Gambling Fallacies During the Pandemic

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Disclosures

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- **Conflicts of Interest:** There are no potential conflicts of interest for this research.

- **Prior dissemination:** Some of the results presented herein have been submitted for publication

Gambling Fallacies

- Gambling specific versions of a subset of known cognitive errors that create erroneous beliefs about how gambling works
  - Hot hand
  - Monte-Carlo (a.k.a. the Gambler's fallacy)
  - Belief in dispositional luck
  - Illusion of control
  - Insensitivity to sample size
  - Base rate neglect

Susceptibility to GF

+ Mathematics and/or Statistical training reduces GF susceptibility
+ Cognition & Resistance

  Rational cognitive style

  Greater cognitive ability
+ Cognitive style & Susceptibility
+ Gambling engagement and/or Problem Gambling

Longitudinal Studies

- GF are malleable

  ANP Online to Follow-Up (tau = .52)
- Bidirectionality
- 1-year time intervals

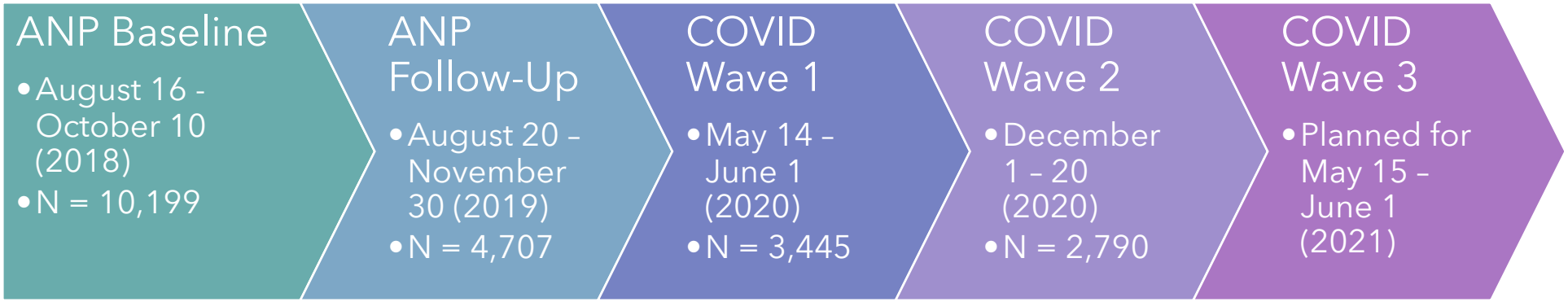
Study Aims

- Examine variability at 6-month intervals
- Predictors of Gambling Fallacies

  Examine GF & PG for bi-directionality

  Examine the impact of COVID-specific variables on GF

Data Collection



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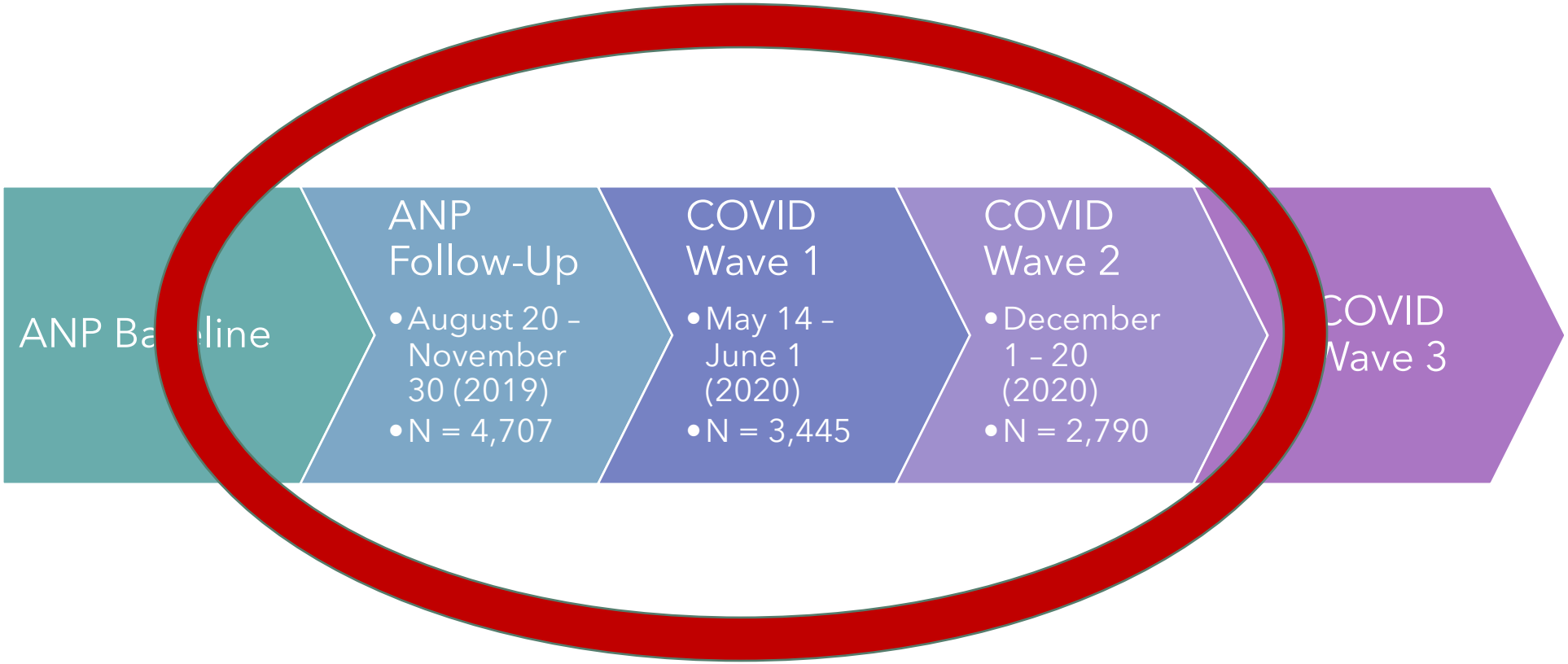

Method

- Comorbidities

  (DSM Criteria)
- Gambling Variables

  Gambling Engagement (frequency, # of games, time/session, total losses, platform) (Williams et al. 2017)

  PGSI (Ferris & Wynne, 2001)

  Gambling Fallacies Measure (Leonard, Williams, & Vokey, 2015)
- Demographics
- Personality (Impulsivity - NEO-PI-R, Costa & McCrae, 1992)
- Covid Specific Experience (Grasso et al., 2020)

  Employment

  Health (self & others)

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ANP → + Demographics

+ Personality (Impulsivity - NEO-PI-R, Costa & McCrae, 1992) ← ANP

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COVID Waves 1 & 2

Results

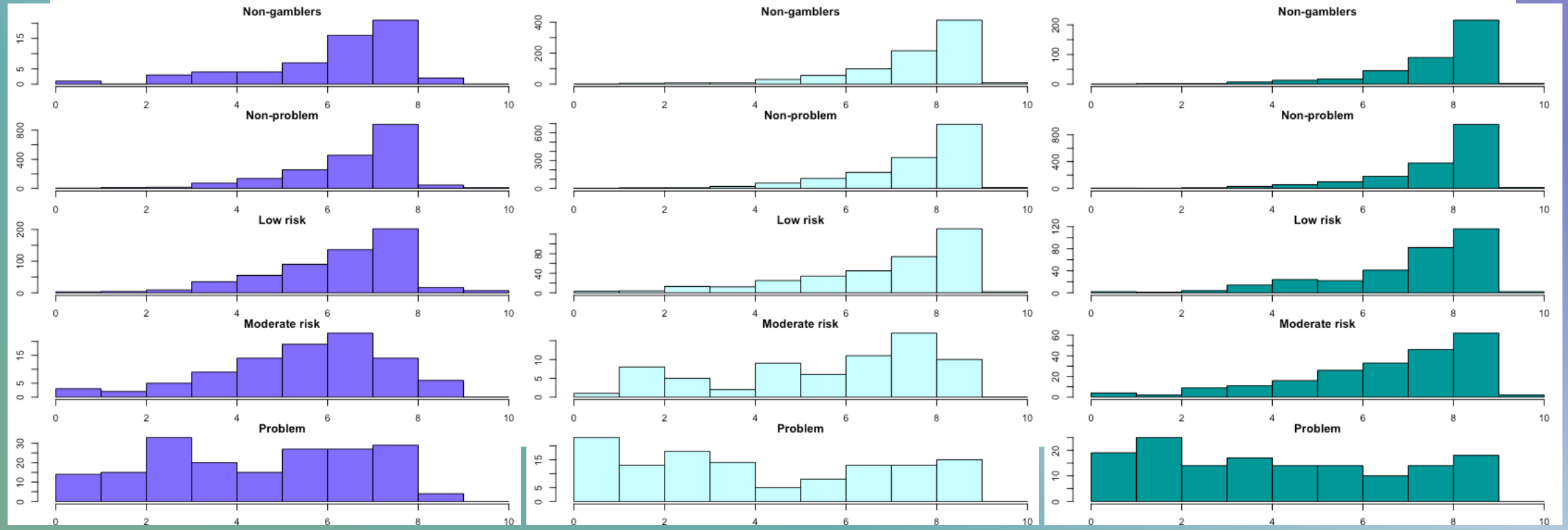
Aim 1

GF by PGSI Category

Pre-COVID

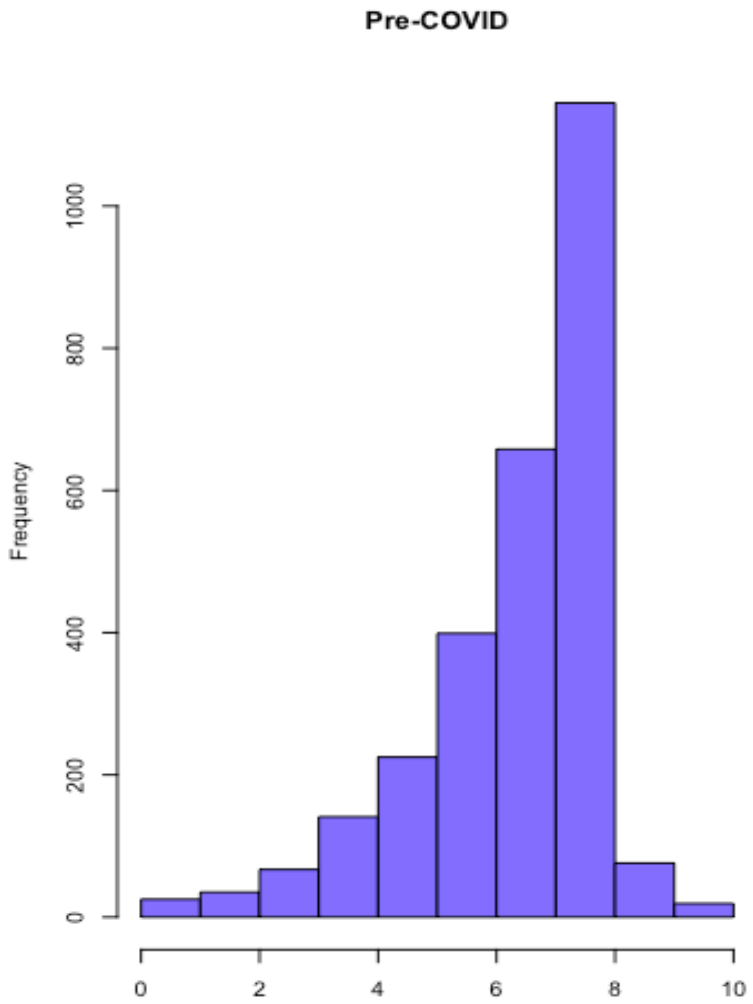
COVID-Lockdown

Post-Lockdown



Changes in GF

	Baseline	COVID Wave 1	COVID Wave 2
Mean	6.82	7.72	7.81
Standard Deviation	1.59	1.76	1.73
Median	7	8	8
Range	0 - 10	0 - 10	0 - 10
Friedman ($df = 2$, $n = 2790$), 2074.89, $p < .001$.			


Pre-COVID
Frequency
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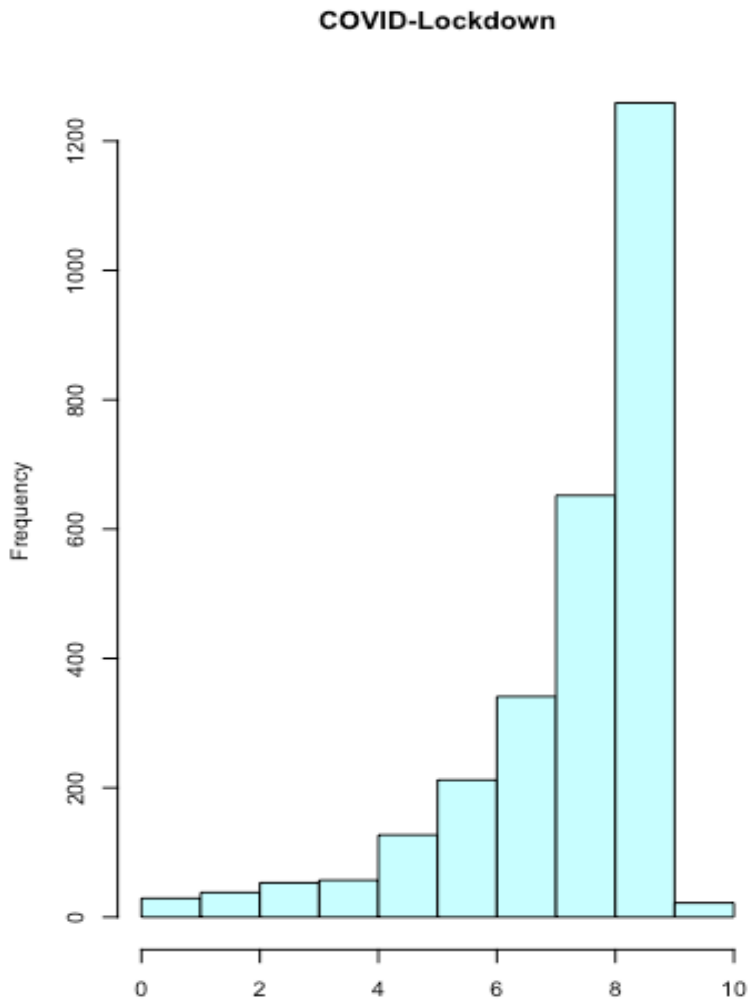
200
400
600
800
1000
0
2
4
6
8
10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0
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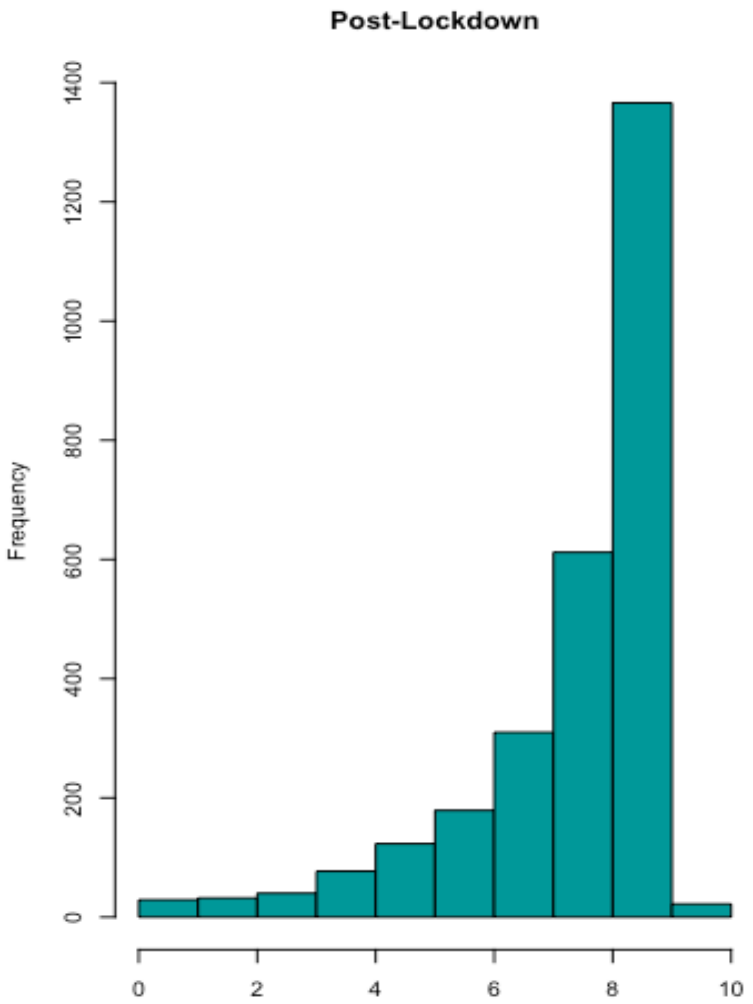
Post-Lockdown
Frequency
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1000
1200
1400
0
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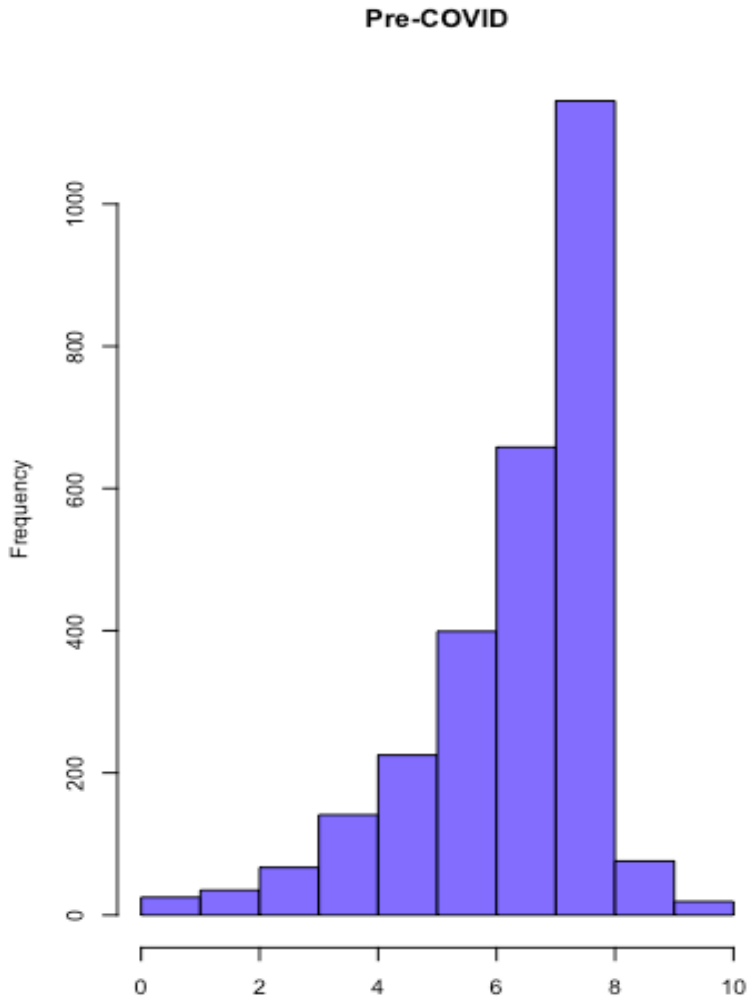
10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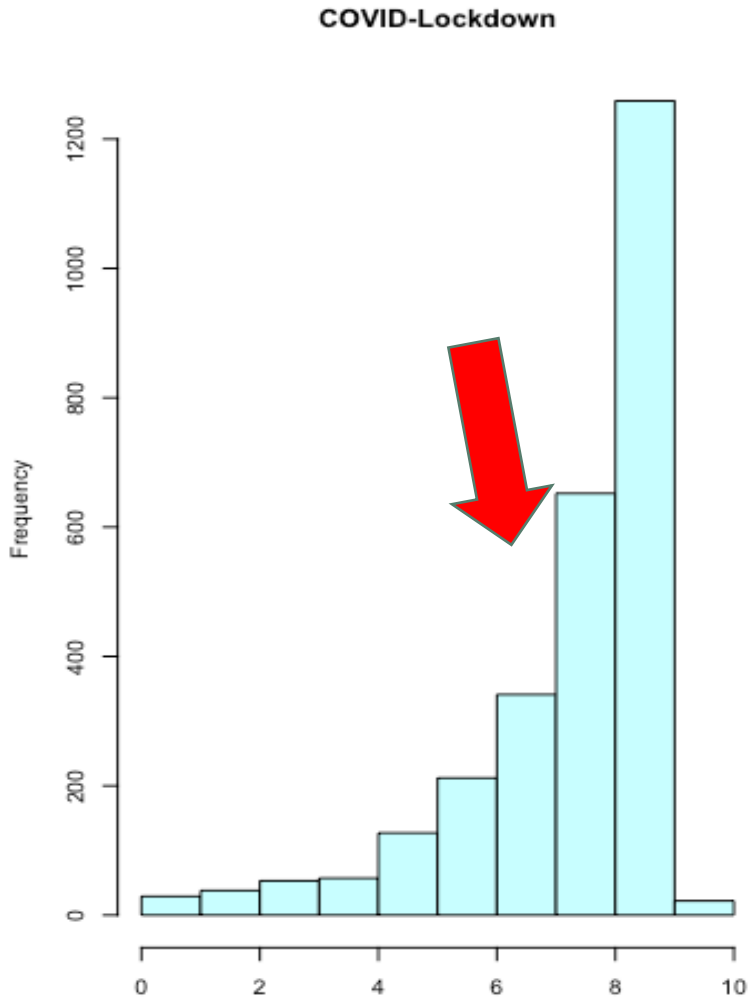
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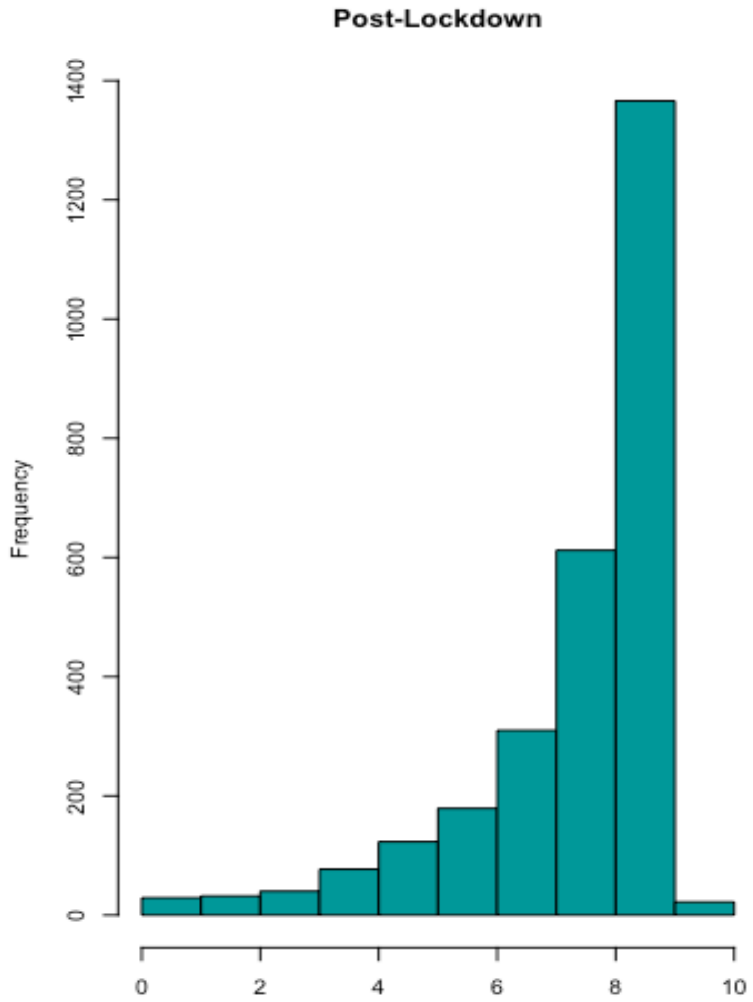
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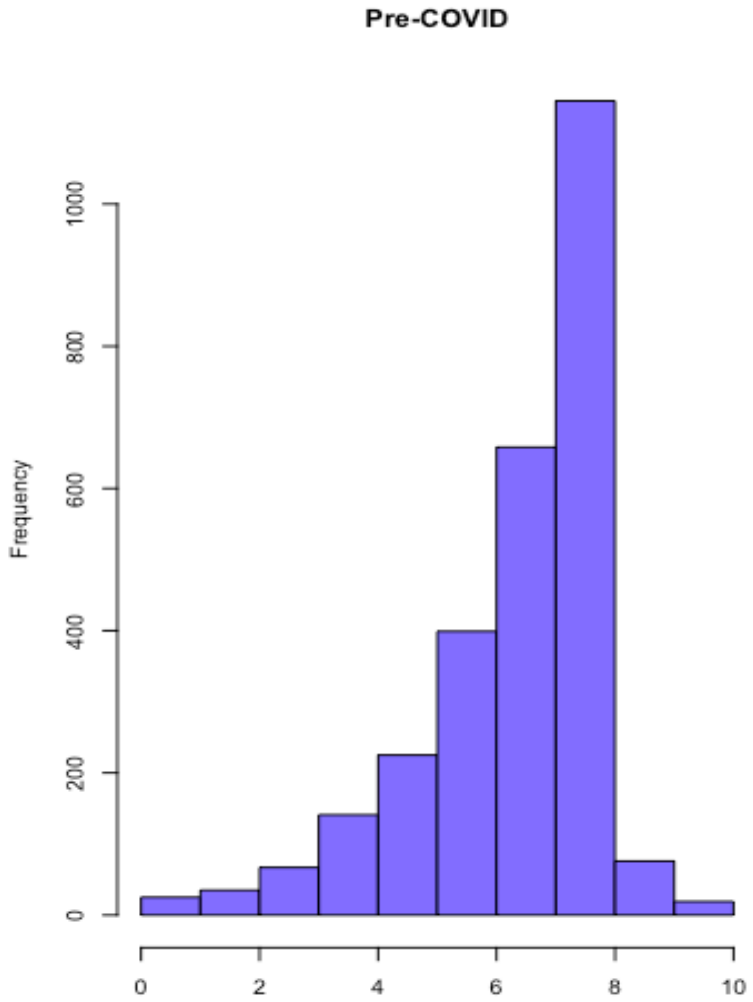
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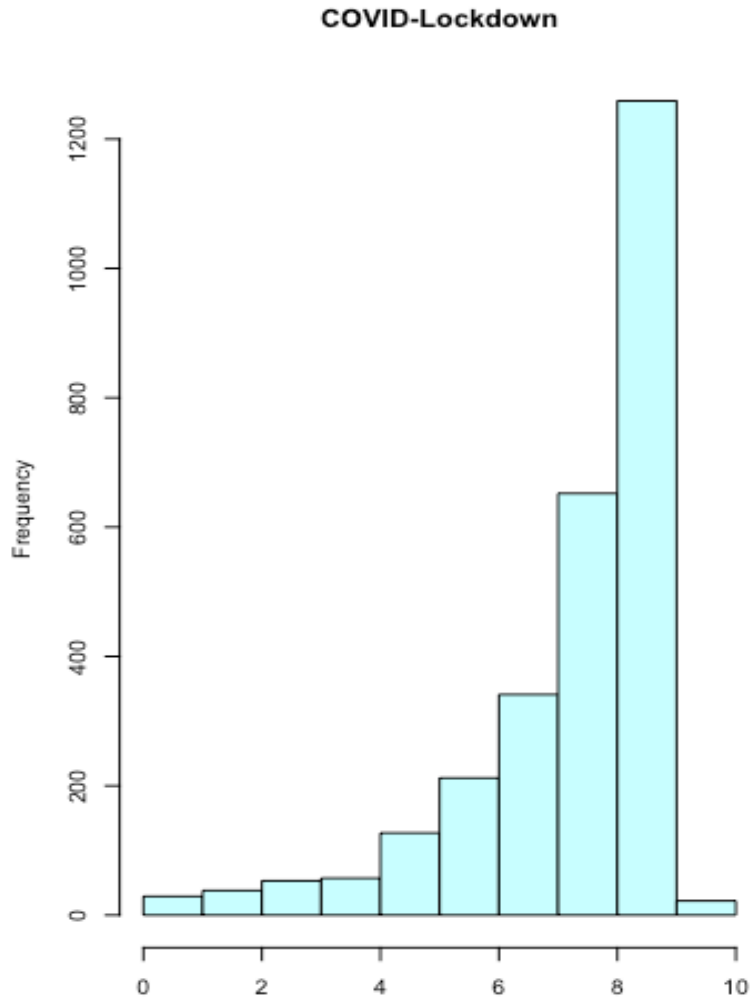
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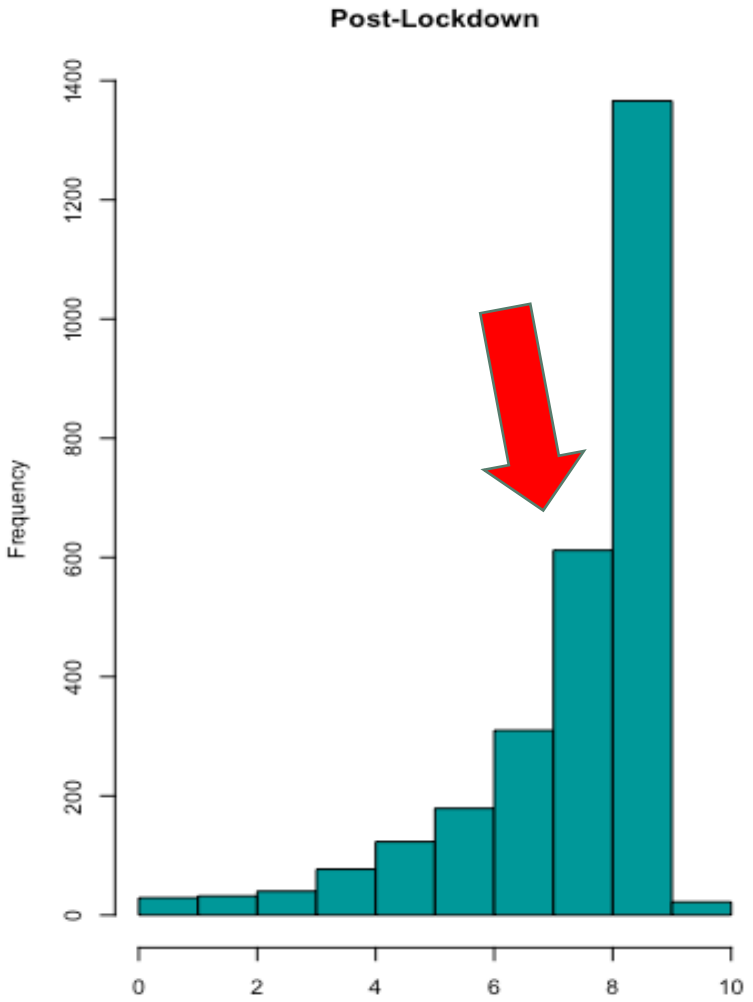
Post-Lockdown
Frequency
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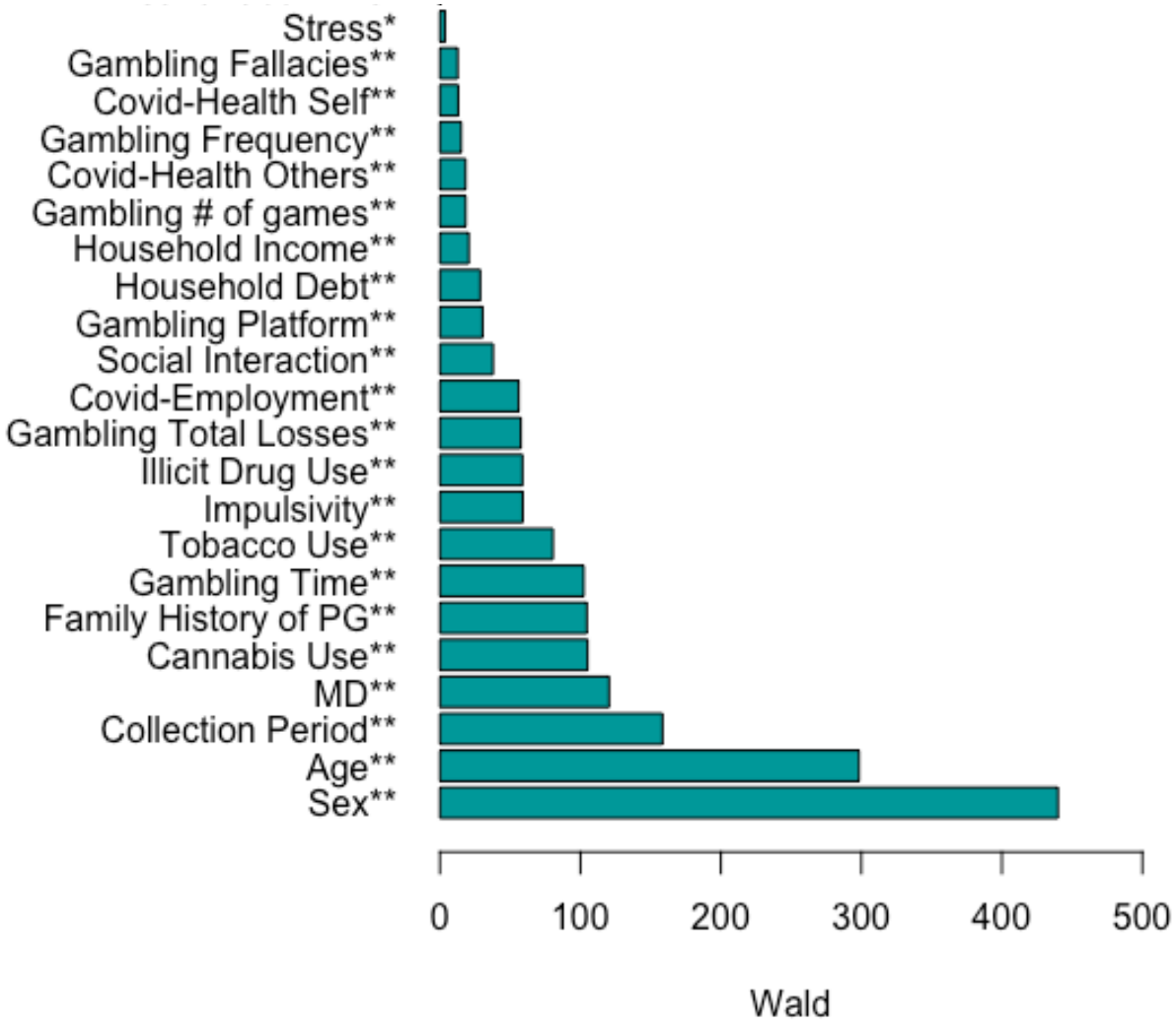
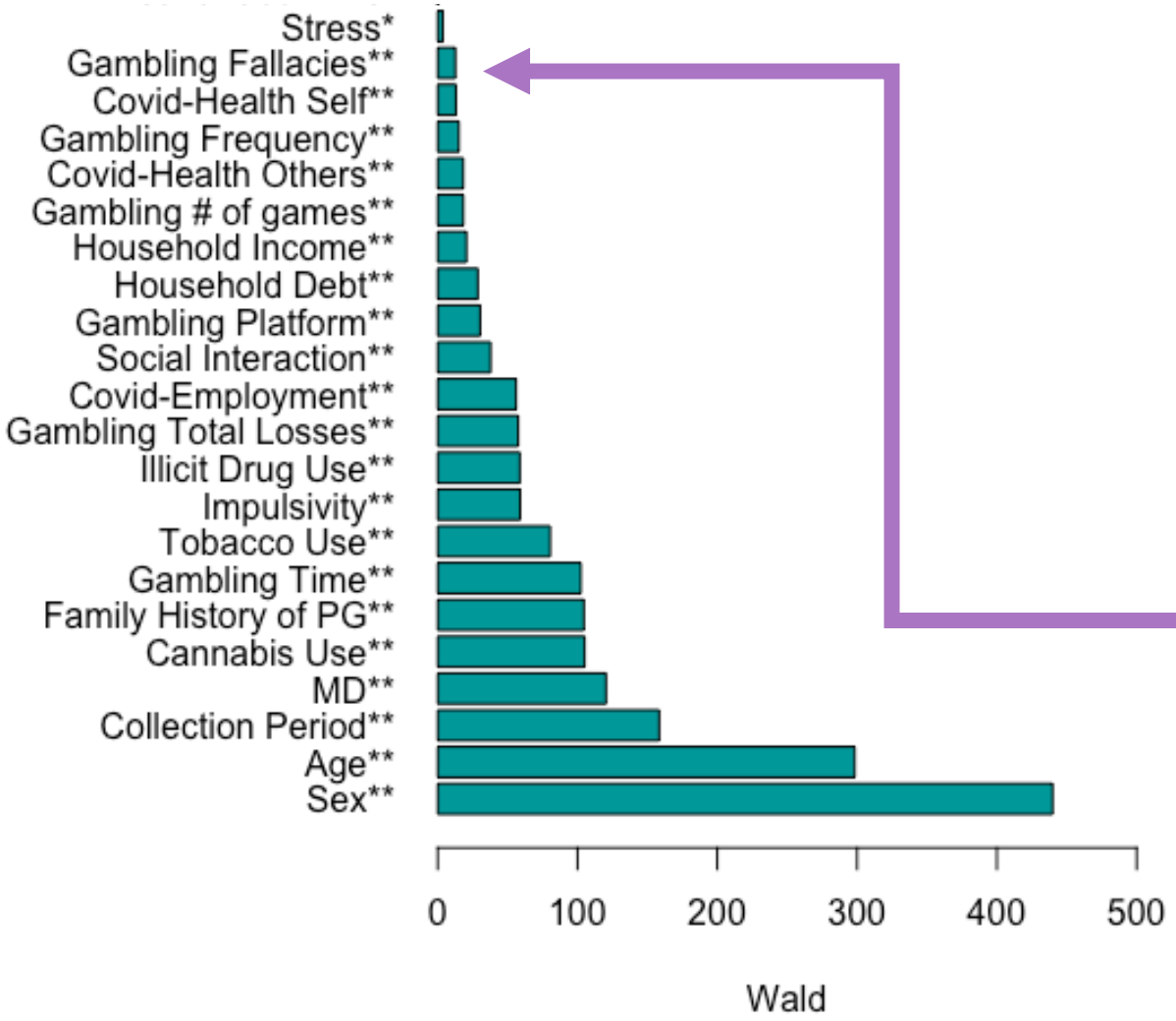
200
400
600
800
1000
1200
1400
0
2
4
6
8
10

Results

Aim 2



Predicting PG Category



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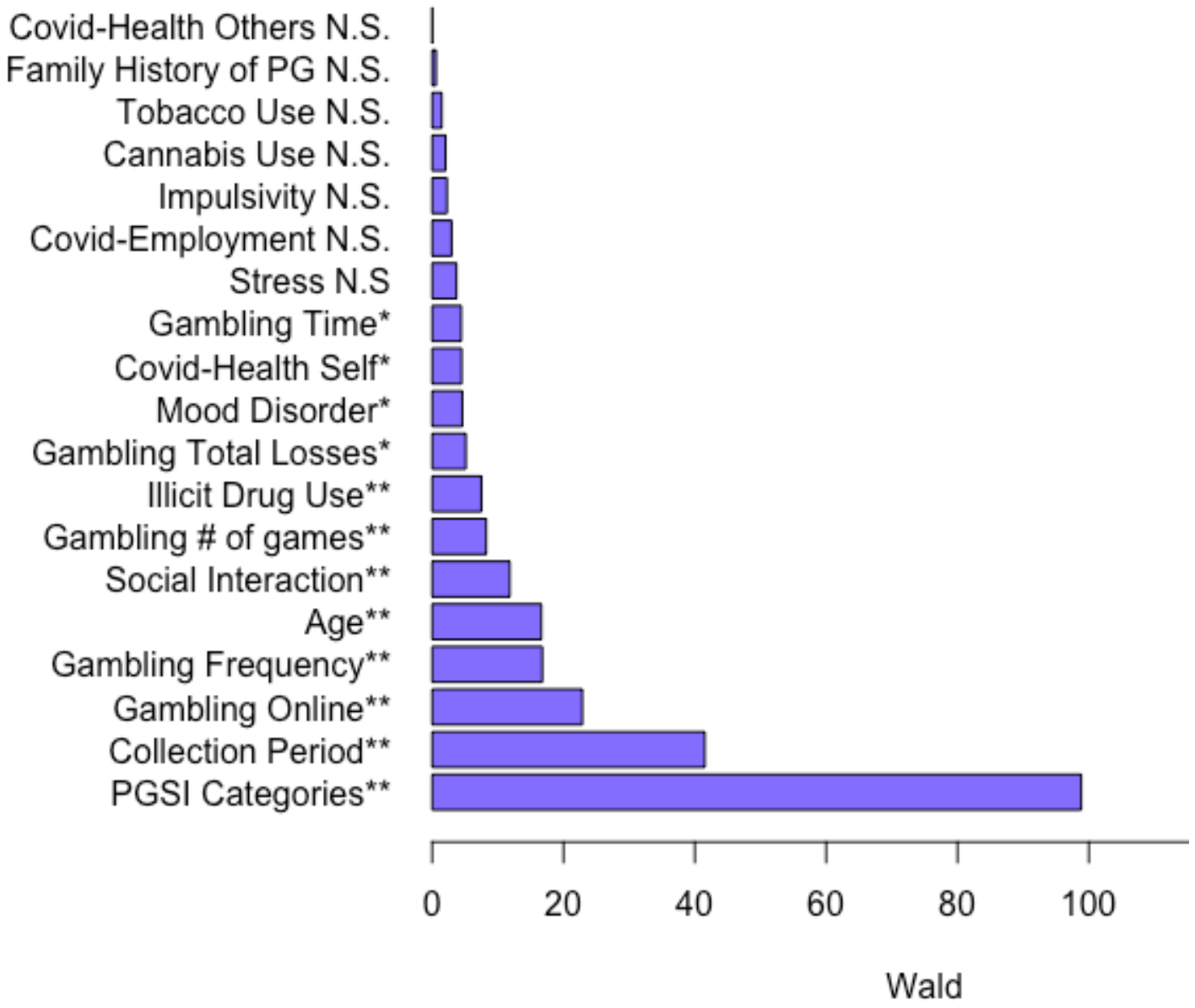
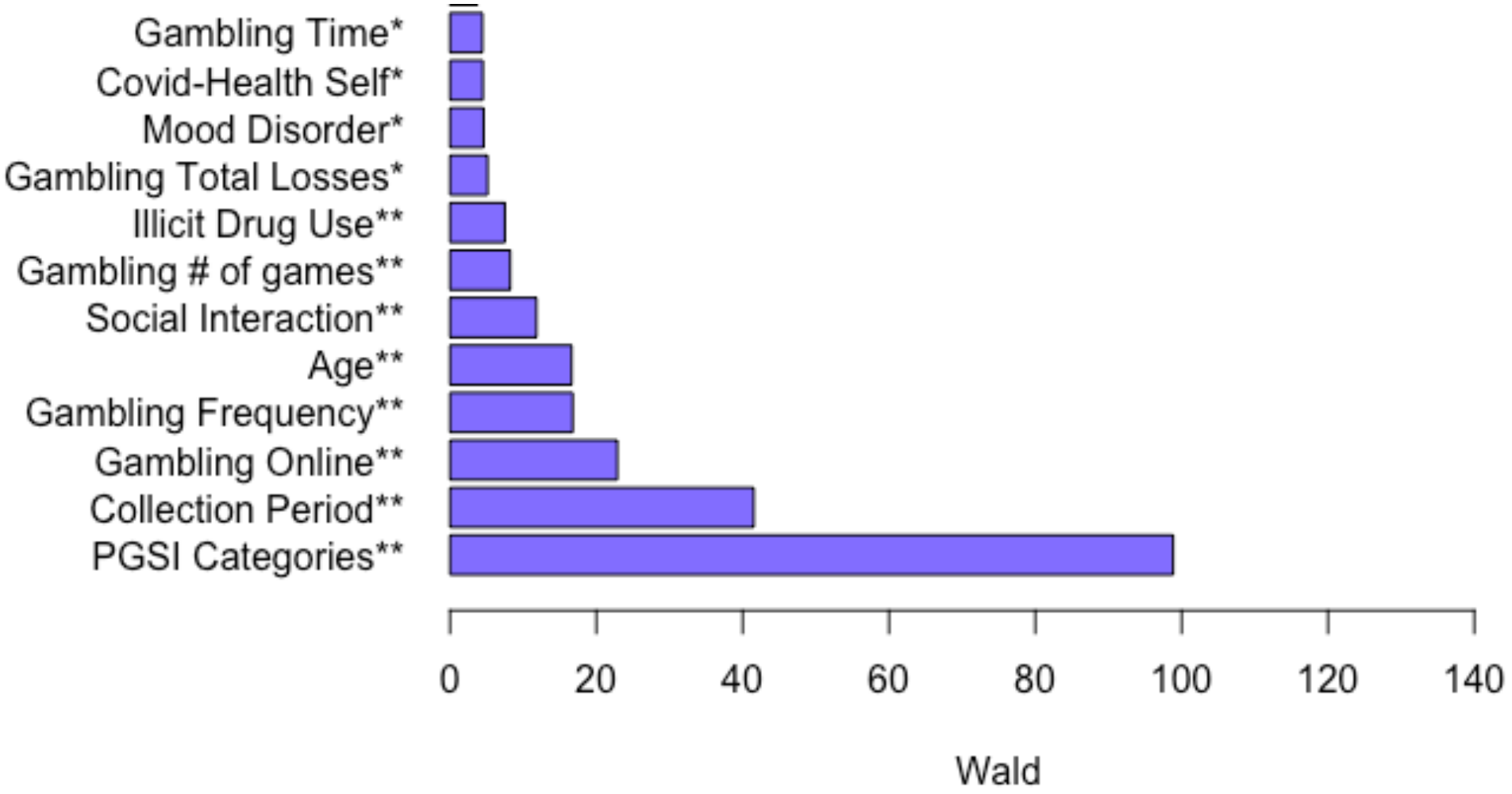
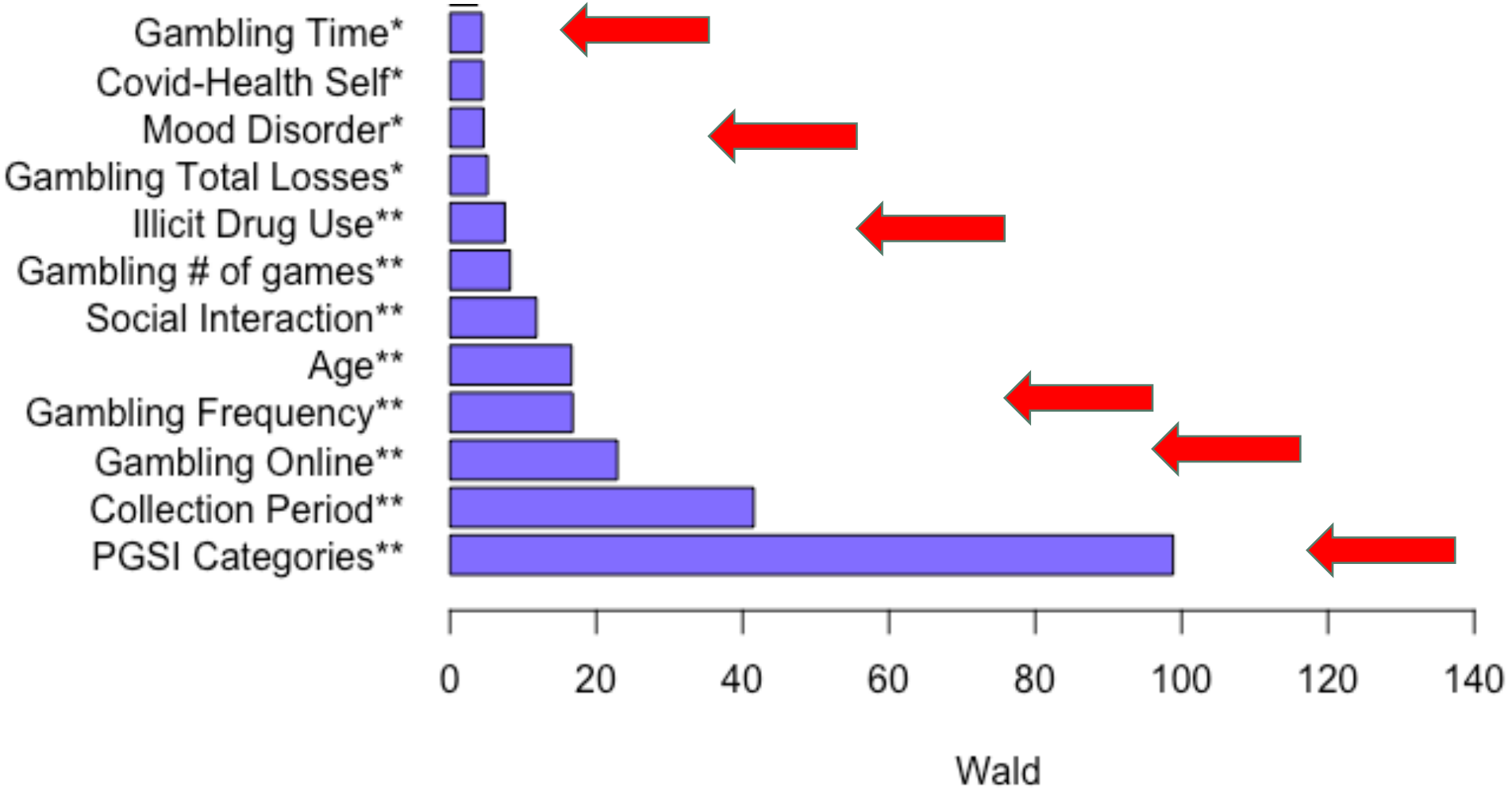


Predicting GF at Post Lockdown


Gambling Time*
Covid-Health Self*
Mood Disorder*
Gambling Total Losses*
Illicit Drug Use**
Gambling # of games**
Social Interaction**
Age**
Gambling Frequency**
Gambling Online**
Collection Period**
PGSI Categories**
0
20
40
60
80
100
120
140
Wald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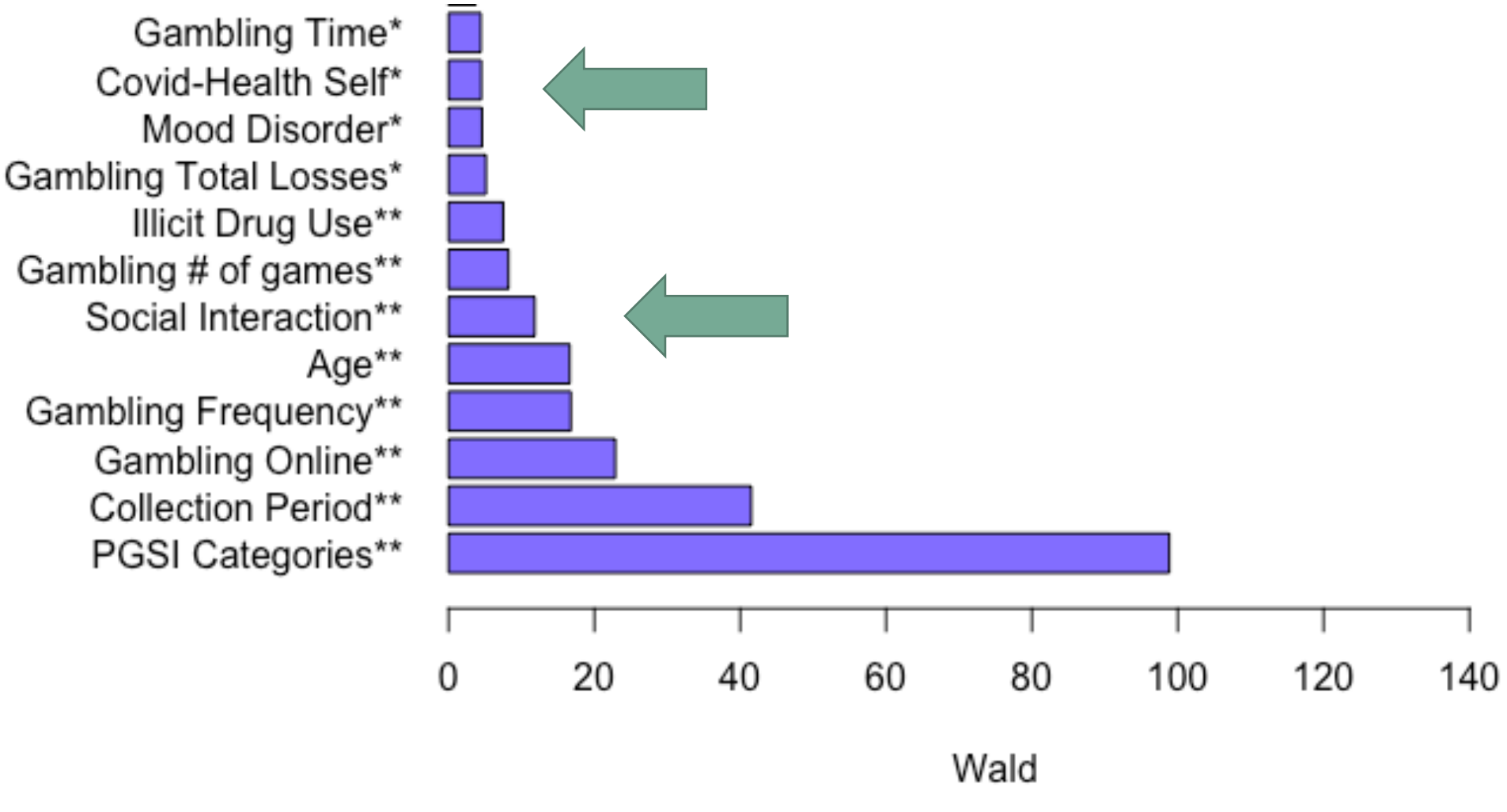
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Conclusions

- GF prevalence
- GF variability
- Bidirectional
- COVID specific variables

Thank You