Partner or intimate violence is a serious social problem that creates trauma for the adults involved as well as children who witness. While all interventions need to pay utmost respect to dynamics of power and safety, there is a need to consider new approaches. Children who witness domestic violence or are the direct victims of family violence typically struggle with emotional sequelae. There is a sizeable body of research that documents the changes in neural development following trauma exposure that contribute to difficulty comprehending and modulating emotions, repeated relationship problems and the propensity to self-medicate with drugs or alcohol (De Zulueta, 2006; Solomon & Siegel, 2003). The vast majority of adults in relationships with intimate violence were exposed to family violence at some point in their childhood, either as witness or recipient. Theory and preliminary research indicate the defense mechanism of splitting appears to play an important part in the resolution of trauma exposure, and with the problems with emotional regulation that persist. Splitting predicts specific relationship dynamics that appear in populations with partner violence and contributes to the cycle of violence through the way that situations are cognitively processed (Siegel & Forero, 2011). Distortions in processing, interpreting and drawing conclusions are directly related to emotional regulation, (Lewis, 2007).

This workshop will present interventions based on reduction of splitting and emotional dysregulation. The presenter will review the neuropsychology of trauma, focusing on the interplay of beliefs and unregulated emotions. Triggers such as criticism, envy, rejection and lack of control will be briefly discussed. Theory will be used to describe the nature of splitting and its role in cognition and judgment. The ways this manifests in intimate violence will also be discussed and supported with research findings and case material. The presenter will then offer interventions that include psychoeducation, exercises to promote awareness of emotions and splitting, and strategies to restore emotional equilibrium.

**A multigenerational perspective**

- Children exposed to parental violence or who experience trauma (immigration, poverty, bullying, neglect) may have changes in brain plasticity and neural synapses that lead to emotional dysregulation
- Unprocessed memories and original affective response can be triggered and merge with present situation (flooding)
Children who are exposed to D.V.

• Research has demonstrated that the overwhelming majority of male batterers were exposed to family violence during their childhood. (Dutton, 2000).
• Children raised in homes with domestic violence and who have experienced multiple forms of trauma are more likely to repeat DV in their own adult relationships (Bensley et al, 2003).
• Intimate partner violence varies according to self-regulatory abilities. (Finkel, et al, 2009).

At highest risk.....

• Early onset, multiple, extended and invasive traumatic events
• Briere & Spinazzola “These individuals are likely to experience a variety of posttraumatic symptoms and negative mood states and often present with chronic affect regulation and interpersonal difficulties”
THE PSYCHOBIOLOGY OF TRAUMA

• "Traumatization in early childhood results in damage to the right hemispheric cortical and sub-cortical limbic circuits, limiting the ability to regulate emotion. As a result, these individuals have difficulties regulating emotions such as hopeless despair.

• Felicity de Zulta 2007 J. Family Therapy

Adverse Consequences to the Developing Brain

• Reduction of corpus callosum, the tract of nerve fibers that connects the left and right hemispheres of the cortex which allows for unified perceptions and memories
• Disruptions in the endogenous opiate system that governs the ability to be comforted
• Synaptic pruning due to excess cortosone
Neurobiology of PTSD

Brain scans of subjects with PTSD and alexithymia indicate disintegration in connectivity required for cognitive insight and conscious awareness during episodes of heightened affect arousal (Frewen et al, 2008).

The stress of maltreatment during childhood, produces dysregulation of this finely balanced system while it is still developing.

Dysregulation can result in the production of too much or too little cortisol and a variety of other hormones and neurotransmitters.

The situation is complicated even further because brain cells can respond to the abundance of a substance by down regulating the number of receptors for that substance, resulting in a brain that is different from one that develops in the absence of abuse and neglect.

Twardosz S & Lutzker, J. R
SHUT DOWN
THE ULTIMATE SURRENDER

The manifestations of failed response to extreme emotional states is best described by Bowlby in his research with infants and young children exposed to extreme object loss (Bowlby, 1959). Bowlby regarded the affectless state of these children as the end stage of a mourning process that allowed them to detach from unbearable loss that could no longer be tolerated.
A defense mechanism activated by stress that is accompanied by denial and projective identification compromising cognitive functions (judgement) and interpersonal relationships

Splitting and Trauma

- Splitting may be a bi-product of trauma

- Dissociation is an extreme form of splitting
Relationships defined by splitting

- Unstable: rapid reversals in how the partner and the relationship are viewed

- Poor problem solving: either minimized to keep the peace or too big to manage

- Cognitive distortions may lead to faulty judgment


Dyadic Splitting Scores for Different Populations

<table>
<thead>
<tr>
<th>Population</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well-adjusted spouses (n = 52)</td>
<td>3.6</td>
<td>2.2</td>
</tr>
<tr>
<td>Narcissistically vulnerable (n = 24)</td>
<td>11.7</td>
<td>3.7</td>
</tr>
<tr>
<td>Court-ordered batterers (n = 20)</td>
<td>12.0</td>
<td>4.1</td>
</tr>
<tr>
<td>Battered women (n = 77)</td>
<td>14.1</td>
<td>4.3</td>
</tr>
</tbody>
</table>

T-test of difference significant at .001 Siegel & Forero (2012)
A multigenerational perspective

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- Unprocessed memories and original affective response can be triggered and merge with present situation (flooding)

Treatment of ER and splitting

“It is important to remember that verbal interpretations processed by the left hemisphere are not going to access the right brain.”

(Alan Schore)
EXPAND EXISTING APPROACHES to treatment of IPV

• Strengths Perspective
• Importance of Attunement and Respect
• Strategies to regain emotional calm
• Strategies to fight splitting and flooding
• Accountability for all individuals
• Break the intergenerational chain