Changes in PTSD Symptom Severity in Women Over Time as a Function of Intimate Partner Violence, Childhood Maltreatment and Lifetime Trauma, and Clinical Depression

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# Background

- Research has shown there are a variety of physiologic and psychological consequences associated with intimate partner violence.
- Over the past decade researchers have shown that persons experiencing trauma and violence often have:
  - · neuroendocrine and immune changes
  - increased morbidity
  - early mortality

### Purpose of Study

- \* Develop models of change over time
  - in the level of post-traumatic stress (PTSD) symptoms in women experiencing intimate partner violence
  - in PTSD symptom severity in women as a function of intimate partner violence, childhood maltreatment and lifetime trauma, and clinical depression

#### Method

Latent growth curve models (LGCM) of PTSD symptom severity using longitudinal data collected at 7 time periods, estimated using structural equation modeling.



- The Lifetime Trauma History Scale (Fullilove et. al, 1993)
- Post-Traumatic Stress Symptoms (PSS) (Foa et al., 1993); Cronbach's α = .90
- \* Depression: Trauma Symptom Inventory (TSI) Depression subscale (Briere, 1995); Cronbach's  $\alpha$  = .90

|                                | : 157 Women Curr<br>y Abusive Relatior | •                       |
|--------------------------------|--|-------------------------|
|                                | Mean                                   | Range                   |
| Age                            | 33.7 yrs (SD 9.5 yrs)                  | 18-64                   |
| Race/Ethnicity                 |  |                         |
| Caucasian                      | 72 (46%)                               |                         |
| African-American               | 74 (47%)                               |                         |
| Other                          | 11 (6.9%)                              |                         |
| Education                      | High School                            | 8 <sup>th</sup> grade – |
| Annual income                  | \$10,000 - \$14,999                    | <\$10K to >             |
| Length of abusive relationship | 5.35 yrs (SD 6.7 yrs)                  | <1 mo to 34             |



#### Childhood Trauma

Items ask about childhood abuse, neglect, and witnessing violence (6 events)

> Women in this sample had a mean score of 3.5 out of 6

Only 12% - or 19 women – had a score of "0"

| Baseline Lifetime Trauma History<br>(0-6 violent events, 0-8 non-violent events) |             |               |              |  |  |  |
|--|-------------|---------------|--------------|--|--|--|
| Lifetime:  | <u>Mean</u> | ( <u>SD</u> ) | <u>Range</u> |  |  |  |
| Total Trauma hx  | 4.46        | 2.52          | 0 - 11       |  |  |  |
| Violent Trauma hx  | 2.36        | 1.54          | 0 - 6        |  |  |  |
| Nonviolent Trauma hx   | 2.10        | 1.49          | 0 - 7        |  |  |  |
|  |             |               |              |  |  |  |

| Intimate Partner Violence (Baseline) |       |           |              |  |  |  |
|--------------------------------------|-------|-----------|--------------|--|--|--|
|                                      | Mean  | <u>SD</u> | <u>Range</u> |  |  |  |
| Physical violence (SVAWS)            | 53.09 | 15.38     | 21-84        |  |  |  |
| Emotional abuse (ISA-NP)             | 63.03 | 18.56     | 18-90        |  |  |  |
| Sexual violence (SVAWS)              | 11.32 | 5.42      | 6-24         |  |  |  |
| Threats of Violence (SVAWS)          | 54.61 | 13.26     | 22-76        |  |  |  |
|                                      |       |           |              |  |  |  |



| Mental Health Consequences:<br>Percentage of Women Experiencing<br>PTSD and Depression |       |  |  |  |
|--|-------|--|--|--|
| At Study Entry   |       |  |  |  |
| Met diagnostic criteria for PTSD   | 92.4% |  |  |  |
| Clinically significant depression  | 58.6% |  |  |  |



| PTSD and Depression<br>1 and 2 Years After Study Entry |              |              |              |              |  |  |  |
|--|--------------|--------------|--------------|--------------|--|--|--|
| One year later 2 years later                           |              |              |              |              |  |  |  |
|  | IPV          | No IPV       | IPV          | No IPV       |  |  |  |
|  | <i>n</i> =69 | <i>n</i> =63 | <i>n</i> =58 | <i>n</i> =70 |  |  |  |
| PTSD<br>(Dx Criteria)                                  | 75.4%        | 46.8%        | 33.6%        | 18.8%        |  |  |  |
| Depression<br>(Clinically Sig)                         | 23.2%        | 19%          | 10.2%        | 4.7%         |  |  |  |







| Model Fit and Nested Model Tests<br>for Change in PTSD Over Time  |                 |        |      |       |      |  |
|---|-----------------|--------|------|-------|------|--|
| Model   | X²<br>(df)      | р      | CFI  | RMSEA | SRMR |  |
| 1. Intercept Factor Only  | 335.515<br>(26) | <.0001 | .413 | .275  | .644 |  |
| 2. Linear: Intercept +<br>Slope Factors   | 140.173<br>(23) | <.0001 | .777 | .181  | .231 |  |
| 3. Quadratic: Intercept,<br>Slope + Quadratic<br>Factors  | 55.186<br>(19)  | <.0001 | .931 | .110  | .079 |  |
| Model 3 vs. Model 1: $\Delta \chi^2$ = 280.329, $\Delta df$ = 7, $p$ < .001.<br>Model 3 vs. Model 2: $\Delta \chi^2$ = 85.527, $\Delta df$ = 4, $p$ < .001. |                 |        |      |       |      |  |











## Discussion/Significance

- Women recruited from crisis shelters showed a relatively high initial level of PTSD symptom severity.
- On average, PTSD symptoms showed a curvilinear pattern of decline over a 2-year time period.
- Residual levels of PTSD are related to their current experience (or non-experience) of intimate partner violence.

# Discussion/Significance

- The following factors tended to be associated with women having higher initial levels of PTSD symptoms:
  - · clinical levels of depression,
  - experienced higher levels of childhood abuse and neglect, and/or
  - experienced greater lifetime violent and non-violent trauma.