

Predictors of Gambling & Problem Gambling in Massachusetts

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 - Robert J. Williams
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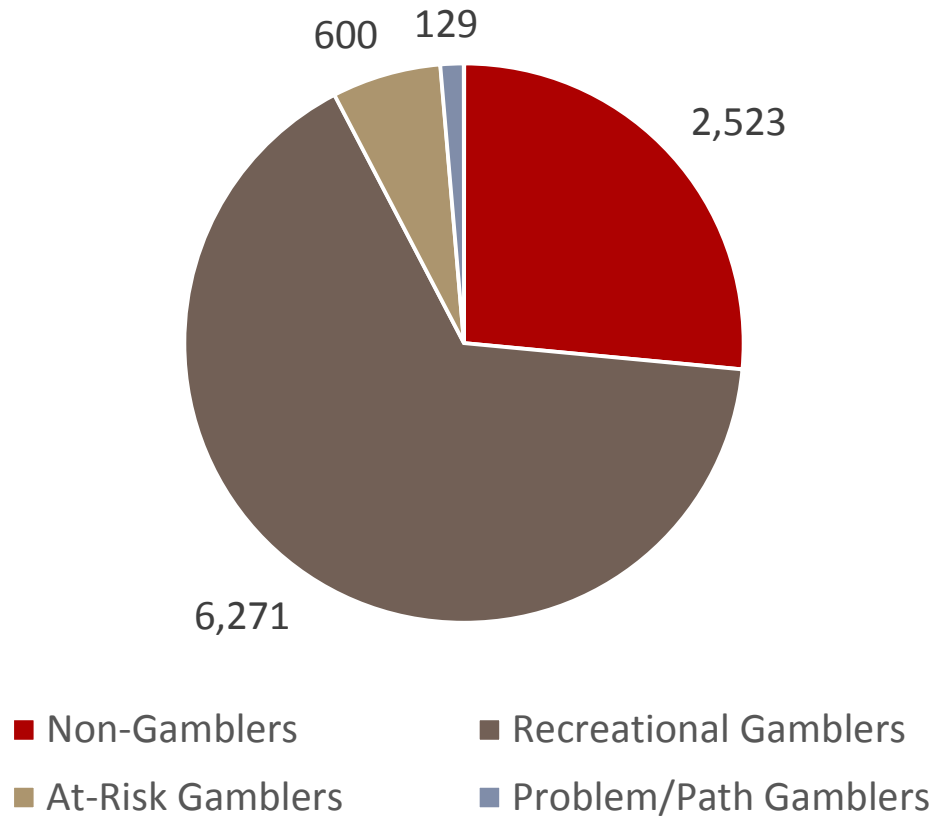
Overview

- Baseline General Population Survey (BGPS) completed in 2013/2014
 - Descriptive report published in 2015
 - Updated report with new weights published in 2017
- Purpose of present analyses is to identify predictors of gambling & problem gambling in MA
- Goal is to inform development of PG prevention, intervention, treatment initiatives in MA

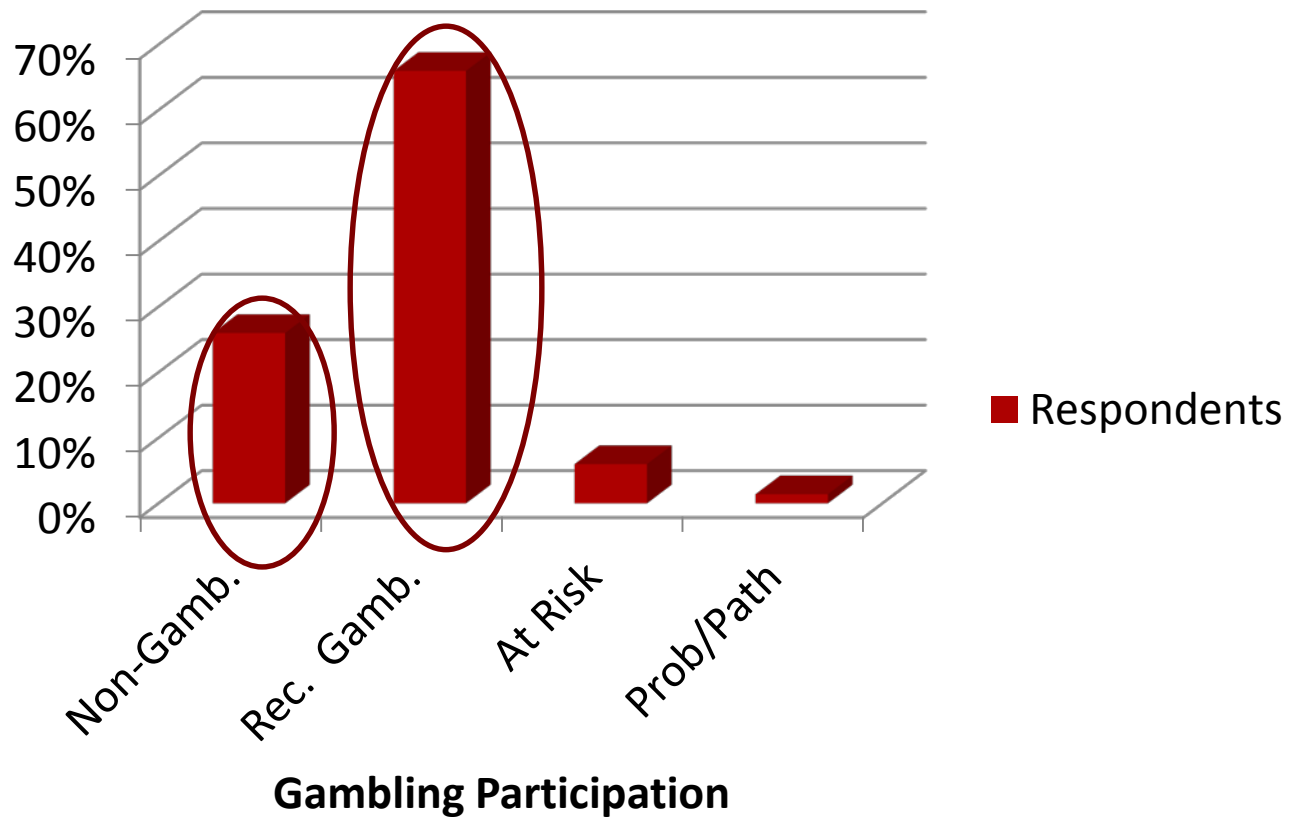
Baseline General Population Survey

- Sample drawn from a list of addresses
- Respondents could complete online, on paper, or by telephone
 - 95% of completed interviews self-administered
- Data collected from Sept. 2013 – May 2014
- Response rate=36.6%
- N=9,578 respondents
 - Respondents classified by Gambling Participation and PPGM

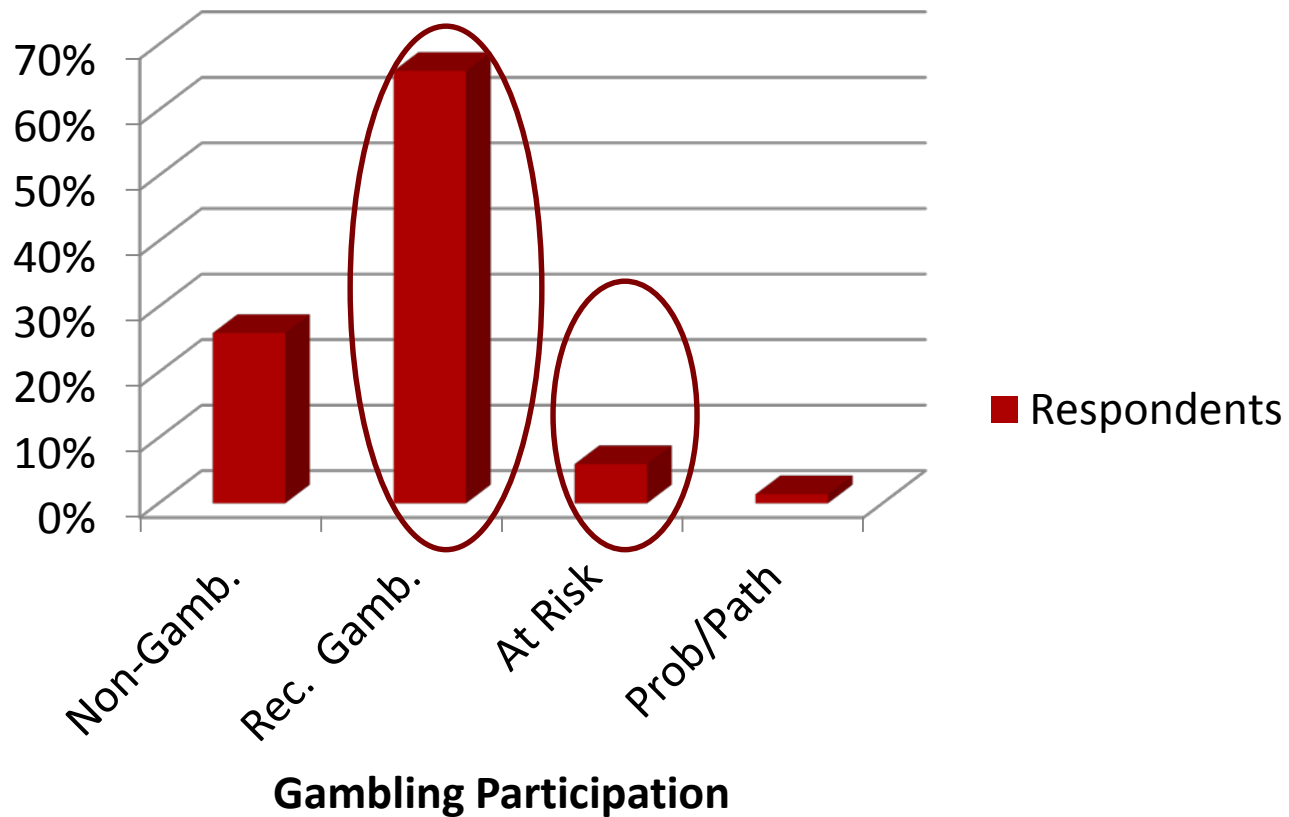
Gambling Groups in MA



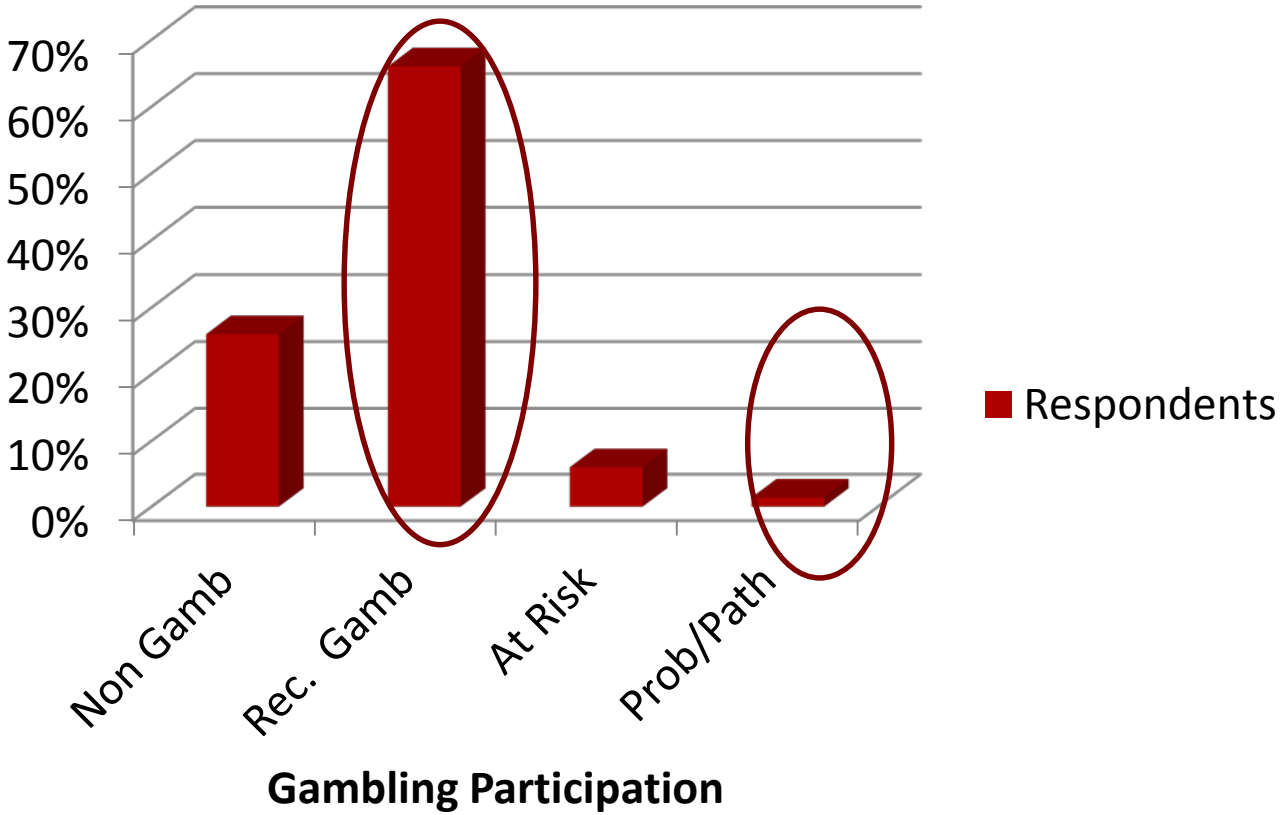
1st Analysis



2nd Analysis



3rd Analysis



Characteristics Included in Multivariate Models

- Demographic Factors

- Gender, Age , Race/ethnicity, Country of birth, Marital status, Education, Employment, HH income, Military service, MA region of residence

- Health-related Factors

- General health, Stress, Mental health, Tobacco, Alcohol, Binge Drinking, Illicit drug use, Problems with drugs/alcohol, Behavioral addictions, Childhood happiness, Extreme sports

- Gambling-related Factors

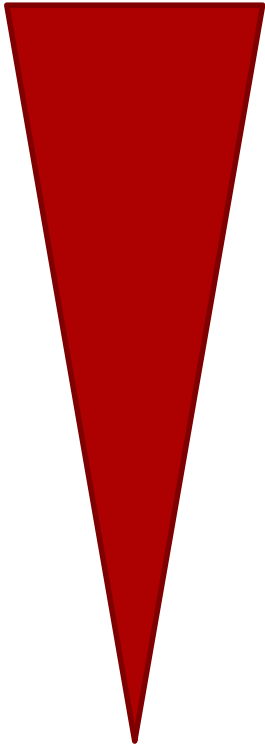
- Involvement of friends/family in gambling
- Past-year participation in 10 gambling formats

Characteristics Distinguishing Non-Gamblers from Recreational Gamblers

		Odds Ratio & 95% C.I.	Wald Statistics	p
Portion of Friends and Family Regular Gamblers		.64 (0.59, 0.71)	89.2	p < .0001
Alcohol use in Past 30 Days	No	1.72 (1.53, 1.93)	85.5	p < .0001
	Yes	Reference group		
Education	High School or Less	Reference group	Reference group	
	Bachelor's or some College	1.07 (0.93, 1.23)	0.9	p = .0029
	Beyond Bachelor's degree	1.72 (1.46, 2.03)	41.3	p < .0001
Employment	Employed	Reference group	Reference group	
	Unemployed	1.00 (0.75, 1.33)	0.0	p = .8811
	Retired	1.17 (0.98, 1.38)	3.1	p < .0001
	Other ¹	1.68 (1.43, 1.97)	41.1	p < .0001
Age	18-34	1.60 (1.37, 1.86)	38.2	p < .0001
	35-64	Reference group	Reference group	
	65+	1.34 (1.14, 1.57)	12.4	p < .0001
Born in United States	No	1.57 (1.33, 1.85)	28.3	p < .0001
	Yes	Reference group		
Binge Drinking	Yes	Reference group	25.3	p < .0001
	No	1.43 (1.24, 1.65)		
Household Income		.97 (0.96, 0.98)	23.4	p < .0001
Current Tobacco use	Yes	Reference group	16.9	p < .0001
	No	1.42 (1.20, 1.69)		
Unhappy Childhood		1.12 (1.06, 1.18)	16.8	p < .0001
Military Service	Yes	Reference group	9.0	p < .0001
	No	1.32 (1.10, 1.58)		
Problems with Drugs or Alcohol	Yes	Reference group	8.5	p < .0001
	No	2.14 (1.28, 3.57)		
Race/Ethnicity	Hispanic	1.19 (0.94, 1.51)	2.1	p = .0048
	Black	1.44 (1.11, 1.86)	7.7	p < .0001
	White	Reference group	Reference group	
	Asian	1.45 (1.10, 1.91)	8.0	p = .0017
	Other	1.54 (0.95, 2.49)	3.2	p = .0001

Characteristics Distinguishing Non-Gamblers from Recreational Gamblers

Largest Difference

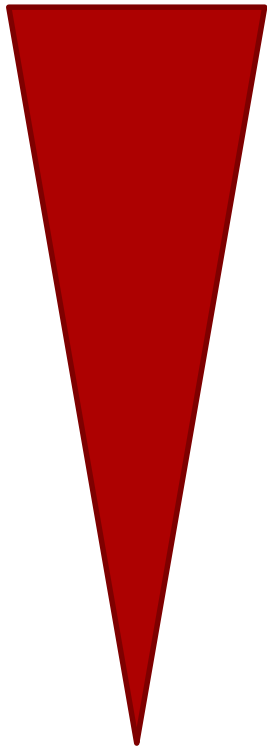


Smallest Difference

Characteristic
Have a lower portion of friends and family that are regular gamblers
Not use alcohol
Higher educational attainment
Be a student, homemaker, disabled, or retired
Be either 18-34 or 65+
Be born outside the United States
Not binge drink
Have lower household income
Not use tobacco
Have less happy childhood
Not have served in the military
Be non-White
Not have problems with drugs or alcohol

Characteristics Distinguishing At-Risk Gamblers from Recreational Gamblers

Largest Difference

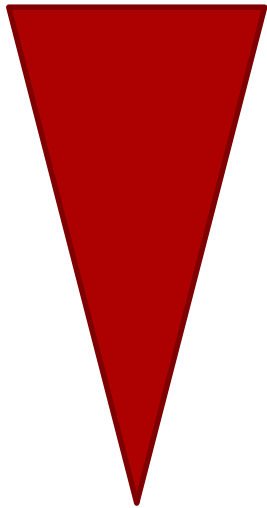


Smallest Difference

Characteristic
Be a casino gambler
Have a greater portion of friends and family that are regular gamblers
Play instant lottery games
Play daily lottery games
Be male
Be an online gambler
Be born outside the United States
Participate in private betting
Have lower educational attainment
Play bingo
Not purchase raffle tickets
Have lower HH income
Have mental health problems
Have no alcohol use in past 30 days

Distinguishing At-Risk from Recreational Gamblers Controlled for Number of Gambling Formats

Largest Difference

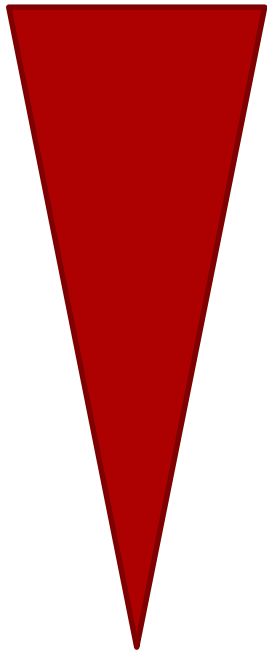


Smallest Difference

Characteristic
Number of gambling formats engaged in
Have a greater portion of friends and family that are regular gamblers
Not purchase raffle tickets
Be born outside the United States
Be a casino gambler
Have lower educational attainment
Be male
Have lower HH income
Have mental health problems
Have no alcohol use in past 30 days

Characteristics Distinguishing Problem/Pathological Gamblers from Recreational Gamblers

Largest Difference

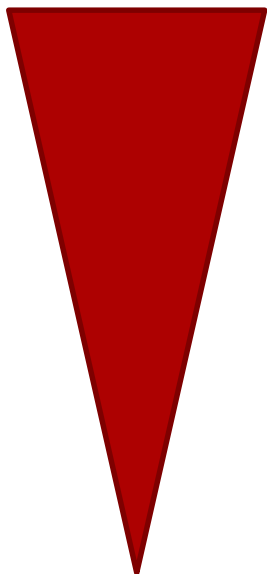


Smallest Difference

Characteristic
Play daily lottery games
Have a greater portion of friends and family that are regular gamblers
Be Black
Be a casino gambler
Be male
Be an online gambler
Play instant lottery games
Have behavioral addictions (overeating, sex, pornography, shopping, exercise)
Have lower educational attainment
Be born outside the United States
Have less happy childhood

Distinguishing Problem/Path from Recreational Gamblers Controlled for Number of Gambling Formats

Largest Difference



Smallest Difference

Characteristic
Number of gambling formats engaged in
Be Black
Have a greater portion of friends and family that are regular gamblers
Not purchase raffle tickets
Be born outside the United States
Have lower educational attainment
Have behavioral addictions (overeating, sex, pornography, shopping, exercise)
Have less happy childhood
Have poorer health status
Participate in private betting

Summary of Multivariate Predictors

	Non-Gambler	Higher Gambling Involvement	At-Risk Gambler	Problem and Pathological Gambler
Gender		Male	Male	Male
Age	18-34 or 65+			
Race/Ethnicity	Non-White			Black
Born in United States	No		No	No
Marital Status				
Educational Attainment	Higher	Lower	Lower	Lower
Employment	Student, Homemaker, Disabled, or Retired			
Household Income	Lower		Lower	
Military Service	No			
Region of Massachusetts				

Summary of Multivariate Predictors

	Non-Gambler	Higher Gambling Involvement	At-Risk Gambler	Problem and Pathological Gambler
Health Status		Poorer		
Extreme Sports				
Stress Level				
Tobacco Use	No	Yes		
Alcohol Use	No		No	
Binge Drinking	No	Yes		
Illicit Drug Use				
Drug or Alcohol Problems	No			
Behavioral Addictions				Yes
Mental Health Problems			Yes	
Childhood Unhappiness	Higher			Higher

Summary of Multivariate Predictors

	Non-Gambler	Higher Gambling Involvement	At-Risk Gambler	Problem and Pathological Gambler
Friend & Family Gambling	Fewer	More	More	More
Traditional Lottery	--	--		
Daily Lottery Games	--	--	Yes	Yes
Instant Lottery Games	--	--	Yes	Yes
Raffles	--	--	No	
Casino Gambling	--	--	Yes	Yes
Bingo	--	--	Yes	
Horse Racing	--	--		
Sports Betting	--	--		
Private Gambling	--	--	Yes	
Online Gambling	--	--	Yes	Yes

Shaded cells indicate the strongest individual predictor in each analysis.

Implications for Prevention

- Importance of targeting excessive gambling levels rather than gambling in general
- The social network of gamblers is a particularly important target for prevention
- Certain demographic groups merit special attention
- Certain forms of gambling also merit attention as they pose an elevated risk to MA residents

Implications for Treatment

- Intervention/treatment could focus on individuals already experiencing substance use & other addiction problems
- Interventions for At-Risk Gamblers could focus on individuals experiencing mental health problems
- Screening for problem gambling is needed in alcohol/drug treatment settings

Thank you!

For more information:

www.umass.edu/seigma/reports