



# CME: Technological Addictions: The New Frontier in Addiction Psychiatry

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# Technological Addictions

The New Frontier in Addiction Psychiatry

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# Disclosure

The following relevant financial relationships have been disclosed by faculty, and all have been mitigated.

**Petros Levounis, MD, MA:** No relevant financial relationships disclosed.

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**Off-Label/Investigational Discussion:**

Faculty have been asked to disclose discussion of unlabeled or unapproved use(s) of drugs or devices, as well as topics that are new and evolving, during the course of their presentations.

# Learning Objectives

- ✓ List 5 forms of Technological Addictions as they appear in the scientific literature of 2024.
- ✓ Describe the psychology and culture surrounding Internet Gaming addiction.
- ✓ Distinguish between normal use and addiction.

# Outline

1. The Lay of the Land
2. Internet Gaming
3. Cybersex
4. Assessment and Diagnosis
5. Treatments
6. New Directions

# 1

## The Lay of the Land

# The Behavioral Addictions

Gambling

Sex

Technology

Food

Shopping

Tanning

Exercise

Love

Work

# The Technological Addictions

Internet Gaming

Cybersex

Internet Gambling

Infobesity

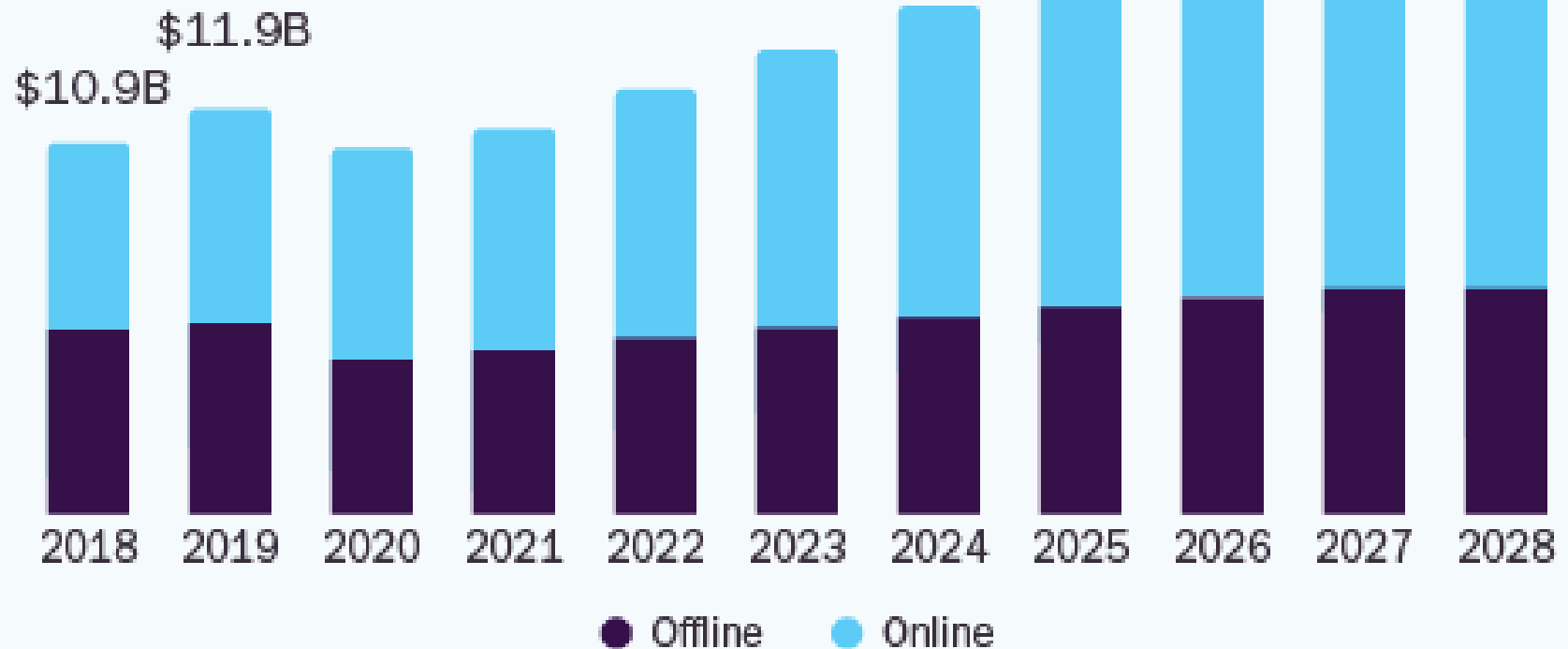
Social Media

Emailing & Texting

Online Auctions & Shopping



# Internet Gambling - Sports Betting



# Infobesity

## ✓ Internet Surfing:

Aimless web browsing for extended periods

## ✓ Information Overload:

Difficulty understanding a topic or making decisions due to too much information

# Social Media

✓ The Self v. the Selfie

✓ FOMO

- Fear
- Of
- Missing
- Out

# Emailing and Texting



# Online Auctions & Shopping

When I shop,  
the world gets better,  
and the world is better,  
but then it's not, and  
I need to do it again.

- Rebecca Bloomwood

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# Internet Gaming



# Careers, Friends, Popularity



# Kids and Video Games Stats

- ✓ 61% play video games on a given day.
- ✓ Average Time: 2 hours 13 minutes
- ✓ Boys > Girls
- ✓ 14% boys, 5% girls play 4 to 10 hrs/day.
- ✓ Do parents limit kids' screen time?
  - 94% parents say YES
  - 48% report a “constant battle”
  - 72% youth say NO
  - Those with no rules play twice as much



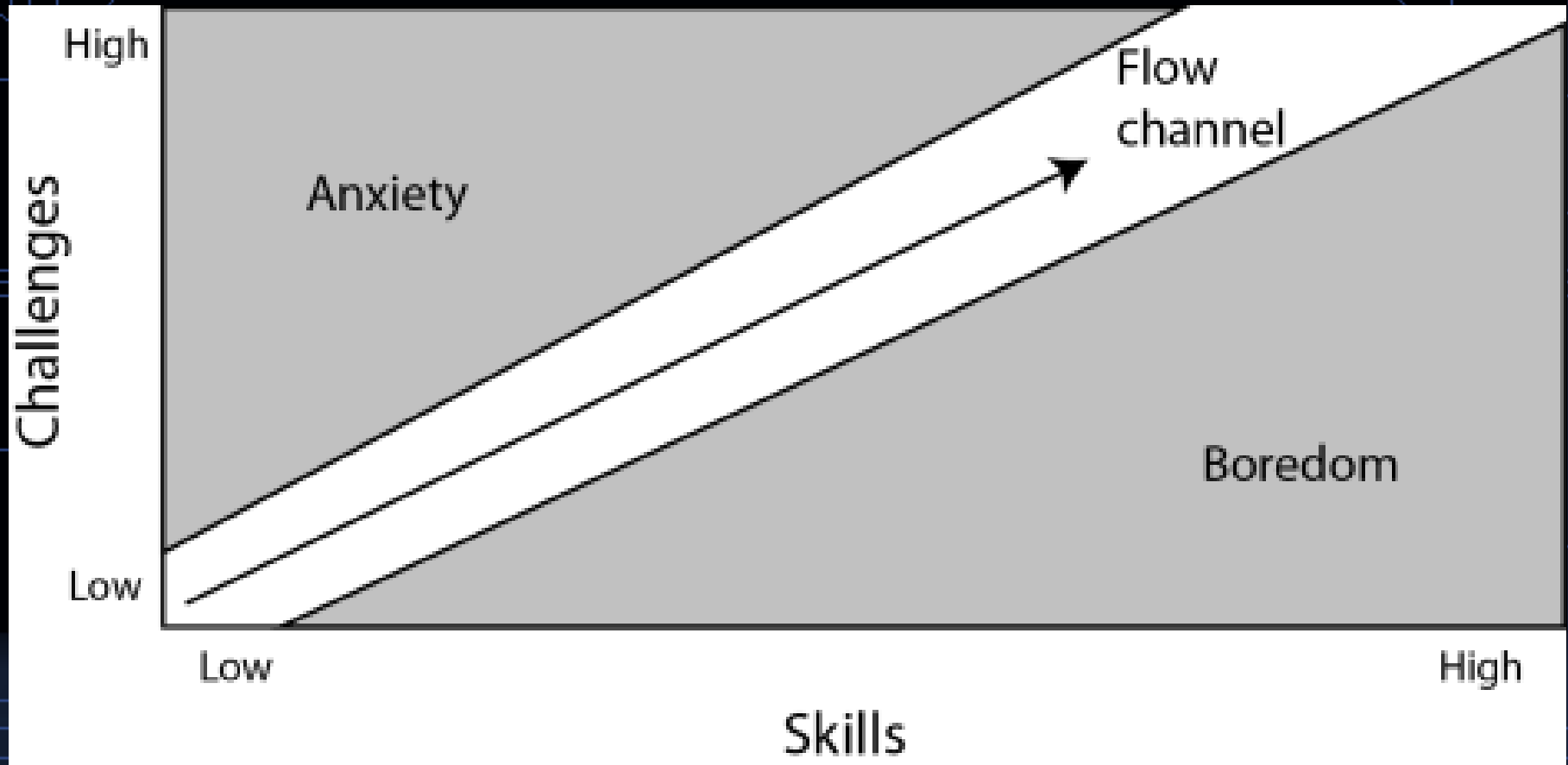
# Internet Gaming - Positives

- ✓ Eye-Hand Coordination
- ✓ Multi-tasking
- ✓ Vision
- ✓ Visual Attention
- ✓ Visual Tracking
- ✓ Mental Rotation

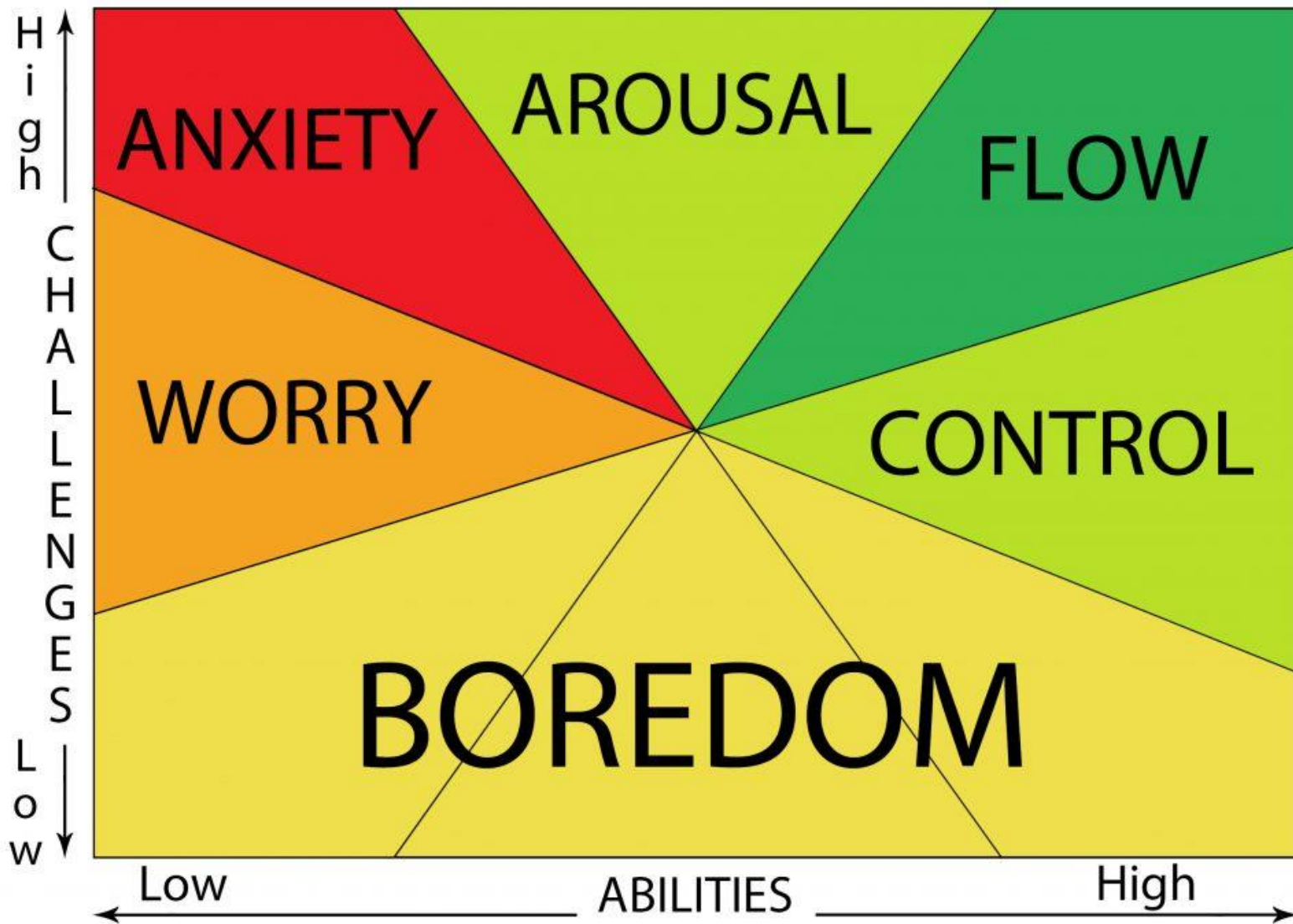
# Internet Gaming - Negatives

- ✓ Academics
  - ✓ Exercise
  - ✓ Sleep
  - ✓ Not Hanging Out with Friends
  - ✓ Feeling Lonely
- ✗ Do they cause violence? No.

# The Flow Zone



# Arousal and Control





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Cybersex

# Cybersex: An All-Inclusive Term

Online Pornography

Online Dating

Sex Chats

Sex Webcams

Teledildonics

# Online Pornography

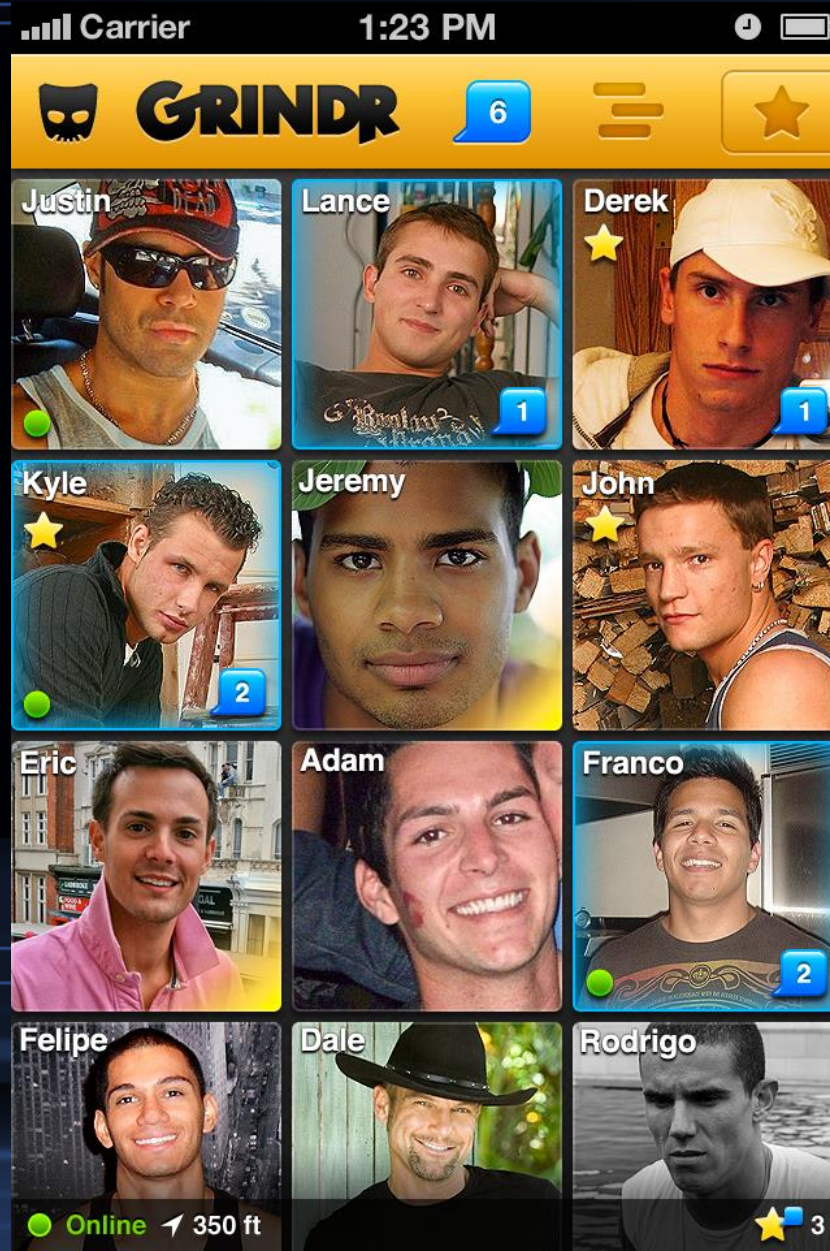


## The Triple A Model

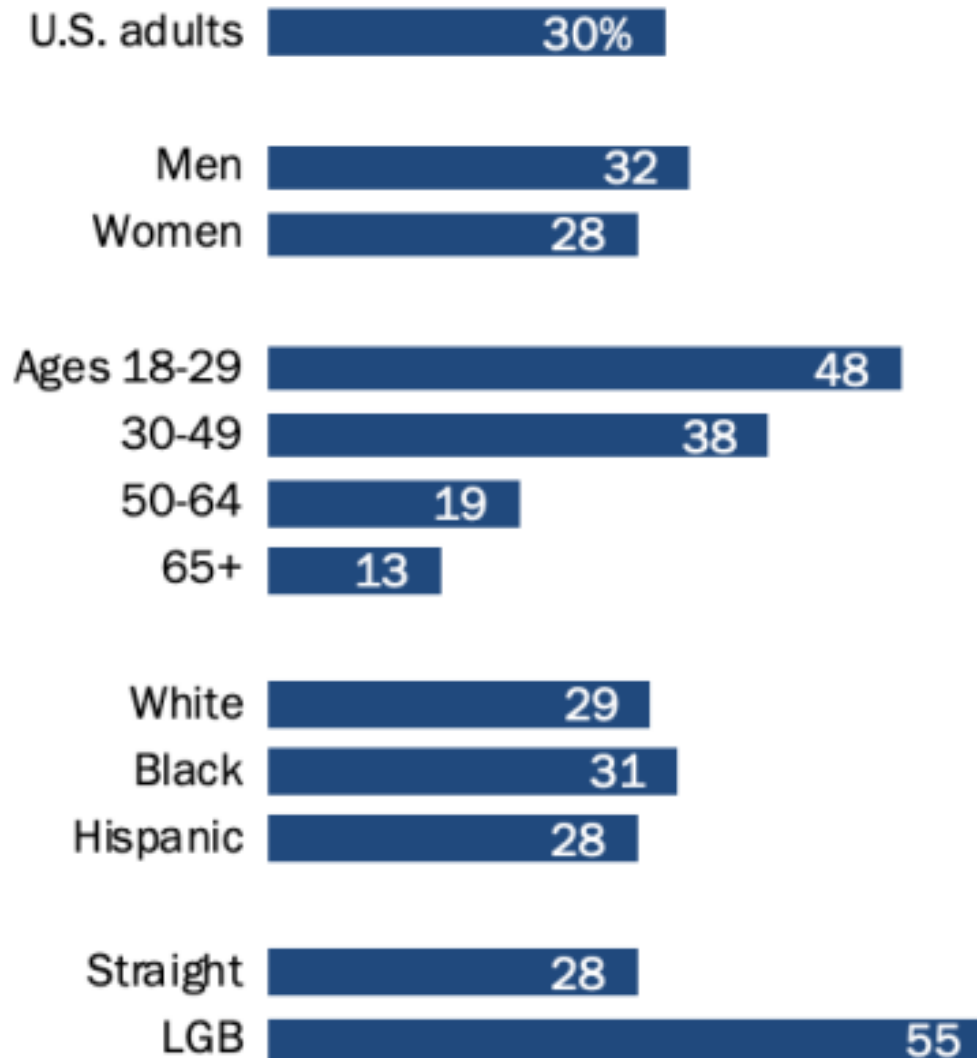
Accessibility  
Affordability  
Anonymity



# Online Dating



# Dating on Sites & Apps Stats



# Love and Sex in Today's World

- Sex, both virtual and real is only a click or a swipe away.
- Variable ratio (intermittent) reinforcement.

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## Assessment and Diagnosis

How do I know my  
patient is addicted to  
technology?

# Same as All Addiction

- ✓ Tolerance and Withdrawal
- ✓ Internal Concerns
- ✓ External Consequences

# A. Physiology

## ✓ Tolerance

- Requiring more use to get the same satisfaction

## ✓ Withdrawal

- Anger and irritability
- Depression and despair
- Tantrums in children

## B. Internal Concerns

### ✓ Preoccupation

- Beyond what is acceptable for a patient's age range, social circle, and profession

### ✓ Inability to cut down despite desire and efforts

### ✓ Attempt to relieve negative moods



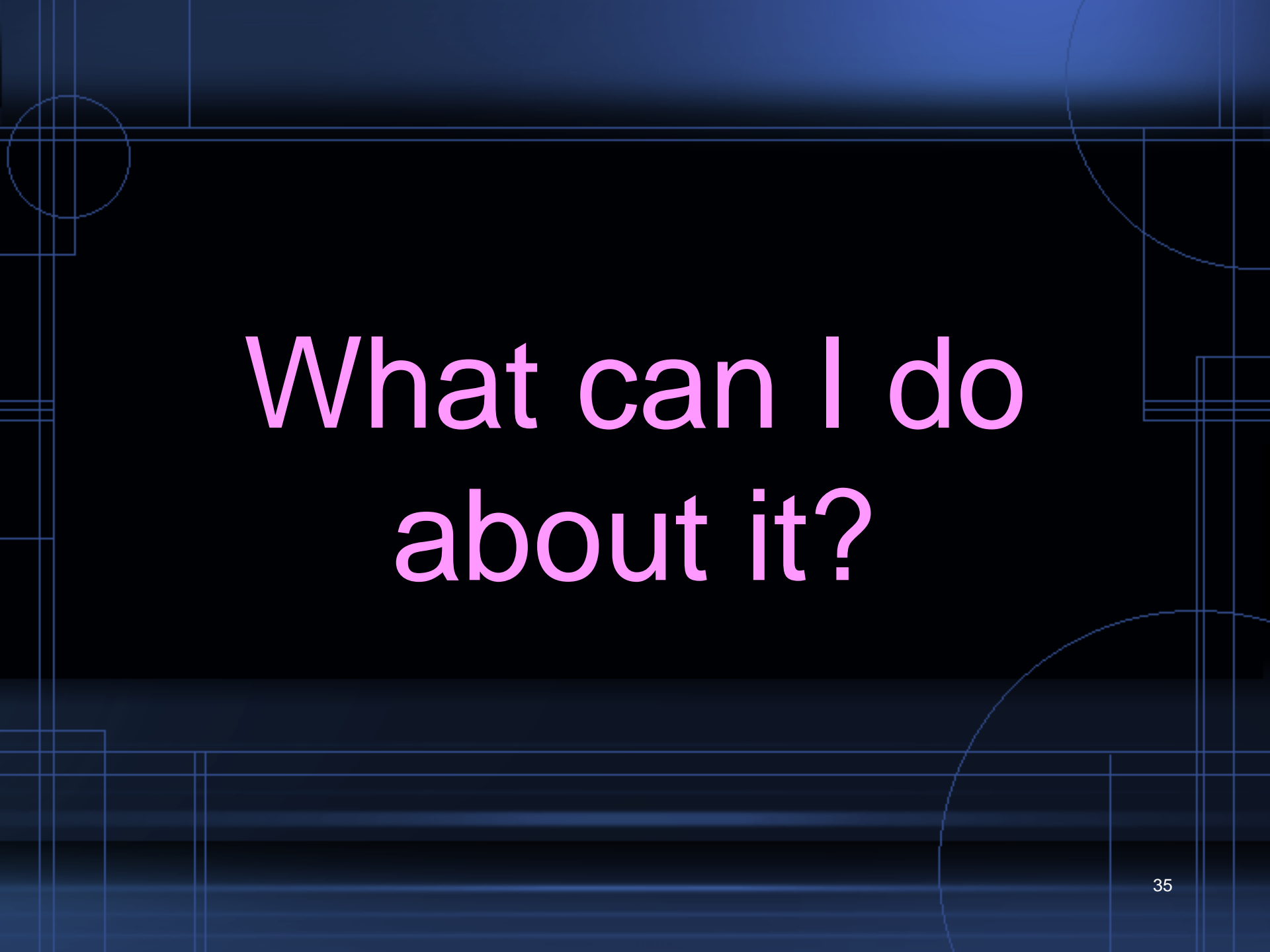
## C. External Consequences

- ✓ Giving up activities
- ✓ Jeopardizing relationships
- ✓ Losing a job
- ✓ Deceiving loved ones



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Treatments



What can I do  
about it?

# Psychotherapy

- ✓ Cognitive Behavioral Therapy (CBT)
- ✓ Motivational Interviewing (MI)

# Mindfulness



# Medications

- ✓ We have no approved medications for any Technological Addiction.
- ✓ Treat co-occurring psychiatric disorders.



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New Directions

# Digital Therapeutics


**Report Your Status**


Have you used today? ☒ Yes ☐ No


How strong is your craving right now?


6 


What triggers are affecting this craving?


HUNGRY ☐ n/a  4


ANGRY ☐ n/a  2

LONELY ☐ n/a  3

TIRED ☒ n/a  0

SOCIAL PRESSURE ☐ n/a  3

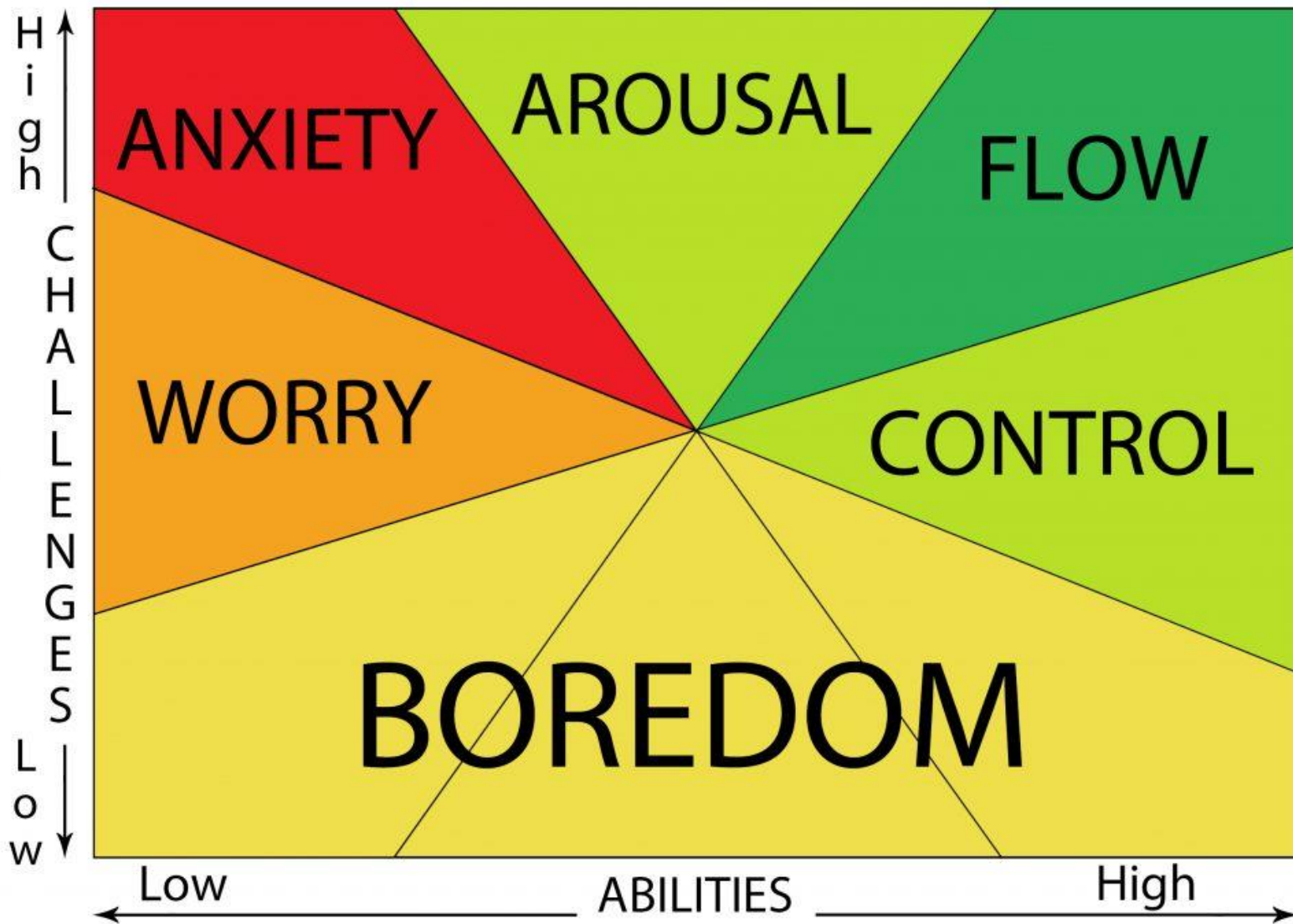
PAIN ☐ n/a  10

OTHER ☐ n/a  6

**SUBMIT**



# Arousal and Control



# Technological Addiction as an Arousal - Impulsive Disorder

- **Opioid Antagonists**
  - Decrease dopamine function by blocking opioid receptors.
  - Reduce the “high.”

# Technological Addiction as a Control - Compulsive Disorder

- Selective Serotonin Reuptake Inhibitors (SSRIs)
  - Increase serotonin function by blocking serotonin reuptake receptors.
  - Decrease obsessiveness.

# Thank you

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**Saturday 2:00pm – 3:00pm**

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