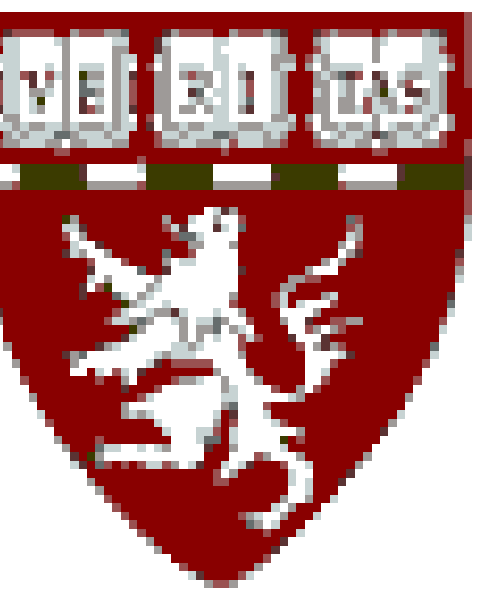




# Gambling Involvement in Massachusetts: A Benchmark Study for Monitoring Exposure to New Gambling Opportunities



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In November, 2011, Massachusetts legalized casino gambling. The first casinos will likely be operational by 2015. Within that context, it is important to understand the level and patterns of gambling involvement among MA residents prior to gambling expansion. Mapping pre-expansion gambling patterns and involvement can provide insight into who might be particularly at risk for problems or unlikely to be affected by additional exposure.

## INTRODUCTION

### Background:

- Across the US, opportunities to gamble have increased substantially, with more states legalizing gambling each year. In 2011, Massachusetts (MA) joined that list, legalizing casino gambling in the state.
- Even without casino gambling in MA, gambling is still widely available to MA residents, through the state lottery, off-track betting, and casino and poker opportunities available in neighboring states.
- Mapping MA residents' pre-expansion gambling patterns and involvement can provide insight into who might be particularly at risk for problems or unlikely to be affected by additional exposure.

### Present Study:

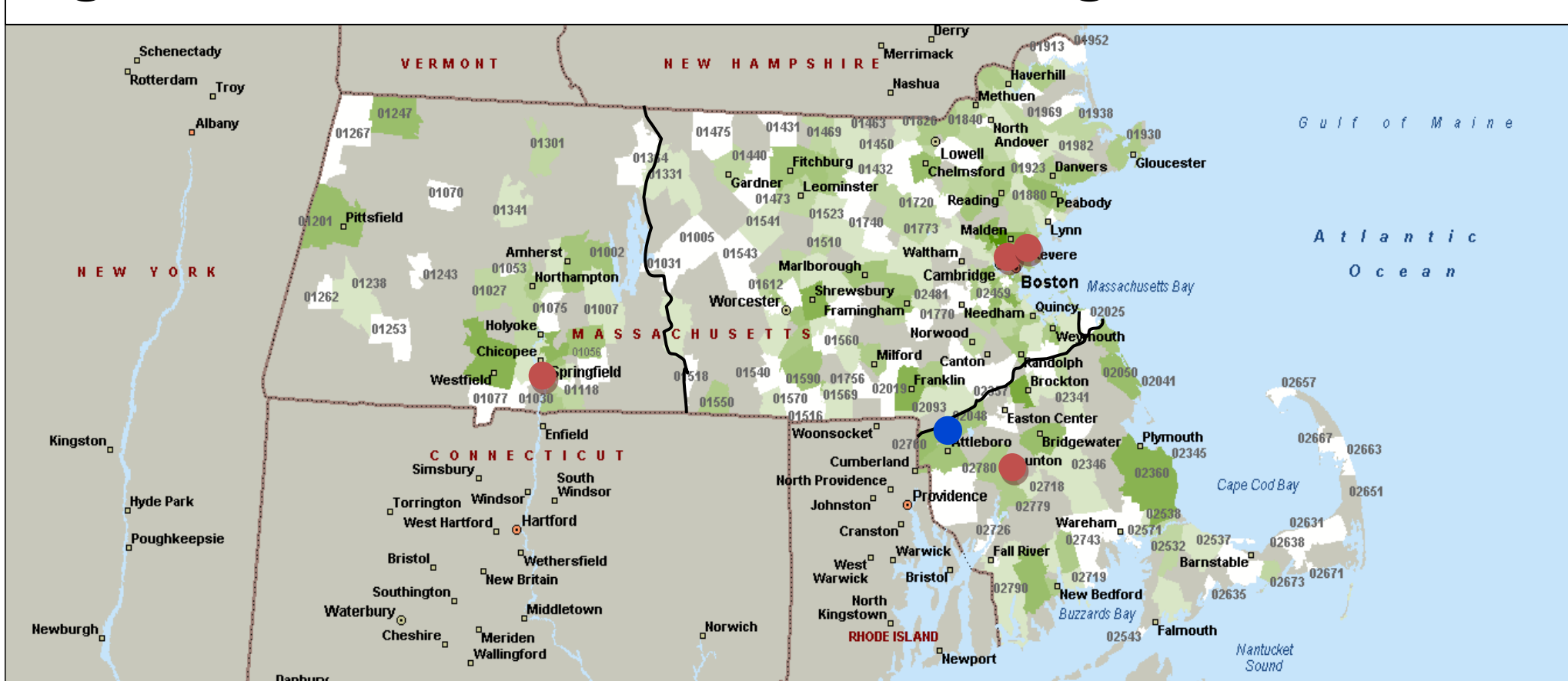
- We examined whether there are distinguishable patterns of gambling involvement and intensity among MA residents and whether those patterns are associated with gambling problems.

## METHODS

### Participants:

- 511 MA residents who are members of a statewide online panel recruited via random household sampling.

Figure 1. Distribution of Panelists throughout MA



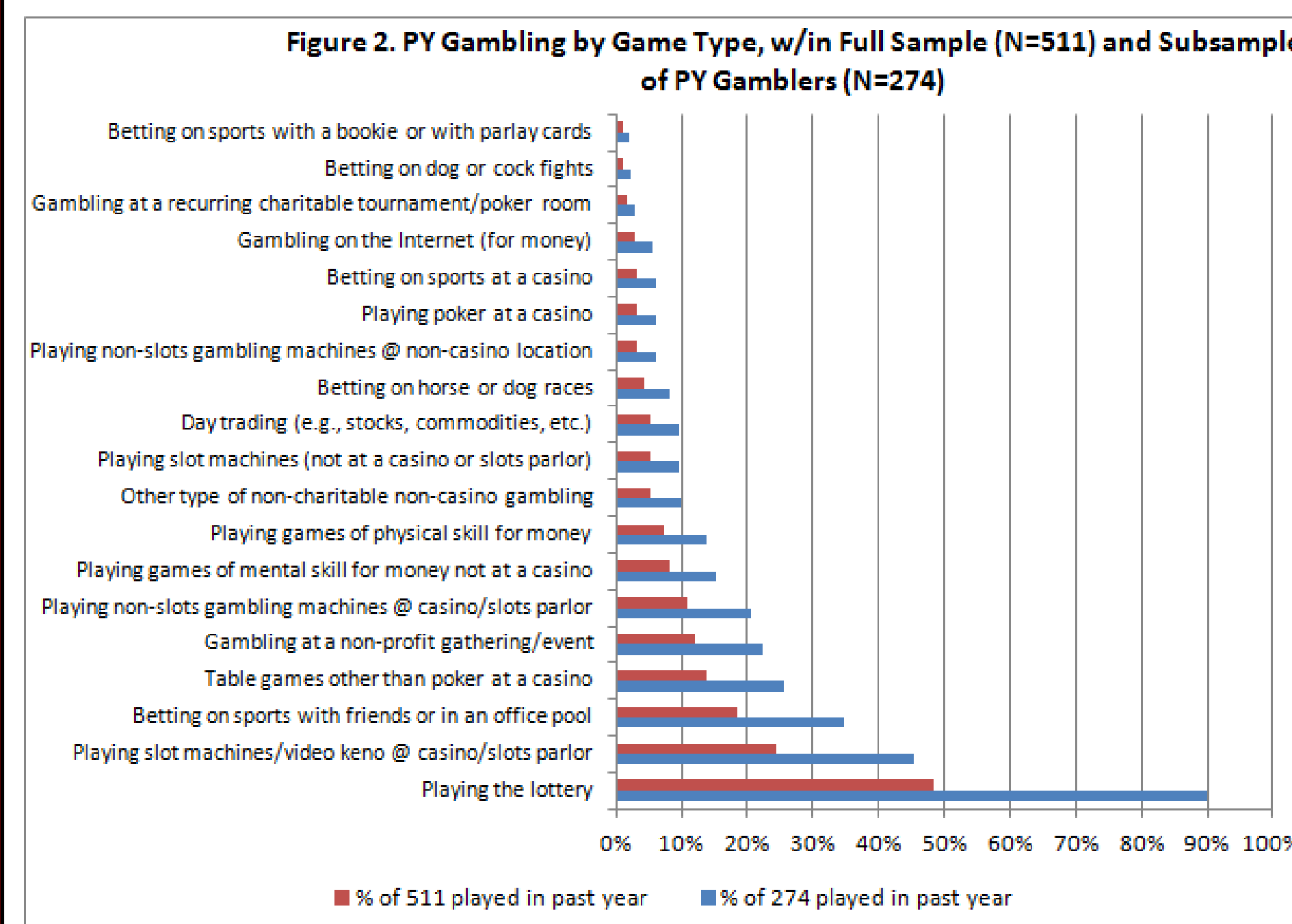
Note. Darker green = more panelists; white = fewer panelists; gray = no panelists; Thick black lines separate casino regions; Red dots indicate currently known potential resort casino locations. The blue dot indicates the location of the slots parlor license.

### Materials:

- Participants completed surveys about:
  - Past year gambling behavior, including games played, frequency of play, and amount wagered and lost
  - Gambling problems (AUDADIS: Grant et al., 2003)
  - Attitudes about gambling

## RESULTS

- As Figure 1 shows, panelists were distributed throughout MA in comparable proportions to the MA population distribution. 71.2% resided in the greater Boston region, 16.8% in Southeastern MA, and 11.9% in Western MA.



- Figure 2 displays past year (PY) rates of play for 19 different game types.
- Lottery was the most commonly played game, followed by slot machines, informal sports betting, and casino table games.
- However, as Table 1 shows, some of the less frequently-played games had much higher involvement levels among those who played.

## RESULTS

Table 1. Weekly Play, Time Spent, Amount Wagered, and Net Loss among Respondents Who Play

Item	PY N	% of N Playing Weekly	Avg. Time / Day <sup>a</sup>	PY Amt. Wagered <sup>b</sup>	PY Net Loss <sup>c</sup>
Playing the lottery	247	27.9%	2.1 (0.5)	2.6 (1.0)	7.9 (1.4)
Playing slot machines/video keno @ casino/slots parlor	125	0.8%	3.3 (1.0)	3.1 (1.2)	7.7 (1.6)
Betting on sports with friends or in an office pool	95	13.7%	2.2 (0.6)	2.2 (0.5)	8.2 (1.1)
Gambling at a non-profit gathering/event	71	2.8%	2.6 (0.9)	2.2 (0.5)	8.2 (1.4)
Table games other than poker at a casino	70	4.3%	2.6 (0.8)	2.9 (1.3)	8.2 (1.6)
Playing non-slots gambling machines @ casino/slots parlor	56	1.8%	2.5 (0.7)	2.6 (1.0)	8.2 (1.0)
Playing poker or other games of mental skill for money not at a casino	42	9.5%	3.3 (1.0)	2.6 (1.1)	8.9 (1.2)
Playing games of physical skill for money	38	13.2%	2.9 (1.0)	2.3 (1.0)	9.1 (0.9)
Other type of non-charitable non-casino gambling	27	7.4%	2.4 (0.8)	2.1 (0.3)	8.2 (2.0)
Playing slot machines (not at a casino or slots parlor)	27	14.8%	2.8 (1.0)	2.4 (1.4)	8.4 (1.8)
Day trading (e.g., stocks, commodities, etc.)	27	25.9%	2.5 (1.0)	5.8 (2.3)	8.5 (2.5)
Betting on horse or dog races	22	4.5%	2.6 (1.2)	2.2 (0.4)	8.1 (1.8)
Playing non-slots gambling machines @ non-casino location	17	5.9%	2.5 (0.5)	2.7 (1.1)	8.4 (1.6)
Playing poker at a casino	17	5.9%	2.9 (1.0)	3.2 (1.2)	8.2 (1.5)
Betting on sports at a casino	17	11.8%	2.8 (1.3)	2.3 (0.8)	8.6 (1.1)
Gambling on the Internet (for money)	15	26.7%	3.1 (1.1)	3.3 (2.3)	7.8 (2.2)
Gambling at a recurring charitable tournament/poker room	8	0.0%	2.6 (0.9)	2.3 (0.5)	7.0 (3.1)
Betting on dog or cock fights	6	0.0%	2.5 (0.7)	2.0 (0.0)	10.0 (0.0)
Betting on sports with a bookie or with parlay cards	6	16.7%	3.3 (2.3)	2.7 (1.2)	8.0 (1.7)

<sup>a</sup> For average time spent gambling per gambling day, 2=<1 hour, 3=1-2 hours, 4=3-4 hours, 5=5-6 hours, 7=7+ hours  
<sup>b</sup> For PY amount wagered, 2=\$1-\$50, 3=\$51-\$100, 4=\$101-\$500, 5=\$501-\$1K, 6=\$1001-\$5K, 7=\$5001-\$10K, 8=\$10001-\$20K, 9=\$20K+  
<sup>c</sup> For PY net loss, 1=lost \$20001+, 2=lost \$10001-\$20K, 3=lost \$5001-\$10K, 4=lost \$1001-\$5K, 5=lost \$501-\$1K, 6=lost \$101-\$500, 7=lost \$51-\$100, 8=lost \$1-\$50, 9=broke even, 10=won \$1 or more

Table 2. Factor Loadings for Frequency of Play of 19 Different Game Types

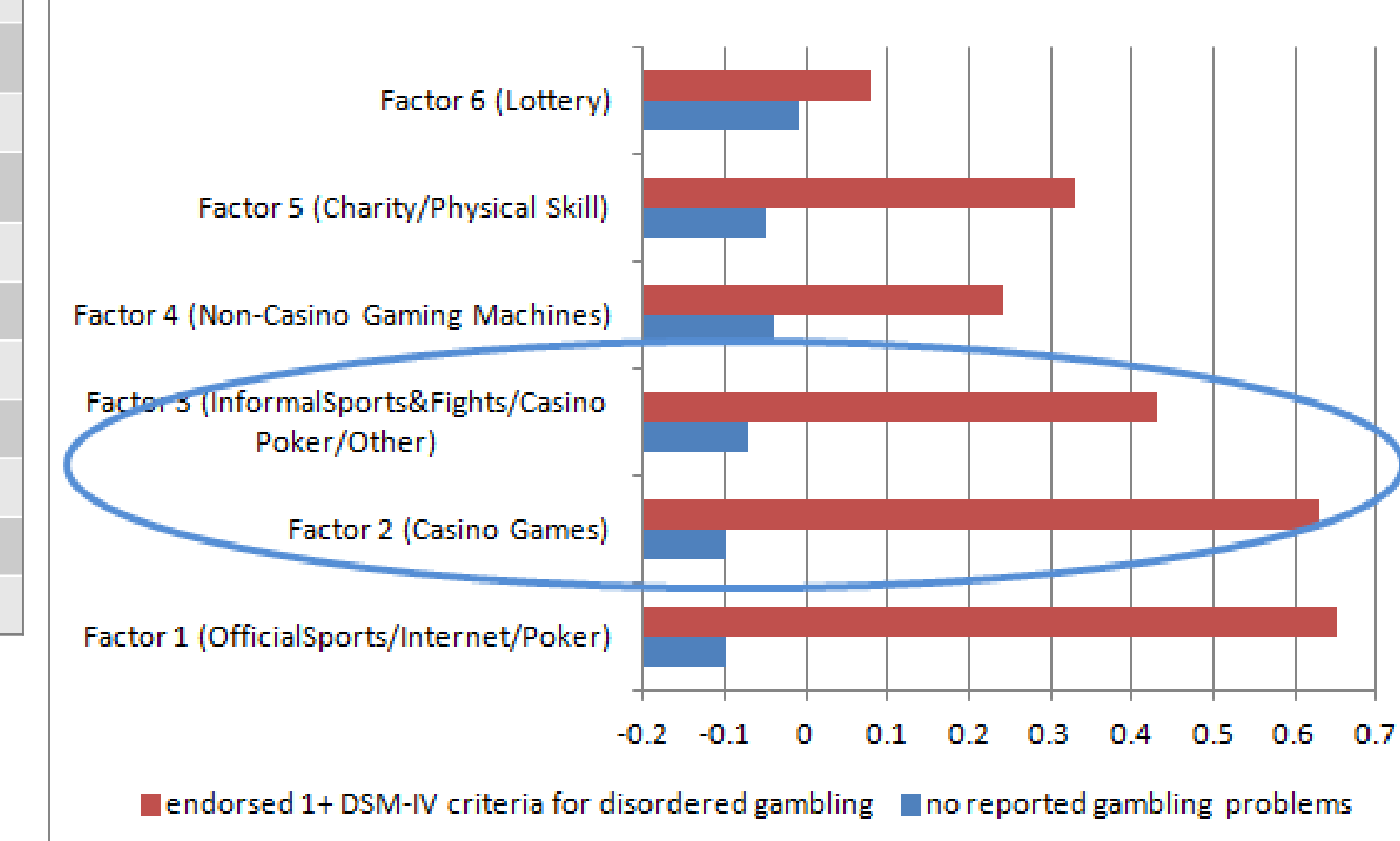
Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Betting on sports with a bookie or with parlay cards	0.90	--	--	--	--	--
Betting on horse or dog races	0.82	--	--	--	--	--
Betting on sports at a casino	0.71	--	0.46	--	--	--
Gambling on the Internet (for money)	0.66	--	--	--	--	--
Playing poker or other games of mental skill for money not at a casino	0.49	--	--	--	--	--
Day trading (e.g., stocks, commodities, etc.)	0.47	--	--	--	--	--
Playing slot machines/video keno @ casino/slots parlor	--	0.86	--	--	--	--
Playing non-slots gambling machines @ casino/slots parlor	--	0.71	--	--	--	--
Table games other than poker at a casino	--	0.64	--	--	--	--
Betting on dog or cock fights	--	--	0.70	--	--	--
Other type of non-charitable non-casino gambling	--	--	0.69	--	--	--
Playing poker at a casino	0.54	--	0.58	--	--	--
Betting on sports with friends or in an office pool	--	--	0.53	--	--	--
Playing non-slots gambling machines @ non-casino location	--	--	--	0.85	--	--
Playing slot machines (not at a casino or slots parlor)	--	--	--	0.81	--	--
Gambling at a recurring charitable tournament/poker room	--	--	--	--	0.76	--
Playing games of physical skill for money	--	--	--	--	0.65	--
Gambling at a non-profit gathering/event	--	--	--	--	0.52	--
Playing the lottery	--	--	--	--	--	0.91

- Multiple regression analyses revealed that scores on Factors 2 and 3 uniquely contributed to the prediction of gambling-related problems, even when amount wagered and gambling attitudes were controlled.

- Factor analysis revealed six play pattern factors accounting for more than 65% of the variance in game play frequency:

- Factor 1: organized sports/Internet
- Factor 2: casino gambling
- Factor 3: poker/informal sports betting
- Factor 4: non-casino gaming machine play
- Factor 5: charitable gambling/physical skill
- Factor 6: lottery play

Figure 3. Play Pattern Factor Scores by Disordered Gambling Criteria Endorsement



## CONCLUSIONS

- The findings confirmed our expectation that this sample would already have discrete and distinguishable gambling involvement patterns and that these patterns would be predictive of gambling-related problems.
- This study extends work suggesting that to gain a better understand of gambling and its relationship to gambling problems, we need to consider involvement more deeply, investigating patterns of play and levels of involvement (see LaPlante, Nelson, & Gray, 2013; LaPlante, Nelson, LaBrie, & Shaffer, 2009).
- This study sets the stage for assessment of gambling expansion by defining groups prior to expansion that might be particularly affected by the impending gambling expansion in MA.

- To assess the impact of gambling expansion in MA, it is imperative to establish and follow a representative longitudinal sample of MA residents during and after gambling expansion activities.



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