

## 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 addition to conventional justice

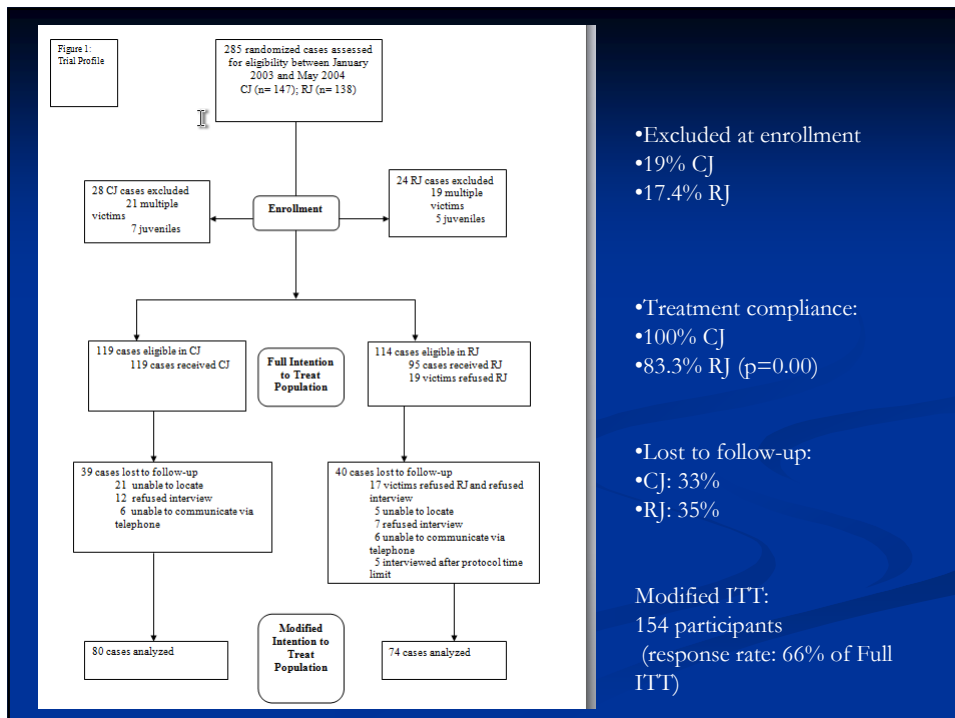
To determine the  
impact of using RJC's  
*in addition to*  
conventional justice on  
PTSS of for adult  
robbery and burglary  
victims.

## 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

# LONDON

- 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



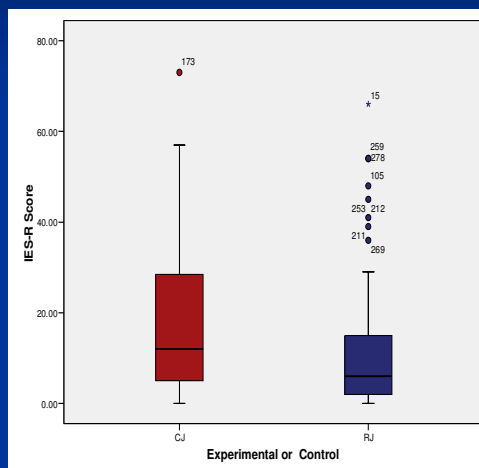
## Sample Characteristics

- 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

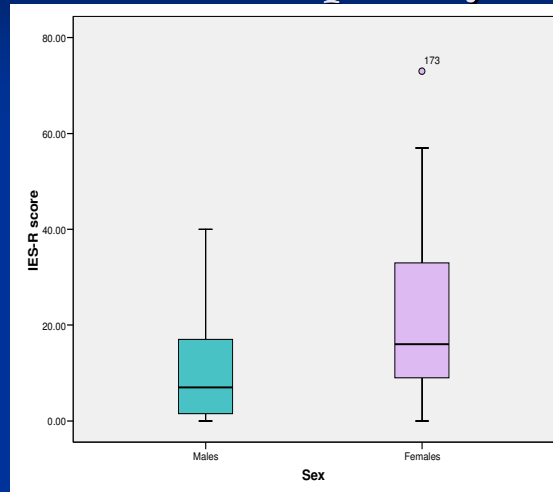
## PTSS Scores CJ vs. RJ

| IES-R Score          |                     |                     |
|----------------------|---------------------|---------------------|
|                      | CJ                  | RJ                  |
| N                    | 80                  | 74                  |
| Median               | 12.00               | 6.00                |
| Inter-quartile Range | 5.00<br>To<br>29.25 | 2.00<br>To<br>15.00 |
| P-Value              | <b>0.007</b>        |                     |
| Cohen's d            | 0.431               |                     |

Small to Medium



## Exploratory Gender Analysis Control Group Only



$P=0.003$ ;  $d= 0.699$

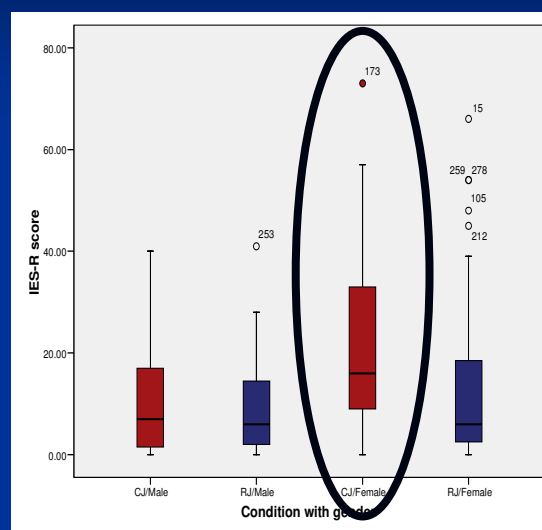
## Traumatic Stress literature suggests

- 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?

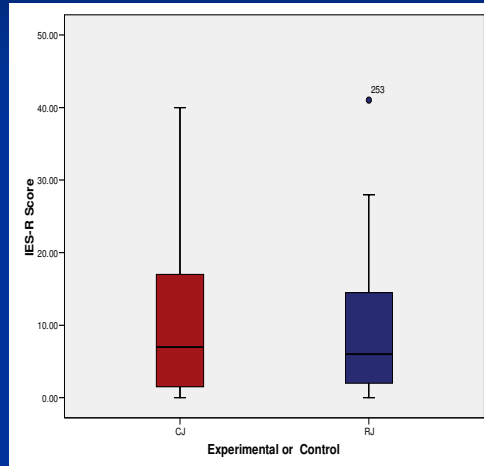
Null hypothesis = No gender differences

## PTSS By Treatment Group & Gender



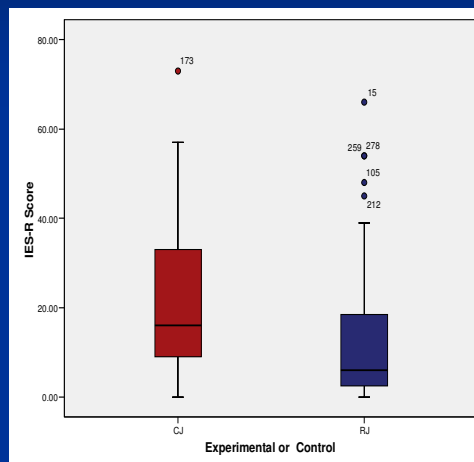
## Results: CJ Males vs. RJ Males

| Males Only           |                     |                     |
|----------------------|---------------------|---------------------|
|                      | CJ                  | RJ                  |
| N                    | 31                  | 35                  |
| Median               | 7.00                | 6.00                |
| Inter-quartile Range | 1.00<br>To<br>17.00 | 2.00<br>To<br>15.00 |
| P-Value              | <b>0.549</b>        |                     |
| Cohen's d            | 0.125               |                     |



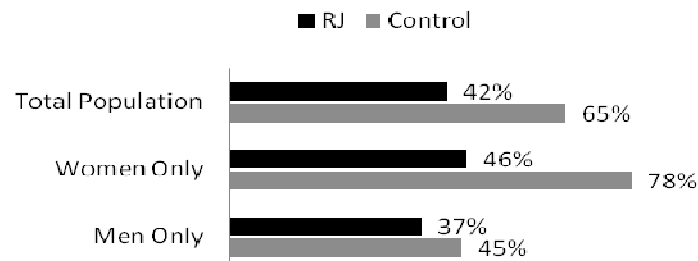
## CJ Females vs. RJ Females

| Females Only         |                     |                     |
|----------------------|---------------------|---------------------|
|                      | CJ                  | RJ                  |
| N                    | 49                  | 39                  |
| Median               | 16.00               | 6.00                |
| Inter-quartile Range | 9.00<br>To<br>34.50 | 2.00<br>To<br>22.00 |
| P-Value              | <b>0.010</b>        |                     |
| Cohen's d            | 0.608               |                     |



Medium to Large

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



- 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.

## 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