# Mindfulness Based Relapse Prevention

**Shane W. Kraus, Ph.D. (shane.kraus@unlv.edu)**
University of Nevada, Las Vegas, Department of Psychology

UNLV
UNIVERSITY OF NEVADA LAS VEGAS

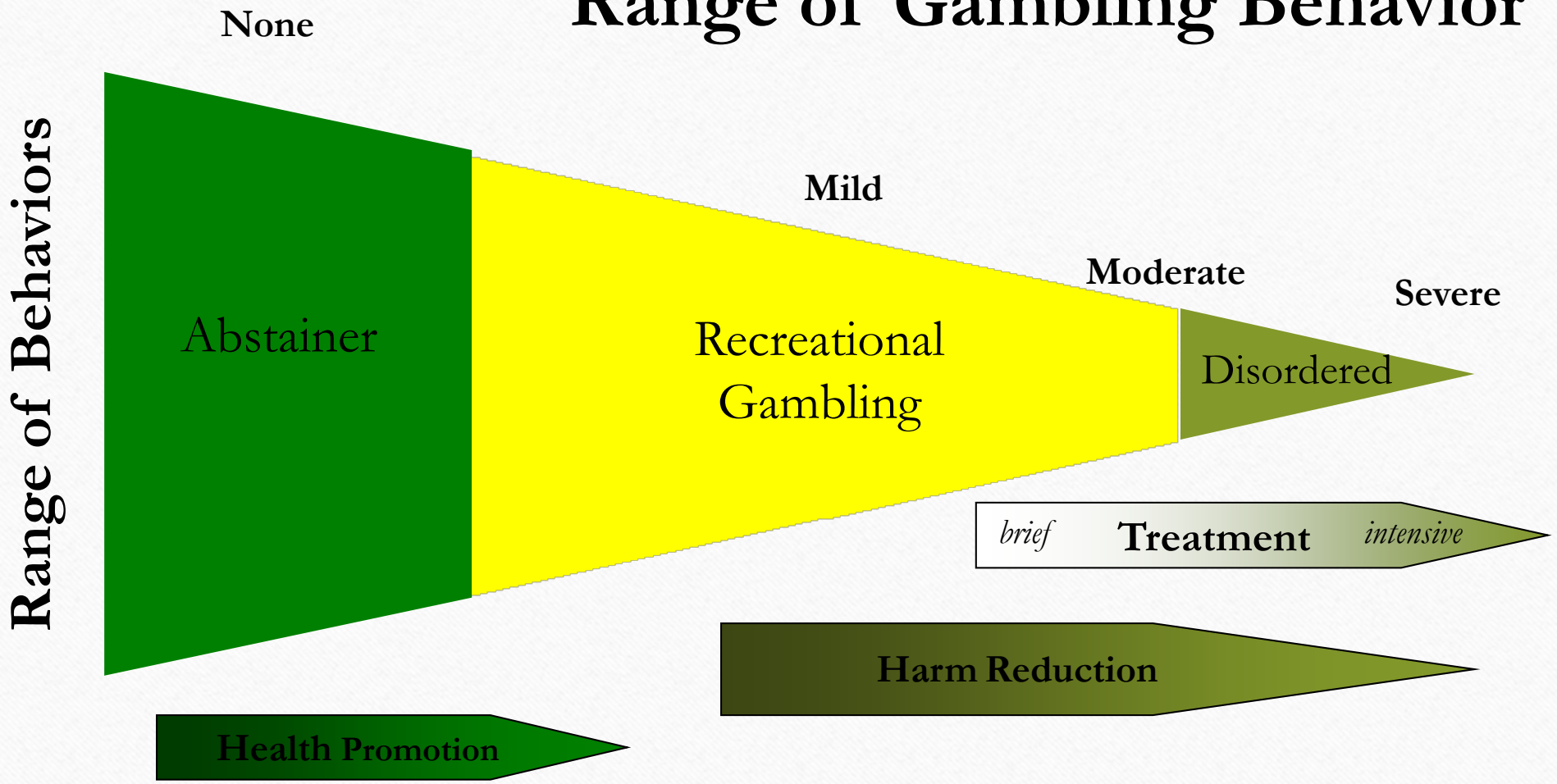
# Disclosures and Funding

- During the past 5 years, Dr. Kraus have received funding from the U.S. Department of Veterans Affairs; International Center for Responsible Gaming; National Science Centre, Poland; Massachusetts Gaming Commission; Center for the Application of Substance Abuse Technologies (University of Nevada, Reno); UNLV International Gaming Institute; and Springer Nature.
- Views expressed are those of mine and do not necessarily reflect the position or policy of the Department of Psychology, University of Nevada, Las Vegas or past funding agencies listed above.

# Learning Objectives

- Describe gambling behaviors among US Veterans, which includes rates, clinical comorbidities, and psychosocial functioning.
- Review methods and instruments used to detect gambling disorder in veterans.
- Several case vignettes of veterans with gambling disorder
- Discuss mindfulness-based relapse prevention for the treatment of gambling disorder.
- Discuss clinical data using mindfulness-based relapse prevention for veterans seeking treatment for gambling disorder.

# Range of Gambling Behavior



# Gambling Disorder Prevalence in U.S. Adults

- **Up to 90%** of U.S. adults gamble
- **Lifetime problem gambling:**
  - 2-5% of U.S. adults
  - **10% of U.S. veterans (see Etuk et al., 2020 for review)**
- **Lifetime gambling disorder:**
  - 6% college students
  - 1-2% of U.S. adults
  - **3% of U.S. veterans**
- **About 1/3** of problem gamblers experience natural remission (Slutske et al., 2012).

# Gambling Among U.S. Veterans

- A national survey of veterans found that approximately **2.2% screened positive for at-risk/problem gambling** (Stefanovics, Potenza, & Pietrzak, 2017).
  - At-risk/problem gambling associated with greater prevalence of substance use, anxiety, and depressive disorders, as well as with a history of physical trauma or sexual trauma, and having sought VA mental health treatment.
- 4.2% of Iraq/Afghanistan veterans exhibit at-risk/probable pathological gambling (Whiting et al., 2016).
- 40% of veteran gamblers seeking treatment reported a previous suicide attempt (Kausch, 2003).

# Psychiatric Co-Occurring Disorders

- Individuals with gambling disorder have high rates of co-occurring disorders, including mood, personality, substance-use, and post-traumatic stress disorder (PTSD) (Kessler, Hwang, LaBrie et al., 2008; Petry, Stinson, & Grant, 2005).
- Gambling disorder is associated with cluster-B personality disorders (Ronzitti, Kraus, Hoff, Clerici, & Potenza, 2017).
- Researchers have found high rates of alcohol (77%), cocaine (43%), opioids (23%), and cannabis use disorders (16%), among veteran problem gamblers seeking treatment (Shirk, Kelly, Kraus et al., 2018).

# Seeking Help for Problem Gambling

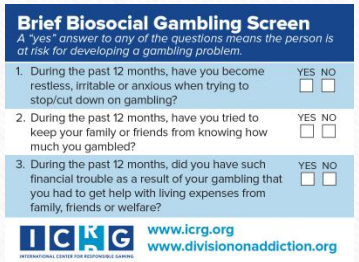
- Public funding for substance abuse treatment is **281 times** greater than for problem gambling services ($17 billion vs. $60.6 million) (Marotta, 2013).
- **~ 11% of U.S. adults** with gambling disorder seek professional help in their lifetime (Lister et al., 2015).
- A study of veterans with gambling disorder found that **less than 5%** had previously sought treatment (Shirk et al., 2018).

# Gambling Problems in US Military Veterans (Etuk et al., 2020)

1. U.S. veterans have higher rates of gambling disorder compared with civilian populations.
2. Gambling disorder often co-occurred with trauma-related conditions, substance use, and suicidality, which may complicate treatment outcomes.
3. The lack of standardized screening for gambling problems among Veterans across U.S. federal agencies (e.g., Department of Defense, Department of Veterans Affairs) is concerning and remains a significant gap for ongoing prevention and treatment efforts.

# Screening and Treatment

# Brief Biosocial Gambling Screen (BBGS)


**Brief Biosocial Gambling Screen**

*A "yes" answer to any of the questions means the person is at risk for developing a gambling problem.*

| | YES | NO |
|---|---|---|
| 1. During the past 12 months, have you become restless, irritable or anxious when trying to stop/cut down on gambling? | ☐ | ☐ |
| 2. During the past 12 months, have you tried to keep your family or friends from knowing how much you gambled? | ☐ | ☐ |
| 3. During the past 12 months, did you have such financial trouble as a result of your gambling that you had to get help with living expenses from family, friends or welfare? | ☐ | ☐ |

ICRG INTERNATIONAL CENTER FOR RESPONSIBLE GAMING www.icrg.org www.divisiononaddiction.org

**Have you gambled in the past 12 months?** No/ Yes*

1. **During the past 12 months, have you become restless irritable or anxious when trying to stop/cut down on gambling?** No / Yes
2. During the past 12 months, have you tried to keep your family or friends from knowing how much you gambled? No / Yes
3. During the past 12 months, did you have such financial trouble as a result of your gambling that you had to get help with living expenses from family, friends or welfare? No / Yes

**Any "yes" responses, suggestive of possible problem gambling.** (Gebauer et al., 2010)

# Screening for Gambling Disorder in Primary Care

- Assessed for gambling disorder among Veterans seeking mental health services in Primary Care Behavioral Health at the Bedford VAMC, Bedford, MA (funded by the Massachusetts Gaming Commission; Kraus, Potenza, et al., 2020).
- Used the Brief Biosocial Gambling Screen (Gebauer, LaBrie & Shaffer, 2010) to assess for problem gambling and used the DSM-5 criteria for diagnosing gambling disorder.
- Gambling behaviors were assessed during a routine, one-hour intake appointment for all new Veteran patients seeking mental health services in primary care.
- 260 Veterans were screened for gambling disorder between Nov 1, 2017 and Sept 15, 2018.

# Other Problem Gambling Screening Instruments

- National Opinion Research Center DSM-IV Screen (Gerstein et al., 1999)
- Massachusetts Gambling Screen (Shaffer et al., 1994)
- Problem Gambling Severity Index (PGSI) (Ferris & Wynne, 2001) – Score higher than 8, indicative of problem gambling
  - No risk, low-risk (1-2), moderate risk (3-7), and high-risk (8 or higher)

# Treatments for Gambling Disorder

- Gambling disorder responds to similar treatments as substance use disorders.
  - Recovery support services–peer support & 12-step program (Gamblers Anonymous)
  - Brief advice-giving/psychoeducation
  - Cognitive behavioral therapies (Petry, Rash, & Alessi, 2016)
- Oral naltrexone (opioid antagonist) has shown efficacy in controlled trials (Bartely & Bloch, 2013).
- Veterans with gambling problems **and** alcohol use disorder had worst outcomes on medication (disulfiram or naltrexone) compared to Veterans with only alcohol use disorder (Grant, Potenza, Kraus & Petrakis, 2017) in terms of mental health functioning.

# Medications for Gambling Disorder

- Few randomized controlled trials have studied pharmacotherapies for gambling disorder.
- Opioid antagonists like naltrexone showed promise in the pharmacological treatment of gambling disorder. Pharmacotherapy combined with psychotherapy treatments for gambling disorder may provide better rates of patient retention in comparison to pharmacology-only treatments, though further research is needed in this area.
- Future studies should address gaps relating to considerations of racial, ethnic, gender and other individual differences in clinical studies (Kraus, Etuk, & Potenza, 2020).

# Clinical Vignettes

# Patient 1: Mr. V

- Middle-aged, white, male Veteran
- Sought treatment to stop using scratch-off tickets—met criteria for mild gambling disorder.
  - Had recently self-initiated refraining from scratch ticket use; $50-$100 per week
- 6 treatment sessions (spread out over ~4 months)
- Treatment strategies (psychoeducation + CBT)
  - Cognitive distortions about gambling (i.e., luck)
  - Money spent vs. identified values (scratch tickets vs. vacation with the family; time with spouse)
  - Behavioral control strategies
  - Stress management (recognize when feeling stressed, upset). Noticing thoughts to gamble when stressed at work.
  - Identifying compulsive vs. "safe" gambling (e.g., setting a limit, asking spouse for support)
  - Relapse prevention strategies (watching for triggers, avoiding liquor stores/gas stations – pay outside)

# Patient 2: Mr. X

- Mid-30s, male Veteran of southeast Asian descent. Unemployed. Casino players (400K in two years)
- Diagnostic history: bipolar disorder and severe traumatic brain injury (TBI) with bilateral damage to frontal lobe; started gambling prior to TBI.
  - Flat affect, thought process often tangential and disorganized
- Referred following psychiatric inpatient hospitalization for sustained financial losses at casinos.
- Veteran had no significant abstinence from gambling and preferred not to talk about it.

# Mr. X: Example of Gambling Problem

- Treatment approach: develop SMART goals, operationalizing values, family therapy.
- To make sure your goals are clear and reachable, each one should be:
  - **S**pecific (simple, sensible, significant).
  - **M**easurable (meaningful, motivating).
  - **A**chievable (agreed, attainable).
  - **R**elevant (reasonable, realistic and resourced, results-based).
  - **T**ime bound (time-based, time limited, time/cost limited, timely, time-sensitive).

- Had sister help him with money. Restricted his access to money. Referred him to supportive employment. Helping Veterans manage their money is often necessary.

# Mindfulness

# What is Mindfulness

- Mindfulness is a ***philosophy*** and a ***practice*** of cultivating increased awareness of our moment to moment experience in a non-judgmental way.
- The practice of mindfulness, although based on many principles of Buddhism, was medicalized by Dr. Kabat-Zin and has been applied to a variety of psychological and medical issues, including addition.

# Attention and Attitude

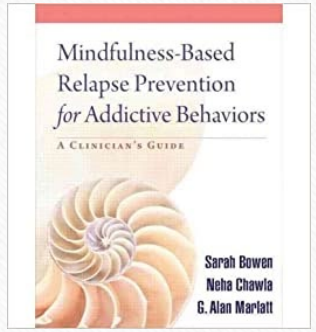
**Attention**

1. Self-regulation of attention so that it is maintained on immediate experience, thereby allowing for increased recognition of mental events in the present moment.

**Attitude**

2. Adopting a particular orientation toward one's experiences in the present moment, characterized by curiosity, openness, and acceptance.

# Mindfulness Based Relapse Prevention (Bowen, Chawla, & Marlatt, 2011)




- **Mindfulness Based Relapse Prevention (MBRP)** is a novel treatment approach developed at the Addictive Behaviors Research Center at the University of Washington, for individuals in recovery from addictive behaviors.

- MBRP is best suited to individuals who have undergone initial treatment and wish to maintain their treatment gains and develop a lifestyle that supports their well-being and recovery.

# Mindfulness Based Relapse Prevention (Bowen, Chawla, & Marlatt, 2011)

**Key Goals of MBRP:**

- 1. Develop awareness of personal triggers and habitual reactions and learn ways to create a pause in this seemingly automatic process.
- 2. Change our relationship to discomfort, learning to recognize challenging emotional and physical experiences and responding to them in skillful ways.
- 3. Foster a nonjudgmental, compassionate approach toward ourselves and our experiences.
- 4. Build a lifestyle that supports both mindfulness practice and recovery.

# MBRP Session Content

| | | |
|---|---|---|
| *Session 1:* | Automatic Pilot and Relapse | Awareness, Presence |
| *Session 2:* | Awareness of Triggers and Craving | |
| *Session 3:* | Mindfulness in Daily Life | |
| *Session 4:* | Mindfulness in High-Risk Situations | Mindfulness and Relapse |
| *Session 5:* | Acceptance and Skillful Action | |
| *Session 6:* | Seeing Thoughts as Thoughts | |
| *Session 7:* | Self-Care and Lifestyle Balance | Finding Balance |
| *Session 8:* | Social Support and Practice | |

# MBRP for Behavioral Addictions

- Veterans engaged in outpatient care in the Behavioral Addictions Clinic in Veterans Affairs Hospital in Northeast United States. Closed group psychotherapy for 9 sessions.
- Six Veterans engaged in a MBRP group at the Behavioral Addictions Clinic in Bedford Massachusetts.
- The participants identified problems resulting from behaviors related to gambling (N=3) and compulsive sexual behavior (N=3).

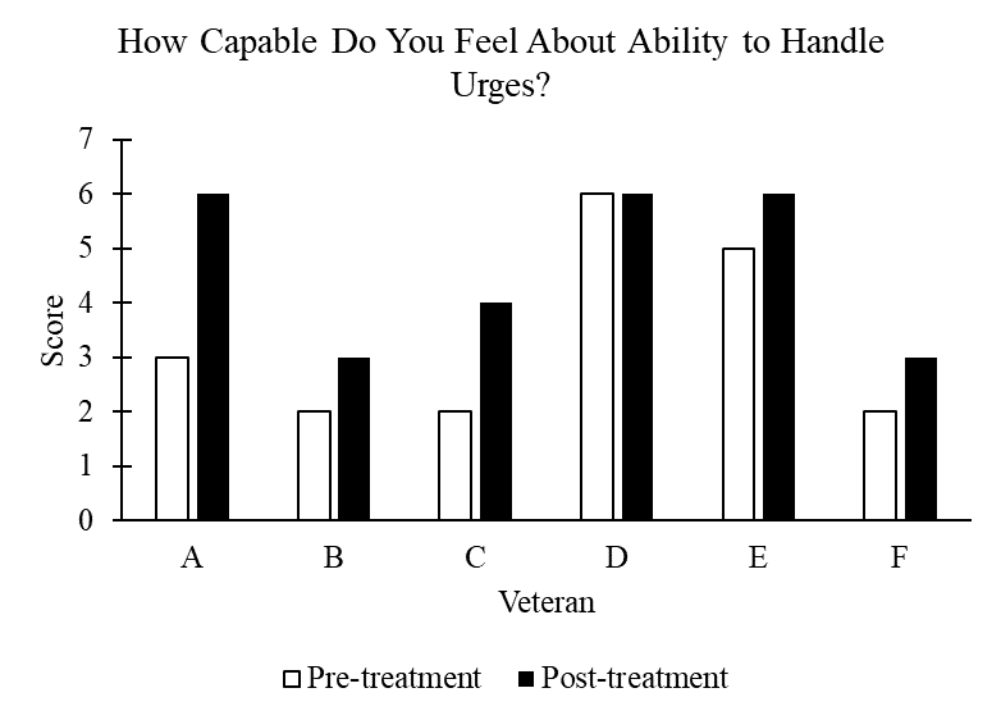
(Shirk, Muquit, Deckro, Sweeney, & Kraus, *under review*)

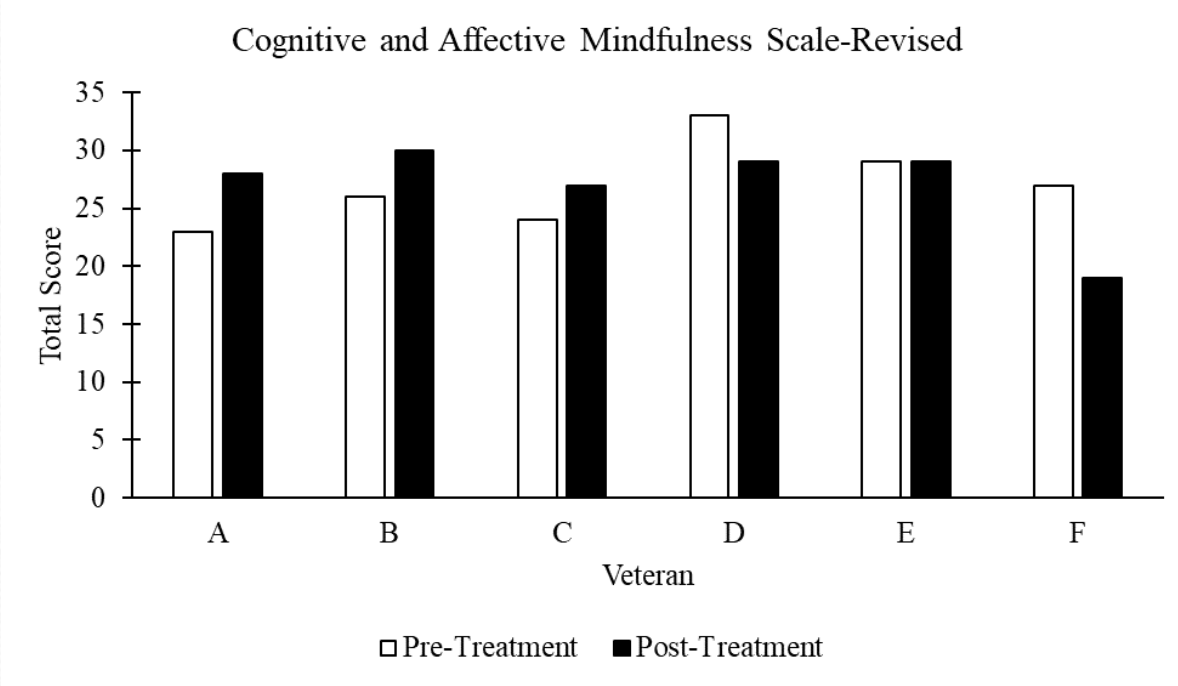
# VA Patients with Gambling Disorder

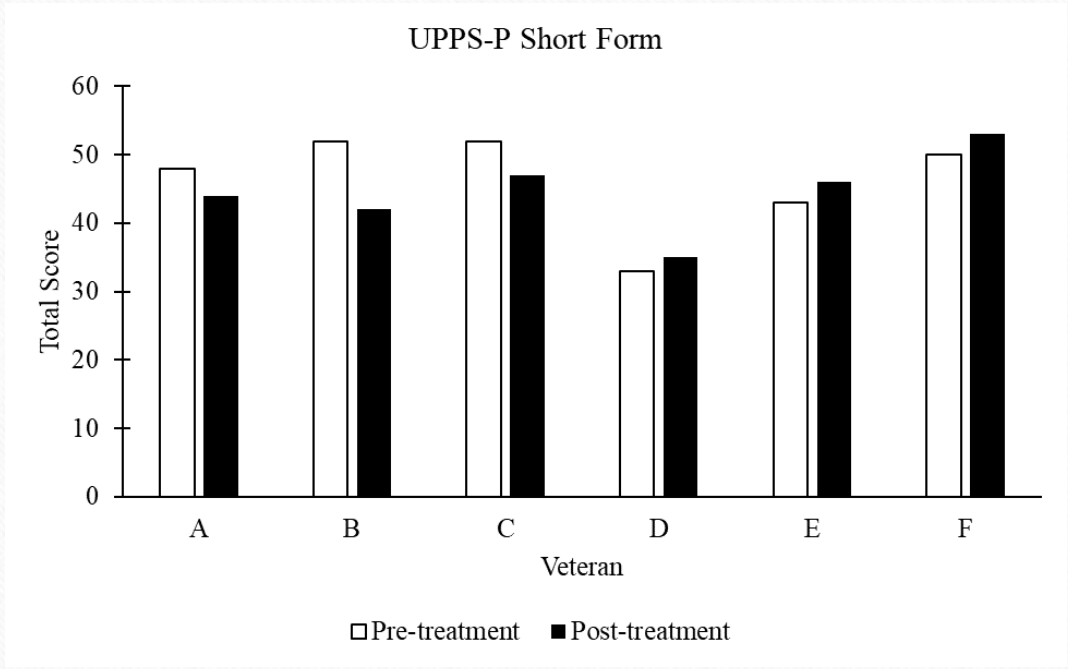
- **V-A:** 57 year old, African-American male, heterosexual, Army, Baptist, Post-Vietnam Era, High School Education, Employed, Currently Homeless, Single-never married, PTSD; 80% service connection.
- **V-B:** 52 year old, Latinx/Hispanic, heterosexual, Christian-Other, Army, Persian Gulf, High School Education, unemployed, stable housing, Separated/Divorced, Bi-polar Dx.
- **V-C:** 46 year old, White, heterosexual, male, Christian-Other, Air Force, 100% service connection, High School Education, Unemployed, At-risk for homelessness, lives alone, single/never married, Schizophrenia Disorder, Tobacco Use Disorder.

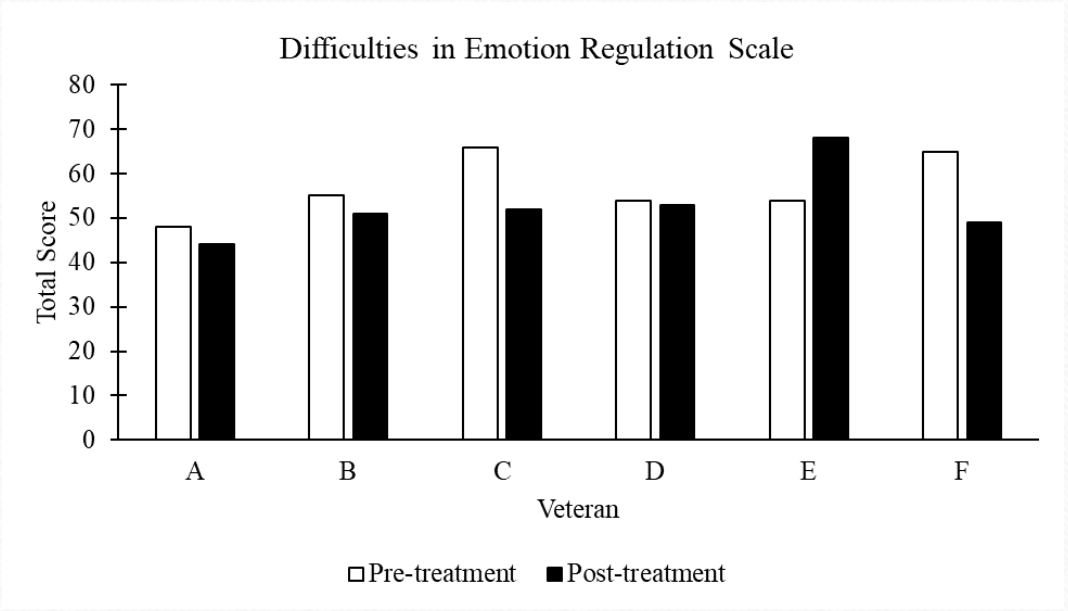
# VA Patients with Compulsive Sexual Behavior

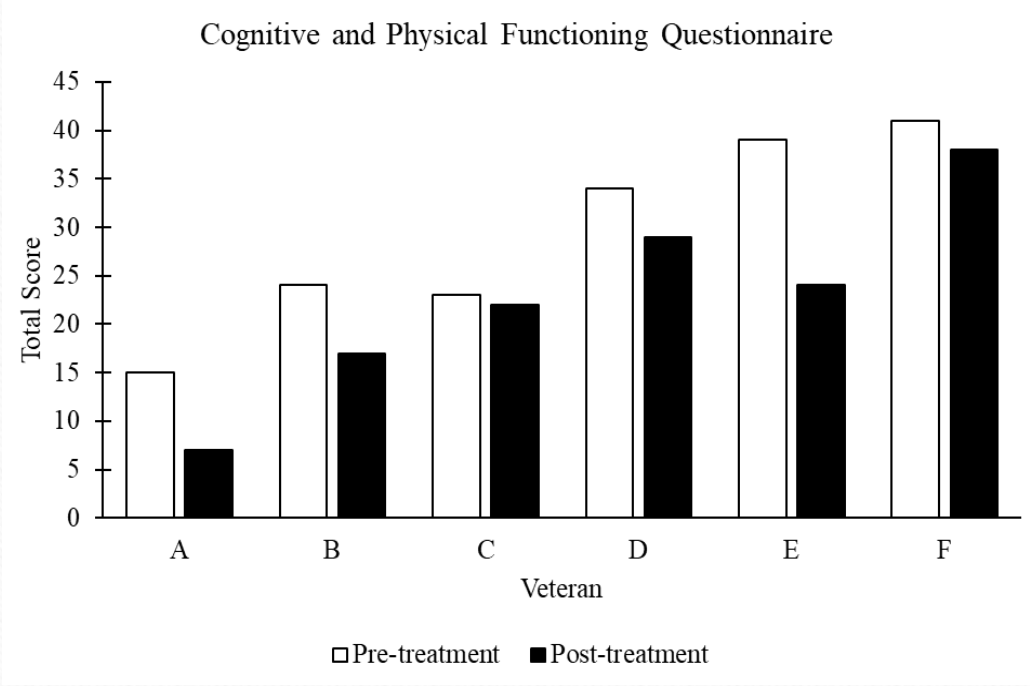
- V-D: 49 year old, White, heterosexual male, Catholic, Marines, Persian Gulf, divorced, unemployed, 70% service connected, CSB, PTSD, Bi-polar, Cocaine Use Disorder.
- V-E: 58 year old, White, heterosexual male, Protestant, Army, post-Vietnam, 100% service connection, Unemployed, married, CSB, Depression.
- V-F: 38 year old, White heterosexual male, Agnostic, Air Force, OIF/OEF/OND, 100% service connection, Associates Degree, Active Duty Full-time, Married, CSB, Shopping, GAD, Depression.

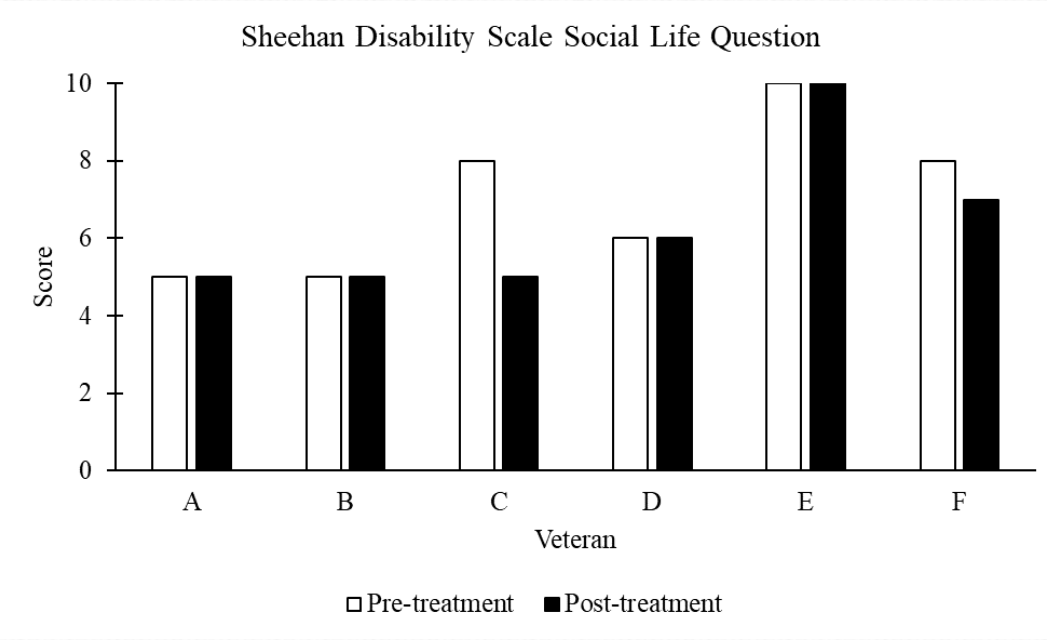

How Capable Do You Feel About Ability to Handle Urges?
Score
0
1
2
3
4
5
6
7
A
B
C
D
E
F
Veteran
Pre-treatment
Post-treatment


Cognitive and Affective Mindfulness Scale-Revised
Total Score
0
5
10
15
20
25
30
35
A
B
C
D
E
F
Veteran
Pre-Treatment
Post-Treatment


UPPS-P Short Form
Total Score
60
50
40
30
20
10
0
A
B
C
D
E
F
Veteran
Pre-treatment
Post-treatment


Difficulties in Emotion Regulation Scale
Total Score
80
70
60
50
40
30
20
10
0
A
B
C
D
E
F
Veteran
Pre-treatment
Post-treatment


Cognitive and Physical Functioning Questionnaire
Total Score
45
40
35
30
25
20
15
10
5
0
A
B
C
D
E
F
Veteran
Pre-treatment
Post-treatment


Sheehan Disability Scale Social Life Question
Score
10
8
6
4
2
0
A
B
C
D
E
F
Veteran
Pre-treatment
Post-treatment

# MBRP for Behavioral Addictions – Veterans

- Veterans with gambling disorder seem to fare better with mindfulness.
  - Increases in control, mindfulness, less impulsivity and difficulties dealing with strong emotions
  - Less cognitive difficulties but no changes for psychiatric disability
- Veterans with compulsive sexual behaviors are having mixed responses to mindfulness. They feel more in control but no changes for mindfulness, impulsivity, or emotional regulation but improvements in cognitive functioning. Perhaps a different treatment is needed.

# National VA Resources

- Edith Nourse Rogers Memorial VA Hospital, Bedford, MA
  - Outpatient Behavioral Addiction Treatment Center
  - Clinic Director: Dr. Dongchan "DC" Park (Dongchan.Park@va.gov)
- Louis Stokes Cleveland VA Medical Center, Cleveland, OH
  - Residential Gambling Treatment Center
- VA Southern Nevada Healthcare System, Las Vegas, NV
  - Las Vegas VA Residential Recovery and Renewal Center (LVR3)
  - Dr. Robert Moering (Robert.Moering@va.gov)

# Questions?