures**
PTSD diagnosis was assessed using the CAPS, a structured interview for DSM-IV categorical diagnosis of PTSD and partial PTSD.

**Key Findings**
Sixty-three percent of TARGET participants with a PTSD diagnosis at intake did not meet the criteria for a PTSD diagnosis at posttreatment, compared with 33% in the wait-list control group (p < .005). No statistically significant difference in PTSD diagnosis was found between TARGET participants and participants in the patient-centered psychoeducational therapy group.

**Studies Measuring Outcome**
Study 2

**Study Designs**
Experimental

**Quality of Research Rating**
3.3 (0.0-4.0 scale)

#### Outcome 3: Negative beliefs related to PTSD and attitudes toward PTSD symptoms

**Description of Measures**
Negative beliefs related to PTSD and attitudes toward PTSD symptoms were measured using the Post-Traumatic Cognitions Inventory (PTCI) and the Interpretation of PTSD Symptoms Inventory (IPSI). The PTCI is a 36-item scale that assesses the strength of posttraumatic beliefs about oneself and the world that have been shown to interfere with psychosocial functioning and problem solving. The IPSI is a 10-item scale that measures distress concerning both unwanted trauma memories (intrusive symptoms) and problems in remembering a traumatic event (memory deficits).

**Key Findings**
In one study, TARGET participants showed a greater improvement in beliefs and attitudes at posttreatment than participants in the wait-list control group and the patient-centered psychoeducational therapy group. Effect sizes were small to medium (Cohen's d = 0.46 to 0.54) and very small (Cohen's d = 0.12), respectively.

In another study that compared TARGET with trauma-sensitive usual care, no statistically significant difference was found in beliefs and attitudes between the two groups.
### Outcome 4: Severity of anxiety and depression symptoms

**Description of Measures**
Severity of anxiety and depression symptoms was measured using the GAIN's Anxiety subscale, which can be used to diagnose generalized anxiety disorder, and Depression subscale, which can be used to identify levels of depression. Other measures used were the State-Trait Anxiety Inventory, State Version, which assesses the strength of 20 psychological, cognitive, affective, and behavioral symptoms of anxiety in the immediate moment, and the Beck Depression Inventory, which assesses depressive symptoms using 21 items, each of which has four possible answers with behavioral indices.

**Key Findings**
In one study, TARGET participants showed a greater improvement in depression symptoms at posttreatment than participants in the wait-list control group. The effect size was small (Cohen's $d = 0.25$). TARGET participants showed a greater improvement in anxiety symptoms at posttreatment than participants in the wait-list control group and the patient-centered psychoeducational therapy group, with effect sizes that were small (Cohen's $d = 0.39$) and very small (Cohen's $d = 0.16$), respectively. From the 3- to 6-month follow-up, TARGET participants showed greater improvement in severity of anxiety symptoms than participants in the patient-centered psychoeducational therapy group ($p < .05$).

In another study that compared TARGET with trauma-sensitive usual care, no statistically significant difference was found in the severity of anxiety and depression symptoms between the two groups.

<table>
<thead>
<tr>
<th>Studies Measuring Outcome</th>
<th>Study 1, Study 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Designs</td>
<td>Experimental</td>
</tr>
<tr>
<td>Quality of Research Rating</td>
<td>3.3 (0.0-4.0 scale)</td>
</tr>
</tbody>
</table>

### Outcome 5: Self-efficacy related to sobriety

**Description of Measures**
Self-efficacy related to sobriety was measured using the GAIN's Self-Efficacy Index, which assesses an individual's self-confidence about resisting relapse of alcohol use in different situations.

**Key Findings**
TARGET participants maintained their level of self-efficacy related to sobriety throughout the follow-up periods (3 and 6 months), while participants in trauma-sensitive usual care showed a significant decline in self-efficacy ($p = .027$).

<table>
<thead>
<tr>
<th>Studies Measuring Outcome</th>
<th>Study 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Designs</td>
<td>Experimental</td>
</tr>
<tr>
<td>Quality of Research Rating</td>
<td>2.8 (0.0-4.0 scale)</td>
</tr>
</tbody>
</table>

### Outcome 6: Emotion regulation

**Description of Measures**
Emotion regulation was measured using the Generalized Expectancies for Negative Mood Regulation, a 30-item scale that assesses self-perceived ability to identify, manage, and adaptively use a variety of negative mood states. Individuals use a 5-point scale from "strongly agree" to "strongly disagree" to respond to items beginning with the phrase, "When I feel upset, I . . . ."

**Key Findings**
At posttreatment, TARGET participants showed a greater improvement in emotion regulation than participants in the wait-list control group and the patient-centered psychoeducational therapy group. The effect sizes were medium (Cohen's $d = 0.75$) and small (Cohen's $d = 0.33$), respectively.

<table>
<thead>
<tr>
<th>Studies Measuring Outcome</th>
<th>Study 2</th>
</tr>
</thead>
</table>
Outcome 7: Health-related functioning

**Description of Measures**
Health-related functioning was measured using the Medical Outcomes Study Short Form-12, a 12-item questionnaire that assesses overall self-perceived physical health and well-being (e.g., global health, ability to manage physical and emotional health problems and pain).

**Key Findings**
At the 6-month follow-up, TARGET participants showed improvement in health-related functioning compared with participants in the patient-centered psychoeducational therapy group ($p < .05$). No statistically significant difference in health-related functioning was found between TARGET participants and participants in the wait-list control group.

**Studies Measuring Outcome**
Study 2

**Study Designs**
Experimental

**Quality of Research Rating**
3.3 (0.0-4.0 scale)

### Study Populations
The following populations were identified in the studies reviewed for Quality of Research.

<table>
<thead>
<tr>
<th>Study</th>
<th>Age</th>
<th>Gender</th>
<th>Race/Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study 1</td>
<td>26-55 (Adult)</td>
<td>61% Female, 39% Male</td>
<td>56% White, 24% Black or African American, 10% Hispanic or Latino, 10% Race/ethnicity unspecified</td>
</tr>
<tr>
<td>Study 2</td>
<td>18-25 (Young adult) 26-55 (Adult)</td>
<td>100% Female</td>
<td>39% White, 33% Black or African American, 28% Race/ethnicity unspecified</td>
</tr>
</tbody>
</table>

### Quality of Research Ratings by Criteria (0.0-4.0 scale)
External reviewers independently evaluate the Quality of Research for an intervention’s reported results using six criteria:

1. Reliability of measures
2. Validity of measures
3. Intervention fidelity
4. Missing data and attrition
5. Potential confounding variables
6. Appropriateness of analysis

For more information about these criteria and the meaning of the ratings, see [Quality of Research](#).

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Reliability of Measures</th>
<th>Validity of Measures</th>
<th>Fidelity</th>
<th>Missing Data/Attrition</th>
<th>Confounding Variables</th>
<th>Data Analysis</th>
<th>Overall Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Severity of posttraumatic stress disorder (PTSD) symptoms</td>
<td>4.0</td>
<td>4.0</td>
<td>3.0</td>
<td>3.3</td>
<td>3.0</td>
<td>2.5</td>
<td>3.3</td>
</tr>
<tr>
<td>2: PTSD diagnosis</td>
<td>4.0</td>
<td>4.0</td>
<td>3.0</td>
<td>2.5</td>
<td>3.5</td>
<td>2.5</td>
<td>3.3</td>
</tr>
<tr>
<td>3: Negative beliefs related to PTSD and attitudes toward PTSD symptoms</td>
<td>4.0</td>
<td>4.0</td>
<td>3.0</td>
<td>3.3</td>
<td>3.0</td>
<td>2.5</td>
<td>3.3</td>
</tr>
</tbody>
</table>
4: Severity of anxiety and depression symptoms
4.0  4.0  3.0  3.3  3.0  2.5  3.3

5: Self-efficacy related to sobriety
3.5  3.5  2.0  3.5  1.5  2.5  2.8

6: Emotion regulation
4.0  4.0  3.0  2.5  3.5  2.5  3.3

7: Health-related functioning
4.0  4.0  3.0  2.5  3.5  2.5  3.3

Study Strengths
The studies were well designed and employed standardized and widely used outcome measures with good to excellent psychometric properties. The intervention model was structured and manualized. A fidelity checklist was developed and used in the studies.

Study Weaknesses
There are a number of confounding variables that make it difficult to attribute differences in outcomes to the study intervention. For example, a significant number of study participants did not receive the full treatment intervention; attrition rates were high; the sample size was small; convenience samples were used, increasing the possibility of selection bias; and the study did not include a placebo control. Results of the intent-to-treat analysis are questionable due to the low intervention completion rate.

Readiness for Dissemination
Review Date: October 2007

Materials Reviewed
The materials below were reviewed for Readiness for Dissemination. The implementation point of contact can provide information regarding implementation of the intervention and the availability of additional, updated, or new materials.


Recommended Readings for Trainers

External reviewers independently evaluate the intervention's Readiness for Dissemination using three criteria:

1. Availability of implementation materials
2. Availability of training and support resources
3. Availability of quality assurance procedures

For more information about these criteria and the meaning of the ratings, see Readiness for Dissemination.

<table>
<thead>
<tr>
<th>Implementation Materials</th>
<th>Training and Support Resources</th>
<th>Quality Assurance Procedures</th>
<th>Overall Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Dissemination Strengths
The program materials are well organized, clearly written, and comprehensive. On-site implementation readiness consultation is provided, and the intensive skills training is complemented by ongoing coaching and consultation. Appropriate supervision is incorporated into the training process. Quality assurance is supported by site visits, fidelity checklists, and the review of taped treatment sessions.

Dissemination Weaknesses
No weaknesses were noted by reviewers.

Costs
The cost information below was provided by the developer. Although this cost information may have been updated by the developer since

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### Costs

- **Severity of anxiety and depression symptoms**: 4.0
- **Self-efficacy related to sobriety**: 3.5
- **Emotion regulation**: 4.0
- **Health-related functioning**: 4.0
The time of review, it may not reflect the current costs or availability of items (including newly developed or discontinued items). The implementation point of contact can provide current information and discuss implementation requirements.

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Cost</th>
<th>Required by Developer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent or adult facilitator guide (with handouts)</td>
<td>$150 each</td>
<td>Yes</td>
</tr>
<tr>
<td>Training manual</td>
<td>$35 each</td>
<td>Yes</td>
</tr>
<tr>
<td>Managing stress brochures</td>
<td>$1 each</td>
<td>Yes</td>
</tr>
<tr>
<td>SOS (Slow down, Orient, Self-check) and FREEDOM Step posters</td>
<td>$30 for a set of 2</td>
<td>Yes</td>
</tr>
<tr>
<td>SOS cards</td>
<td>$50 for a set of 25</td>
<td>Yes</td>
</tr>
<tr>
<td>SOS wristband</td>
<td>$1 each</td>
<td>Yes</td>
</tr>
<tr>
<td>Stress cards</td>
<td>$50 for a set of 25</td>
<td>Yes</td>
</tr>
<tr>
<td>Reactive and main emotion flashcards</td>
<td>$15 per set</td>
<td>Yes</td>
</tr>
<tr>
<td>Reactive and main thought flashcards</td>
<td>$15 per set</td>
<td>Yes</td>
</tr>
<tr>
<td>1-hour, online introductory video</td>
<td>Included in the cost of introductory training</td>
<td>Yes</td>
</tr>
<tr>
<td>Training packet</td>
<td>$15 each</td>
<td>Yes</td>
</tr>
<tr>
<td>3-day, on-site level 1 introductory TARGET training in year 1 (includes license to use copyrighted materials)</td>
<td>$3,000 per day per trainer for up to 20 participants, plus travel expenses</td>
<td>Yes</td>
</tr>
<tr>
<td>3-day, on-site level 2 TARGET skills integration training in year 2</td>
<td>$3,000 per day per trainer for up to 20 participants, plus travel expenses</td>
<td>Yes</td>
</tr>
<tr>
<td>1-day, on-site TARGET skills enhancement training in year 1</td>
<td>$3,000 per day per trainer for up to 20 participants, plus travel expenses</td>
<td>No</td>
</tr>
<tr>
<td>Additional on-site, trauma-related classes in year 1 or 2</td>
<td>$3,000 per day per trainer for up to 20 participants, plus travel expenses</td>
<td>No</td>
</tr>
<tr>
<td>On-site training on administering screening measures in year 1 or 2</td>
<td>$3,000 per day per trainer for up to 20 participants, plus travel expenses</td>
<td>No</td>
</tr>
<tr>
<td>Site visit and organizational readiness assessment</td>
<td>$3,000 per day per consultant, plus travel expenses</td>
<td>No</td>
</tr>
<tr>
<td>Weekly on-site consultation group (for agencies within a 1.5-hour drive of Farmington, CT)</td>
<td>$300 per hour, plus travel expenses</td>
<td>Yes, one consultation option is required</td>
</tr>
<tr>
<td>Weekly consultation via videoconference or phone</td>
<td>$300 per hour</td>
<td>Yes, one consultation option is required</td>
</tr>
<tr>
<td>Monthly on-site implementation review meetings (for agencies within a 1.5-hour drive of Farmington, CT)</td>
<td>$300 per hour, plus travel expenses</td>
<td>Yes, one implementation review option is required</td>
</tr>
<tr>
<td>Monthly implementation review meetings via videoconference or phone</td>
<td>$300 per hour</td>
<td>Yes, one implementation review option is required</td>
</tr>
<tr>
<td>Fidelity checklist and fidelity monitoring support, with direct feedback to implementers</td>
<td>$300 per hour</td>
<td>Yes</td>
</tr>
<tr>
<td>Unscheduled phone or email consultation</td>
<td>Free</td>
<td>No</td>
</tr>
<tr>
<td>Weekly email with TARGET tips</td>
<td>Free</td>
<td>No</td>
</tr>
</tbody>
</table>
Spanish versions of the facilitator guide handouts and training manual are available.

Replications
Selected citations are presented below. An asterisk indicates that the document was reviewed for Quality of Research.


Contact Information
To learn more about implementation or research, contact:
Julian D. Ford, Ph.D.
(860) 679-8778
ford@psychiatry.uchc.edu

Judith Ford, M.A.
(860) 269-8663
judy@advancedtrauma.com

Consider these Questions to Ask (PDF, 54KB) as you explore the possible use of this intervention.

Web Site(s):
- http://www.advancedtrauma.com/

This PDF was generated from http://nrepp.samhsa.gov/ViewIntervention.aspx?id=258 on 5/15/2014