

Gambling and Problem Gambling in Massachusetts: Results of a Follow-up Population Survey

Rachel Volberg, PhD
Research Professor
School of Public Health & Health Sciences

Overview

- Methods
- Attitudes about gambling
- Gambling behavior
- Problem gambling
- Comparing gambling groups
- Awareness of services in MA
- Changes since 2013
- Future directions

Methods

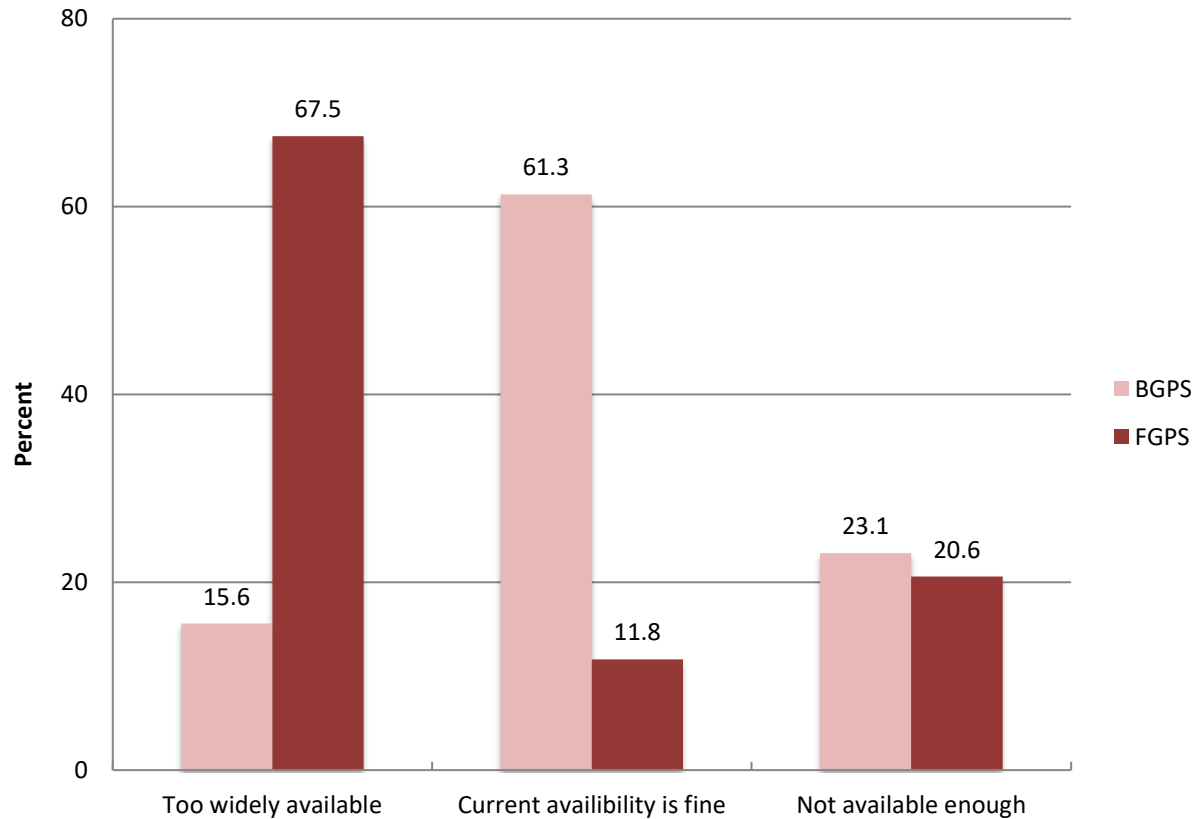
- Questionnaire
 - Aligned closely with baseline survey questionnaire
 - Added items assessing sports betting, non-gambling spending at casinos, impact of COVID-19 on behavior
 - Described as survey of ‘health and recreation’
 - Sections included
 - Physical & mental health, alcohol & drug use
 - Attitudes, gambling behavior, gambling problems
 - Awareness of services
- Sample (n=6,293)
 - Random sampling of HHs & individual in HHs
 - Targets for Asian, African American, Hispanic, adults aged 18-20

Methods

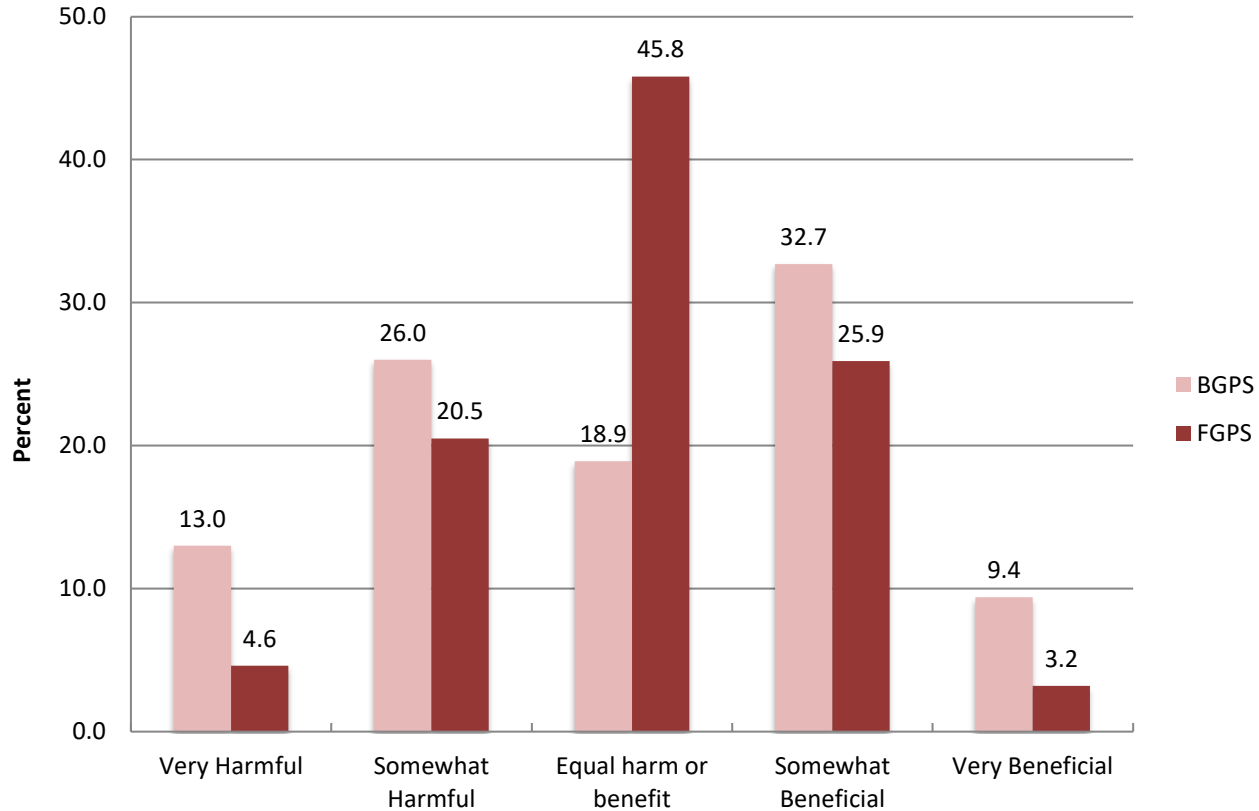
- Data collection
 - Invitation letter w/incentive, reminder postcard, 2nd letter, 3rd letter w/SAQ, reminder postcard, 4th letter w/SAQ, telephone efforts
- Responses
 - 75% completed online, 24% completed SAQ, 2% telephone
 - 11% completed in Spanish
 - Weighted response rate = 27.5%
- Sample weighting
 - Iterative raking & trimming employed to align sample w/MA population
 - Weighting variables included gender, age, ethnicity, education

ATTITUDES TOWARD GAMBLING

Attitudes: Availability



Attitudes: Benefits and Harms



Hypothesis 1

- Attitudes toward gambling will be **less negative** in the FGPS compared with the BGPS, reflecting Massachusetts adults' experience with casino gambling in the Commonwealth
- This hypothesis was **not supported** because a significantly greater proportion of Massachusetts adults believed that the current availability of gambling in the state was too high in 2021 compared with 2013

GAMBLING PARTICIPATION

Gambling Participation

- Definition provided for consistency:

We define gambling as betting money or material goods on an event with an uncertain outcome in the hopes of winning additional money or material goods. It includes things such as lottery tickets, scratch tickets, bingo, betting against a friend on a game of skill or chance, betting on horse racing or sports, investing in high risk stocks, etc.

- 13 activities assessed
 - Past-year participation
 - Frequency of participation
 - Expenditures

Gambling Participation

	BGPS Past Year Participation		FGPS Past Year Participation		% Change ¹
	% ³	95% ³ CI	% ³	95% ³ CI	
All gambling	73.1	(71.8, 74.4)	60.2*	(58.3, 62.2)	17.7
All lottery	61.7	(60.2, 63.1)	47.6*	(45.6, 49.6)	22.9
Traditional	58.1	(56.6, 59.5)	43.3*	(41.3, 45.3)	25.5
Instant games	37.2	(35.8, 38.7)	26.6*	(24.8, 28.4)	28.5
Daily games	14.1	(13.1, 15.2)	14.5	(13.1, 16.0)	-2.8
Raffles	31.5	(30.2, 32.8)	18.6*	(17.2, 20.2)	41.0
Casinos either in or out of state ²	21.5	(20.3, 22.7)	15.7*	(14.3, 17.3)	27.0
Only casinos out of state			4.3	(3.6, 5.3)	
Only casinos in MA	NA		5.1	(4.3, 6.1)	
Casinos both in & out of state	NA		5.6	(4.7, 6.7)	
Sports betting	12.6	(11.6, 13.7)	9.9*	(8.6, 11.2)	21.4
Private wagering	11.1	(10.1, 12.2)	6.7*	(5.7, 7.8)	39.6
Horse racing	3.4	(2.9, 4.0)	2.6	(2.0, 3.3)	23.5
Bingo	3.4	(2.9, 4.0)	2.1*	(1.5, 2.8)	38.2
Online	1.6	(1.2, 2.1)	2.7	(2.0, 3.5)	-68.8

*Indicates significant change from Baseline

¹ Percent change calculated by subtracting FGPS from BGPS and dividing result by BGPS

² This group includes 30 individuals with a missing answer for one of the questions about gambling at casinos in MA or out of state

³ Percentages and 95% CI are calculated using the weighted N

Hypothesis 2 & Hypothesis 3

- Participation in casino gambling will be **higher** in 2021 compared with 2013, reflecting the impact of the introduction of casinos in Massachusetts.
- This hypothesis was **not supported** because past-year participation in casino gambling declined significantly between the two surveys.
- Participation in lottery games will be **lower** in 2021 than in 2013, reflecting shifts in gambling participation and expenditures following the introduction of casinos in Massachusetts.
- Because participation in traditional, large-jackpot lottery games and instant scratch tickets was lower in 2021 compared with 2013, this hypothesis was **partly supported**

Impact of COVID-19

- To evaluate impact:
 - Considered timing of restrictions in MA and 'past 12 month' recall window
 - Correlation of changes in GenPop surveys with changes in Online Panel surveys
 - Answers to specific questions about impact of COVID-19 on gambling behavior
- Results confirm that COVID-19 and the associated restrictions almost certainly had some impact on prevalence rates of gambling participation in the FGPS
- COVID-19 likely affected the behavior of recreational gamblers to a greater extent than those experiencing gambling problems because it is more difficult for heavy gamblers to change their behavior in response to changing circumstances

PROBLEM GAMBLING

Problem Gambling

Category	Classification criteria
Non-Gambler	Has not gambled in the past 12 months
Recreational Gambler	Has gambled in past 12 months Total score 0
At-Risk Gambler	Total score 1+ Does not meet criteria for more severe categories OR Gambling frequency and expenditure \geq PG median
Problem Gambler	Has gambled at least once a month in past 12 months Impaired Control score 1+ Problems score 1+ Total score of 2-4 OR Total score 3+ Gambling frequency and expenditure \geq PG median
Pathological Gambler (equivalent to severe problem gambler)	Has gambled at least once a month in past 12 months Impaired Control score 1+ Problems score 1+ AND Total score of 5+

Problem Gambling

	Sample Size		
	Unweighted N ¹	Percent ²	95% CI ²
Total	6,089	100	
Non-gambler	2,575	38.7	(36.7, 40.7)
Recreational gambler	2,953	51.3	(49.3, 53.4)
At-risk gambler	475	8.5	(7.4, 9.8)
Problem or pathological gambler	86	1.4	(1.0, 2.1)

¹ Unweighted N refers to the total number of respondents who were in this category for this question

² Percentages and 95% CI are calculated using the weighted N

Hypothesis 4

- Problem gambling prevalence will be **higher** in 2021 compared with 2013, reflecting the increase in gambling availability in Massachusetts.
- This hypothesis was **not** supported, as the prevalence of problem gambling did not change significantly between the two surveys.

	BGPS		FGPS	
	Percent ¹	95% CI ¹	Percent ¹	95% CI ¹
Total	100		100	
Non-gambler	26.6	(25.3, 28.0)	38.7*	(36.7, 40.7)
Recreational gambler	62.9	(61.4, 64.4)	51.3*	(49.3, 53.4)
At-risk gambler	8.4	(7.5, 9.4)	8.5	(7.4, 9.8)
Problem or pathological gambler	2.0	(1.6, 2.6)	1.4	(1.0, 2.1)

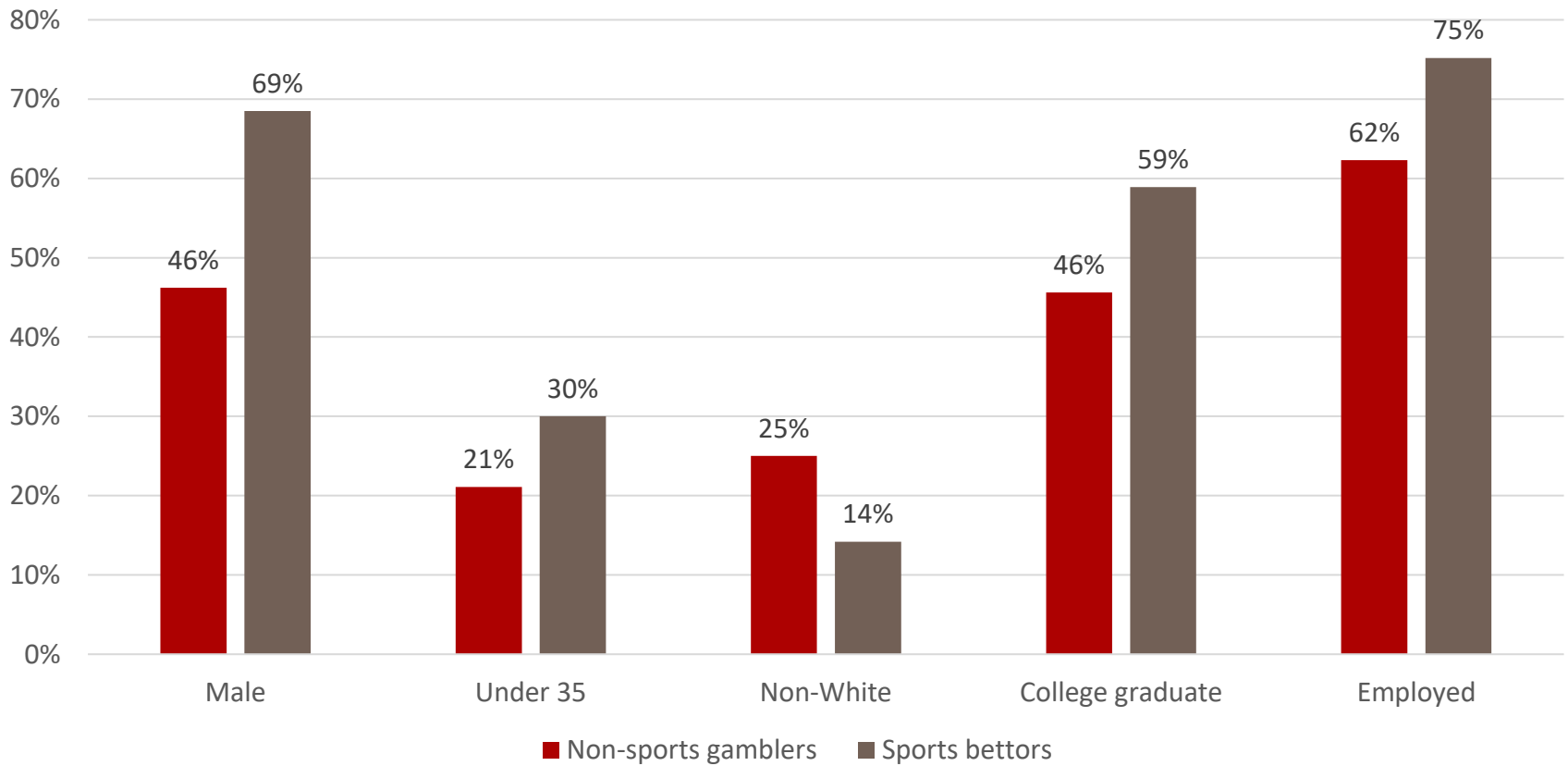
SPORTS BETTING

Hypothesis 5

- Sports Wagering Act required the MGC to conduct research to answer four specific questions:
 - **Are sports bettors different than those participating in other forms of gambling?**
 - Is problem sports betting comorbid with problem gambling?
 - Impact of sports betting on individuals under age 25
 - Impacts of sports betting on college athletics & professional sports
- Survey data analyzed to investigate whether individuals participating in sports betting in Massachusetts **differ** from individuals participating in other types of gambling.
- Hypothesis that sports bettors in Massachusetts **differ** from individuals participating in other types of gambling is **supported**
 - Significant differences in the demographic characteristics of sports bettors compared to those who gambled but not on sports in the past year
 - Much higher rates of participation in every type of gambling included in the survey.

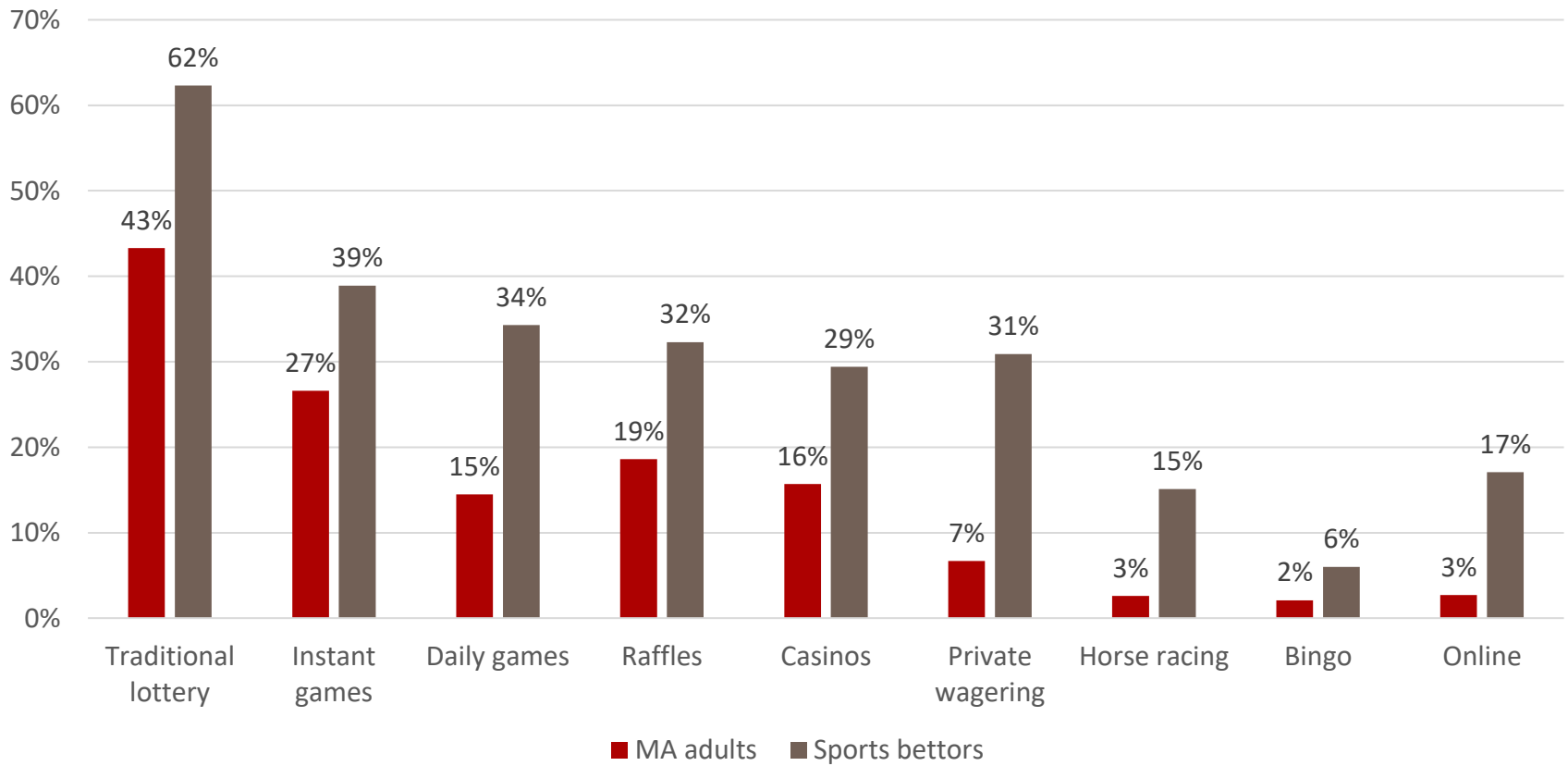
Sports Bettors in MA

Demographics



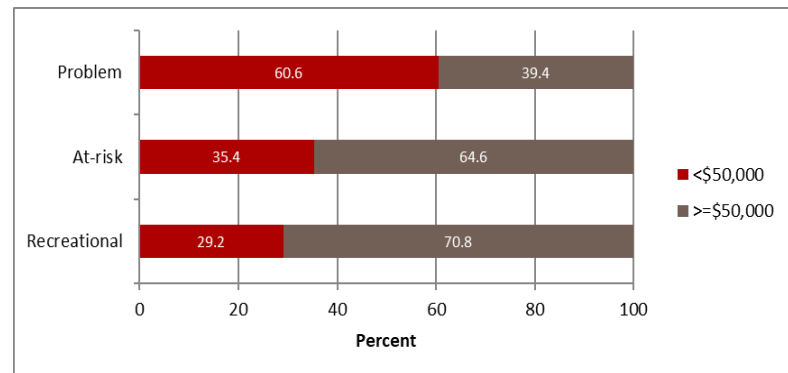
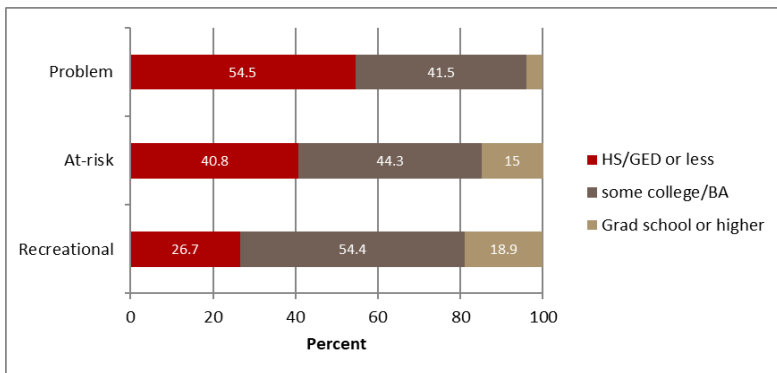
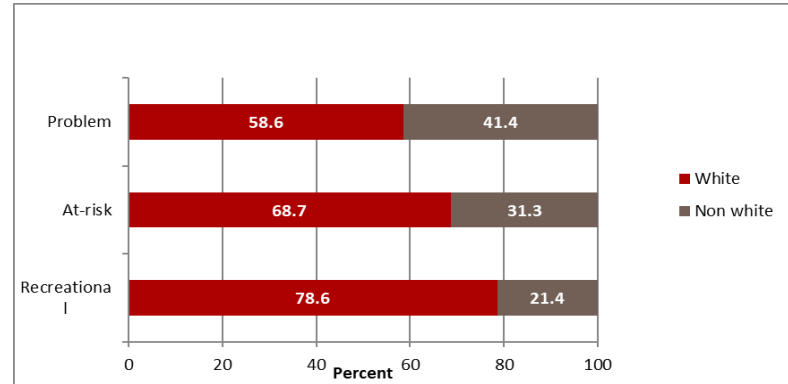
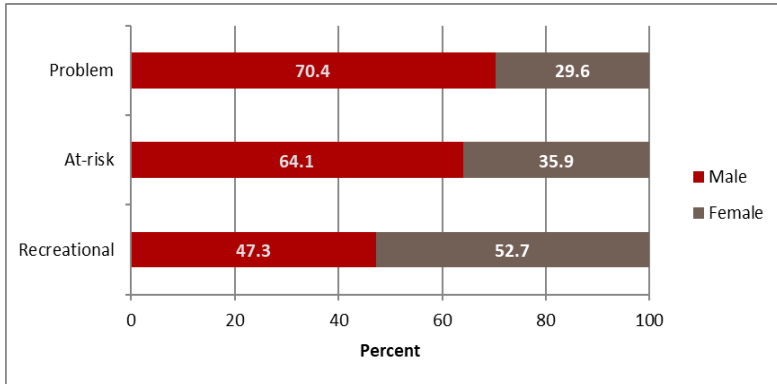
Sports Bettors in MA

Past-year Participation



COMPARING GAMBLING GROUPS

Comparing Gambling Groups



Comparing Gambling Groups

	Recreational gamblers		At-risk gamblers		Problem gamblers		p-value ³
	% ²	95% CI ²	% ²	95% CI ²	% ²	95% CI ²	
Unweighted N ¹	2,953		475		86		
All lottery	78.3	(75.8, 80.5)	86.1	(80.9, 90.0)	98.6	(94.2, 99.7)	<0.0001
Traditional	71.1	(68.4, 73.6)	81.2	(75.4, 85.9)	86.0	(66.2, 95.0)	0.0010
Instant games	40.9	(38.1, 43.7)	63.4	(56.6, 69.8)	73.3	(52.7, 87.1)	<0.0001
Daily games	20.6	(18.3, 23.1)	44.0	(37.0, 51.3)	41.7	(25.9, 59.4)	<0.0001
Raffles	31.0	(28.5, 33.7)	32.6	(26.5, 39.4)	34.0	(19.9, 51.7)	0.8589
Table games	6.5	(5.1, 8.2)	18.0	(13.4, 23.7)	16.3	(8.9, 27.9)	<0.0001
EGMs	9.8	(8.3, 11.5)	23.9	(18.7, 29.9)	32.4	(17.2, 52.7)	<0.0001
Sports betting	14.2	(12.2, 16.5)	32.3	(25.7, 39.7)	NSF		<0.0001
Private wagering	10.1	(8.3, 12.1)	18.6	(14.1, 24.2)	11.9	(6.7, 20.2)	0.0068
Horse racing	3.1	(2.2, 4.3)	9.9	(6.1, 15.8)	NSF		0.0054
Bingo	2.7	(1.8, 3.9)	6.9	(4.0, 11.4)	NSF		0.0129
Online	2.7	(1.9, 3.9)	14.4	(9.6, 21.0)	NSF		0.0001

¹ Unweighted N refers to the total number of respondents who were in this category for this question

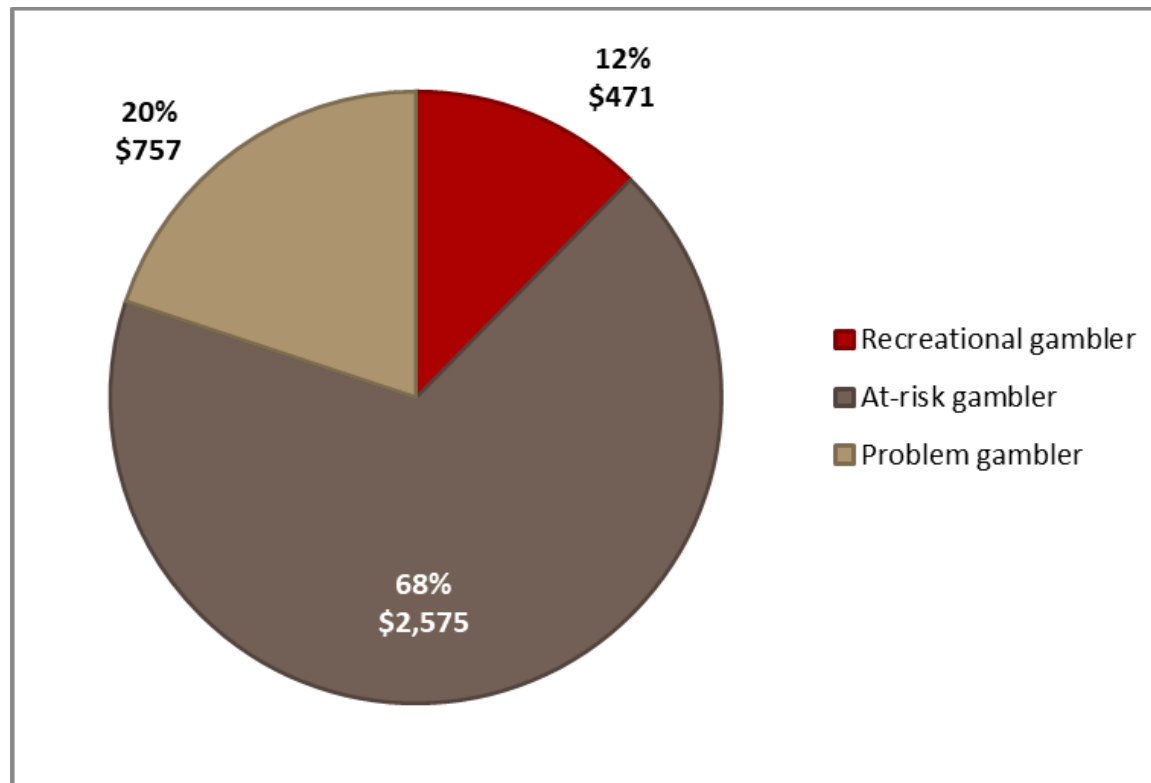
² Percentages and 95% CI are calculated using the weighted N

³ P-value from chi-square test for differences across groups

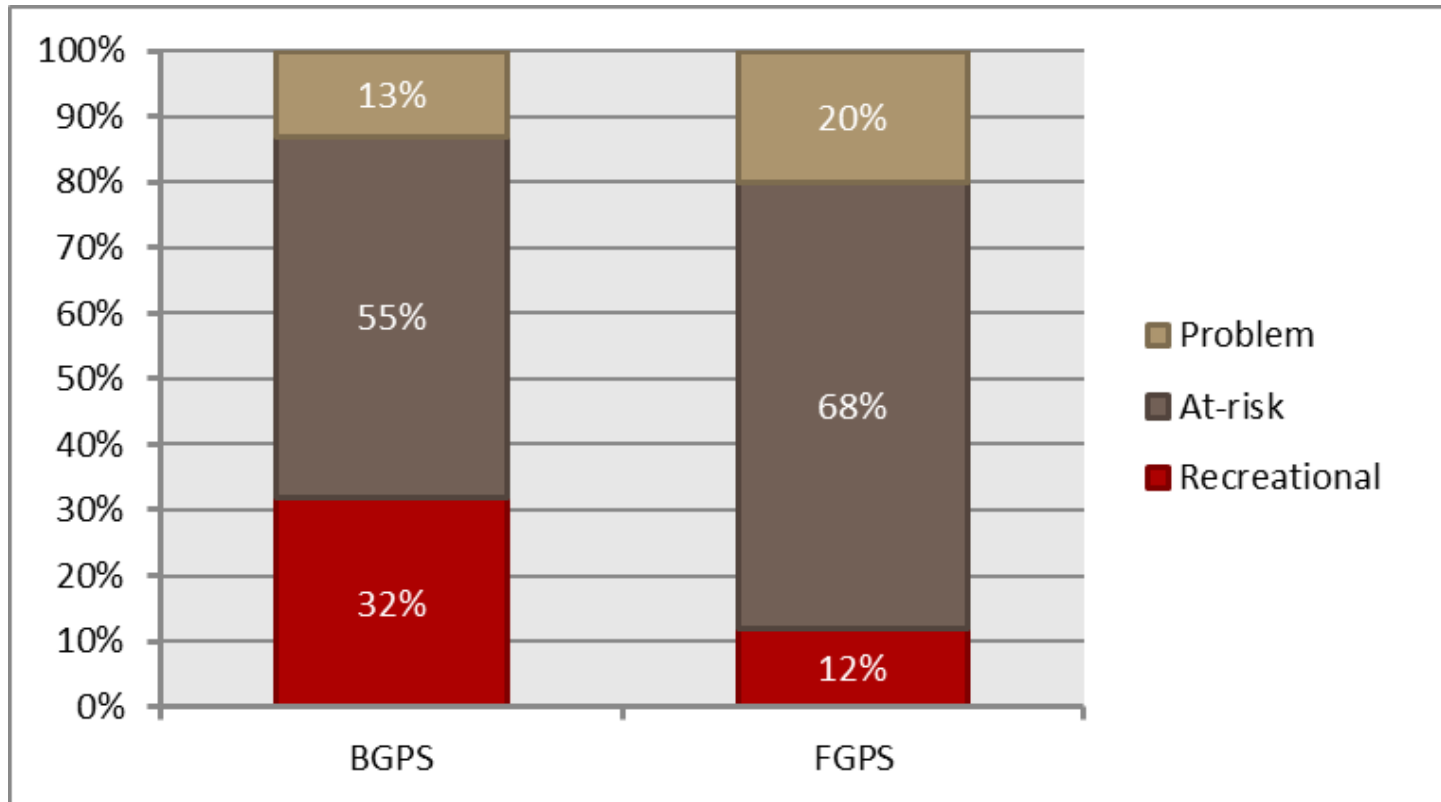
Note: Not Sufficient Information (NSF) indicates estimates are unreliable, relative standard error > 30%

Comparing Gambling Groups

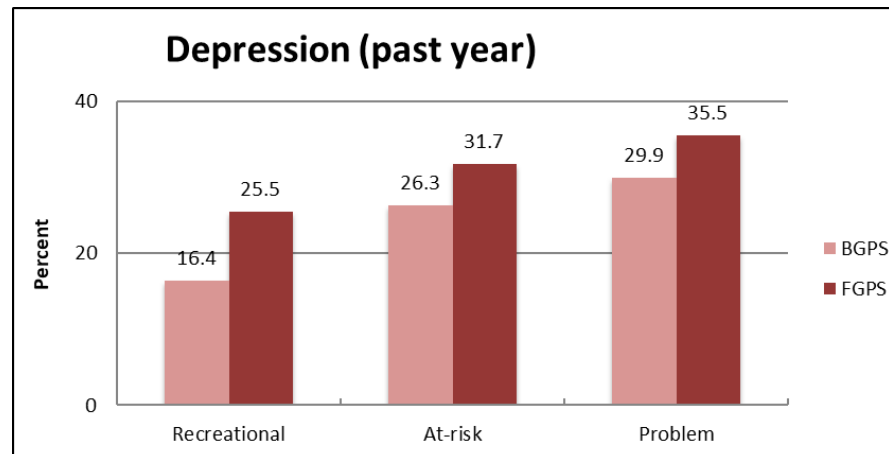
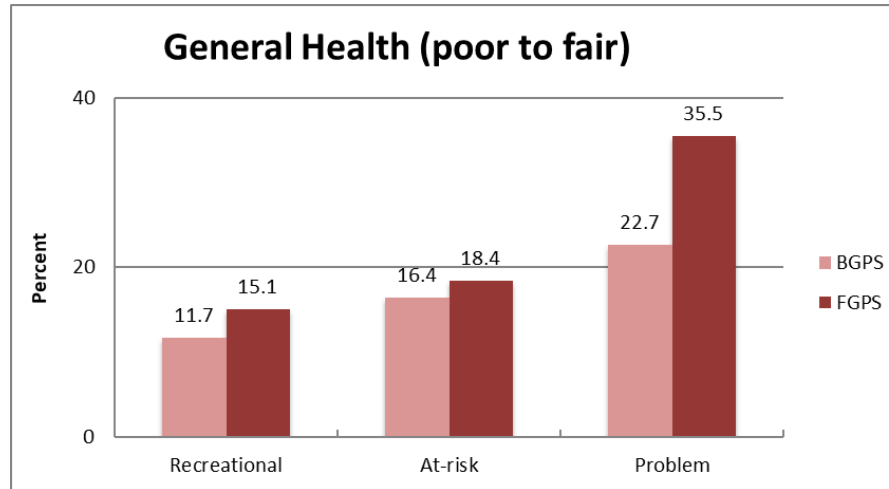
Total expenditures (in millions) on all gambling



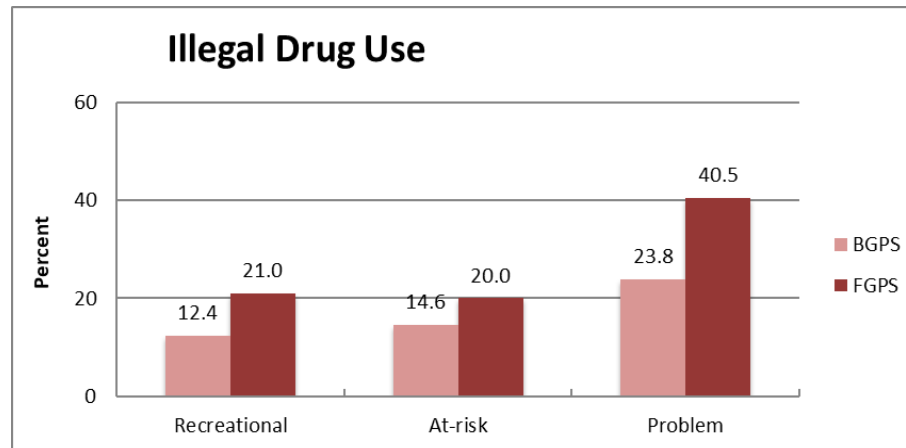
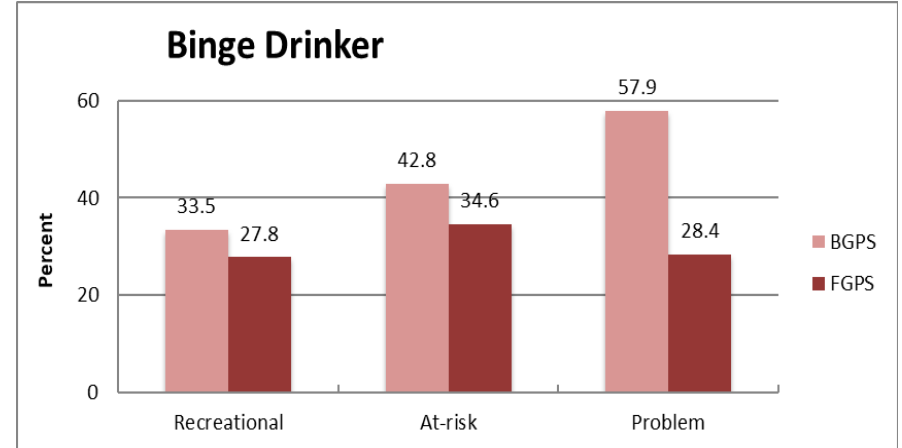
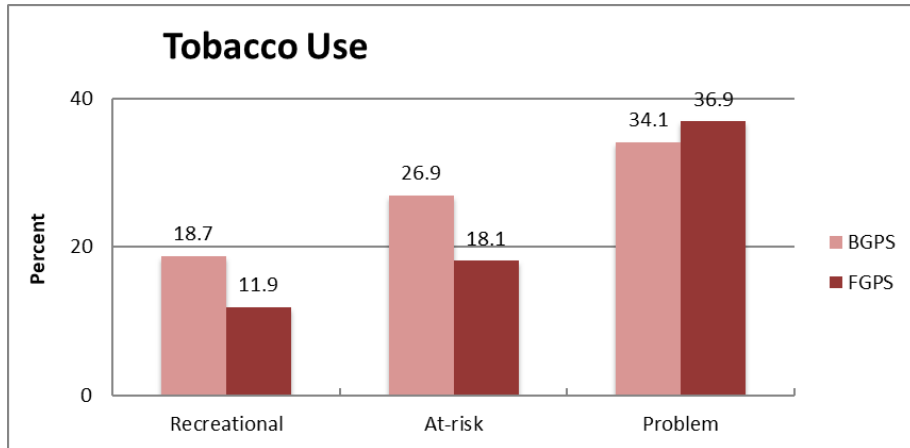
Comparing Gambling Groups



Comparing Gambling Groups



Comparing Gambling Groups



Awareness of Services

- Everyone was asked if they had seen or heard any media campaigns to prevent gambling problems in MA in past year
 - 20.9% were aware of media campaigns
 - Compared to 41.0% in 2013
- Everyone was asked if they were aware of any programs offered in school, workplace or community
 - 9.2% were aware of other programs
 - Compared to 13.1% in 2013

PG Services in MA

- DPH Office of Problem Gambling Services
 - Funding
 - \$4.6 million in FY21
 - \$8.0 million in FY22
 - Public awareness campaigns
 - Community initiatives
 - MA Technical Assistance Center for PG
 - MA Center of Excellence on PG Prevention
 - Helpline
 - 1,378 calls in FY22
 - 56,455 unique website visitors in FY22

Changes Since 2013

- Increase in view that gambling is too widely available
- Gambling participation declined for most types
 - Partly due to lingering effects of COVID-19 pandemic
 - Partly due to longer trend of declines in North American gambling and problem gambling prevalence
- Reduction in lottery spending, increases in spending on casinos, sports betting, online gambling
- Significant differences between sports bettors and non-sports gamblers
- Casino gamblers no longer distinct by gender, age, ethnicity
- No change in problem gambling prevalence
 - More likely to gamble for excitement, entertainment
 - At-risk gamblers account for larger proportion of gambling expenditures
 - No significant differences in rates of depression, anxiety, other MH problems
- Reduction in awareness of problem gambling prevention efforts

Strengths and Limitations

- Strenuous efforts to obtain high coverage and representative sample
- Response rate lower than desired
- Restricted to adults living in households
- English and Spanish only
- Small size of some subgroups means unreliable estimates of prevalence
- Cross-sectional design limits causal attributions

Future Directions

- Multivariate analyses
 - Is problem sports betting comorbid with problem gambling?
 - Predictors of at-risk, problem gambling (overall)
 - Predictors of problem gambling in population groups
 - Importance of friends and family
- Combined GenPop and Online Panel data
 - Riskiest forms of gambling
 - Specific gambling harms
 - Predictors of treatment seeking
- Changes in Online Panels (2022 – 2024)
- Integrated report on social and economic impacts of casinos to date

Thank you!

For more information:

www.umass.edu/seigma/reports

<https://massgaming.com/about/research-agenda/>