THE BEHAVIORAL ADDICTIONS

Petros Levounis, MD, MA
Chair
Department of Psychiatry
Rutgers – New Jersey Medical School

Rutgers – New Jersey Medical School
Fundamentals of Addiction Medicine Summer Series
Newark, NJ – August 21, 2013
Outline

1. Spectrum of Behavioral Addictions
2. Gambling Disorder
3. Gambling Cognitive Distortions
4. Body Dysmorphic Disorder
5. Pharmacological Treatments
6. Conclusions
1 Spectrum of Behavioral Addictions
Why did it take us that long?

- Impulse Control Disorders, Substance Use Disorders, Somatoform Disorders, and Behavioral Addictions
- The tobacco companies, the lawsuits, and organized medical professional organizations.
- The DSM-5
Failure to resist an

- impulse,
- drive, or
- temptation

to perform an act that is harmful to the person or others.
Impulsivity vs. Compulsivity

- Both show inability to refrain from repetitive behaviors.
- Impulsivity is driven by an effort to obtain arousal and gratification.
- Compulsivity is driven by an effort to reduce anxiety.
Dimensional Approach

Body Dysmorphic Disorder
Anorexia Nervosa
Depersonalization Disorder
Hypochondriasis
Tourette’s Syndrome
Trichotillomania
Autism
Binge Eating
Compulsive Buying
Kleptomania
Pathological Gambling
Self-Injurious Behaviors
Sexual Compulsions
Borderline Personality Disorder
Gender Differences

MEN
- Body Dysmorphic
- Sexual Compulsion
- Pyromania
- Gambling
- Internet Addiction

WOMEN
- Anorexia
- Binge Eating
- Kleptomania
- Compulsive Buying
- Trichotillomania

Gambling Disorder
Clinical Presentation

DSM-5 Addiction Criteria, plus

✓ “Chases” one’s losses
✓ Lies to conceal the extent of her or his gambling
✓ Relies on others for money

Phases

- Winning Phase
- Loss Phase
- Desperation Phase
- Hopelessness Phase

Epidemiology

US Gambling Statistics:
- $36 billion/year casino revenue (2011 data).
- 82% of US residents gamble.
- 1% - 3% meet criteria for PG.

Pathological Gamblers:
- $40,000 average individual debt.
- 25 hours/week average time spent.

2002-2011 Commercial Casinos
US Consumer Spending

Sources: State Gaming Regulatory Agencies

Screening Tools

- The Lie/Bet Test

  - Have you ever felt the need to bet more and more money?
  - Have you ever had to lie to people important to you about how much you gambled?

  - .99 sensitivity, .91 specificity.

Gambling
Cognitive Distortions
The Shell Game

PRACTICE

[Card images: King of Hearts, 2 of Hearts, 7 of Hearts, with an 'X' symbol]
The Shell Game

PLAY

2 hearts

X

2 hearts
What would you do?

1. Switch.

2. Stick to my original choice.

3. It doesn’t matter; either way my chance of winning is 50%.

4. You’ve lost me. I have no idea.
# The Shell Game

<table>
<thead>
<tr>
<th>CARD # 1</th>
<th>CARD # 2</th>
<th>CARD # 3</th>
<th>IF YOU STAY:</th>
<th>IF YOU SWITCH:</th>
</tr>
</thead>
<tbody>
<tr>
<td>King/Chosen</td>
<td></td>
<td></td>
<td>Win</td>
<td>Lose</td>
</tr>
<tr>
<td>King</td>
<td>Chosen</td>
<td></td>
<td>Lose</td>
<td>Win</td>
</tr>
<tr>
<td>King</td>
<td></td>
<td>Chosen</td>
<td>Lose</td>
<td>Win</td>
</tr>
<tr>
<td>Chosen</td>
<td>King</td>
<td></td>
<td>Lose</td>
<td>Win</td>
</tr>
<tr>
<td>King/Chosen</td>
<td></td>
<td></td>
<td>Win</td>
<td>Lose</td>
</tr>
<tr>
<td>King</td>
<td>Chosen</td>
<td></td>
<td>Lose</td>
<td>Win</td>
</tr>
<tr>
<td>Chosen</td>
<td>King</td>
<td></td>
<td>Lose</td>
<td>Win</td>
</tr>
<tr>
<td>Chosen</td>
<td></td>
<td>King</td>
<td>Lose</td>
<td>Win</td>
</tr>
<tr>
<td>Chosen</td>
<td></td>
<td>King/Chosen</td>
<td>Win</td>
<td>Lose</td>
</tr>
</tbody>
</table>

**CHANCE OF WINNING:** 33% 66%
Interpretative Biases

- Attributing wins to skill, losses to flukes
- Wrongly believing that a series of losses increases the chance of subsequent win
- The “Sunk-Cost” effect
- Near misses
Near Misses:
Of Mice and Men

- “Why Mice are Smarter than Men?”
- “But I was only one number away from winning the lottery!”
- Free dinner on my birthday.
Superstitious Beliefs

Believing in:

- good luck objects (like animal parts),
- behaviors,
- routines.

Selective Memory

- Remembering wins while ignoring losses.
- Totaling wins without correcting for amounts lost.
Telescoping

- **Temporal:**
  Expecting that naturally occurring—that is, probabilistically expected—wins will happen sooner rather than later.

- **Reference:**
  Expecting that naturally occurring—that is, probabilistically expected—wins will happen to oneself rather than others.
Body Dysmorphic Disorder
1. Preoccupation with one or more perceived defects or flaws that are not observable or appear slight to others.

2. At some point during the course of the disorder, the person has performed repetitive behaviors or mental acts in response to the appearance concerns.

Specify if:

Muscle dysmorphia form of BDD
(i.e., the belief that one’s body build is too small or is insufficiently muscular).

Indicate:

- Good or fair insight
- Poor insight
- Absent insight (i.e., delusional beliefs)
Associated Features

- Excessive mirror checking
- Mirror avoidance
- Excessive exercising (primarily weight lifting)
- Camouflage (hats, beards, stuffed pants)
- Ideas of reference
- Frank delusions
- Social isolation (night crawlers)
- Suicidality
- The relentless pursuit of dermatological and surgical treatments
The Big Three

Skin 73 %
Hair 56 %
Nose 37 %
Affected Body Parts

- Nose
- Eyes
- Eyelids
- Eyebrows
- Ears
- Mouth
- Lips
- Teeth
- Jaw
- Chin
- Cheeks
- Head
- Genitals
- Breasts
- Buttocks
- Abdomen
- Arms
- Hands
- Feet
- Legs
- Hips
- Shoulders
- Spine
- Larger Body Regions
- Overall Body Size
- Body Built
- Muscularity
Differential Diagnosis

✓ Normal concerns about appearance
✓ Healthy exercising
✓ Eating Disorders
✓ Gender Identity Disorder
✓ Major Depressive Episode
✓ Social Phobia
✓ Trichotillomania
✓ Koro
The Feusner Experiments 1

Feusner JD, Arch Gen Psychiatry, 2010.
The Feusner Experiments 2

High spatial frequency  |  Low spatial frequency  |  Normal spatial frequency
Global v. Local Processing

Face Recognition Experiments

Face Recognition in BDD

![Bar chart showing the comparison between BDD and control groups for the number of faces named, both upright and inverted.]

5
Pharmacological Treatments
Pathological Gambling

PG as an Impulsive Disorder

- **Opioid Antagonists**
  - Naltrexone and Nalmefene.
  - Block opioid receptors, decrease dopamine function, and reduce “Reward Cravings.”
  - Best with family history of alcoholism.

PG as an Compulsive Disorder

- Selective Serotonin Reuptake Inhibitors
  - Fluvoxamine, Paroxetine, Escitalopram.
  - Block serotonin reuptake, increase serotonin function, and reduce “Self-Medication.”
  - Best with co-occurring depression or anxiety.

Body Dysmorphic Disorder

Fluoxetine for BDD

- BDD-symptom response rates during a 12-week treatment trial with fluoxetine ~80 mg QD.
- Fluoxetine helped both delusional and non-delusional subjects; however, no delusional patients responded to placebo.

Phillips KA, Arch Gen Psychiatry, 2002.
Conclusions
1. Behavioral addictions fall within an impulsivity-compulsivity spectrum of illness.

2. Gambling Disorder is now one of the “Substance-Related and Addictive Disorders.”

3. Body Dysmorphic Disorder falls under the DSM-5 “Obsessive-Compulsive and Related Disorders” chapter.

4. Antidepressants have shown efficacy for BDD, but not for Gambling Disorder.
Thank you