Measuring Race-Based Traumatic Stress Injury: Clinical and Research Instruments

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Presenters: Rebecca Rangel,
Sinéad Sant-Barket, & Pei-Han Cheng
Discussant: Thema S. Bryant-Davis

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Overview

• Race-Based Traumatic Stress Model and Measures

• Initial Scale Development: Foundation for Interview Protocol

• The Race-Based Traumatic Stress Interview (RBTSI) Protocol and Test Battery: Preliminary Findings

• Discussion
Key Terms and Concepts

- **Racism**: “the transformation of racial prejudice into individual racism through the use of power directed against racial group(s) and their members, who are defined as inferior by individuals, institutional members, and leaders, which is reflected in policy and procedures with the intentional and unintentional support and participation of the entire race and dominant culture” (Jones & Carter, 1996).

Classes (Types) of Racism

- Racial Discrimination (avoidance)
- Racial Harassment (hostility)
- Discriminatory Harassment (aversive-hostility)
Discriminatory Harassment is not the same as Sexual Harassment

- Individuals grow up crossing gender lines; not true with race.
- Adverse racial experiences are not common among all individuals.
- The physical exploitation of men/or women is not a core element of racism.

Key Terms

- Stress: an interaction wherein the events are appraised as positive or negative.
- Trauma: more severe form of stress.
Overview of RBTSI

Race-Based Traumatic Stress Model

The core stressor of the trauma is emotional pain rather than a physical threat to one’s life.

Overview of RBTSI continued…

• The encounter with racism must be experienced as emotionally painful, sudden, and uncontrollable.
• The reactions are expressed as intrusion (recurring thoughts), avoidance (push away the events), and arousal (irritability) and with symptom clusters of anxiety, anger, rage, depression, low self-esteem, shame, and guilt.
RBTSSI’s Emotional/Psychological Impact

- Client’s complex emotional experience:
  - Both-and quality
  - Intensity of emotions
  - Sense of helplessness
  - Ambivalent
  - Forthcoming

Non-Pathological

- Race-based Traumatic Stress injuries are **not** due to a mental illness or disorder but caused by emotional or physical pain or the threat of emotional and physical pain resulting from the different forms of racism.
NOT PTSD

- It is similar but NOT PTSD which has as its core physical threat to life not solely emotional pain.

Remember…. RBTSI is

- NOT a mental disorder or pathological
- NOT PTSD
- NOT the same as sexual harassment

- But it is…
RBTSI

- Individual-level based experience
- Emotional in Nature
- Emotionally Painful, Sudden & Uncontrollable
- Cluster of Symptoms: anxiety, depression, anger, low self-esteem, shame and guilt
- Reactions: intrusion, avoidance, arousal

Measuring & Assessing RBTSI

- No current validated measures exist
- Need for assessment
- Carter et al. 2011 developed the Race-Based Traumatic Stress Symptom Scale
- RBTSI Protocol and Testing Battery
Race-Based Traumatic Stress Symptom Scale (RBTSSS)

Group-level assessment

Reactions to described racist experience

Each reaction item followed by the following questions:

1. Right after the event?
2. More recently?

Current presentation:

“After” and “Now” reactions
Differences in reaction endorsement by demographic groups

Scoring approach

Procedure and Participants

N = 370
Sex: 73% Female, 27% Male

Race

Socioeconomic Status
Results

Canonical correlation analysis (CCA):

**IVs: 7 After Reaction Scales**
- Depression
- Anger
- Intrusion
- Physical
- Avoidance
- Hypervigilance
- Low Self-Esteem

**DV: 7 Now Reaction Scales**
- Depression
- Anger
- Intrusion
- Physical
- Avoidance
- Hypervigilance
- Low Self-Esteem

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**Function 1**

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### RBTSSS Reactions by Racial Group

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<tr>
<th></th>
<th>Black</th>
<th>White</th>
<th>Hispanic</th>
<th>Asian/Pacific Islander</th>
<th>Biracial</th>
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<tr>
<td><strong>Depression</strong></td>
<td>5.07 (7.11)</td>
<td>3.60 (4.31)</td>
<td>4.22 (6.33)</td>
<td>6.04 (8.34)</td>
<td>4.13 (4.99)</td>
</tr>
<tr>
<td><strong>Anger</strong></td>
<td>7.68 (7.61)</td>
<td>6.16 (6.30)</td>
<td>6.43 (6.85)</td>
<td>5.92 (6.14)</td>
<td>7.46 (6.09)</td>
</tr>
<tr>
<td><strong>Physical</strong></td>
<td>3.95 (5.83)</td>
<td>3.87 (5.37)</td>
<td>3.11 (4.43)</td>
<td>3.00 (5.13)</td>
<td>4.67 (5.16)</td>
</tr>
<tr>
<td><strong>Avoidance</strong></td>
<td>0.88 (1.97)</td>
<td>0.66 (1.39)</td>
<td>1.00 (2.04)</td>
<td>1.06 (2.11)</td>
<td>1.00 (1.89)</td>
</tr>
<tr>
<td><strong>Hypervigilance</strong></td>
<td>3.56 (6.02)</td>
<td>3.75 (5.71)</td>
<td>2.95 (4.34)</td>
<td>2.88 (4.92)</td>
<td>4.25 (7.04)</td>
</tr>
<tr>
<td><strong>Intrusion</strong></td>
<td><strong>9.05 (8.30)</strong></td>
<td>6.51 (6.81)</td>
<td>7.36 (7.91)</td>
<td><strong>5.65 (6.43)</strong></td>
<td>9.33 (6.94)</td>
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<tr>
<td><strong>Low Self-Esteem</strong></td>
<td>2.24 (3.71)</td>
<td>3.02 (4.23)</td>
<td>2.80 (4.22)</td>
<td>3.39 (5.06)</td>
<td>2.88 (4.29)</td>
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</table>

### Scoring Approach

**What do the scores mean?**

**How do we interpret the scores?**
RBTSSS: Initial Scale Development

RBTSSS Person-Level Scoring Approach

- Participant Raw Scores
  - Depression
  - Anger
  - Intrusion
  - Physical Avoidance
  - Hypervigilance
  - Low Self-Esteem
- Mean and Standard Deviation Scores
- Scale z-Scores
- Scale T-scores
- Participant Total T-Scores
  - Depression
  - Anger
  - Intrusion
  - Physical Avoidance
  - Hypervigilance
  - Low Self-Esteem

RBTSI: Protocol & Testing Battery

The RBTSI testing battery
- Race-Based Stress Interview
  - demographics; racial discriminatory exp
- Trauma Symptom Checklist – 40 (TSC-40)
  - Trauma-related symptoms
- Symptom Checklist-90-Revised (SCL-90-R)
  - 9 primary symptoms; 1 total severity score
- People of Color Racial Identity Attitude Scale (POCRIAS)
  - Racial identity attitude statuses
- Structured Inventory of Malingered Symptomology (SIMS)
  - Malingering behaviors
- Millon Clinical Multiaxial Inventory – III (MCMI-III)
  - Axis I & Axis II
RBTSI: Protocol & Testing Battery

How is RBTSI different from RBTSSS?

- Individual – based interview
- Focuses on the participants’ emotional reactions
- Allows for deeper exploration of the experience
- A clinical and forensic testing battery

RBTSI: Protocol & Testing Battery

Participants

N = 63
All Black sample
17.5% Male 82.5% Female
Age: 18 - 49 (M =26.66; SD = 7.73)

Religion

- Christian
- Other
- Non-religious
- Catholic
- Baptist
- Protestant
**RBTSI: Protocol & Testing Battery**

**Procedure**

- Responded to fliers
- Contacted by interviewers from the same racial group
- Were interviewed: demographics & RBTSSS
- Completed independently: TSC-40, SCL-90, MCMI-III, SIMS, POCRIAS
- 60-90 min; $25 compensation

**Preliminary Analysis: Frequencies**

<table>
<thead>
<tr>
<th>Type of Racism</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Verbal assault</td>
<td>31.3%</td>
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<tr>
<td>Treated on basis of stereotype</td>
<td>18.8%</td>
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<tr>
<td>Denied access or service</td>
<td>14.1%</td>
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<tr>
<td>Violated racial rules</td>
<td>10.9%</td>
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<tr>
<td>Profiled</td>
<td>9.4%</td>
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<tr>
<td>Hostile work environment</td>
<td>6.3%</td>
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<tr>
<td>Physical assault</td>
<td>4.7%</td>
</tr>
<tr>
<td>Own group discrimination</td>
<td>3.1%</td>
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<tr>
<td>Vicarious</td>
<td>1.6%</td>
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</table>

- Racist event: 91% did not expect; 89% could not control; 91% emotionally painful

**Similar events happen in lifetime**

- 27% once
- 21% 2-4 times
- 19% 5-6 times
- 33% > 7 times
Preliminary Analysis: Correlations

No significant relationships between the RBTSS scale and the SIMS scale.

| Table 1: Correlation Matrix for RBTSS after scales, total score, & POCRIAS scales |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | --- | .23 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | .23 | --- | --- | .31 | .08 | .18 | .37** | .07 | .07 | .24* | .27* | .07 |
| 3 | --- | .31 | --- | .08 | .18 | .37** | .07 | .07 | .24* | .27* | .07 | .07 |
| 4 | .05 | .24* | .08 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5 | .09 | .23* | .18 | .37** | --- | --- | --- | --- | --- | --- | --- | --- |
| 6 | .11 | .37* | .07 | .07 | .24* | .27* | .07 | .07 | .24* | .27* | .07 | .07 |
| 7 | .18 | .37** | .07 | .07 | .24* | .27* | .07 | .07 | .24* | .27* | .07 | .07 |
| 8 | .4** | .84** | .07 | .07 | .24* | .27* | .07 | .07 | .24* | .27* | .07 | .07 |

Note: 1 = RBTSS Depression — After subscale; 2 = RBTSS Anger — After subscale; 3 = RBTSS Anxiety — After subscale; 4 = RBTSS Hypervigilance — After subscale; 5 = RBTSS Avoidance — After subscale; 6 = RBTSS Intrusion — After subscale; 7 = RBTSS Low Self-Esteem — After subscale; 8 = RBTSS After total score; 9 = POCRIAS Conformity subscale; 10 = POCRIAS Immersion/Resilience subscale; 11 = POCRIAS Internalization subscale

**p < .01; *p < .05

| Table 2: Correlation Matrix for RBTSS after scales, total score, & TSC-40 subscales |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 1 | --- | .27* | .13 | .23 | .03 | .23 | --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | .26** | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3 | .28** | .22** | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4 | .21** | .21** | .18** | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5 | .25** | .28** | .21** | .03** | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6 | .21** | .21** | .21** | .21** | .03** | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7 | .27** | .26** | .26** | .26** | .26** | .26** | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | .27** | .23 | .13 | .23 | .03 | .23 | --- | --- | --- | --- | --- | --- | --- | --- |
| 9 | .04 | .09 | .03 | .02 | .05 | .13 | .04 | .23 | --- | --- | --- | --- | --- | --- |
| 10 | .05 | .14 | .16 | .09 | .04 | .18 | .13 | .10 | .02 | --- | --- | --- | --- | --- |
| 11 | .13 | .24 | .32** | .16 | .15 | .20 | .27* | .05 | .24* | --- | --- | --- | --- | --- |
| 12 | 0 | .11 | .01 | .09 | .04 | .05 | .06 | .11 | .09 | .24* | .16 | --- | --- | --- |
| 13 | .05 | .18 | .08 | .37** | .07 | .19 | .17 | .08 | .32 | .37** | .01 | .01 | --- | --- |
| 14 | .03 | .12 | .01 | .01 | .05 | .12 | .02 | .18 | .08 | .12 | .22 | .22 | .17 | --- |
| 15 | .06 | .05 | .02 | .01 | .08 | .10 | .02 | .40** | .84** | .02 | .21 | .21 | .08 | .05 | --- |

Note: 1 = TSC-40 Dissociation subscale; 2 = TSC-40 Anxiety subscale; 3 = TSC-40 Depression subscale; 4 = TSC-40 Sexual Abuse Trauma Index; 5 = TSC-40 Sleep Disturbances; 6 = TSC-40 Sexual Problems; 7 = TSC-40 Total score; 8 = RBTSS Depression — After subscale; 9 = RBTSS Anger — After subscale; 10 = RBTSS Anxiety — After subscale; 11 = RBTSS Avoidance — After subscale; 12 = RBTSS Hypervigilance — After subscale; 13 = RBTSS Intrusion — After subscale; 14 = RBTSS Low Self-Esteem — After subscale; 15 = RBTSS After total score

**p < .01; *p < .05
Table 3: Correlation Matrix for RBTSSS after subscales, total score, and SCL-90 subscales

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<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
</tr>
</thead>
</table>
| 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...
| 2 | $R_{ij}^2$ | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...
| 3 | $R_{ij}^2$ | $R_{ij}^2$ | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...
| 4 | $R_{ij}^2$ | $R_{ij}^2$ | $R_{ij}^2$ | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...
| 5 | $R_{ij}^2$ | $R_{ij}^2$ | $R_{ij}^2$ | $R_{ij}^2$ | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...
| 6 | $R_{ij}^2$ | $R_{ij}^2$ | $R_{ij}^2$ | $R_{ij}^2$ | $R_{ij}^2$ | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...
| 7 | 0.21 | 0.21 | 0.14 | 0.04 | 0.07 | 0.12 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...
| 8 | $R_{ij}^2$ | $R_{ij}^2$ | $R_{ij}^2$ | $R_{ij}^2$ | $R_{ij}^2$ | $R_{ij}^2$ | $R_{ij}^2$ | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...
| 9 | $R_{ij}^2$ | $R_{ij}^2$ | $R_{ij}^2$ | $R_{ij}^2$ | $R_{ij}^2$ | $R_{ij}^2$ | $R_{ij}^2$ | $R_{ij}^2$ | ... | ... | ... | ... | ... | ... | ... | ... | ...
| 10 | 0.28 | 0.31 | 0.28 | 0.36 | 0.22 | 0.29 | 0.21 | 0.29 | 0.29 | 0.29 | ... | ... | ... | ... | ...
| 11 | 0.21 | 0.23 | 0.15 | 0.08 | 0.14 | 0.14 | 0.09 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | ...
| 12 | 0.07 | 0.07 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | ...
| 13 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | ...
| 14 | -0.30 | -0.30 | -0.30 | -0.30 | -0.30 | -0.30 | -0.30 | -0.30 | -0.30 | -0.30 | -0.30 | -0.30 | -0.30 | -0.30 | ...
| 15 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | ...
| 16 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | ...
| 17 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | ...
| 18 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | ...

Note: 1 = SCL-90 Somatic subscale; 2 = SCL-90 Obsessive compulsive subscale; 3 = SCL-90 Interpersonal subscale; 4 = SCL-90 Depression subscale; 5 = SCL-90 Anxiety subscale; 6 = SCL-90 Hypochondriasis subscale; 7 = SCL-90 Hostility subscale; 8 = SCL-90 Phobic anxiety subscale; 9 = SCL-90 Psychasthenia subscale; 10 = SCL-90 Global Severity Index; 11 = RBTSS Depression; 12 = RBTSS Anger; 13 = RBTSS Anxiety; 14 = RBTSS Avoidance; 15 = RBTSS Hypervigilance; 16 = RBTSS Intrusion; 17 = RBTSS Low Self-Esteem; 18 = RBTSS Total score.

**p < .01; *p < .05

Discussion

Individual-Based Information:

- Racist events: did not expect, could not control, had lasting psychological effects
- Many racist events were recurring in many aspects of people’s lives at different life stages.

Correlation Findings:

- Anger is a more significant and meaningful component of race-based traumatic stress injury.
- Avoidance & intrusion are related to symptoms measured by TSC-40 and SCL-90.
- Openly experience racial identity transition makes individuals examine racist events without pushing away unpleasant emotions.
Title goes here

Discussion

Race-Based Traumatic Stress Injury
• Distinct from PTSD
• Non-Pathological
• Not sexual harassment

RBTSSS
• Relationship between After and Now reactions
• Significant, yet minor, racial group differences
• Shift from group-level to individual-level scoring approach

RBTSI
• No malingering
• Anger reactions were the main component of RBTS
• Avoidance & Intrusion reactions were related with specific symptoms assessed by the TSC-40 & SCL-90

Thank you
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