Effects of restorative justice conferences on post-traumatic stress symptoms among robbery and burglary victims: a randomised controlled trial

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Psychological responses to criminal victimization

In the wake of criminal victimization—normative responses:

- Intrusion: Distressing trauma-related thoughts and feelings, nightmare, and flashbacks

- Hyperarousal: Sleep disturbances, anger outburst, difficulty concentrating, hypervigilance (i.e., feeling watchful and on guard)

- Avoidance: Avoiding trauma-related situations, thoughts and activities

Phasic recovery period of varying degrees of intensity and duration
Post Traumatic Stress Disorder

Psychological Trauma:
- A: a person has experienced, witnessed or been confronted with an event of actual or threatened death or serious injury to himself or others
- B: emotional responses to the event include fear, helpless, and/or horror

Resulting in avoidance, intrusion, and hyperarousal symptoms (post traumatic stress symptoms “PTSS”)

About 30% of individuals who experience a traumatic event do not recover over time

Low to moderate levels of PTSS still very serious consequences

- Higher rates of morbidity and mortality from coronary heart disease
- Poorer health functioning and greater medical utilization
- Increased social and work morbidity.
- Account for an average of 24 working days lost per year per worker, with 42% of those suffering from post-traumatic stress receiving Incapacity Benefits or Income Support
Cognitive Behavioural Therapy for PTSD

- Exposure therapy (ET) is the most empirically supported form of CBT
- ET treatment asks victims (in safe settings) to confront anxiety-provoking stimuli by discussing the crime and engaging thoughts about the offense that are otherwise avoided.
- The underlying premise is that avoiding trauma-related memories interferes with the emotional processing of the event

Restorative Justice Conference (RJC) Intervention

- Face-to-face meetings of 2-3 hours duration
- Specially-trained police assemble crime victims, their offenders, and their respective friends and family
- Discuss the crime and the harm it has caused
- After which offenders usually apologize and always offer to make amends
- Conferences occurred after guilty pleas entered in court, but before sentencing
- Conferences occurred in additional to conventional justice
To determine the impact of using RJC in addition to conventional justice on PTSS of for adult robbery and burglary victims.

Methods: The London Experiment

- Participants
  - Eligible offenses: robbery (n=109), burglary (n=176)
  - Eligible offenders: 17+ years old and pleading guilty
  - Eligible victims: adults, could communicate in English and answer questions via telephone
- Consenting victims and offenders randomly assigned as a unit via computer (blinding not possible)
  - Intervention: RJC + Conventional justice
  - Control: Conventional Justice
- Telephone interviews 6 weeks following the conference/random assignment
- Instruments: Impact of Event Scale Revised (PTSS)
- For current analysis:
  - Excluded juveniles
  - Excluded case with multiple victims
Outcome of interest

- Post-traumatic stress symptoms
- Defined by the DSM
- Measured by the Impact of Event Scale Revised
  - 22 item questionnaire
  - Wide recognition in the field of traumatic stress
  - Performed well in pilot test
  - Cronbach’s alpha: 0.92
- Parameters:
  - 0-8 = sub-clinical
  - 9-22 = moderate distress
  - 23 and over = high distress
Sample Characteristics

- 6 months between offense and initial interview
- 57% female
- 39 years old
- 62% burglary
- 4% knew offender prior to crime
- 44% had interpersonal interactions with the offender during the crime
- 25% experienced a psychologically traumatic event (thereby only 25% even eligible for PTSD diagnosis)
- 8% received counseling after the crime

PTSS Scores CJ vs. RJ

<table>
<thead>
<tr>
<th>IES-R Score</th>
<th>CJ</th>
<th>RJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>80</td>
<td>74</td>
</tr>
<tr>
<td>Median</td>
<td>12.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Interquartile Range</td>
<td>5.00 To 29.25</td>
<td>2.00 To 15.00</td>
</tr>
<tr>
<td>P-Value</td>
<td>0.007</td>
<td></td>
</tr>
<tr>
<td>Cohen’s d</td>
<td>0.431</td>
<td></td>
</tr>
</tbody>
</table>

Small to Medium
Exploratory Gender Analysis
Control Group Only

Traumatic Stress literature suggests:

- Men more frequently exposed to trauma, but women have higher rates of PTSD
- PTSD in women tends to be more chronic
- Women’s subjective experience of trauma is usually more threatening than that of men

Explained in part by:
- Gender differences in neuroendocrine responses to trauma
To what extent are these findings driven by gender differences?

Null hypothesis: No gender differences

PTSS By Treatment Group & Gender

[Graph showing PTSS scores by treatment group and gender]
Results: CJ Males vs. RJ Males

<table>
<thead>
<tr>
<th></th>
<th>CJ</th>
<th>RJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>31</td>
<td>35</td>
</tr>
<tr>
<td>Median</td>
<td>7.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Interquartile Range</td>
<td>1.00 To 17.00</td>
<td>2.00 To 15.00</td>
</tr>
<tr>
<td>P-Value</td>
<td>0.549</td>
<td></td>
</tr>
<tr>
<td>Cohen’s d</td>
<td>0.125</td>
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CJ Females vs. RJ Females

<table>
<thead>
<tr>
<th></th>
<th>CJ</th>
<th>RJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>49</td>
<td>39</td>
</tr>
<tr>
<td>Median</td>
<td>16.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Interquartile Range</td>
<td>9.00 To 34.50</td>
<td>2.00 To 22.00</td>
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<tr>
<td>P-Value</td>
<td>0.010</td>
<td></td>
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<tr>
<td>Cohen’s d</td>
<td>0.608</td>
<td></td>
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Medium to Large
- One-third fewer clinical cases after RJC than control, p = 0.004
- Driven by effects on female victims (41% fewer clinical cases with RJC, p = 0.002)
- In males (18% fewer clinical cases with RJC, n.s.)
- Nonetheless, RJC effects on PTSS were in the same beneficial direction for both men and women, and did not cancel each other out.

**Figure 2: Participants with PTSS Above Sub-Clinical Levels**

<table>
<thead>
<tr>
<th></th>
<th>RJC</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>42%</td>
<td>65%</td>
</tr>
<tr>
<td>Women Only</td>
<td>46%</td>
<td>78%</td>
</tr>
<tr>
<td>Men Only</td>
<td>37%</td>
<td>45%</td>
</tr>
</tbody>
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**Discussion**

- Restorative justice conferencing led by police can reduce PTSS, especially for female adult victims of serious crime.
  - Main finding is based on only a portion of all cases randomly assigned
- No dropout from treatment (by default) in the CJ control group
  - The proportion of attrition in follow-up measurement was similar in both treatment groups.
- Main threat to internal validity in this study is the 17 victims who refuse RJC and Interviews
  - But if PTSS assumed--28% fewer cases of clinical PTSS in the hypothetical RJC group (53%) than in the actual control group (65%).
Implications

- One-fourth less prevalence of clinical PTSS could translate into saving millions of pounds, Euros or dollars in lost work, health care, and quality of life.
- May even reduce mortality from coronary heart disease
- The first evidence that RJC can be cost-justified by victim health effects
  - Replications of the present test with larger samples, longer follow-up, and more financial data
- Even if RJC treatment was limited to women, the vast number of crimes against women could make the treatment worth providing

- Justifiable to include a health budget for the face-to-face conference form of restorative justice.
  - Police have shown that they will provide RJC when funding is available.
- The evidence for health benefits of criminal justice-initiated treatment of crime victims through restorative justice conferencing is very promising.
  - At the very least, further investments in much larger RCTs seem well justified