TESTING THE VALIDITY AND RELIABILITY OF THE SHAME QUESTIONNAIRE AMONG SEXUALLY ABUSED GIRLS IN ZAMBIA

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Global Perspectives on Adolescent Health and Economic Strengthening Conference: 2nd Annual Conference May 12, 2016 Columbia University
Acknowledgements


• This study was funded by a K23 grant for Dr. Murray: the National Institute of Mental Health (NIMH: K23MH077532) and the Centers for Disease Control and Prevention in Zambia (CDC-Zambia).

• Applied Mental Health Research of Johns Hopkins University School of Public Health
Background

- Child sexual abuse is a global health problem (Gilbert et al., 2009; Kessler et al., 2010)
- Specifically in sub-Saharan Africa
  - Forced sexual initiation among 1/3 adolescent girls in South Africa
  - 23% prevalence of sexual abuse in Namibia, Swaziland, Uganda, Zambia and Zimbabwe
  - 64% prevalence of child sexual/physical abuse in South Africa (Meinck, Cluver, Boyes, Mhlongo, 2015)
CSA outcomes: Shame

- Shame is important to include in the development of treatments for mental health problems related to CSA
  - predicts higher levels of dissociation (Taylor, Talbot Tu, 2004)
  - the development and maintenance of PTSD (Budden, 2009)
  - fear or avoidant behavior with intimate relationships (Dorahy, 2013)
  - may help distinguish between degree of adjustment among children following CSA (Feiring, Taska, Lewis, 2002)
  - Predictor of depression among girls (Tagney et al., 1995)
  - Changes in cortisol levels and negative physiological health outcomes (Dickerson, 2004)

- Shame associated with HIV
  - HIV risk behavior
  - medication non-adherence

- Thus, shame is a construct to be measured and targeted as a relevant outcome in the development of evidence-based treatments
Measurement of Shame

- Important to measure the impact of CSA on psychosocial health/functioning

- But, there are lack of valid and reliable instruments available in low and middle income countries

- Western measures applied in these contexts often do not account for impact of culture on mental health symptoms (Bass, Bolton & Murray, 2007; Bass, Ryder, Lammers, Mukaba, & Bolton, 2008; van Ommeren, 2003).
Context

- Part of a larger project within Lusaka, Zambia
  - examining the feasibility of implementing evidence-based assessments and treatments for HIV-affected children and adolescents who experienced traumatic events
- Study was conducted among girls who had received services specifically for sexual abuse at a One-Stop Center in Lusaka
- Local stakeholders felt that shame was an important cultural factor and part of qualitative findings from DIME process (Murray et al., 2006)
  - additional local items not added on
- Translation
  - Nyanja and back translation
  - Local community group translation
  - Comparison between qualitative results and measure, If there were conflicting terms, qualitative was chosen
The Shame Questionnaire

- The Shame Questionnaire (Feiring & Taska, 2005)
- 8-item self-report measure used to assess feelings of shame in response to child sexual abuse
  - “I feel ashamed because I think that people can tell from looking at me what happened”
  - “When I think about what happened I want to go away by myself and hide”
  - “What happened to me makes me feel dirty.”
- No known validation studies of The Shame in LMIC
- Adequate reliability with $\alpha = .86$ (Feiring & Taska, 2005)
- The Shame Questionnaire, A total sum score for 8 items
  - Range 0 to 16 (3 point Likert scale not true to certainly true)
Data Analysis of the Shame Questionnaire

- **Internal consistency reliability**
- **Criterion validity** - establishing a statistical relationship with a measure that is external, but related to the measure itself (Nunnally & Bernstein, 1994)
  - 1) mean scores across number of traumatic events
  - 2) mean scores across trauma types (witnessing physical abuse, experiencing physical abuse, and experiencing sexual abuse)
  - 3) correlation between the Shame and the PTSD-RI
- **Construct Validity** - the degree to which the measure reflects the underlying latent variable
  - Item response theory - item location (difficulty parameter) and item fit (MNSQ infit statistic)
  - Sub-analyses for girls who did not endorse sexual abuse compared to girls who endorsed sexual abuse
## Results: The Shame Questionnaire

### Child Participant Demographics (n = 325)

<table>
<thead>
<tr>
<th>Trauma Type</th>
<th>Count (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age in years, Mean (range)</td>
<td>12.8 (6-15)</td>
</tr>
<tr>
<td>Being hit, punched or kicked-P</td>
<td>49 (15.1%)</td>
</tr>
<tr>
<td>Seeing a family member or kicked -W</td>
<td>57 (17.5%)</td>
</tr>
<tr>
<td>Being beaten, shot at or threatened-P</td>
<td>122 (37.5%)</td>
</tr>
<tr>
<td>Seeing someone in your community being beaten shot or threatened-W</td>
<td>87 (26.8%)</td>
</tr>
<tr>
<td>Seeing a dead body in your community -W</td>
<td>90 (27.7%)</td>
</tr>
<tr>
<td>Having an adult or someone older than you touch you inappropriately-S</td>
<td>200 (61.5%)</td>
</tr>
<tr>
<td>Hearing about the violent death of someone you know-W</td>
<td>28 (8.6%)</td>
</tr>
<tr>
<td>Having painful or scary medical procedures</td>
<td>23 (7.1%)</td>
</tr>
</tbody>
</table>

(Michalopoulos et al., 2015)
Results

• Internal Consistency Reliability $\alpha = .87$
• Criterion validity established through
  • trauma type (physical not sexual) and
  • number of traumatic events
  • Significant correlation between trauma score and Shame
• Multidimensional IRT Rating Scale Model
  • adequate overall item fit
• Differences in construct validity between girls who did and did not endorse sexual abuse
  • 1 factor for girls who did not endorse sexual abuse
  • 2 factors whole sample (active and experience) and those who endorsed abuse

(Michalopoulou et al., 2015)
<table>
<thead>
<tr>
<th>Item</th>
<th>Difficulty Parameter</th>
<th>Mean Squared Infit Statistic*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor 1: Active Outcomes of Shame</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Away and Hide</td>
<td>-0.33</td>
<td>0.91</td>
</tr>
<tr>
<td>Covering up</td>
<td>0.10</td>
<td>0.63</td>
</tr>
<tr>
<td>Wish invisible</td>
<td>0.24</td>
<td>0.58</td>
</tr>
<tr>
<td><strong>Factor 2: Experience of Shame</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tell by Look</td>
<td>-1.10</td>
<td>1.15</td>
</tr>
<tr>
<td>Only One Happened To</td>
<td>1.18</td>
<td>1.20</td>
</tr>
<tr>
<td>Feel Dirty</td>
<td>-0.32</td>
<td>0.94</td>
</tr>
<tr>
<td>Disgusted with Self</td>
<td>-0.13</td>
<td>0.91</td>
</tr>
<tr>
<td>Feel Exposed</td>
<td>0.11</td>
<td>0.85</td>
</tr>
</tbody>
</table>

(Michalopoulouos et al., 2015)

* Acceptable range above 0.50 and below 1.40
Conclusions and Next Steps

- Usefulness of IRT / CTT in understanding the concept of shame in Zambia
- Can assist with early identification of mental health symptoms among trauma-affected Zambian youth
- Those who denied the abuse may have more shame and be less likely to disclose the experience.
  - BUT, lack of significance but differences in factor structure and item location suggests that there are other factors that may be contributing to why some girls would report abuse and others would not
  - Sugar daddy phenomenon and reliability of information as limitation
- Findings suggest general utility of the Shame Questionnaire among Zambian girls
- Demonstrates need for more psychometric studies in low and middle income countries