

Project HOBS

Health Outcomes of Betting on Sports

Scott Graupensperger

UNIVERSITY *of* WASHINGTON



1

A VERY quick overview of

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2

Funding Acknowledgment



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3

Introduction to Our Team



Ty Lostutter, PhD
Joey Lambuth, B.S.
Arvin Shaygan
Frank Song, M.S.
Modesta Hurtado, B.S.



4

Sports Betting

Definition:

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

Outcome is determined by chance



5

Sports Betting

Concerning Trends:

- Sports betting wagering was nearly \$120 billion in the US in 2023 (+27.5% from 2022).
- Sports betting industry revenue in 2023 of \$11 billion in the US alone (+46% over 2022).
- Growing especially fast for young adults.
 - > 1/3 past month betting.
 - **19%** make bets **at least weekly**.
- **Changing Landscape:** Mobile betting, prop bets, live in-game betting, daily fantasy betting, etc.



6

“Sports” Betting

How often will Taylor Swift be shown during the Super Bowl? Now you can bet on it



By Becky Sullivan (NPR)

Feb. 4, 2024 9 a.m.



Swifty Super Bowl Odds:

- What color will she wear?
- 12-to-1 odds shown eating a hotdog.
- 6-to-1 odds Kelce proposes after game.



7

“Sports” Betting

Taylor Swift Special Bets

- **Cruel Summer:** Travis Kelce Under 50.5 Receiving Yards And Chiefs to Lose (+360)
- **How Did it End:** Travis Kelce to Score a TD in the 4th Quarter (+570)
- **The Man:** Patrick Mahomes to Record 300+ Passing Yards & 3+ Passing TDs (+570)
- **You Need to Calm Down:** Saquon Barkley 125+ Rushing Yards & Score 2+ Touchdowns (+590)
- **Wildest Dreams:** Travis Kelce 100+ Receiving Yards and 8+ Receptions (+630)
- **13:** Chiefs to Score Exactly 13 Points in the 1st Half (+880)
- **Blank Space:** Travis Kelce to have a Reception of 30+ Yards & Score a TD (+920)
- **Down Bad:** Eagles to Score 2+ TDs in First Quarter (+1040)
- **Mastermind:** Chiefs Defense to Score First TD of the Game (+2500)
- **Clean:** Chiefs to Win Each Quarter (+2500)



8

Sports Betting



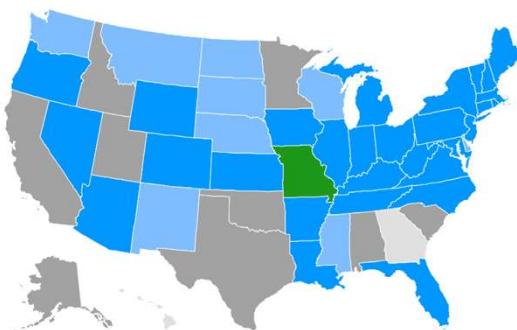
THE NIGHT IS NOT OVER YET! now

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



9

Sports Betting in the US



Washington: Legal, but highly regulated.

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

Oregon: Less regulated than WA.

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



10

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.



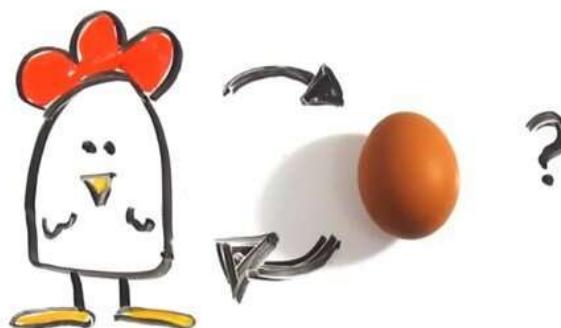
WHY IS THIS?

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



11

A Public Health Priority?



WHY IS THIS?

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



12

PROJECT HOBS

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 >



13

PROJECT HOBS

- Young adult sports bettors complete an in-depth baseline, bi-weekly surveys for a full calendar year, and a 15-month follow-up.
- Mean age = 24.5 (range 18-29).
- 77.1% male,
- 60% below household median income (\$75k)
- 64.6% identified as white.
- Participants represent 35 different states.



14

N = 210 young adults; 4,155 total biweekly responses



15

Overview of Presentation

1. Psychosocial antecedents of sports betting
2. Sports betting and mental health
3. Sports betting and alcohol use
4. Sports betting and cannabis use

16

PSYCHOSOCIAL PREDICTORS OF SPORTS BETTING

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17

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**Advanced Undergraduate (Junior/Senior)
Academic Scholarship**



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18

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
- 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).

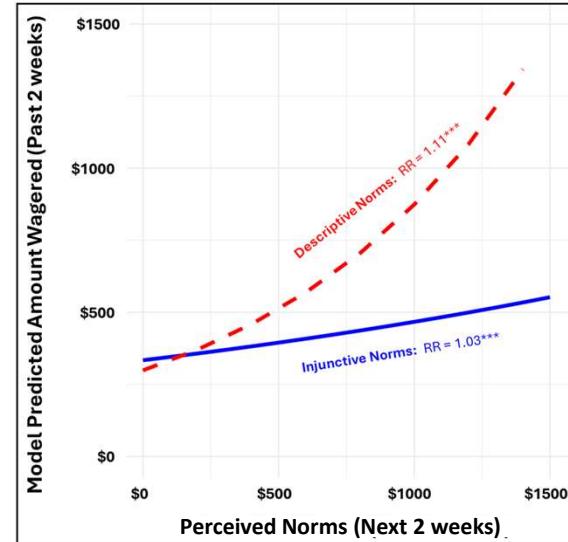


19

Key Findings – Baseline Data

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



20

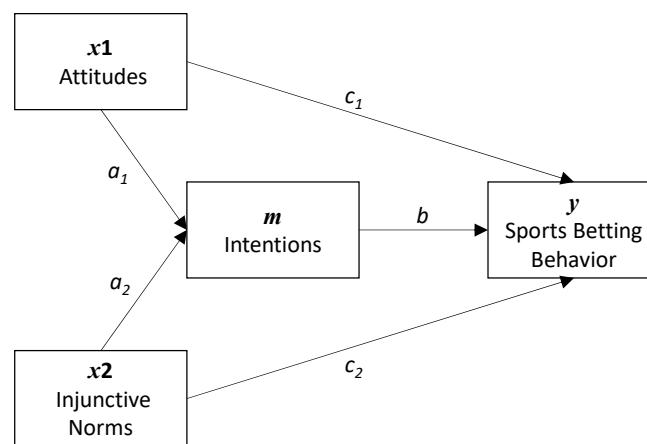
Prototype Willingness Model – Longitudinal Data

- PWM is a dual-process model comprised of both **rational** and **reactive** pathway.
- **Rational:** Planned, reasoned decision making. Key mechanism = **intentions**
- **Reactive:** Spontaneous decision making. Key mechanism = **willingness**



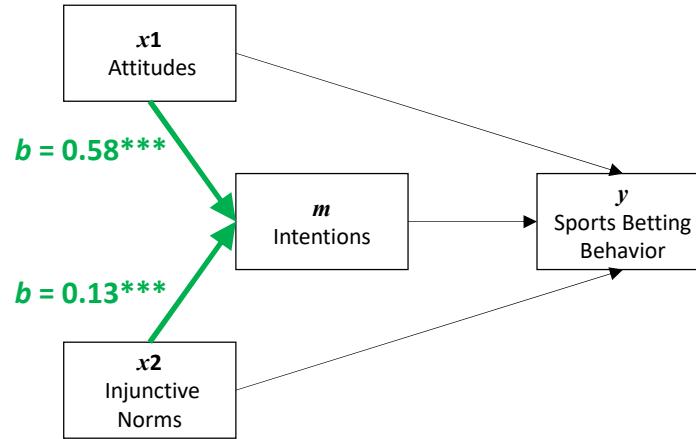
21

Prototype Willingness Model - Rational



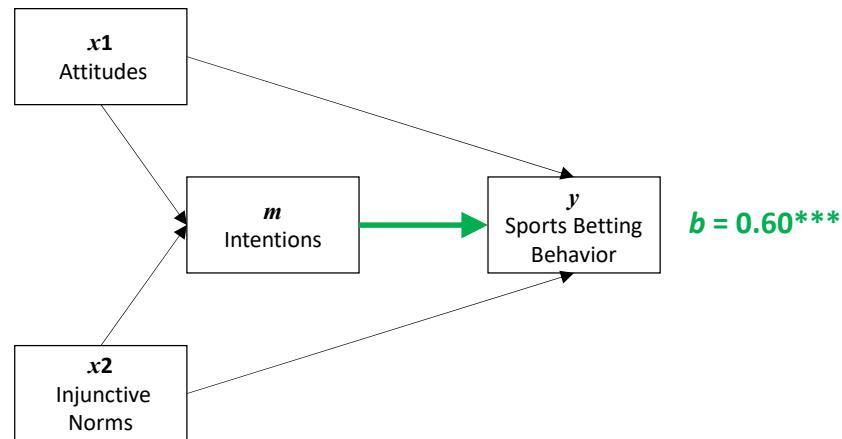
22

Prototype Willingness Model - Rational



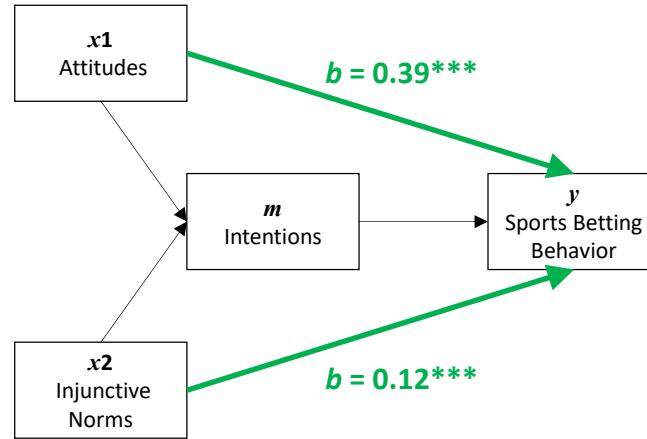
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Prototype Willingness Model - Rational



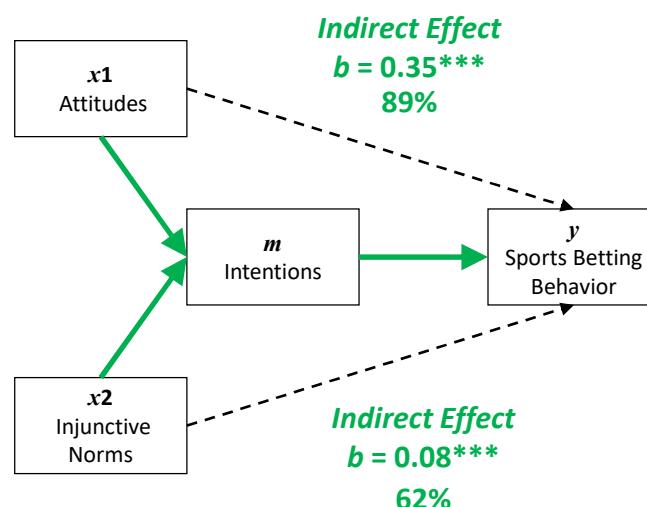
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Prototype Willingness Model - Rational



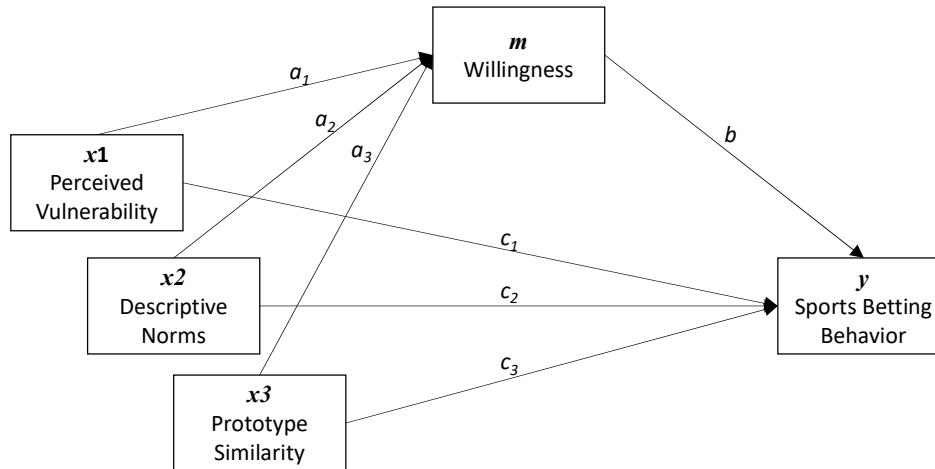
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Prototype Willingness Model - Rational



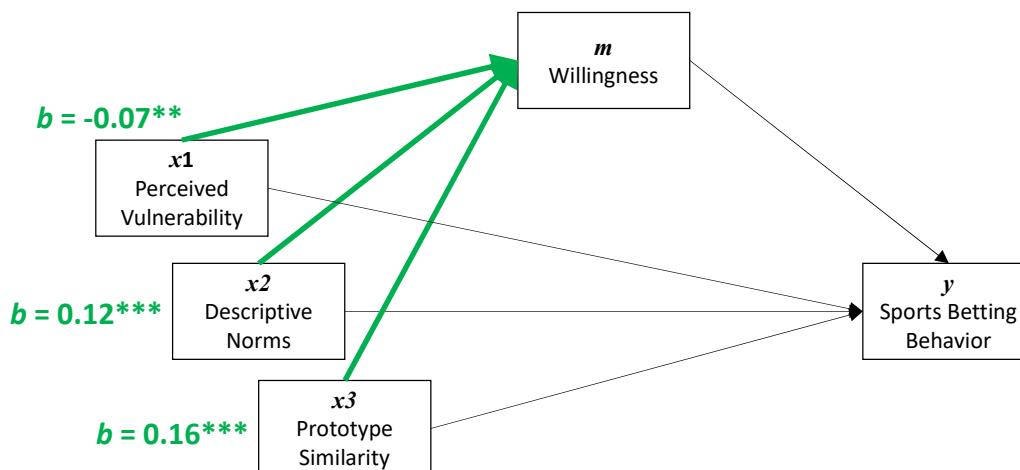
26

Prototype Willingness Model - Reactive



27

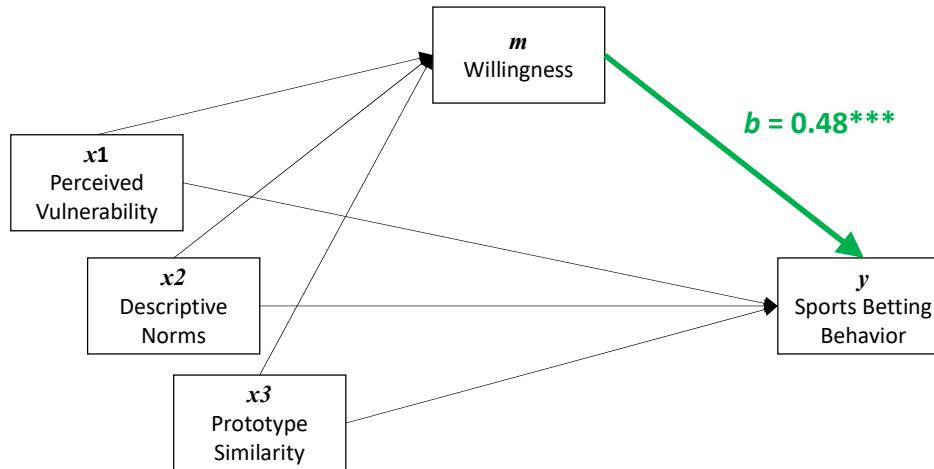
Prototype Willingness Model - Reactive



28

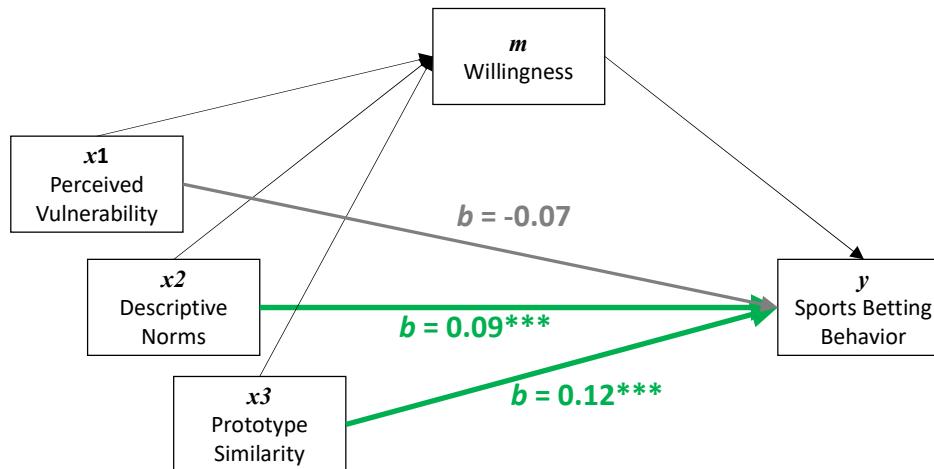
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Prototype Willingness Model - Reactive



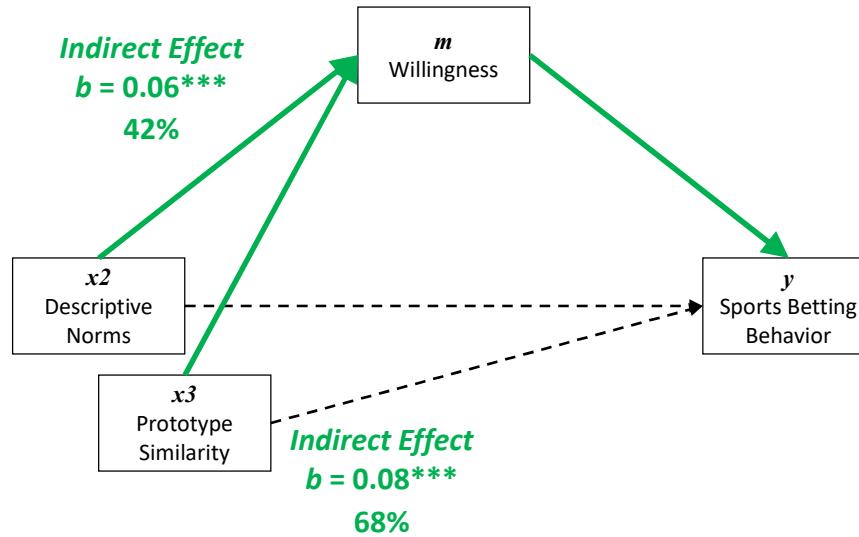
29

Prototype Willingness Model - Reactive



30

Prototype Willingness Model - Reactive



31

MENTAL HEALTH CORRELATES OF SPORTS BETTING

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32

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**Advanced Undergraduate (Junior/Senior)
Academic Scholarship**



33

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Contents lists available at [ScienceDirect](#)

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

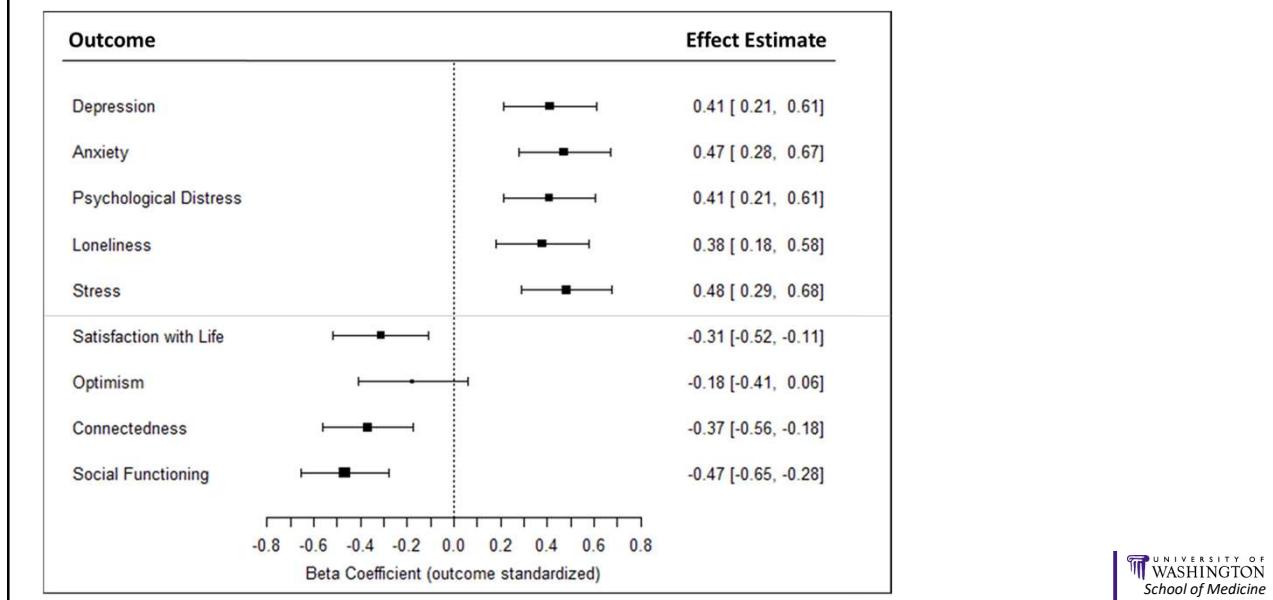
Arvin Shaygan, Joseph Lambuth, Frank Song, Modesta Hurtado, Ty W. Lostutter, Scott Graupensperger*

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



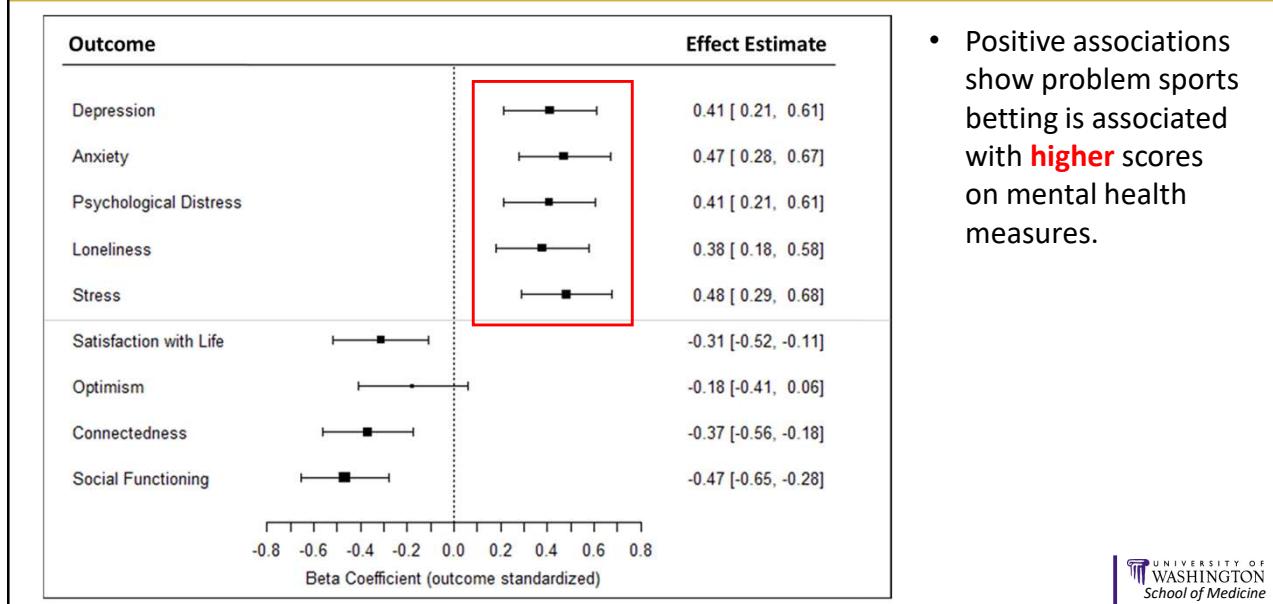
34

Mental Health – Baseline Data



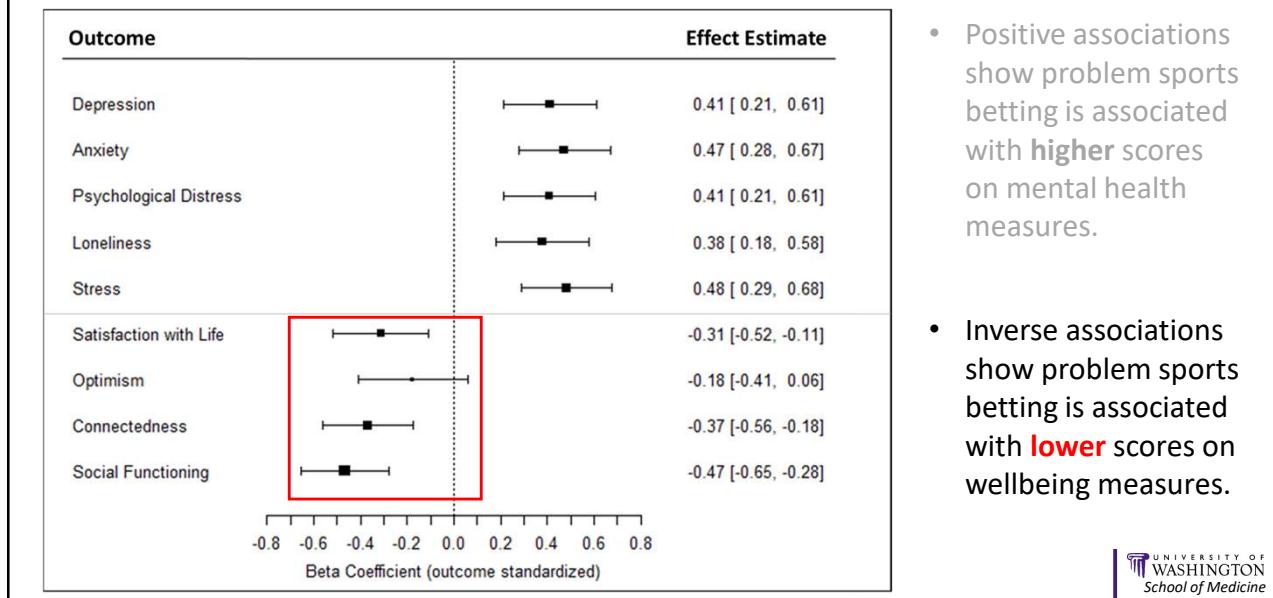
35

Mental Health – Baseline Data



36

Mental Health – 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.



37

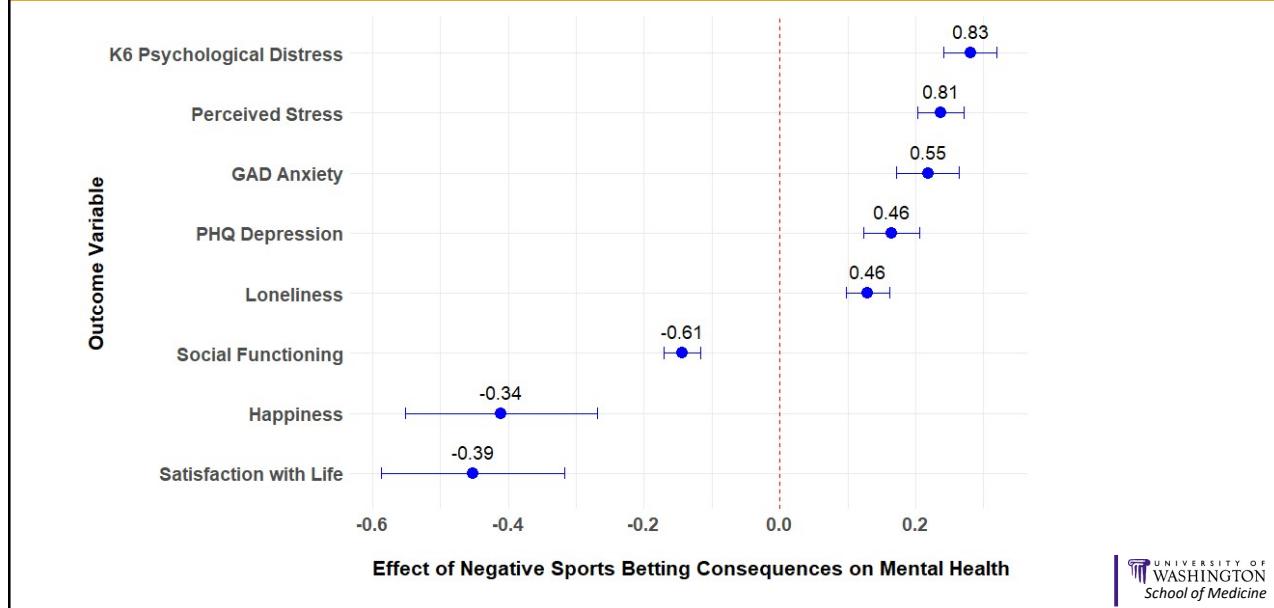
Mental Health– Longitudinal Data

- 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.



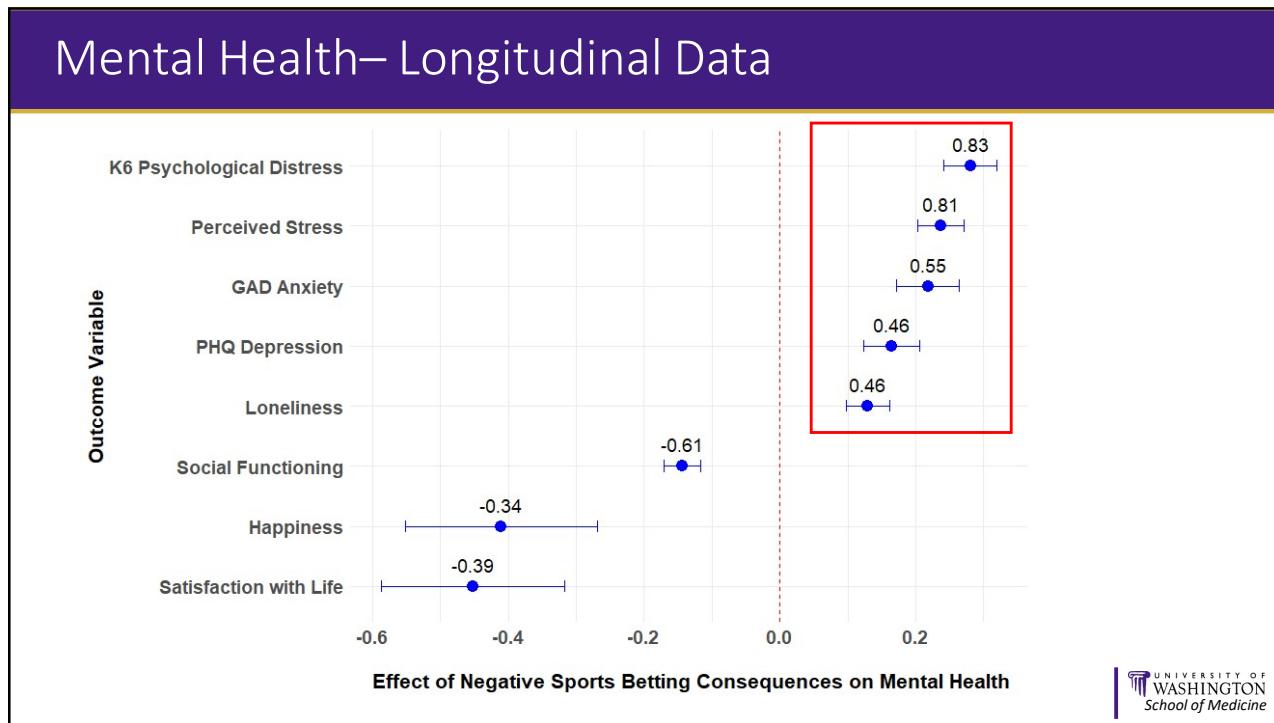
38

Mental Health– Longitudinal Data



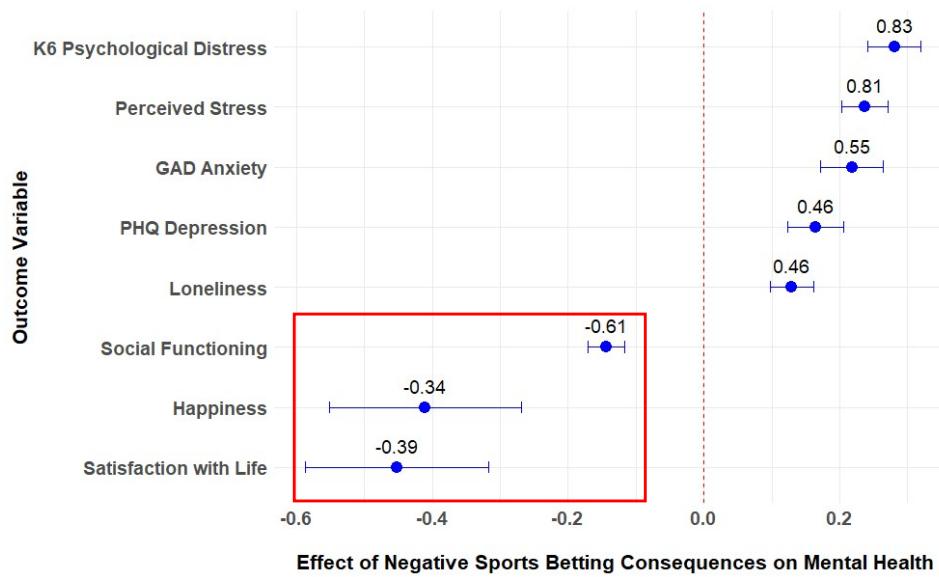
39

Mental Health– Longitudinal Data



40

Mental Health– Longitudinal Data



41

SPORTS BETTING & ALCOHOL USE

Addiction Research & Theory

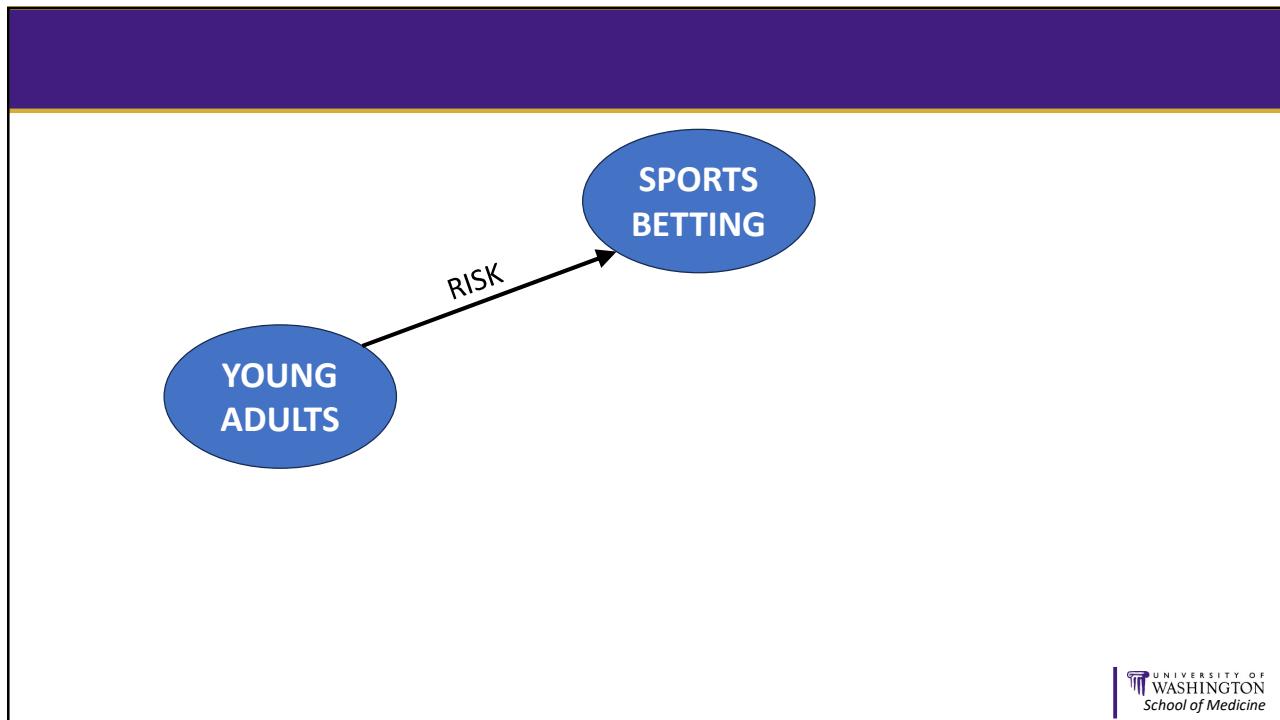
ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/iar20

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

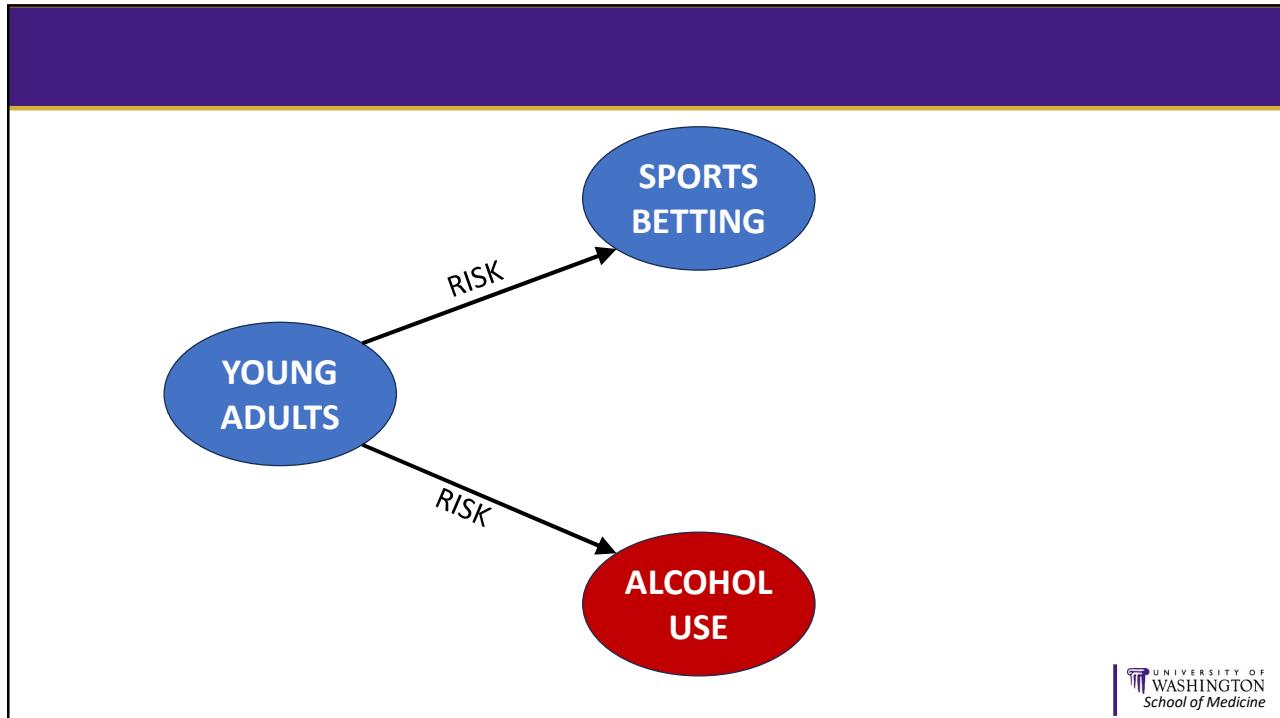
Scott Graupensperger, Frank Song, Joseph Lambuth, Arvin Shaygan, Modesta Hurtado & Ty W. Lostutter



42

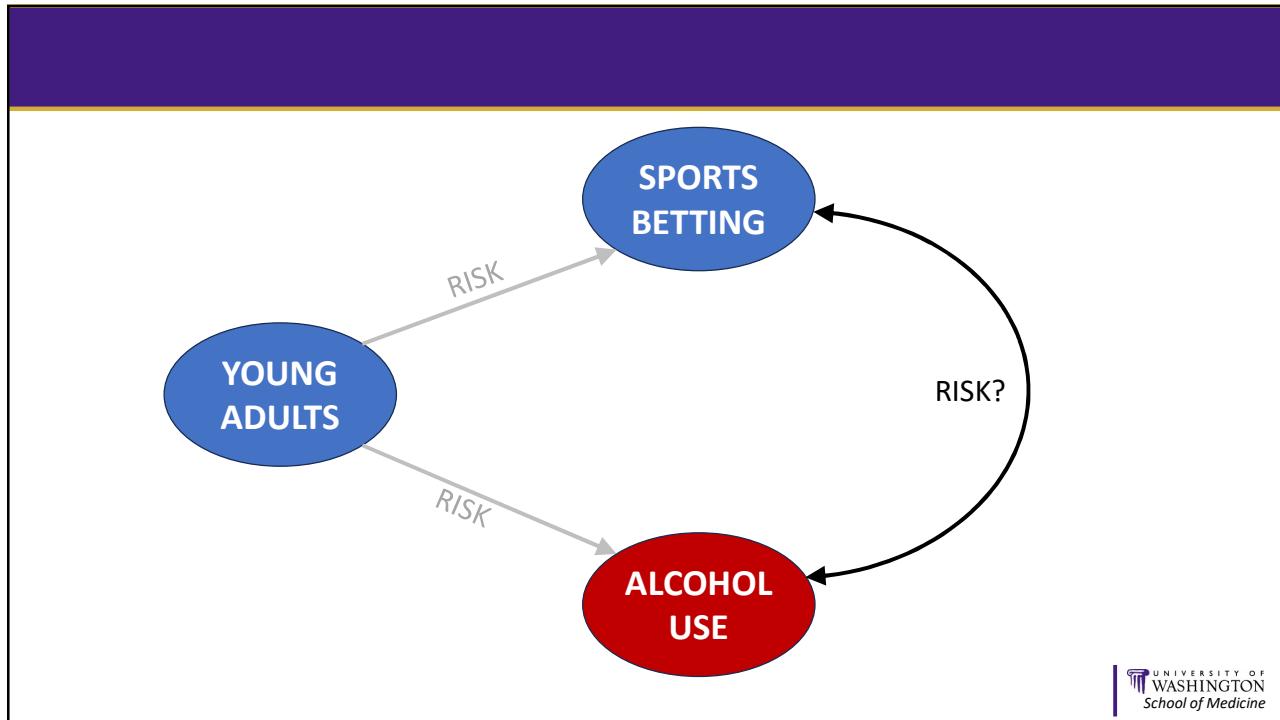


43

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44

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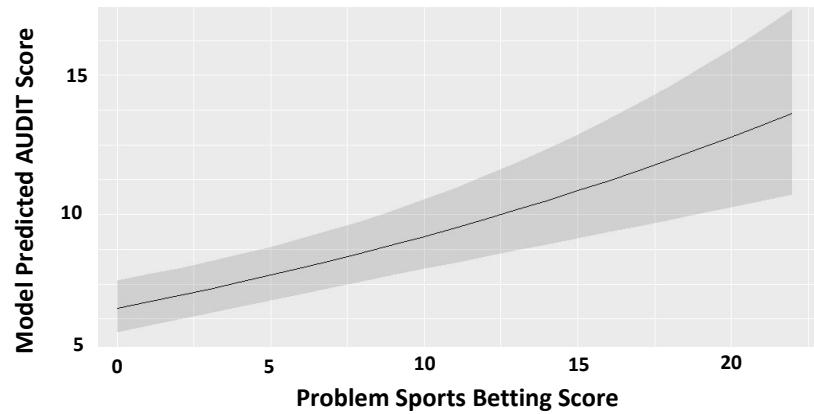


45

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Sports Betting & Alcohol – Baseline Findings

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



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

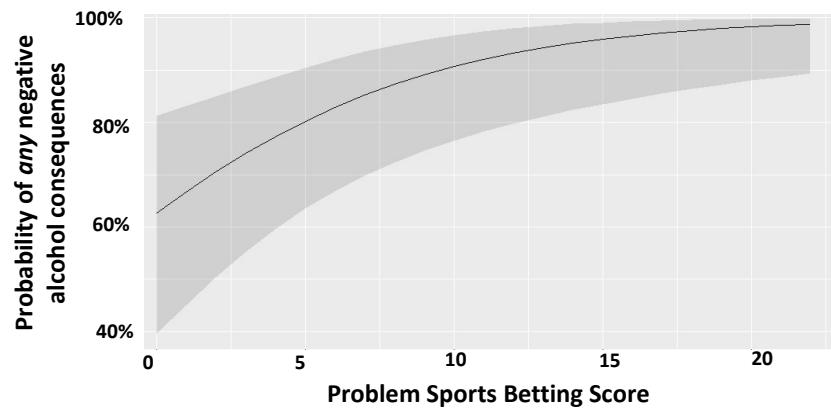
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46

23

Sports Betting & Alcohol – Baseline Findings

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



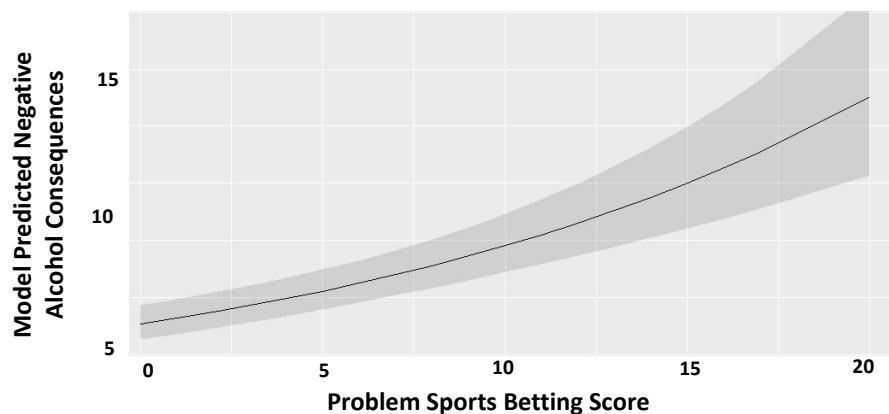
Each 1-unit increase in PGSI-SB → 12% increased odds of any alcohol-related consequences.



47

Sports Betting & Alcohol – Baseline Findings

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

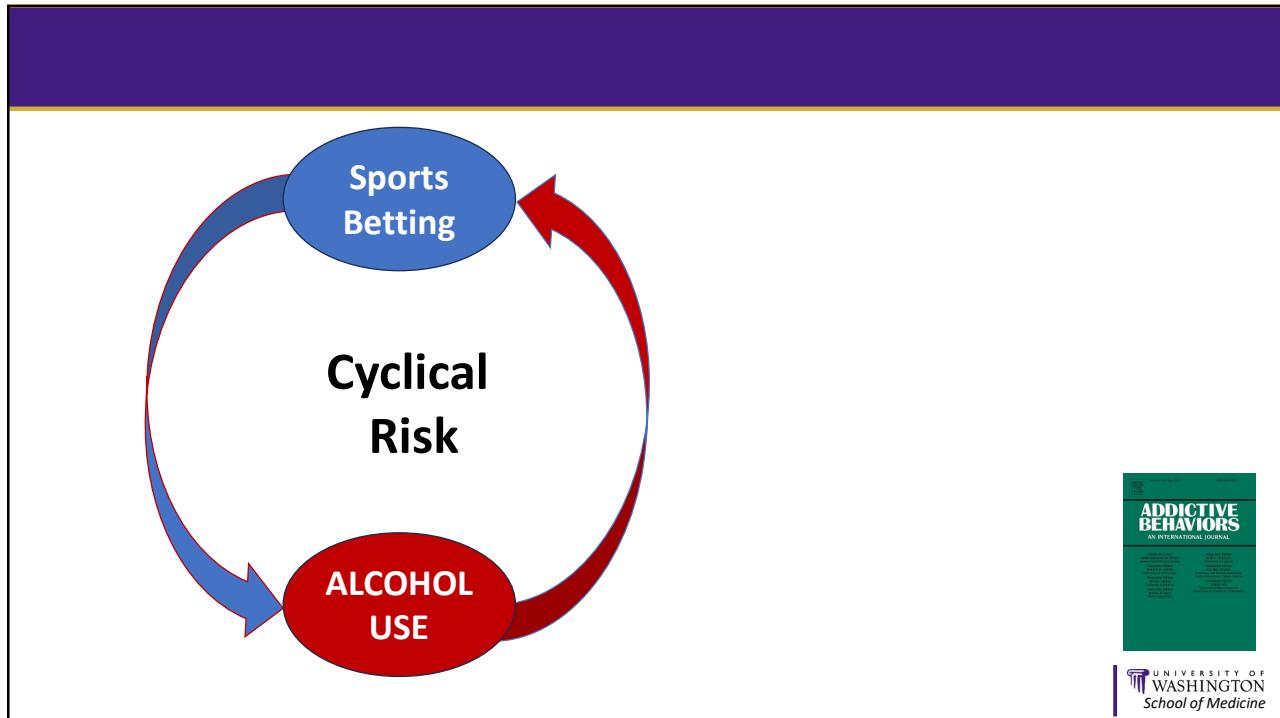


Each 1-unit increase in PGSI-SB → 7% increase in number of alcohol consequences.



48

24

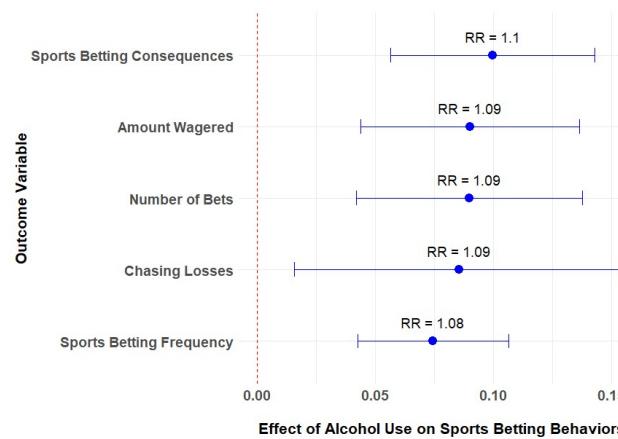


49

Sports Betting & Alcohol – Longitudinal Findings

Fluctuations in alcohol use → fluctuations in sports betting

- Weeks with elevated drinking frequency corresponded to heavier betting:

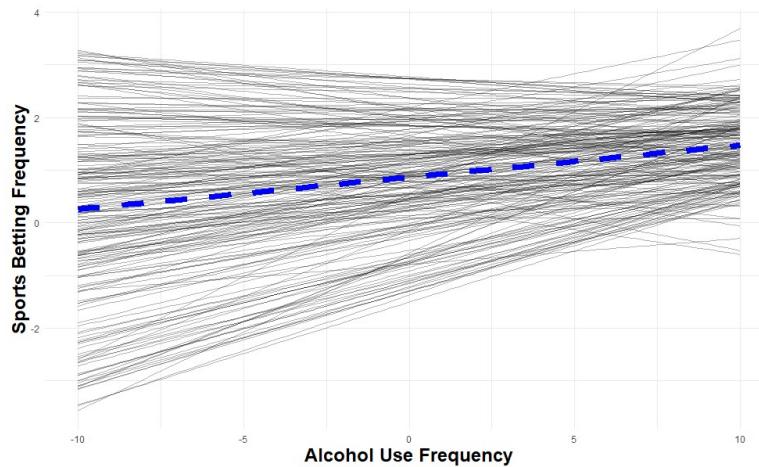


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50

Sports Betting & Alcohol – Longitudinal Findings

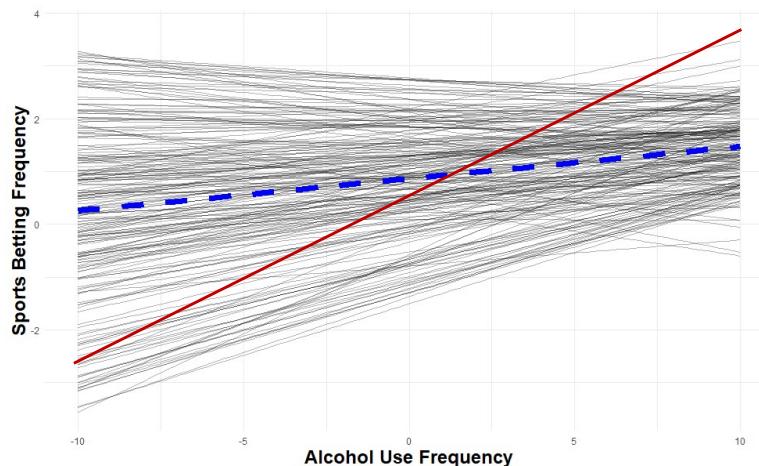
Fluctuations in alcohol use → fluctuations in sports betting



51

Sports Betting & Alcohol – Longitudinal Findings

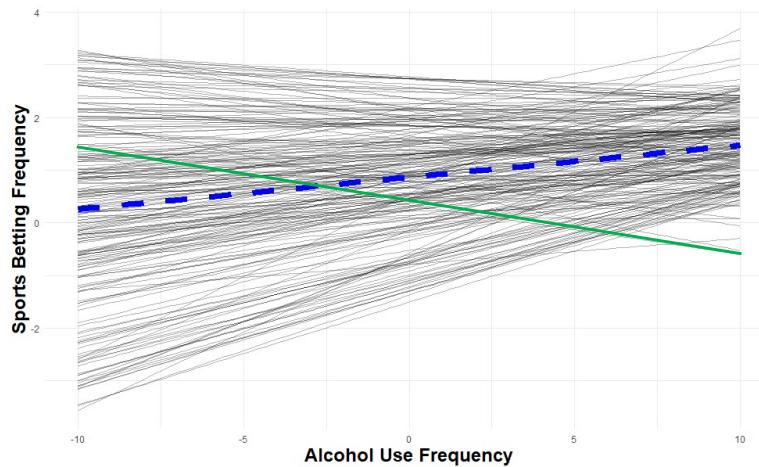
Fluctuations in alcohol use → fluctuations in sports betting



52

Sports Betting & Alcohol – Longitudinal Findings

Fluctuations in alcohol use → fluctuations in sports betting



53

CANNABIS USE & SPORTS BETTING

Ty Lostutter: Associate Professor of PBSI at UW

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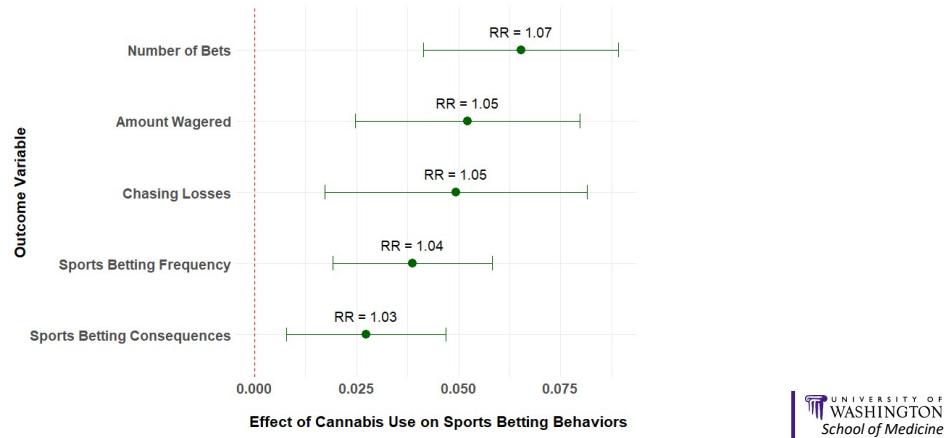


54

Sports Betting & Cannabis – Longitudinal Findings

Fluctuations in cannabis use → fluctuations in sports betting

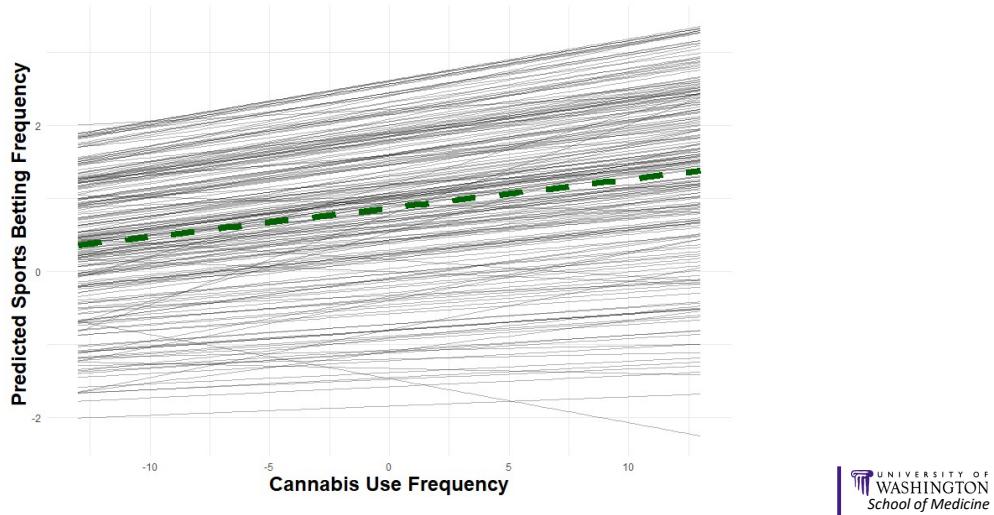
- Weeks with elevated cannabis use frequency corresponded to heavier betting:



55

Sports Betting & Cannabis – Longitudinal Findings

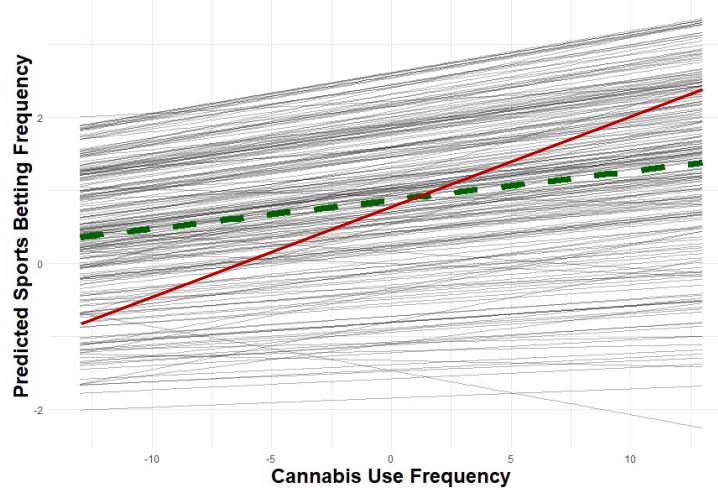
Fluctuations in cannabis use → fluctuations in sports betting



56

Sports Betting & Cannabis – Longitudinal Findings

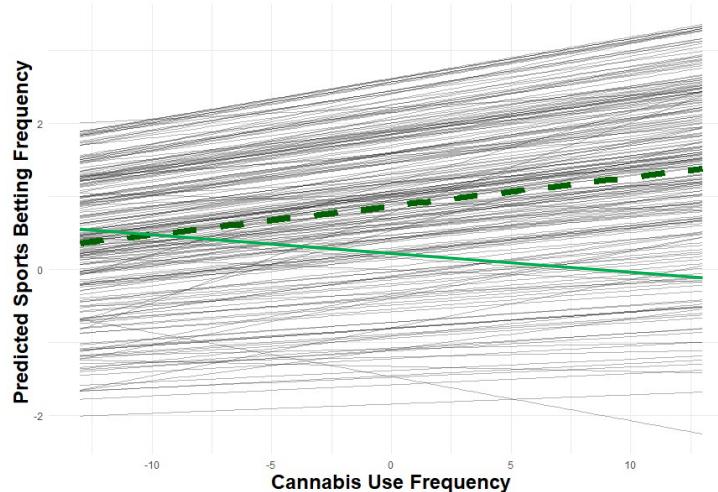
Fluctuations in cannabis use → fluctuations in sports betting



57

Sports Betting & Cannabis – Longitudinal Findings

Fluctuations in cannabis use → fluctuations in sports betting



58

29



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