Evaluation of an Intervention for Adolescent Girls with Trauma Related Disorders

Meredith Elzy, M.Ed., Sarah Cobb Ph.D., Norin Dollard, Ph.D., Teresa Van Alstine, M.S.W, & Colleen Clark, Ph.D.
Louis de la Parte Florida Mental Health Institute

Acknowledgements
This work is funded in part by Florida’s Agency for Healthcare Administration (AHCA) contract MED-078
Thank you to Michelle LeVasseur, MA and Victoria Hummer, MSW for the time and effort they have committed to the development and implementation of the TRIAD Girl’s Group.

Background of the intervention

- Trauma-Informed Treatment
- Triad of Issues
- Development of the Triad Girls’ Group
- Goals of Treatment

How do we conceptualize Developmental Trauma Disorder?

- Incidents of trauma that cross over multiple developmental domains
- Interpersonal nature (Including child abuse and neglect)
- Begins at an early age and is prolonged

TRIAD

- TRIAD of challenges
  - History of Trauma
  - History of Substance Abuse
  - History of Emotional Problems
- TRIAD = Intersection of these difficulties

Trauma ↔ Emotional Probs ↔ Substance abuse

Development of the Triad Girls Group

- Based on the Triad Women’s Group
  - SAMHSA funded project
  - Modified to be appropriate for adolescents
  - Target Population
    - Group appropriate for girls with at least two of the three Triad issues since they represent girls who are at risk for all three issues
    - Girls who have no histories of trauma or abuse may not be appropriate for this group
Treatment for high-risk adolescents will ideally:

- Address histories of trauma, substance use/abuse, and emotional problems
- Be gender-specific and gender-appropriate
- Be developmentally appropriate
- Be sensitive to diversity
- Will offer skills training and psychoeducation
- Will use both cognitive and behavioral approaches to facilitate change

Goals Accomplished By

- Building emotional regulation skills
- Building problem-solving skills
- Building social supports
- Building interpersonal effectiveness skills
- Fostering feelings of self-efficacy
- Enhancing capacities to cope with distress
- Addressing triggers for substance abuse
- Teaching drug refusal skills
- Increasing capacity for mindfulness
- Increasing awareness of abusive relationships
- Increasing awareness of risky behaviors

Evaluation of the Project

- Overview of Evaluation Project
- Research Questions / Hypotheses
- Methodology
  - Participants
  - Measures
  - Procedure
- Preliminary Data Presented
- Closing Remarks

Overview of Evaluation Project

- Larger Study:
  - Evaluation of Medicaid-funded Out-of-Home Treatment Settings for FY 08-09
- This Study
  - AHCA Sub-Study: Trauma-Informed Treatment in Out-of-Home Settings

AHCA Sub-Study: Trauma-Informed Treatment in Out-of-Home Settings

- Implementation and evaluation project
  - Triad Girls’ Group Curriculum training for staff with emphasis on trauma-specific treatment
  - Technical assistance in conducting groups
  - Assessment of girls pre-, post-, with 2 follow-ups to investigate outcomes of intervention
  - Measurement of treatment fidelity to manualized Triad Girls’ Group intervention

Research Questions

- What are the effects of Triad Girls’ Group as a trauma intervention on emotional problems, coping strategies, and symptoms related to trauma?
- What is the impact of the Triad Girls’ Group on the participants’ progress through the system?
Hypotheses of Project

- Participants should show improvement in:
  - Self-concept / self-esteem
  - Coping strategies including temptation to use substances

- Participants should show decrease in symptoms related to:
  - Trauma related symptoms
  - Depression
  - Anger / Aggression

- Participants should show decrease in use of substances

Methodology: Participants

- N=28 (2 sites at Baseline)
- Age range 12 to 18 years-old (Mean = 14.4)
- Mean Age Site 1 = 13 Years
- Mean Age Site 2 = 15 Years
- 24% (N=6) of sample identifies as Hispanic

Living Situation

Previous Year (6 M or more)

<table>
<thead>
<tr>
<th>Family Type</th>
<th>Site 1</th>
<th>Site 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>45%</td>
<td>30%</td>
</tr>
<tr>
<td>Foster</td>
<td>20%</td>
<td>30%</td>
</tr>
<tr>
<td>Family living</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Other</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Boyfriend</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Foster Parent</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Parent or Guardian</td>
<td>6%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Racial Identity at Baseline

<table>
<thead>
<tr>
<th>Racial Identity</th>
<th>Site 1</th>
<th>Site 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>35%</td>
<td>20%</td>
</tr>
<tr>
<td>White</td>
<td>20%</td>
<td>30%</td>
</tr>
<tr>
<td>Multiracial</td>
<td>30%</td>
<td>30%</td>
</tr>
</tbody>
</table>

Methodology: Measures

- Demographics
  - Trauma Symptoms - Trauma Symptom Report for Adolescents (TSRA; Briere, 2006)
  - Coping - Coping Responses Inventory – Youth Form (CRI-Y; Moos, 1993)
  - Problem Behaviors and Symptoms - Youth Self Report (YSR; Achenbach & Rescorla, 2001)
  - Substance Use - Comprehensive Adolescent Severity Inventory (CASI) (Myers, 1996)
  - Coping with Temptation - Temptation Coping Questionnaire (Myers & Wagner, 1995)
  - Self-esteem - Self Esteem Scale (Rosenberg, 1979)

Methodology: Procedures

- Facilitator Training
- Identification of girls with Triad of issues
- Informed Consent / Assent
- Assessment of Girls
  - Pre- and Post-group participation
  - Follow-up assessments: 3 and 6 months
  - Participants are paid $25 per assessment session; each session takes ~ 1 - 1.5 hrs
## Fidelity Information
- Evaluation and sign-in sheets to monitor attendance
- Facilitator interview
- Feedback from group members

## Attendance and Evaluation - Site 1
- 17 Group Meetings
- Covered 1 manualized session
- Mean groups attended = 6.6
- 5 girls attended ≥ 50% of sessions
- Older group members had better attendance

## Attendance and Evaluation - Site 2
- **GROUP 1**
  - 11 Group Meetings
  - Covered 11 manualized sessions
  - Mean groups attended = 3.8
  - 2 girls attended ≥ 50% of sessions
  - 13 girls in group 1 not enrolled in study
- **GROUP 2**
  - 12 Group Meetings
  - Covered 12 manualized sessions
  - Mean groups attended = 6.2
  - 7 girls attended ≥ 50% of sessions
  - 12 girls in group 2 not enrolled in study

## Sample Facilitator Comments: Site 1
- **Positive Comments by Facilitators:**
  - “Clients wanted to share their traumatic experience.”
  - “Girls’ support and encouragement for each other has come a long way.”
  - “Girls shared that they feel safe and wanted to come back.”
- **Constructive Feedback of Sessions:**
  - “There’s too much to cover in one session- we have to split it up.”
  - “Girls are struggling with respecting each other.”
- **Comments regarding Girl’s Conduct in Group Sessions:**
  - “Girls were very distracted and required numerous redirections to remain on task, on topic and to remain positive when speaking with others.”
  - “Girls were extremely hyper- feeding off of each other, Difficult to complete.”

## Sample Facilitator Comments: Site 2
- **Positive Comments by Facilitators:**
  - “Group members able to let conflict go quickly from outside group- ended on a positive note.”
  - “Everyone engaged in Mental Grounding exercise.”
- **Constructive Feedback of Sessions:**
  - “Empathy concept difficult for some.”
  - “Girls had difficulty totally understanding these worksheets.”
- **Comments regarding Girl’s Conduct in Group Sessions:**
  - “Somewhat chaotic first session, although girls were engaged. This group has many conflicts coming in from outside- Being able to draw on folders helps them.”
  - “Engaged, curious, lots of disruption.”
  - “Very chaotic group due to one member in distress- hurt self in group, had to be escorted out.”

## Sample Feedback from Group Members
- “I can be just me.”
- “I learned that nobody can make you do what you really don’t want to do.”
- “I liked telling my story.”
- “I learned that I can trust some people.”
- “I liked talking about empowerment & survivors.”
- “It is easier to talk about it in group than in individual therapy where you just sit there.”
- “It’s fun…when are we going to start again.”
- “The group leader is sweet and nice.”
Trauma Symptom Report for Adolescents

- Trauma Exposure (13 items)
  - Measures child abuse & neglect, natural disasters, hospitalizations, and deaths
- Clinical Scales (97 items)
  - Anxiety, Depression, Anger/Aggression, Attachment Insecurity, Sexual Issues, Dissociation, Tension Reduction Behavior, Social Withdrawal/Isolation, Vulnerability to Victimization
- Posttraumatic Stress (17 items)
  - Reliving, Avoidance, Hyperarousal, Total

TSRA – Percent with at Least One Trauma Exposure

Coping Responses Inventory-Youth Form

- Part 1
  - Identify and describe recent problem or situation
  - 10 items about situation appraisal
- Part 2
  - 48 items
  - Evaluation of Coping Skill Usage

Coping Response Inventory-Youth Form Subscales

* Higher scores indicate higher use of that coping skill
Coping Responses Inventory-Youth Form

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Approach Responses</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logical Analysis</td>
<td>-1.265</td>
<td>11</td>
<td>.232</td>
</tr>
<tr>
<td>Positive Reappraisal</td>
<td>-1.913</td>
<td>11</td>
<td>.082</td>
</tr>
<tr>
<td>Seeking Guidance</td>
<td>-2.404</td>
<td>11</td>
<td>.035</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>-1.558</td>
<td>11</td>
<td>.148</td>
</tr>
<tr>
<td><strong>Avoidance Responses</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive Avoidance</td>
<td>-2.244</td>
<td>11</td>
<td>.061</td>
</tr>
<tr>
<td>Acceptance or Resignation</td>
<td>-1.148</td>
<td>11</td>
<td>.279</td>
</tr>
<tr>
<td>Seeking Alt. Rewards</td>
<td>-1.139</td>
<td>11</td>
<td>.279</td>
</tr>
<tr>
<td>Emotional discharge</td>
<td>-3.83</td>
<td>11</td>
<td>.371</td>
</tr>
</tbody>
</table>

Youth Self-Report

- 112 items designed to measure general psychological functioning (emotional & behavioral)
- Psychometrically validated for use with youth ages 12-18
- Internalizing subscales:
  - Anxious/Depressed
  - Withdrawn/Depressed
  - Somatic Complaints
- Externalizing subscales:
  - Rule-breaking
  - Aggressive Behaviors
- Total score also includes Social Problems, Thought Problems, & Attention Problems

Internalizing, Externalizing & Total T-scores at Baseline

<table>
<thead>
<tr>
<th></th>
<th>Site 1 (N = 5)</th>
<th>Site 2 (N = 17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internalizing</td>
<td>65.62</td>
<td>80.47</td>
</tr>
<tr>
<td>Externalizing</td>
<td>93.22</td>
<td>95.99</td>
</tr>
<tr>
<td>Total Score</td>
<td>92.62</td>
<td>96.49</td>
</tr>
</tbody>
</table>

Youth Self-Report

* Higher scores indicate more problem behaviors and symptoms

CASI

- Using 3 Modules ***:
  - Drug & Alcohol Use
  - Leisure Activities
  - Peer Relationships
- *** Also using one item regarding gang involvement

CASI – Lifetime Drug and Alcohol Use

<table>
<thead>
<tr>
<th></th>
<th>Site 1 (N = 5)</th>
<th>Site 2 (N = 17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever Used Tobacco?</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>Ever Used Alcohol?</td>
<td>40%</td>
<td>28%</td>
</tr>
<tr>
<td>Ever Used Cannabis?</td>
<td>40%</td>
<td>3%</td>
</tr>
<tr>
<td>Ever Used Cocaine?</td>
<td>6%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Temptation Coping Questionnaire-1

(Ask participants to imagine a social situation with drugs/alcohol present)

<table>
<thead>
<tr>
<th></th>
<th>Site 1 (N = 5)</th>
<th>Site 2 (N = 17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>How Likely to Not Use?</td>
<td>8.40 (2.61)</td>
<td>4.40 (4.28)</td>
</tr>
<tr>
<td>How Hard to Cope?</td>
<td>4.40 (5.76)</td>
<td>4.40 (5.76)</td>
</tr>
<tr>
<td>How Important to Not Use?</td>
<td>7.20 (7.59)</td>
<td>7.20 (7.59)</td>
</tr>
</tbody>
</table>

1 = Not Likely to Abstain from Use; 10 = Definitely would not Use
1 = Not at all Difficult to Cope; 10 = Very Difficult to Cope
1 = Not at all Important to Not Use, 10 = Very Important to Not Use
Temptation Coping Questionnaire

- Part 2
  - Uses same social situation as Part 1
  - 11 items measuring drug refusal coping responses to situation
  - Items scored on a scale from 1 to 7 with higher scores indicating higher expectation to use coping skill
  - Total scores range from 11 to 77

Baseline Mean SD
Site 1 (N=5) 53.6 16.1
Site 2 (N=17) 60.0 15.6

Self-Esteem Scale

- 10 items aimed at measuring self-esteem
  - "On the whole, I am satisfied with myself."
  - "At times, I think I am no good at all." (Reverse-coded)
  - 4-point Likert scale with responses ranging from Strongly Agree to Strongly Disagree
  - Scores range from 10 to 40, higher scores = higher self-esteem

Self-esteem at Baseline

<table>
<thead>
<tr>
<th>SES</th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site 1</td>
<td>9</td>
<td>25</td>
<td>40</td>
<td>34.11</td>
<td>5.42</td>
</tr>
<tr>
<td>Site 2</td>
<td>18</td>
<td>15</td>
<td>37</td>
<td>28.44</td>
<td>4.79</td>
</tr>
</tbody>
</table>

Summary of Preliminary Results: Highlights of Baseline Group Data

- Trauma exposure
  - Site 1 (N=9) had a total of 29 traumatic exposures (M= 3.22 events each)
  - Site 2 (N = 18) had a total of 102 Traumatic Exposures (M= 5.66 events each)
- Coping skills
  - Use of Approach Coping Skills – Average
  - Use of Avoidance Coping Skills – Above Average
- Substance Use
  - Site 2 higher rates than Site 1
- Self-esteem
  - Site 1 higher than Site 2

Summary of Preliminary Results: Highlights of Pre-post Trends

- Coping Skills
  - Overall, more improvement in approach coping skills
  - Significant improvement in "Seeking Guidance" subscale
  - No other improvement trends noted

Concluding Remarks

- Large differences between 2 sites
  - Demographics
  - Treatment Fidelity
  - Trauma exposure
- High prevalence of trauma
- Lack of support for hypotheses
- "Real-life" research issues
- This pilot data confirms the need to address these issues!!!
THANK YOU!!!!

For more information about:
Triad Girls’ Group
A copy of the manual
The evaluation project
Please contact:

Colleen Clark, Ph. D.
Louis de la Parte Florida Mental Health Institute
Tampa, Florida 33617
ccclark@fmhi.usf.edu