Peritraumatic Response, PTSD and Functional Impairment Among OEF/OIF Veterans

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PTSD Criterion A2 includes three peritraumatic emotions:
- Fear
- Helplessness
- Horror

These emotions are equivocal in their prediction of PTSD
Background

There may be other important peritraumatic emotions

- Additional emotions may predict outcomes
  - Studies have found other emotions are associated with psychopathology
- Prediction may vary by gender
  - Differences by gender have been found for A2
What We Don’t Know

- Can peritraumatic emotions predict psychopathology and impairment?
- Do men and women experience the same range of peritraumatic emotions?
- Do the same peritraumatic emotions predict outcomes for men and women?
The Current Study: Goals

- Use peritraumatic emotions to predict PTSD, depressive symptoms, and functional impairment
- Examine gender differences in prediction of these outcomes
The Current Study: Participants

- 773 OEF/OIF Veterans (54% female)
- Sample ranged in age from 22-46 years
  \[ M = 33 \text{ years}; \ SD = 6.24 \text{ years} \]
The Current Study: Procedure

- Interview measures:
  - PTSD Module of the SCID
  - Peritraumatic Emotion Endorsement Inventory

- Self-report measures:
  - Patient Health Questionnaire
  - Inventory of Psychosocial Functioning
Peritraumatic Emotions

- Frustrated
- Angry
- Anxious
- Afraid
- Helpless
- Sad
- Disgusted
- Surprised
- Confused
- Numb
- Horrified
- Regretful
- Guilty
- Excited
- Ashamed
- Embarrassed
- Humiliated
- Joyful
- Relaxed
Peritraumatic Emotions

- Frustrated (84.8%)
- Angry (84.4%)
- Anxious (81.9%)
- Afraid
- Helpless
- Sad
- Disgusted
- Surprised
- Confused
- Numb
- Horrified
- Regretful
- Guilty
- Excited
- Ashamed
- Embarrassed
- Humiliated (26.7%)
- Joyful (12.9%)
- Relaxed (9.7%)
Rates of symptoms/impairment: Total Sample

- 62.3% met criteria for PTSD (SCID)
- 42.8% met criteria for depressive symptoms (PHQ)
- Mean impairment score 3.52 ($SD = .97$)
Predicting PTSD and Depressive Symptoms: Total Sample

**PTSD:**
- Horror (B(SE) = .66(.18); $p < .01$)
- Numb (B(SE) = .70(.17); $p < .01$)

**Depressive Symptoms**
- Horror (B(SE) = .39(.18); $p < .05$)
- Sadness (B(SE) = -.54(.19); $p < .01$)
- Numb (B(SE) = .38(.16); $p < .05$)
Predicting Impairment: Total Sample

- Horror (B(SE) = .20(.08); p < .05)
- Sadness (B(SE) = -.32(.08); p < .01)
- Surprised (B(SE) = -.21(.08); p < .01)
- Numb (B(SE) = .24(.07); p < .01)
Frequency of Endorsement: Men versus Women

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
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</thead>
<tbody>
<tr>
<td><strong>Most common</strong></td>
<td>- Angry (86%)</td>
<td>- Frustrated (84.9%)</td>
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<tr>
<td></td>
<td>- Frustrated (85%)</td>
<td>- Angry (83.4%)</td>
</tr>
<tr>
<td></td>
<td>- Anxious (81.9%)</td>
<td>- Anxious (81.9%)</td>
</tr>
<tr>
<td><strong>Least common</strong></td>
<td>- Relaxed (15.5%)</td>
<td>- Relaxed (4.8%)</td>
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<td>- Embarrassed (16.1%)</td>
<td>- Joyful (7.4%)</td>
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<tr>
<td></td>
<td>- Humiliated (17.6%)</td>
<td>- Excited (27.6%)</td>
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</tbody>
</table>
Differences in Endorsement

Men more likely to endorse:
- Joyful
- Relaxed
- Excited

Women more likely to endorse:
- Sadness
- Ashamed
- Humiliated
- Embarrassed
- A2 emotions (fear, helplessness, horror)
Rates of PTSD: Men versus Women

- Men: 29.30%
- Women: 33.10%
Rates of Depressive Symptoms: Men versus Women

Men: 20.60%
Women: 22.10%
Rates of Impairment: Men versus Women

The graph compares the rates of functional impairment between men and women. The x-axis represents functional impairment levels, while the y-axis shows the impairment rates. The chart indicates a higher level of functional impairment among men compared to women.
Peritraumatic Emotions Predict PTSD

Men

– Horror (B(SE) = 1.03(.28); p < .01)
– Anxious (B(SE) = .69(.34); p < .05)
– Numb (B(SE) = .63(.26); p < .05)

Women

– Numb (B(SE) = .69(.23); p < .01)
Peritraumatic Emotions Predict Depressive Symptoms

Men
- Sadness (B(SE) = -.82(.28); p < .01)
- Anxious (B(SE) = .73(.35); p < .05)
- Numb (B(SE) = .60(.25); p < .05)

Women
- Horror (B(SE) = .55(.25); p < .05)
Peritraumatic Emotions Predict Functional Impairment

Men
- Sadness (B(SE) = -0.39(.12); p < 0.01)
- Surprised (B(SE) = -0.29(.12); p < 0.05)
- Horror (B(SE) = 0.29(.12); p < 0.05)
- Numb (B(SE) = 0.28(.11); p < 0.05)

Women
- None
Implications

For the total sample:
- High rates of PTSD and Depressive Symptoms
- Moderate levels of functional impairment
- Several peritraumatic emotions predict these outcomes
- Certain peritraumatic emotions (e.g., sadness) are protective
Implications

Comparing men and women:
- Similar rates of psychopathology and impairment
- Different peritraumatic experiences in general
- Different peritraumatic emotions predict outcomes for each gender

Peritraumatic emotions tend to be somewhat more predictive for men than women
Future Directions

- Assess peritraumatic emotions closer to the time of the trauma
- Assess prediction of the development of symptoms over time
- Examine these questions in other populations
  - Are the results specific to combat veterans?
DISCLOSURE

I, Michelle Bovin, have nothing to disclose
Additional Slides
Endorsement Rates for Total Sample

- Frustrated (84.8%)
- Angry (84.4%)
- Anxious (81.9%)
- Afraid (76%)
- Helpless (70.6%)
- Sad (68.1%)
- Disgusted (66.5%)
- Surprised (65.2%)
- Confused (63.6%)
- Numb (63.5%)
- Horrified (61%)
- Regretful (54.6%)
- Guilty (54.1%)
- Excited (39.7%)
- Ashamed (36.6%)
- Embarrassed (27.7%)
- Humiliated (26.7%)
- Joyful (12.9%)
- Relaxed (9.7%)
Endorsement Rates for Men

- Angry (86%)
- Frustrated (85%)
- Anxious (81.9%)
- Afraid (69.3%)
- Surprised (65.8%)
- Disgusted (64.6%)
- Sad (62.3%)
- Helpless (62%)
- Confused (61.7%)
- Numb (61%)

- Horrified (55.6%)
- Excited (54.1%)
- Regretful (52%)
- Guilty (50.6%)
- Ashamed (29.8%)
- Joyful (19.6%)
- Humiliated (17.6%)
- Embarrassed (16.1%)
- Relaxed (15.5%)
Endorsement Rates for Women

- Frustrated (84.9%)
- Angry (83.4%)
- Anxious (81.9%)
- Afraid (81.6%)
- Helpless (78.1%)
- Sad (73%)
- Disgusted (68.3%)
- Numb (65.6%)
- Confused (65.6%)
- Horrified (65.1%)

- Surprised (64.5%)
- Regretful (57.4%)
- Guilty (57.4%)
- Ashamed (43.1%)
- Embarrassed (37.8%)
- Humiliated (35.5%)
- Excited (27.6%)
- Joyful (7.4%)
- Relaxed (4.8%)