Youth Functioning Post-Discharge from Residential Treatment

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Tamaki Hosoda, M.A.
Clinical Psychology Doctoral Student
Northwestern University Feinberg School of Medicine
Mental Health Services & Policy Program

Overview

- Introduction
- Background
- Methods
- Results
- Implications
- Limitations

Introduction

Clinical Experiences in Tokyo

Mostly worked with children, adolescents, and their families at:

- Pediatric department of a university hospital
- Public health center
- Public middle school
- University counseling center

Background
Out-of-home placements in the US

- Residential treatment
- Group home
- Foster care
- Home of relatives
- Go back home
- Stepping-down → Good sign!
- More Severe problems exist → More restrictive (structured) environment

Residential Treatment Population

Diagnoses
- Depression
- PTSD
- Developmental Trauma Disorder
- Self-injurious behaviors
- ADHD, autism spectrum, learning disabilities
- Oppositional defiant and conduct disorders
- Drug use

Home of relatives
- Independent/transitional living (for older kids)

More Severe problems exist = More restrictive (structured) environment

Residential Treatment

Comprehensive support
- Mental health services
- School
- Daily life support
- Family-support care

What we already know

- Is residential treatment effective?
  → Findings are mixed (Hair, 2005; Lyons et al., 2001)
- Therapeutic gains after discharge tend to be reduced in the long-term (Hair, 2005; Lyons et al., 2001)
- Since the late 20th century, there has been an increased attention on strength-based, family-included approach in mental health services for children (Lyons & Uziel-Miller, 2000)
- Strength predicts fewer risk behaviors in children (Lyons & Terry, 2000)
- Specifically, while in residential treatment, youth’s strengths increase and their risk behaviors improve (Lyons, 2005)

What we want to know (Research Questions)

1. To what extent are strengths and behavioral/emotional functioning associated?
2. To what extent do strengths predict future behavioral/emotional functioning?
   And which of strengths best predict favorable future behavioral/emotional functioning?
3. Are age, race, and gender associated with future behavioral/emotional functioning?

Methods
Sample

- Collected data in the Illinois Department of Children and Family Services (DCFS) System
- All youth who stepped-down from residential facilities (i.e., were discharged from residential treatment to a less restrictive placement) between November 1st 2012 and August 31st 2015

Sample Characteristics (N = 1139)

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>Mean (SD)</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (at discharge)</td>
<td></td>
<td>16.4 yrs (2.2)</td>
<td>6 yrs - 21 yrs</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>61.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>38.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>55.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>38.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>6.3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Instrumentation

- CANS Illinois version
  - domains related to children’s lives
  - trauma experiences
  - trauma stress symptoms
  - child strengths
  - life domain functioning
  - acculturation
  - child behavioral/emotional needs
  - child risk behaviors
  - ratings of children five years old and younger
  - transition to adulthood
  - caregiver needs and strengths

Child Strengths

Not included:
- Vocational
- Resilience

Behavioral/Emotional Needs

- Psychosis
- Attention deficit
- Depression
- Anxiety
- Oppositional behavior
- Conduct
- Substance abuse

CANS Scoring

Score range for each item: 0 – 3

Child Strengths

0 – can be the focus of a strength-based plan
1 – can be used in a strength-based plan
2 – strengths identified but need to be developed
3 – no strengths identified

(CANS 2.0; Gillis, 2011; Lynch, Brand, Weiner, & Kisel, 1999)
CANS Scoring

Score range for each item: 0 – 3

Behavioral/Emotional Needs (BE Needs)

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>no need for action</td>
</tr>
<tr>
<td>1</td>
<td>watchful waiting</td>
</tr>
<tr>
<td>2</td>
<td>action required</td>
</tr>
<tr>
<td>3</td>
<td>immediate/intensive action</td>
</tr>
</tbody>
</table>

Behavioral/Emotional Needs: 0 – no need for action; 1 – watchful waiting; 2 – action required; 3 – immediate/intensive action.

(CANS 2.0; Griffin, 2011; Lyons, Small, Weiner, & Kisiel, 1999)

Timeline

At discharge from residential treatment

CANS Time 1

At 6 months post-discharge

CANS Time 2

Research Question 1

To what extent are strengths and behavioral/emotional functioning associated?

Hypothesis

- When the # of usable strengths increases post-discharge, the # of actionable behavioral/emotional needs (BE Needs) decreases post-discharge
  - Strengths and BE Needs are negatively associated

Procedures

- Paired-sample t-test
  - Examined if the # of usable strengths significantly increased between T1 & T2
  - Examined if the # of BE needs significantly decreased between T1 & T2

- Pearson’s correlation
  - Examined if the change in the # of usable strengths (T2-T1) is negatively associated with the # of change in actionable BE needs (T2-T1)

Results

At discharge

At 6 months post-discharge

P<.001

r=-.50, p<.001
Research Question 2
To what extent do strengths predict future behavioral/emotional functioning?

Hypothesis
- The higher the # of usable strengths at discharge, the fewer the # of actionable BE needs at 6 months post-discharge.
- The increased # of usable strengths between discharge and 6 months post discharge is associated with the fewer # of actionable BE needs at 6 months post-discharge.

Independent Variables
1. The # of usable strengths at T1
2. Change in the # of usable strengths between T1 & T2
   - Increased
   - No change
   - Decreased

Models
Model 1:
\[ \text{BE Needs T2} = \beta_0 + \beta_1 \text{Strengths T1} + \beta_2 \text{BE Needs T1} + \beta_3 \text{(race, gender, age)} + \epsilon \]

Model 2:
\[ \text{BE Needs T2} = \beta_0 + \beta_1 \text{Strengths T1} + \beta_2 \text{(Strength change)} + \beta_3 \text{BE Needs T1} + \beta_4 \text{(race, gender, age)} + \epsilon \]

Procedures
- Negative binomial regression
  - DV was skewed and over-dispersed
- Compared likelihood ratio chi-square between Model 1 & 2
  - Examined the improvement from Model 1 to Model 2

Results
- Chi-square comparison
  - \[ \chi^2_{\text{diff}} = 150.532 - 25.053 = 125.479 \]
  - \[ df_{\text{diff}} = 9 - 7 = 2 \]
  - \[ 125.479/2 = 62.74 > 9.21 \text{ (Chi-square table)} \]
  - \[ p < .01 \]
  - huge significant difference b/w Model 1 & 2
Results: Model 1

The number of usable strengths (T1) was not significant (p.05)

Results: Model 2

Both the number of usable strengths (T1) and strength change (T1→T2) were significant (p<.001)

- Relative to youth with no change in the # of usable strengths, youth with an increased # of usable strengths had a 38% lower rate of BE needs
- Relative to youth with no change in the # of usable strengths, youth with a decreased # of usable strengths had a 81% higher rate of BE needs

Summary

- Youth strengths at discharge are important for their future behavioral/emotional functioning
- Further, strengths development post-discharge is even more important

Procedures

Did the same statistical procedures (comparing 2 models) using individual items in Strengths

1. Individual items at discharge (T1)
2. Individual items change b/w discharge (T1) and 6 months post-discharge (T2)
   - Increased
   - No change
   - Decreased

So which of strengths best predict favorable future behavioral/emotional functioning?
Results
Significant findings (p<.05)
• Usable strengths at discharge (T1)
  o Coping and Savoring skills
• Usable strengths change (b/w T1 & T2): increased, no change, decreased
  o Family
  o Interpersonal
  o Educational Setting
  o Coping and Savoring Skills
  o Optimism

Research Question 3
Are age, race, and gender associated with future behavioral/emotional functioning (T2)?

Procedures
• Stratify the analyses by age groups, race, and gender
• Compared regression coefficients and confidence intervals

<table>
<thead>
<tr>
<th>Age groups</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 - 11</td>
<td>54</td>
</tr>
<tr>
<td>12 - 17</td>
<td>838</td>
</tr>
<tr>
<td>18 - 22</td>
<td>247</td>
</tr>
</tbody>
</table>

Results
No substantial differences among different age groups, race, and gender

→ Findings are consistent in the overall sample

Implications
• Strengths are important even after discharge from residential treatment to improve future behavioral/emotional functioning
• Providers may need not only to make sure that youth have enough strengths at discharge, but also to consider a way of helping youth develop their strengths post-discharge

Overall
Specifically...

Coping and savoring skills
- Skills to enjoy positive life experiences and manage negative life experiences
- Having coping skills at discharge may be important for youth’s future functioning
- Also, developing coping skills after discharge can help youth’s future functioning

Family
- Is the family (biological or relatives) a support to the child?
- It may be important to facilitate a strong loving relationship between youth and their family post-discharge

Interpersonal
- Interpersonal skills w/ both peers and adults
- It may be important to help youth form or develop interpersonal skills post-discharge

Educational Setting
- Strengths of the school system (e.g., school has a good effective plan such as IEP) or any specific educational skills of the youth
- It may be important to foster youth’s educational skills and keep providing academic support post-discharge
  - For providers, working with school teachers might be helpful for youth

Optimism
- Positively see their future, having some positive future vision
- It may be important to keep eyes on how youth’s outlook is like and encourage them to visualize their positive future vision post-discharge
Summary

• Youth needs continuous care to strengthen their protective factors even after discharge from residential treatment.

• Specifically, youth need to develop internal skills (i.e., coping skills, communication skills). Environmental factors (i.e., family, school) are also important. Additionally, having positive outlook is important.

• These findings are consistent among different age groups, race, and gender.

Limitations

• CANS measure

• Second time-point

• Sample

Any questions, impressions, or suggestions for future research?

Thank you very much!
References


