Gambling and Post-Traumatic Stress in Veteran Populations

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What do we know about PTSD?

• Requires a “Criterion A” Trauma
• The person was exposed to:
  • Death
  • Threatened death
  • Actual or threatened serious injury
  • Actual or threatened sexual violence
What do we know about PTSD?

- The traumatic event is persistently re-experienced.
  - Flashbacks
  - Nightmares
  - Intrusive Thoughts
What do we know about PTSD?

- The person tries to control this re-experiencing:
  - avoids trauma-related stimuli after the trauma.
  - experiences negative thoughts or feelings that began or worsened after the trauma.
  - experiences trauma-related arousal and reactivity that began or worsened after the trauma.
What do we know about PTSD?

- Relatively Common in the General Population (Lifetime Prevalence of 6-8%)
- Even more common among veterans (Lifetime Prevalence of 12—20%)
What do we know about PTSD and gambling?

• Surprisingly little (Moore & Grubbs, 2019)
Post Traumatic Stress and Rates of Gambling

- In clinical and community samples of individuals with Gambling Disorder:
  - 17% (Westermeyer et al., 2005)
  - 19% (Lederwood and Milosevic, 2015)
  - 24% (Toneatto & Pillai, 2016)
  - 34% (Ledgerwood and Petry, 2006)
  - 41% (Taylor and Sharpe, 2008)
Post Traumatic Stress and Rates of Gambling

- In (U.S.) nationally representative samples:
  - Individuals with GD report higher levels of lifetime history of PTSD (up to 14.8% lifetime prevalence; Kessler et al., 2008)
  - Individuals with GD or PTSD are at greater risk of developing the other (Parhami et al., 2014)
Post Traumatic Stress, Gambling Disorder, and Etiology

- Individuals with PTSD are at higher risk of developing GD (Scherrer et al., 2007a)
- Individuals with childhood trauma are at greater risk for developing GD later in life (Petry et al., 2005; Scherrer et al., 2007a, 2007b)
- In epidemiological work (e.g., Parhami et al., 2014), PTSD and GD are equally likely to precede the other.
Post Traumatic Stress, Gambling, and Well-Being

- Greater negative emotionality (Ledgerwood & Milosevic, 2015).
- Greater use of gambling to cope with negative emotions (Ledgerwood & Milosevic, 2015).
- Greater emotional distress in general (Najavits et al., 2011)
- Greater suicidality (Najavits et al., 2011)
- Greater likelihood to seek mental health treatment (Najavits, 2010)
- Preference for PTSD treatment or both (Najavits, 2010)
- Large number of psychiatric comorbidities (Chou & Afifi, 2011)
Post Traumatic Stress & Gambling: Outstanding Questions

- Is post-traumatic stress associated with greater gambling severity?
- Is post-traumatic stress associated with differing motivations for gambling?
- Is post-traumatic stress associated with greater cognitive distortions around gambling?
- Is post-traumatic stress associated with differing vulnerabilities to gambling?
Who did we study?

- United States Armed Forces Veterans \((N = 330)\)
- All in residential treatment for Gambling Disorder
  - Gambling Treatment Program at the Louis Stokes Cleveland VA Medical Center
  - Only residential gambling treatment program in the VA medical system
- \(M_{\text{age}} = 53.5, \ SD = 11.5, \ 80\% \text{ men}\)
- White/Caucasian (69%), followed by African-American/Black (21%), Native American/American Indian (3%), Asian/Pacific Islander (3%), Hispanic/Latino (2%), and other (2%)
How did we study them?

- **PTSD**
  - Clinician Based Diagnosis
  - **Rate = 43%**
- Gambling Symptom Severity—SOGS (Lesieur & Blume, 1987)
Key Outcomes: 1

- **Gambling Motives**
  - Questionnaire (Stewart & Zack, 2008)
    - Enhancement Motives
      - Gambling because it's fun
    - Coping Motives
      - Gambling to escape from painful emotions
    - Social Motives
      - Gambling because friends are doing it
Key Outcomes: 2

- Gambling Related Cognitions (Raylu & Oei, 2004)
  - Positive Expectancies
    - Belief that Gambling will enhance your well-being
  - Illusions of Control
    - Belief that you can control gambling outcomes via ritual or superstition
  - Predictive Control
    - Believe you can predict how gambling will result

- Inability to Stop
  - Belief that you are unable to stop your gambling

- Interpretative Bias
  - Ritualized ways of thinking about results
Key Outcomes: 3

- Inventory of Gambling Situations (Turner et al., 2013)
  - Negative Emotions
  - Conflict With Others
  - Positive Emotions
  - Social Pressure

- Urges and Temptations
- Testing Personal Control
- Need for Excitement
- Worried About Debt
- Winning/Chasing
- Confidence in Skills
Post-Traumatic Stress and Gambling Symptom Severity

- No differences in severity of gambling symptoms

Comparison of SOGS scores by PTSD Status

Grubbs, Chapman, Milner, Gutierrez, & Bradley, 2019, Psychology of Addictive Behaviors
Post-Traumatic Stress and Gambling Motives

• Significant differences across all three motives, but most notable for coping.

Grubbs, Chapman, Milner, Gutierrez, & Bradley, 2019, Psychology of Addictive Behaviors
Post-Traumatic Stress and Gambling Related Cognitions

- Those with PTSD demonstrated higher gambling related cognitions across the board.

Grubbs, Chapman, & Shepherd, 2019, Addictive Behaviors
PTSD and Gambling Situations

Inpatient Sample

Grubbs & Chapman, 2019, Substance Abuse, Research and Treatment
So what are the takeaways?
**Key Conclusions**

**From Prior Research**
- People with PTSD are at higher risk for Gambling Disorder.
- People with Gambling Disorder are at higher risk for PTSD.
- People with PTSD and Gambling Disorder are more distressed than those with just Gambling Disorder.
- People with PTSD tend to demonstrate more use of gambling to cope with negative emotions.

**From our Recent Work**
- Veterans seem to be at even higher risk for comorbid GD and PTSD.
- People with PTSD demonstrate a greater propensity to gambling in a number of situations.
- People with PTSD demonstrate more problematic beliefs or cognitive distortions around gambling.
Gambling to Cope

- Coping Motivations are especially strong
- Veterans with gambling disorder and PTSD are probably trying to escape their symptoms
  - This is common in PTSD
  - These veterans are also probably at higher risk for Substance Use Disorders and Compulsive Sexual Behavior Disorder
- This method of coping likely exacerbates symptoms
Cognitive Distortions

- Cognitive Distortions are more prevalent among gamblers with PTSD.
- Greater cognitive distortions around gambling are known to predict more problems with gambling.
- Greater cognitive distortions are associated with more difficulty in treatment.
Veterans with PTSD and Gambling Disorder are prone to gambling as a result of social situations.

Veterans with PTSD and GD are also prone to gamble more in response to gambling symptoms themselves.
What do we do?

- Be aware that treating either disorder means you might end up treating people with both.
- Be aware that veterans are likely at a higher risk for both.
- Be aware that people with both GD and PTSD are likely to be particularly distressed and difficult cases.
- Consider both disorders as focus of treatment, or be prepared to make referrals to someone competent to treat what you cannot.