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SPORTS BETTING IN AMERICA: UNDERSTANDING A RAPIDLY EMERGING BEHAVIORAL HEALTH CHALLENGE

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GENERAL DISCLOSURES

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INTERNATIONAL CENTER FOR RESPONSIBLE GAMING

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EVERGREEN
council on problem gambling

SPEAKER DISCLOSURES

✓ No Conflicts of Interest

PLANNER DISCLOSURES

The following series planners have no relevant conflicts of interest to disclose; other disclosures have been mitigated.

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SPORTS BETTING

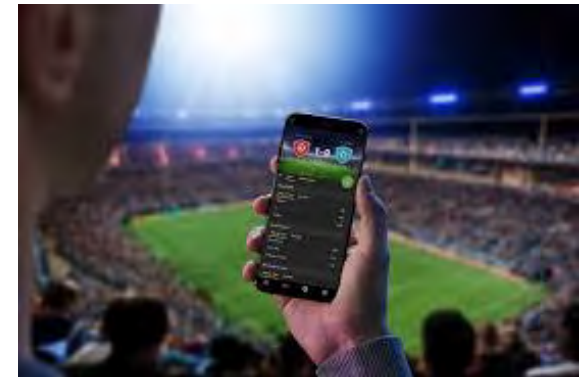
Definition: Wagering something of value (\$) on aspects of sporting events, either live or computer-based (e-sports).

- **Outcome is determined by chance**

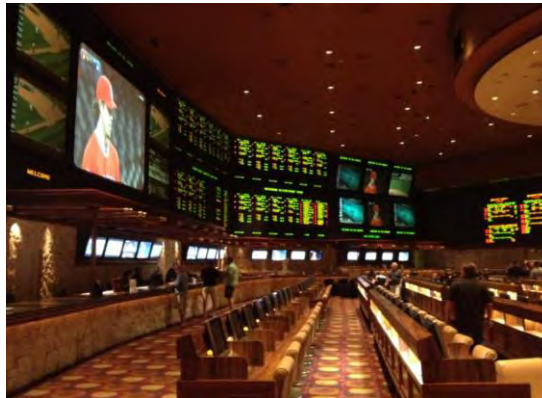
Concerning Trends: In 2021, there was an **80%** increase in prevalence of $\geq$ monthly sports betting (10% to 18%).

- Growing especially fast for young adults. Over **one-third** of young adults have done sports betting in the past month, and **19%** of young adult sports bettors make bets **at least weekly**.

Changing Landscape: Mobile betting, prop bets, live in-game betting, daily fantasy betting, etc.

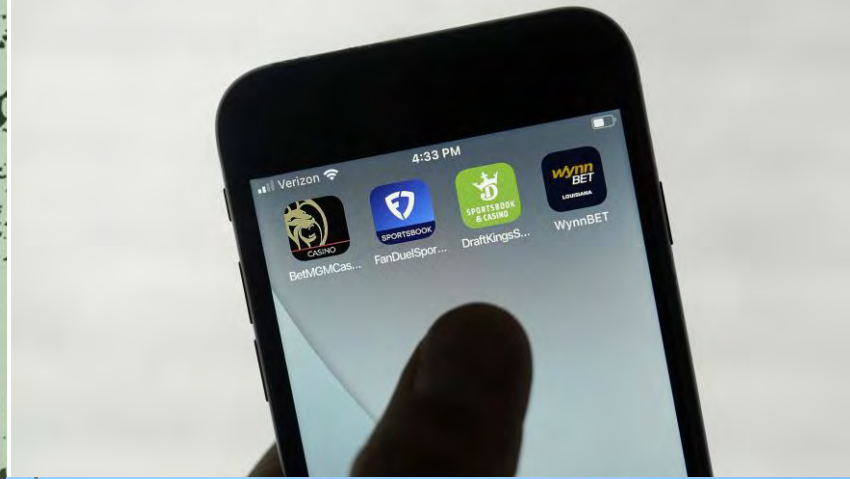


TRADITIONAL SPORTS BETTING



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TODAY'S SPORTS BETTING



SPORTS BETTING

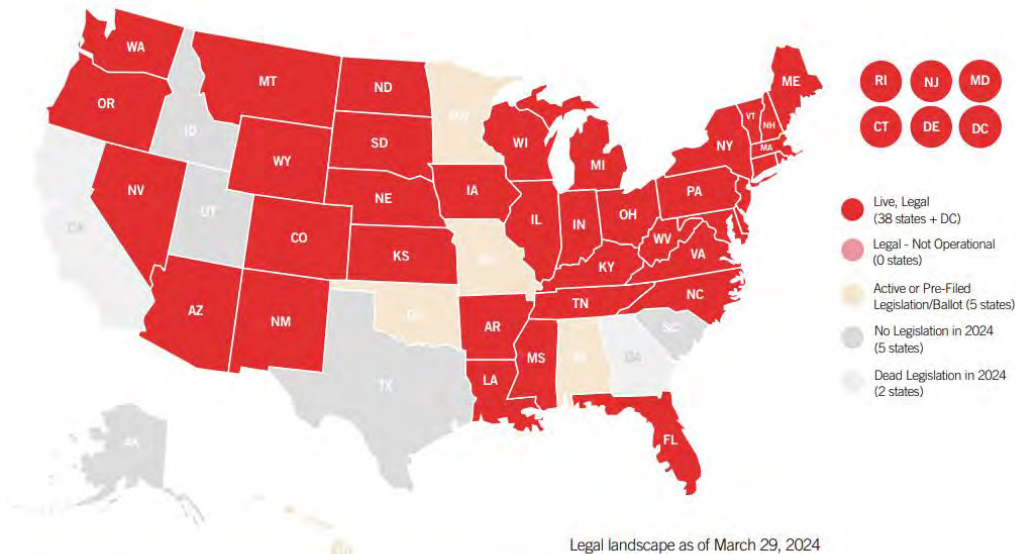


THE NIGHT IS NOT OVER YET! now

  Soto & the Padres are battling the Diamondbacks with Wildcard hopes at stake! Bet live, pitch-by-pitch, batter-by-batter!  **BET NOW**

SPORTS BETTING IN THE US

U.S. Legal Sports Betting



Washington: Legal, but among the most highly regulated jurisdictions.

- Can only sign-up and place bets from a tribal casino property legally.
- Cannot bet on in-state college, currently.

Oregon: Less regulated than WA.

- Can only use one sportsbook (DK).
- Cannot bet on *any* college sports.

A PUBLIC HEALTH PRIORITY?

- Despite concerning trends, sports betting is not *yet* widely recognized as a public health concern.
- As such, there is almost ZERO available federal funding.
- Industry-funded, but with ethical considerations, and <\$1m.



National Institutes
of Health

WHY IS THIS?

- Very little research on health-related correlates of sports betting.

DSM-5 GAMBLING DISORDER

An individual must meet 4 out of 9 to be diagnosed with a Gambling Disorder.

Tolerance	Needs to gamble with increasing amounts of money in order to achieve the desired level of excitement
Withdrawal	Is restless or irritable when attempting to cut down or stop gambling
Loss of Control	Has made repeated unsuccessful efforts to control, cut back, or stop gambling
Preoccupation	Preoccupied with reliving past gambling experiences, handicapping or planning the next venture, or thinking of ways to get money with which to gamble.
Escape	Often gambles when feeling distress; hopeless, guilty, anxious or depressed
Chasing Losses	After losing money gambling, often returns another day in order to get even (“chasing one’s losses”)
Lying	Lies to family members, therapists, or others to conceal the extent of involvement with gambling
Risked Significant Relationship	Has jeopardized or lost significant relationship, job, educational or career opportunity because of gambling
Bailout	Has relied on others to provide money or relieve a desperate financial situation caused by gambling
This Criterion was dropped between DSM-IV and DSM-5	
Illegal Activities	Has committed illegal acts, such as forgery, fraud, theft, or embezzlement, in order to finance gambling

Adapted from Problem Gambling’s Place in Therapeutic Justice and reproduced with permission from the Evergreen Council on Problem Gambling.

WE COULD FILL THE SEAHAWKS STADIUM TO CAPACITY FOUR TIMES TO FIT ALL THE PROBLEM GAMBLERS IN OUR STATE



PROBLEM GAMBLING, SUBSTANCE USE, AND TREATMENT NEED

- Key findings from the WA Needs Survey include:
- Problem gamblers were twice as likely to smoke cigarettes in the past year (40.0 percent), compared to adults without a gambling problem (20.7 percent).
- Problem gamblers are nearly three times as likely to use illicit drugs other than marijuana (12.6 percent), compared to adults who do not have a gambling problem (4.6 percent).
- Problem gamblers were twice as likely to need alcohol or drug treatment (23.2 percent), compared to adults without a gambling problem (10.7 percent).

PROJECT HOBBS

A RESEARCH STUDY EXPLORING YOUNG ADULTS' SPORTS BETTING AND OTHER HEALTH-RELATED BEHAVIORS

To find out if you are eligible to participate, complete the following brief survey

TAKE THE SCREENER SURVEY >

INTRODUCTION TO OUR TEAM



Ty Lostutter, PhD
Scott Graupensperger, PhD
Joey Lambuth, B.S.
Arvin Shaygan, B.S.
Modesta Hurtado, B.S.
Frank Song, Ph.D.

PROJECT HOBBS

- Young adult sports bettors (N = 221) complete an in-depth baseline, bi-weekly surveys for a full calendar year, and a 15-month follow-up.
- Mean age = 24.4 (range 18-29).
- 77.7% male, 68.6% had attained college degree, and 64.6% identified as white.
- Participants represent 36 different states.

PROJECT HOBS

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- Participants represent 36 different states.

PSYCHOSOCIAL PREDICTORS OF SPORTS BETTING

Original Manuscript



All My Friends Are Doing It: Perceived Social Norms Predict Heavier Sports Betting Behavior Among Young Adults

Joseph Lambuth, BS¹, Arvin Shaygan, BS¹, Ty W. Lostutter, PhD¹, and Scott Graupensperger, PhD¹ 

Health Education & Behavior
1–9

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SOCIAL NORMS

- **Social norms** are a potential predictor of sports betting behavior among young adults.
 - Highly susceptible to peer influences
 - Look to others to inform their own behavior
 - Fit in
 - Avoid being excluded/ostracized
- **Social Norms Theory**: Individual behavior is largely driven by perceptions of what others *think* about a behavior and perceptions of what others actually *do* (social norms).
 - **Injunctive Norms**: Perceptions of peers' attitudes (e.g., how much money do my peers think is *acceptable* to wager on sports betting).
 - **Descriptive Norms**: Perceptions of peers' engagement (e.g., how many of my peers engage in sports betting, or how much do my peers wager).

SOCIAL NORMS

- Normative perceptions are often overestimated.
- Given the salience of sports betting in the **media** (constant advertisements), one may easily overestimate the prevalence, engagement, and acceptability of sports betting.
- **Proximal normative influences** (e.g., close friends) may be a particularly salient influence on young adults' engagement in sports betting.



SOCIAL NORMS AND TRADITIONAL

No existing studies have examined sports betting norms, but there is some indication that social norms are predictive of traditional gambling.

- In college students, perceived **injunctive** and **descriptive** norms each uniquely predicted self-reported **gambling frequency, expenditure, and negative consequences** (Larimer & Neighbors, 2003).
- **Perceived norms** for more **proximal referent groups** (friends and family) are more predictive of gambling, and **injunctive** norms are more associated with gambling frequency (Meisel & Goodie, 2014).
- Among non-gambling adolescents, **initiation** was predicted by **perceived norms** for peers (Parrado-Gonzalez et al., 2023).

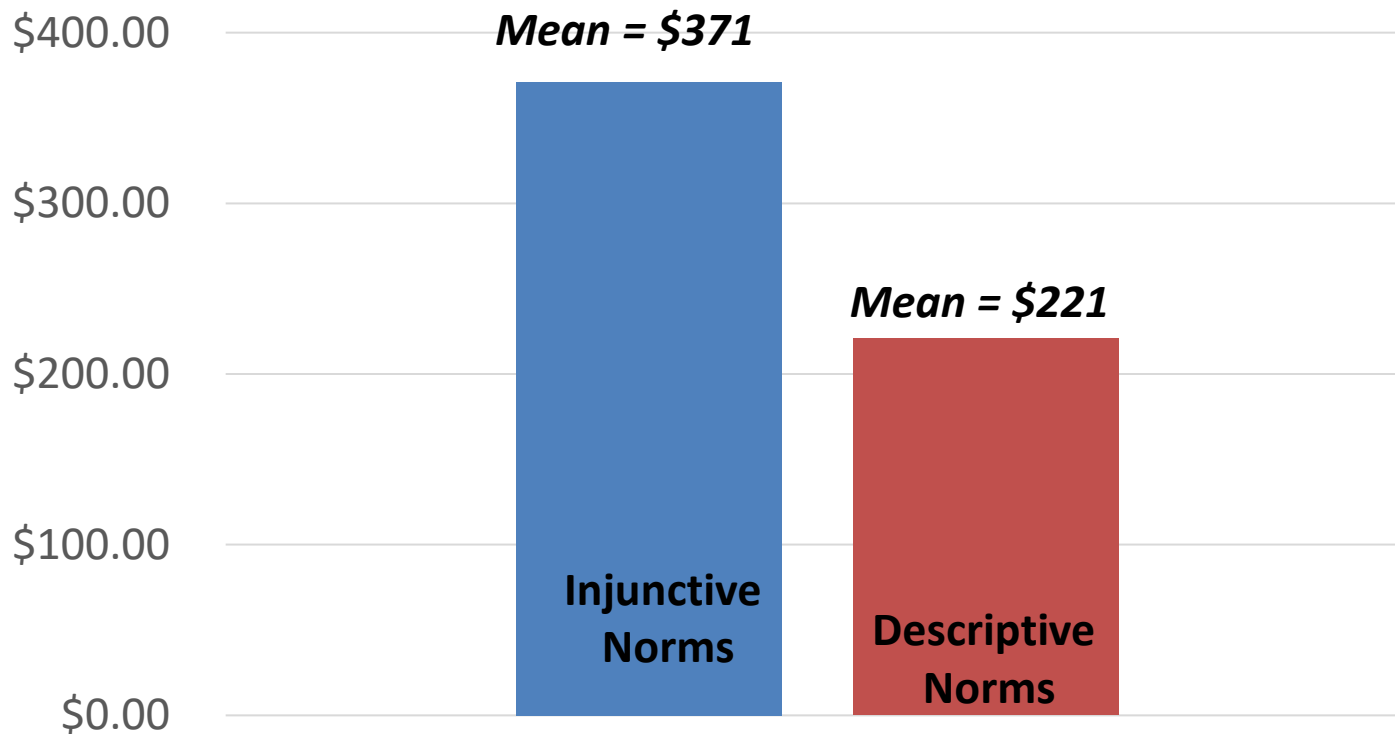
CURRENT STUDY

1. Estimating associations between **perceived sports betting norms** (for one's friends) and one's engagement in sports betting and symptoms of problem sports betting.
2. Examining whether fluctuations in **perceived sports betting norms** map onto fluctuations in young adults' sports betting engagement.

KEY FINDINGS – BASELINE DATA

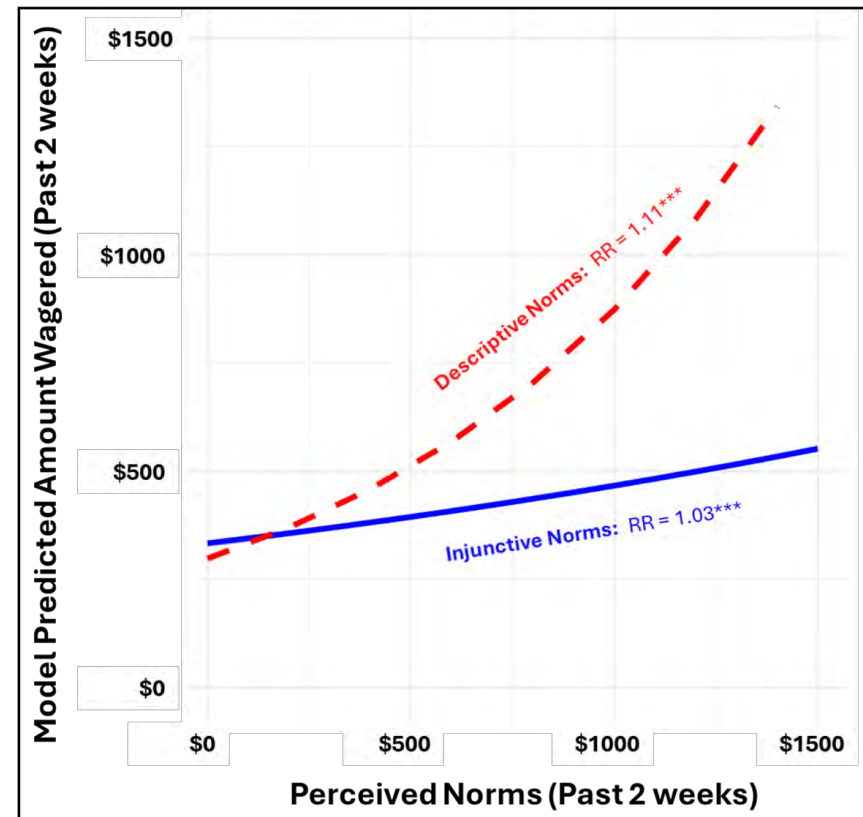
Injunctive Norms: “In the next two weeks, how much money do your friends think is an acceptable amount to wager on sports betting?”

Descriptive Norms: “In the next two weeks, how much money do you think your friends will wager on sports betting, on average?”



Injunctive and descriptive norms predicted...

- (a) Sports betting frequency
- **(b) Amount wagered on sports betting**
Strongest association, shown in graph
- (c) Symptoms of problem sports betting



PIVOT: BASELINE → LONGITUDINAL

***Injunctive Norms:** “To what extent do you agree or disagree: In the next two weeks my friends think it would be good to engage in sports betting?”*

***Descriptive Norms:** “What percentage of your friends do you think will engage in sports betting in the next two weeks?”*

We just looked at the **between-person** differences...



Now we want to focus on **within-person** fluctuations

KEY FINDINGS – LONGITUDINAL DATA

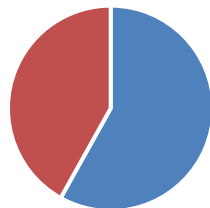
Injunctive Norms: “To what extent do you agree or disagree: In the next two weeks my friends think it would be good to engage in sports betting?”

Descriptive Norms: “What percentage of your friends do you think will engage in sports betting in the next two weeks?”

Variability in Injunctive Norms

58.1% of the variability comes from between-person differences.

41.9% of the variability comes from within-person fluctuation.

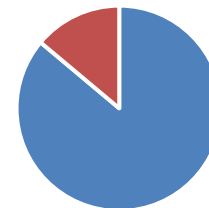


■ Between Person ■ Within Person

Variability in Descriptive Norms

86.1% of the variability comes from between-person differences.

13.1% of the variability comes from within-person fluctuation.



■ Between Person ■ Within Person

KEY FINDINGS – LONGITUDINAL DATA

We are interested in these within-person fluctuations

Injunctive Norms



■ Between Person ■ Within Person

Descriptive Norms



■ Between Person ■ Within Person

KEY FINDINGS – LONGITUDINAL DATA

Injunctive Norms → Sports Betting Frequency

Descriptive Norms → Sports Betting Frequency

- When an individual's normative perception was higher than usual, they reported betting on sports more frequently than usual.
- Stronger effect of injunctive norms than descriptive norms.

KEY FINDINGS – LONGITUDINAL DATA

Injunctive Norms → Number of Sports Bets

Descriptive Norms → Number of Sports Bets

- When an individual's normative perception was higher than usual, they reported placing more sports bets than usual.
- Stronger effect of injunctive norms than descriptive norms.

KEY FINDINGS – LONGITUDINAL DATA

Injunctive Norms → Amount Wagered on Sports Betting

- When an individual's scores for injunctive norms were higher than usual, they reported wagering more on sports than usual.

MAIN TAKEAWAYS

- Social Norms Theory was supported as a potential explanation for sports betting among young adults.
- Between person and within person differences suggest that when perceived norms are either **(1)** more than the average or **(2)** higher than usual, young adults generally report more engagement in sports betting.
- Social influences may be a key focus in forthcoming interventions.

SPORTS BETTING & MENTAL HEALTH

Psychiatry Research 342 (2024) 116258



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Psychiatry Research

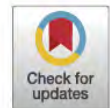
journal homepage: www.elsevier.com/locate/psychres



More than fun and games: Problematic sports betting and its adverse impact on mental health and well-being in young adults

Arvin Shaygan, Joseph Lambuth, Frank Song, Modesta Hurtado, Ty W. Lostutter, Scott Graupensperger*

Psychiatry and Behavioral Sciences, University of Washington School of Medicine, Seattle, WA



PROBLEM GAMBLING & MENTAL HEALTH

- Problem gambling has been linked to several mental health concerns (e.g., depression).
- The link is especially strong for those with earlier onset of gambling.
- Despite these links, problem gambling is not widely studied from a public health perspective.
- **Sports betting** is growing rapidly among young adults, an age period with increased vulnerability to mental health concerns, but there have been few studies specifically examining mental health correlates of sports betting.

SPORTS BETTING SEVERITY INDEX

Measuring problem sports betting:

- We recently adapted the PGSI specifically to sports betting.
- Psychometrically validated this measure (currently under review)



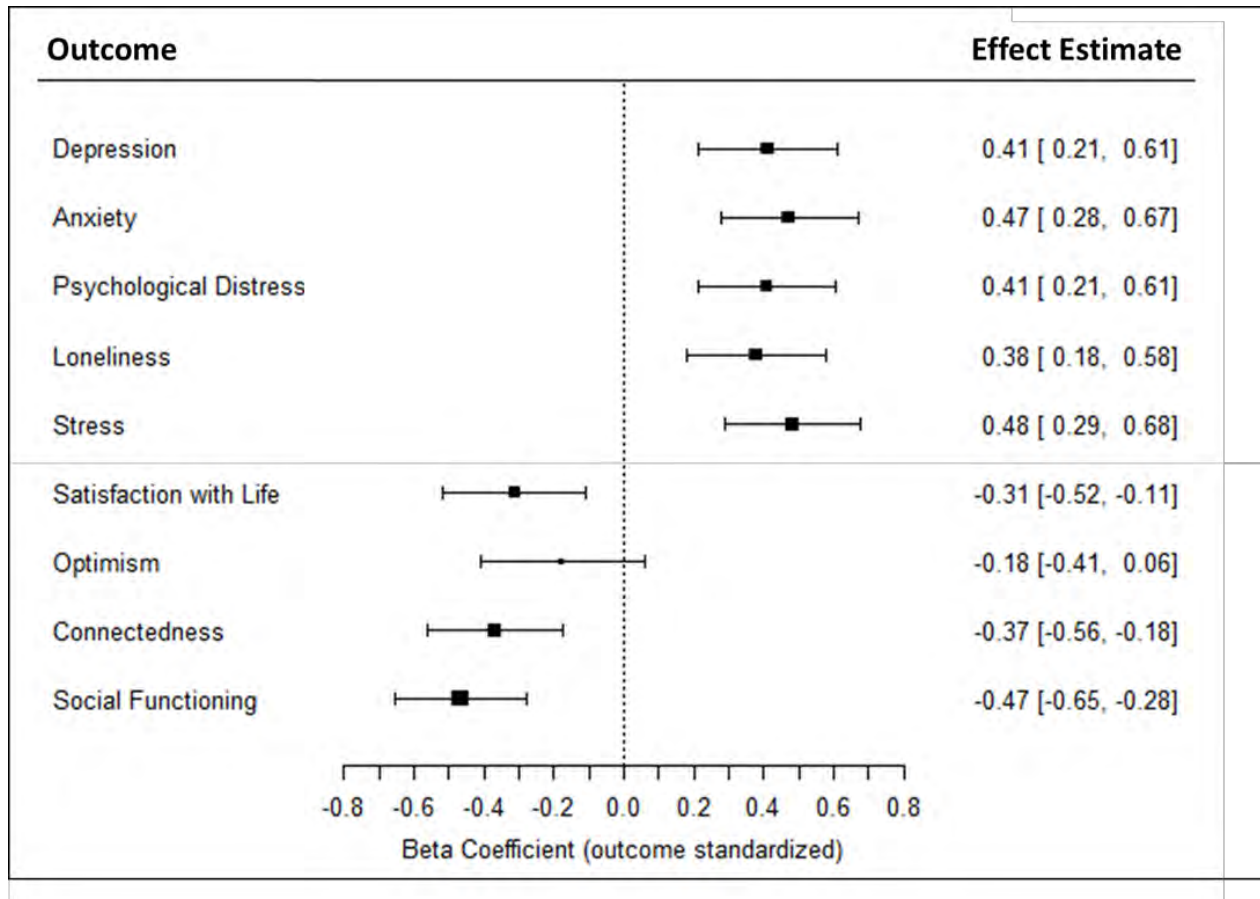
1. When you think of your sports betting in the past 3 months, have you bet more than you could really afford to lose?
2. Still thinking about the past 3 months, have you needed to bet larger amounts of money when sports betting to get the same feeling of excitement?
3. When you bet on sports, did you bet again another day to try to win back the money you lost?
4. Have you borrowed money or sold anything to get money to bet on sports?
5. Have you felt that you might have a problem with sports betting?
6. Has sports betting caused you any health problems, including stress or anxiety?
7. Have people criticized your sports betting or told you that you had a problem, regardless of whether or not you thought it was true?
8. Has your sports betting caused any financial problems for you or your household?
9. Have you felt guilty about the way you bet on sports or what happens when you bet on sports?

← scan to read scale validation paper

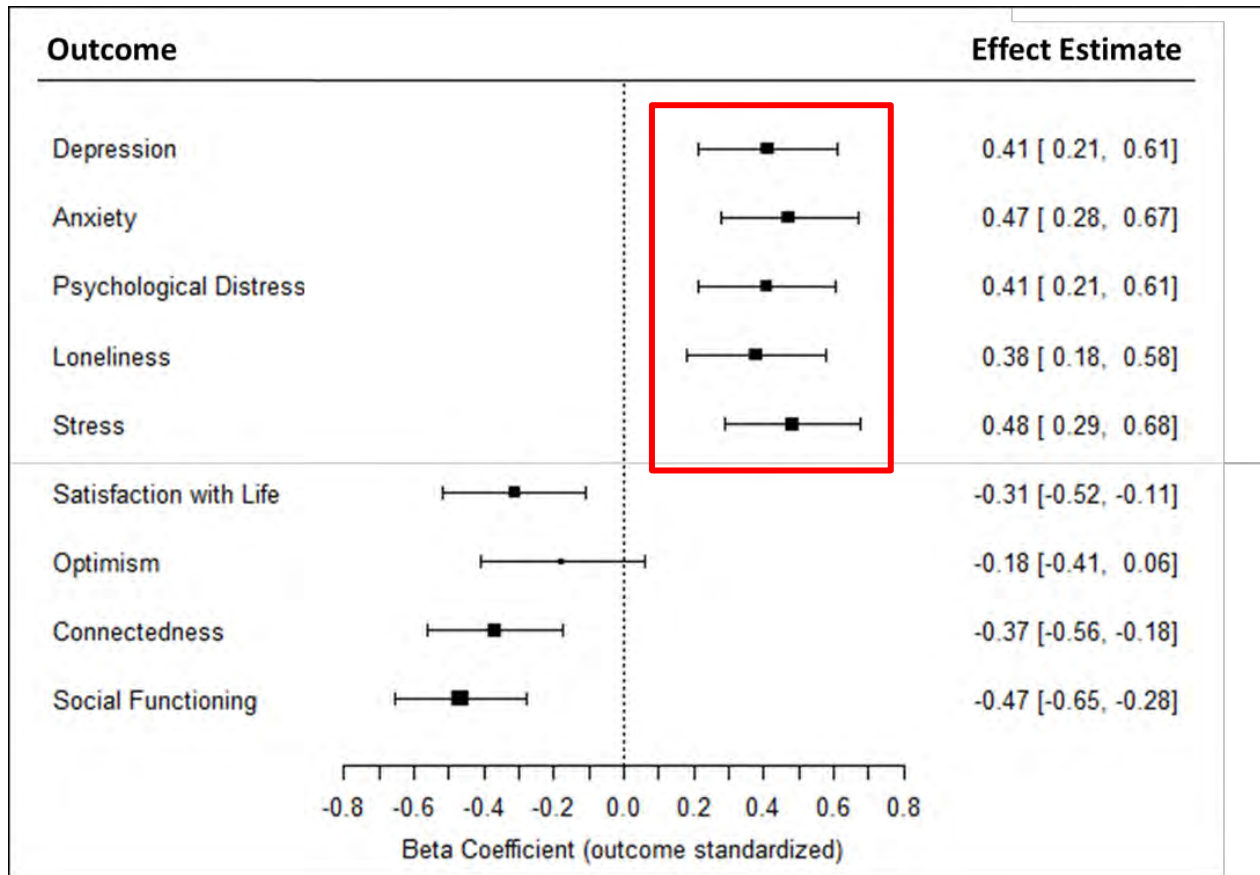
CURRENT STUDY

1. **Estimating associations between indices of mental health/wellbeing and symptoms of problem sports betting in young adults.**
2. **Examine whether fluctuations in problem sports betting are associated with fluctuations in mental health and wellbeing across longitudinal follow-ups.**

KEY FINDINGS – BASELINE DATA

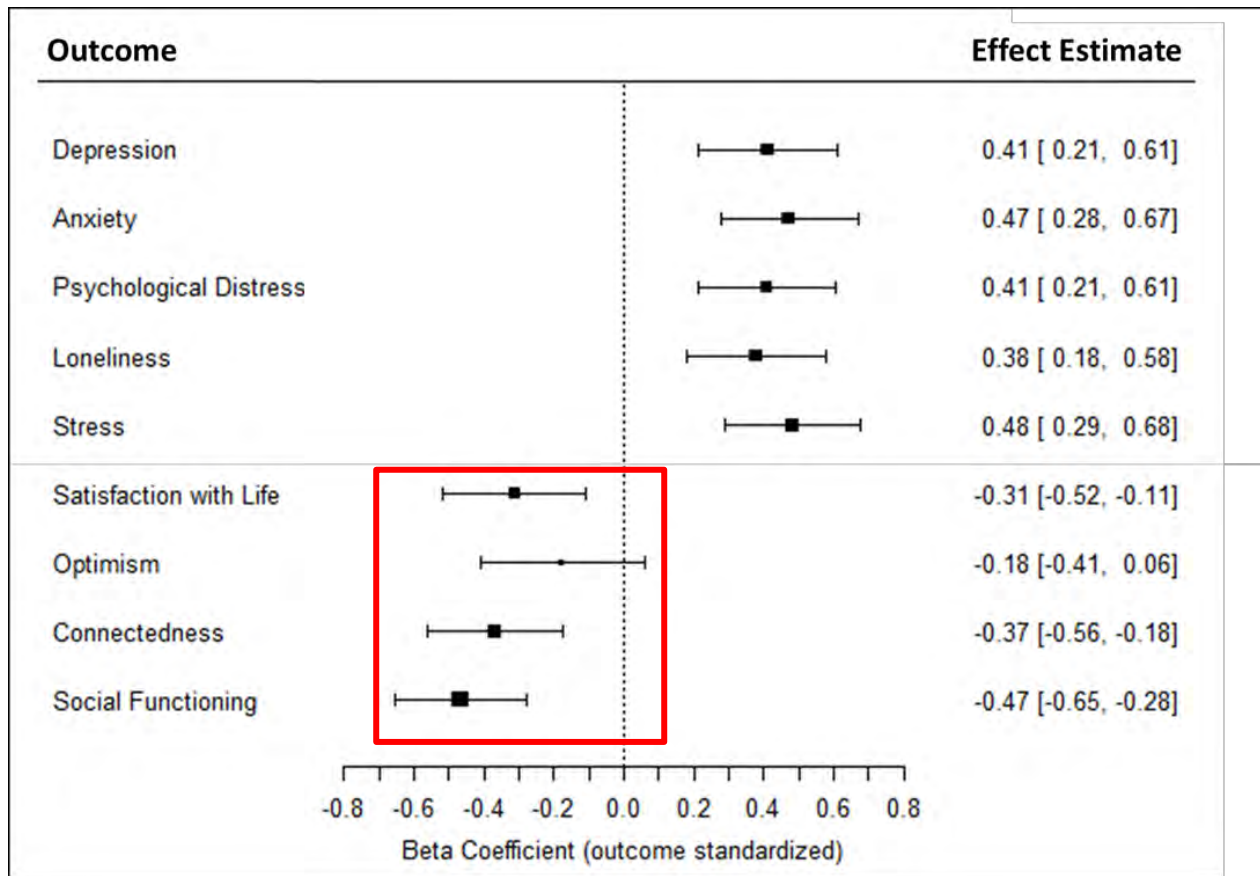


KEY FINDINGS – BASELINE DATA



- Positive associations show problem sports betting is associated with **higher** scores on mental health measures.

KEY FINDINGS – BASELINE DATA



- Positive associations show problem sports betting is associated with **higher** scores on mental health measures.
- Inverse associations show problem sports betting is associated with **lower** scores on wellbeing measures.

LONGITUDINAL ASSOCIATIONS

- Biweekly surveys asked the 5 consequences items from the sports betting PGSI.
- Models estimated whether two-week periods that young adults experienced more negative sports betting consequences (relative to their usual/average) also corresponded to poorer than usual mental health and wellbeing indices.
- **Outcomes included in the longitudinal surveys:**
 - Depression symptoms
 - Anxiety symptoms
 - Psychologic distress
 - Stress
 - Loneliness
 - Social functioning
 - Satisfaction with life

KEY FINDINGS – LONGITUDINAL DATA

- Findings across models show *robust* associations between negative sports betting consequences and mental health/wellbeing indices.
- That is...
 - At timepoints young adults report more negative consequences than they usually do, they have significantly more symptoms of depression, anxiety, psychological distress, stress, and loneliness.
 - Young adults also report significantly lower levels of social functioning and satisfaction with life at timepoints they report more negative sports betting consequences than usual.

MAIN TAKEAWAYS

- Cross-sectional findings highlight negative impacts of problem sports betting on the mental health of young adults.
- Current results of the longitudinal data indicate that increased betting compared to person-specific average is associated with worse symptoms of mental health
- This serves as an important first step in thus far understudied field of gambling addiction research

SPORTS BETTING & ALCOHOL USE



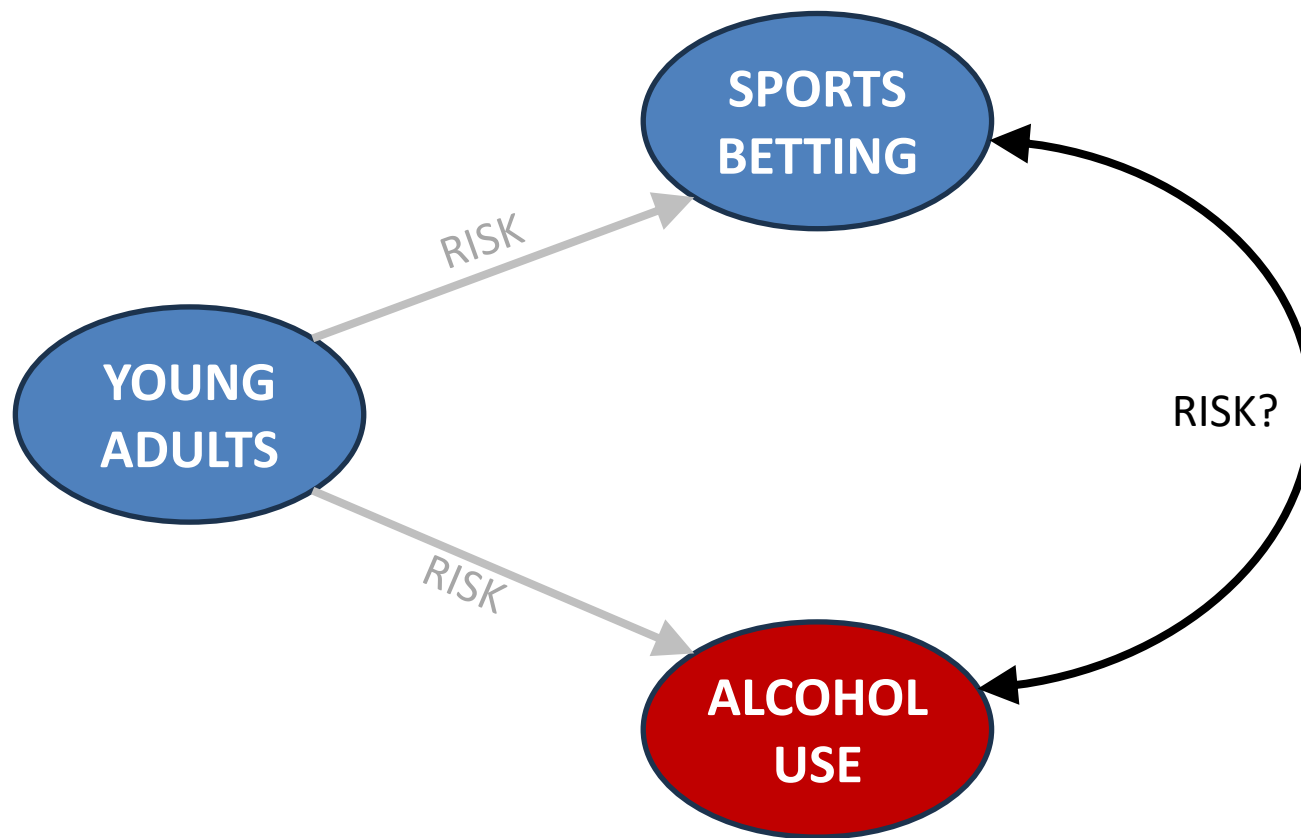
Addiction Research & Theory



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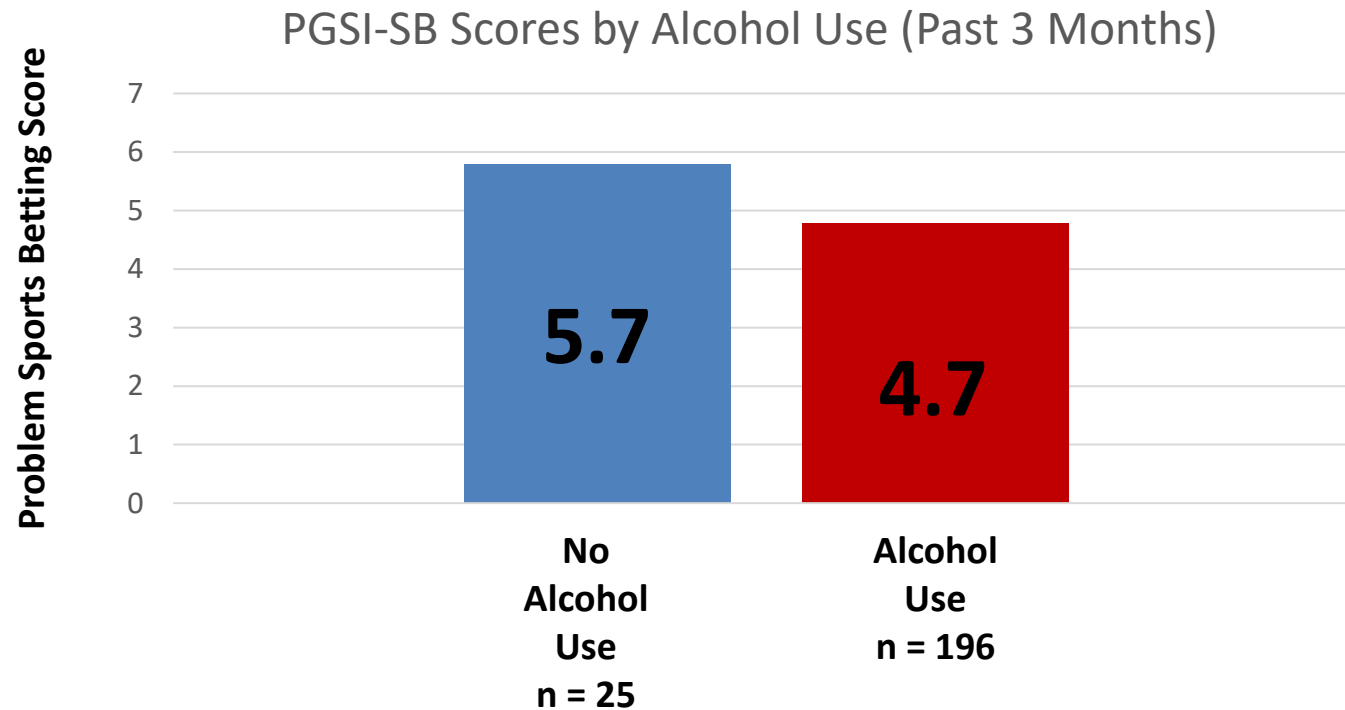
Sports betting and hazardous alcohol use among young adults: added risks of betting and drinking on the same day

Scott Graupensperger, Frank Song, Joseph Lambuth, Arvin Shaygan,
Modesta Hurtado & Ty W. Lostutter



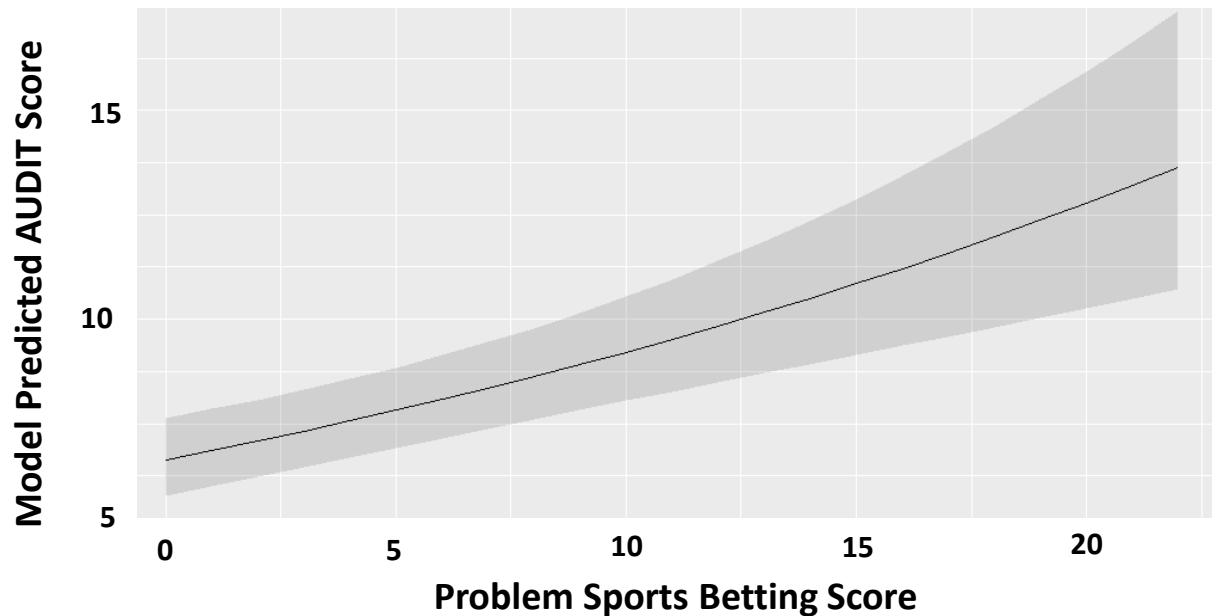
SPORTS BETTING & ALCOHOL – BASELINE FINDINGS

1. Problem sports betting was *not* associated with any vs. no alcohol use (past 3mo).



SPORTS BETTING & ALCOHOL – BASELINE FINDINGS

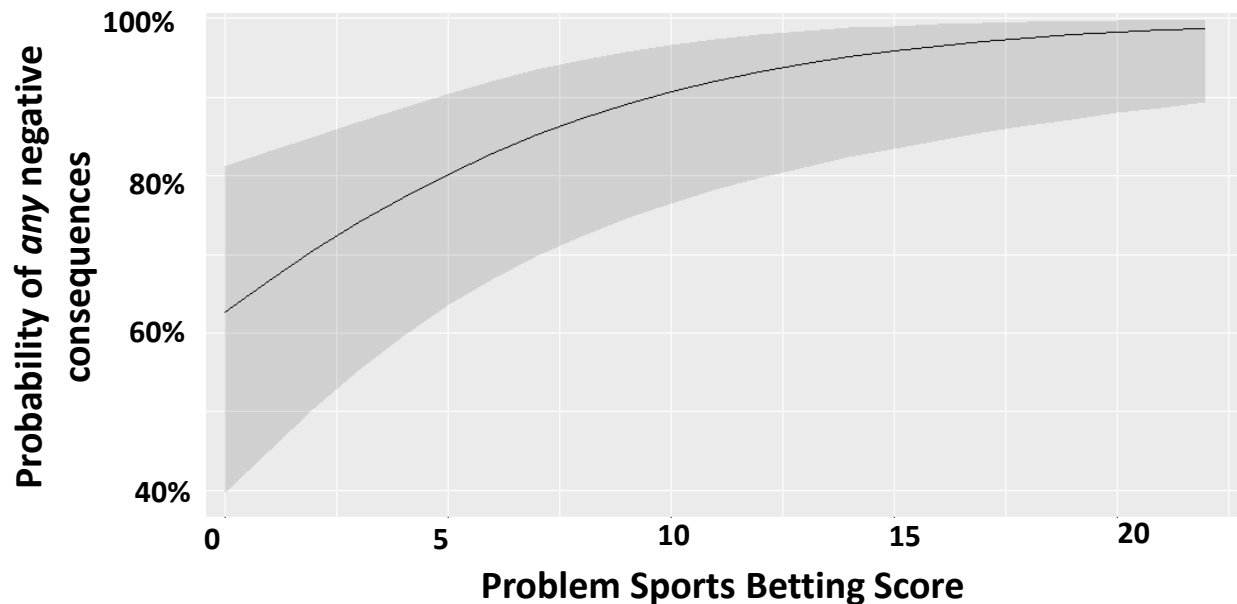
2. Among drinkers, problem sports betting scores associated with higher AUDIT scores



Each 1-unit increase in PGSI-SB → 3% exponential increase in AUDIT scores

SPORTS BETTING & ALCOHOL – BASELINE FINDINGS

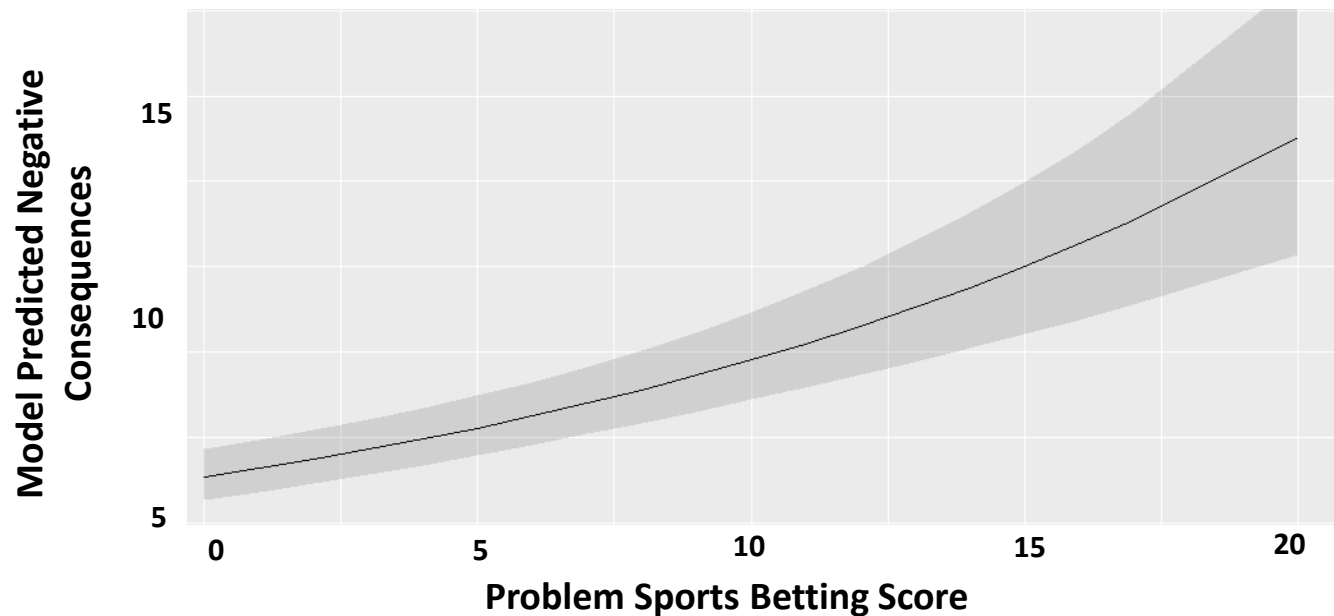
3. Problem sports betting was significantly associated with any vs. no alcohol consequences in the past 2 weeks (BYAACQ)



Each 1-unit increase in PGSI-SB → 12% increased odds of any alcohol-related consequences.

SPORTS BETTING & ALCOHOL – BASELINE FINDINGS

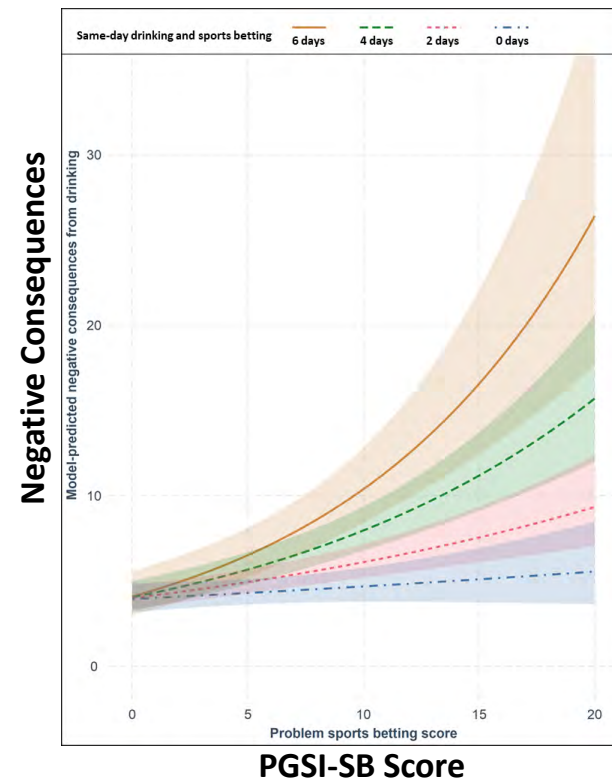
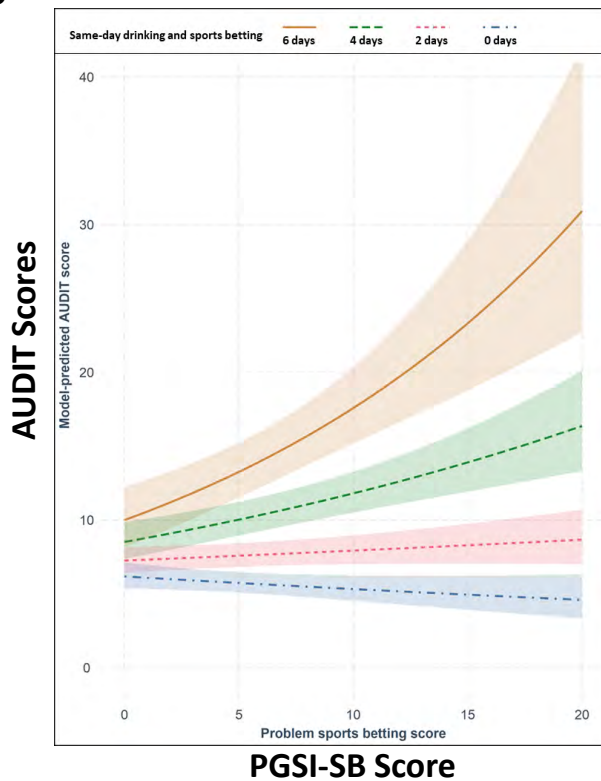
4. Higher PGSI-SB scores were significantly associated with *number* of consequences.

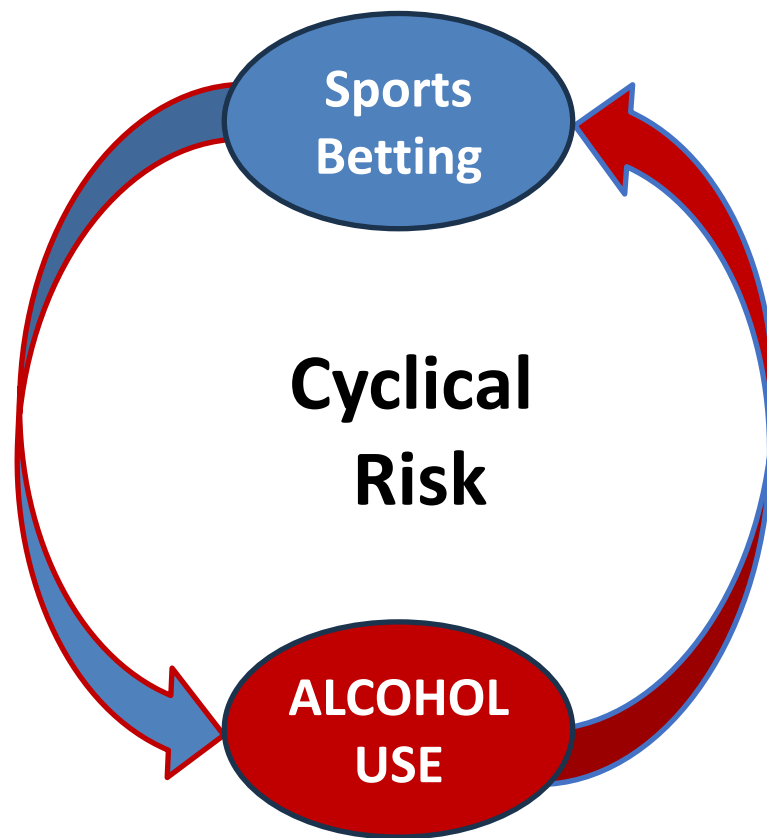


Each 1-unit increase in PGSI-SB → 7% increase in number of alcohol consequences.

SPORTS BETTING & ALCOHOL – BASELINE FINDINGS

5. Associations *amplified* for those who more frequently sports bet and drink on the same day?





SPORTS BETTING & ALCOHOL – LONGITUDINAL FINDINGS

Fluctuations in alcohol use → fluctuations in sports betting

- Weeks with elevated drinking frequency corresponded to weeks with:
 - More frequent sports betting
 - Total number of sports bets placed
 - Total amount wagered
 - Negative sports betting consequences

SPORTS BETTING & ALCOHOL – LONGITUDINAL FINDINGS

Fluctuations in sports betting → fluctuations in alcohol use

- Weeks with elevated sports betting frequency corresponded to weeks with:
 - More frequent drinking
 - Total drinks consumed
 - Heavy episodic drinking (binge)
 - Negative alcohol consequences

CONCLUSIONS

1. Young adults with elevated sports betting also tend to have problems with alcohol use (trait-level associations).

- Barstool Culture?



CONCLUSIONS

1. Young adults with elevated sports betting also tend to have problems with alcohol use (trait-level associations).

- Barstool Culture



2. Sports betting and alcohol use behaviors **FLUCTUATE TOGETHER** (state-level).

- Directionality is difficult to disentangle

KEY TAKEAWAYS

1. **Peer influence may be a salient driver of sports betting engagement.**
2. **Problem sport betting may contribute to mental health concerns for young adults.**
3. **A complex (but concerning) association between sports betting and alcohol use.**

REFERRAL FOR TREATMENT



If you or someone you love is
experiencing a gambling addiction,
help and information are available at
our 24-hour, toll-free Washington
Helpline: call or text

1-800-547-6133,

or chat with a Helpline specialist

www.evergreencpg.org

UW PACC REGISTRATION

Please be sure that you have completed the full UW PACC series registration.

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