



Gambling and Problem Gambling in North Dakota: 2024

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Overview

- Methods
- Attitudes about gambling
- Gambling participation
- Problem gambling
- Comparing gambler groups
- Awareness of services in North Dakota
- Best practices recommendations

Methods

Methods

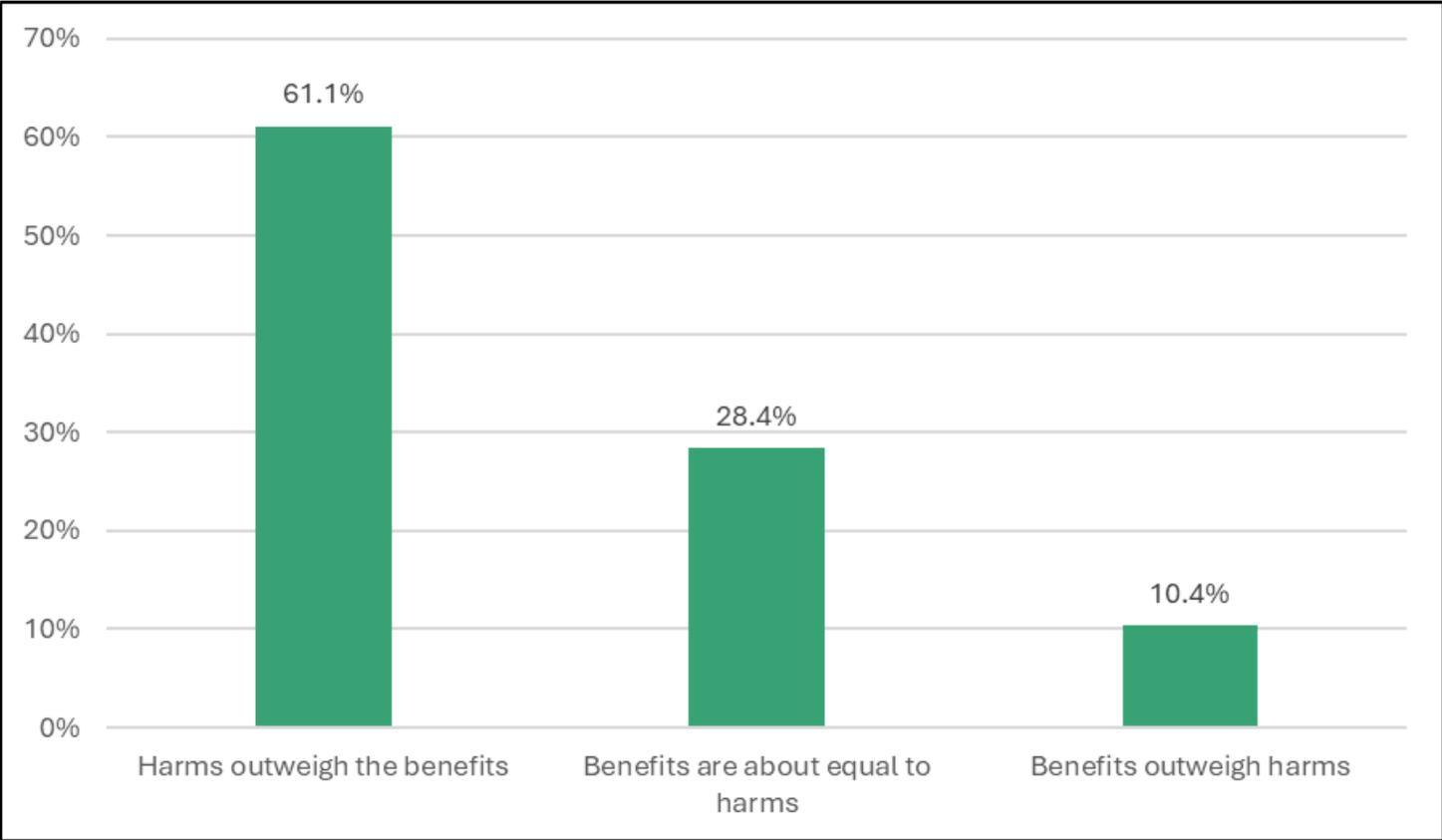
- Questionnaire
 - Aligned with questionnaires used in gambling surveys in other U.S. states
 - Survey described as about 'health and recreation' to avoid over-recruitment of gamblers
 - Sections included
 - Physical and mental health, alcohol and drug use
 - Attitudes, gambling behavior, gambling problems
 - Awareness of services
- Sample (n=3,030)
 - Random sampling of households in ND and individuals aged 18+ in households
 - Targets for eight Human Health Service Regions to obtain adequate representation

Methods

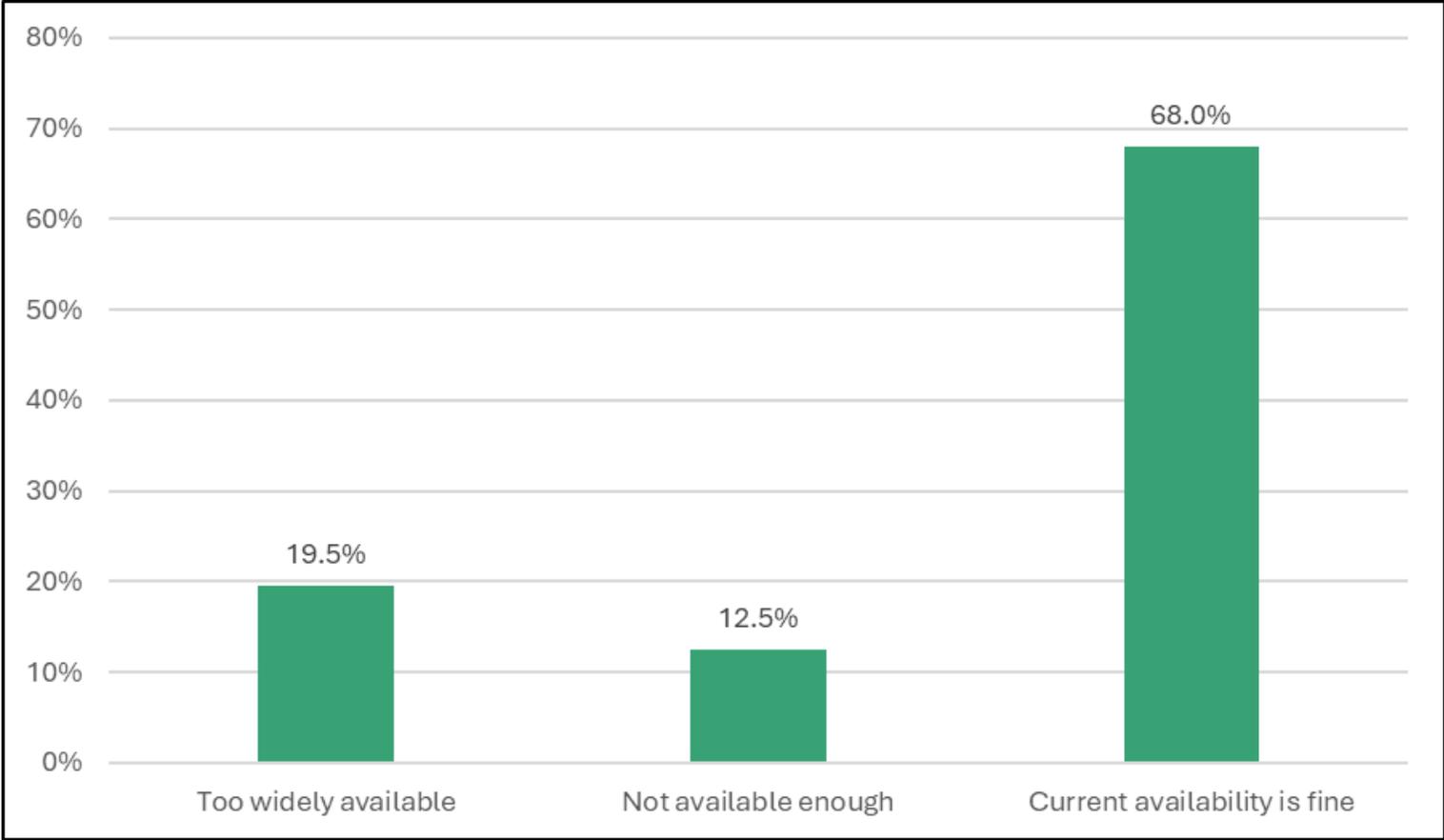
- Data Collection
 - July – October 2024
 - Invitation letter w/incentive, letter w/paper questionnaire, reminder postcard, 2nd questionnaire, final reminder letter
- Responses
 - 54% completed online, 46% completed and returned paper questionnaire
 - Response rate of 20.8% (AAPOR Standard Def. 3)
- Sample Weighting
 - Iterative raking and trimming employed to align sample with ND adult population
 - Weighting variables included gender, age, ethnicity, education

Attitudes

Attitudes: Benefits and Harms



Attitudes: Availability



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.

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

Gambling Participation

	Unweighted N ¹	Weighted N ²	Past Year Participation	
			% ³	95% ³ CI
All gambling	2,221	434,880	73.7	(71.43, 76.00)
Raffles	1,563	287,243	48.0	(45.44, 50.62)
Lottery	1,244	240,958	40.2	(37.68, 42.77)
Charitable gambling at bars or restaurants (excluding E-tabs)	1,034	214,072	35.7	(33.22, 38.20)
Electronic pull tab machines (E-tabs)	864	181,097	30.2	(27.81, 32.58)
Casino electronic gambling machines (EGMs)	686	140,903	23.4	(21.24, 25.63)
Casino table games	290	73,258	12.2	(10.53, 13.93)
Sports betting	308	72,449	12.1	(10.40, 13.78)
Bingo	377	70,407	11.7	(11.6, 11.8)
Private wagering	288	69,875	11.6	(9.98, 13.31)
Online	92	25,088	4.2	(3.17, 5.26)
Horse racing	97	18,697	3.1	(2.23, 4.04)
Financial speculation	256	77,740	13.0	(11.26, 14.77)

¹ Unweighted N refers to the total number of respondents who answered this question

² Weighted N is the total number of respondents who answered the question weighted to the ND population

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

Gambling Participation

Significant differences among raffle players

More likely	Less likely
35 and older	Under 35
White	Non-white
Employed	Retired, Other
HH income over \$50K	HH income less than \$50K

Significant differences among lottery players

More likely	Less likely
Men	Women
35 and older	Under 35
HH income over \$150K	HH income less than \$50K

Gambling Participation

Significant differences among charitable gamblers

More likely	Less likely
Under 55	55 and older
White	Non-white
Employed	Retired, Other
HH income over \$150K	HH income less than \$100K

Significant differences among E-tab players

More likely	Less likely
35-54	55 and older
White	Non-white
Employed	Retired, Other
HH income over \$100K	HH income less than \$50K

Gambling Participation

Significant differences among casino table game players

More likely	Less likely
Men	Women
18-34	55 and older
Employed	Retired, Other
HH income over \$150K	HH income less than \$50K

Significant differences among sports bettors

More likely	Less likely
Men	Women
18-34	55 and older
Employed	Retired
HH income over \$150K	HH income less than \$100K

Gambling Participation

Significant differences among private bettors

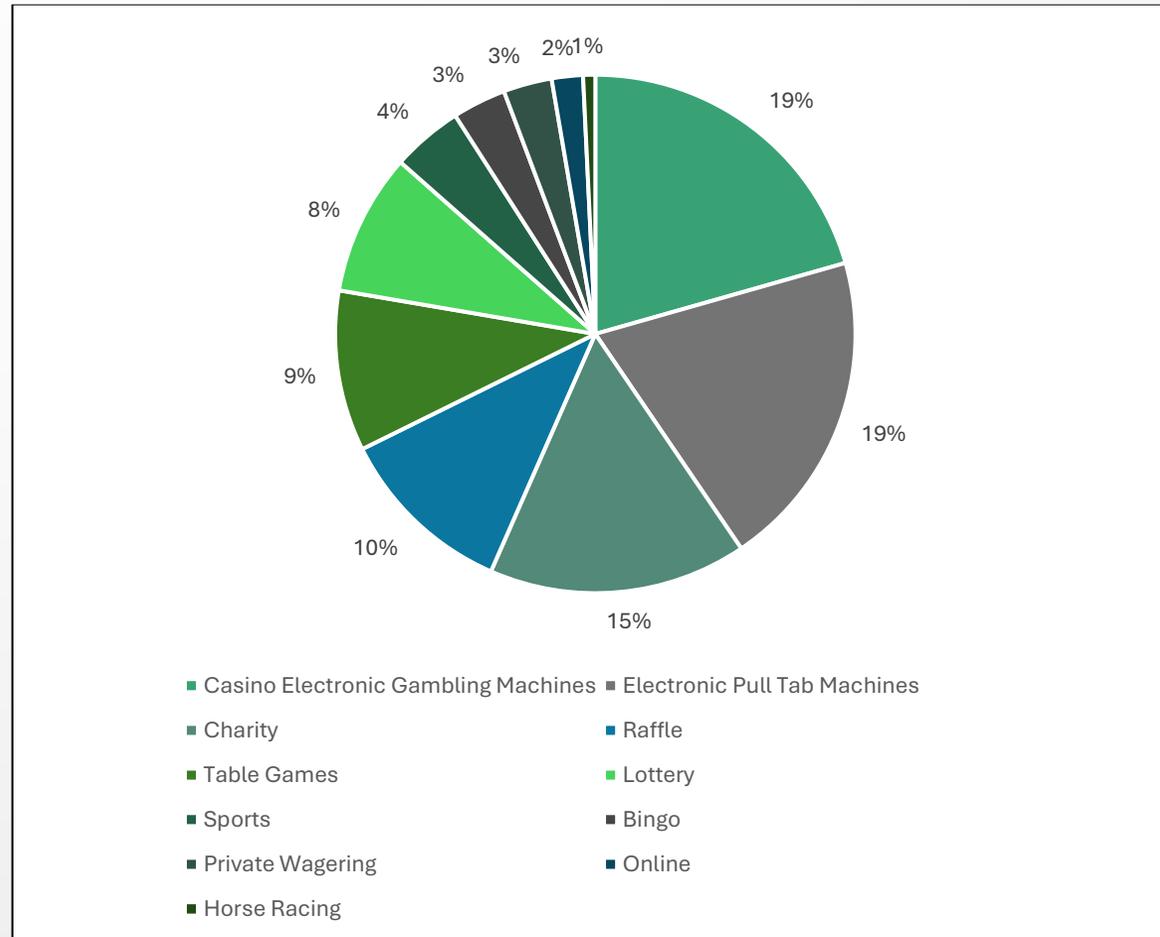
More likely	Less likely
Men	Women
18-34	55 and older
Employed	Retired
HH income over \$150K	HH income \$50K - \$150K

Significant differences among online gamblers

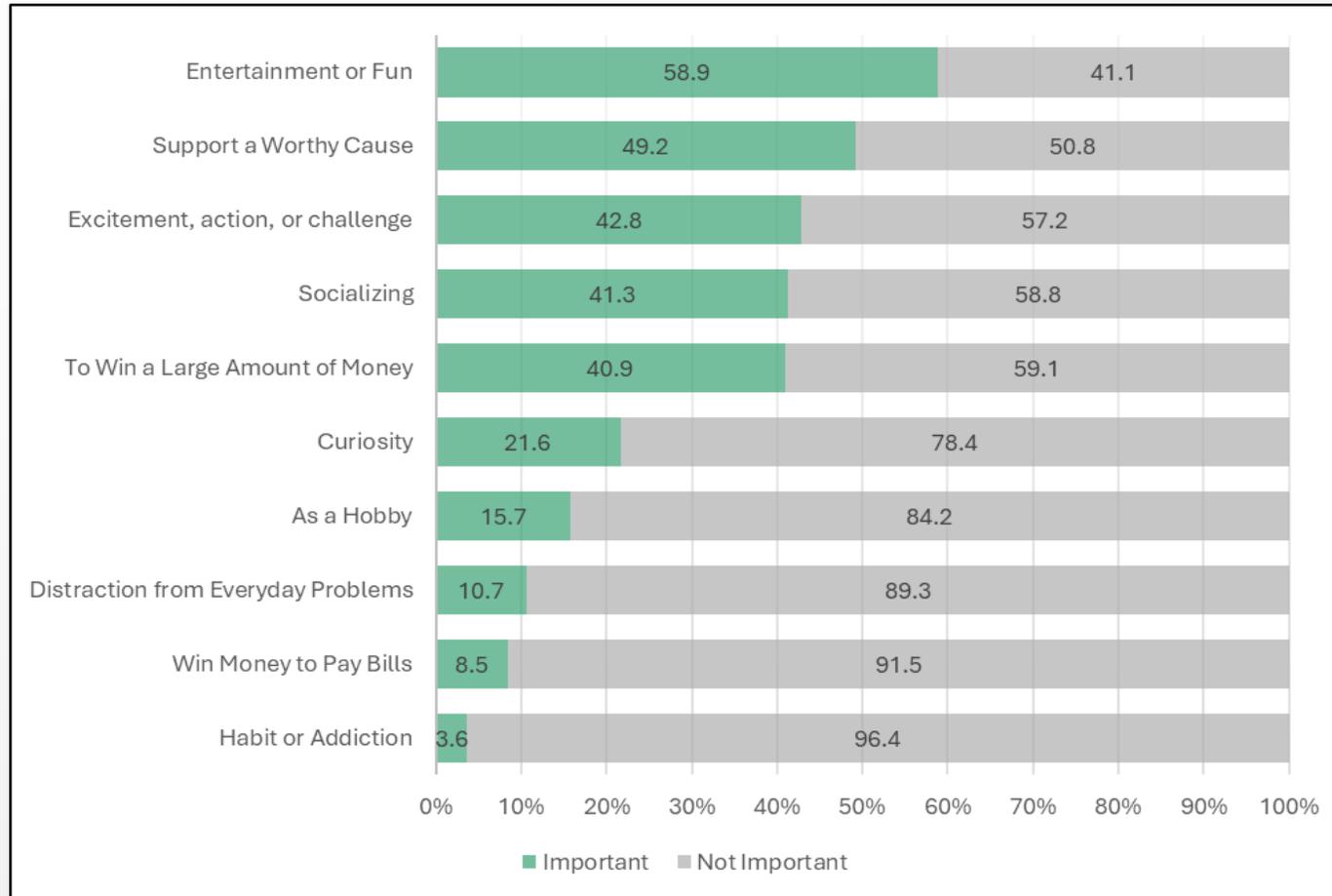
More likely	Less likely
18-34	55 and older
Employed, Other	Retired

Gambling Expenditures

Proportion of reported expenditures on different gambling activities



Reasons for Gambling



Problem Gambling

Problem Gambling

Basis for classifying respondents using the PGM

Category	Classification criteria
Non-Gambling	Has not gambled in the past 12 months
Recreational Gambling	Has gambled in past 12 months Total score 0
At-Risk Gambling	Does not meet criteria for Problem Gambling Total score 1+ Total PGM score: 0 = 0; 1-2 = 2; 3+ = 5 Score on PGM15: 0 = 0; 1 = 2 Number of types of gambling monthly: 0-2 = 0; 3-4 = 1; 5+ = 4 Largest amount lost in single day: <\$200 = 0; \$200- \$499 = 1; \$500+ = 3 Importance of gambling as recreational activity: not very important = 0; somewhat important = 1; quite/very important = 2
Moderate At-Risk	Total score 1+
High At-Risk	Total score 4+
Very High At-Risk	Total score 8+
Problem Gambling	Has gambled at least once a month in past 12 months Impaired Control score 1+ Problems score 1+ Total score of 2+ with score of 7+ predictive of continued PG in next 12 months OR Total score 3+ Gambling frequency and expenditure ≥ PG median

Problem Gambling

Classification of respondents on the PGM

	Sample Size			
	Unweighted N ¹	Weighted N ²	Percent ³	95% CI ³
Non-gambler	752	155,068	26.29	(24.00, 28.57)
Recreational gambler	1,728	317,081	53.75	(51.16, 56.34)
At-risk gambler (moderate)	360	86,049	14.59	(12.75, 16.42)
At-risk gambler (high/very high)	95	23,366	3.96	(2.95, 4.97)
Problem gambler	38	8,382	1.42	(0.81, 2.04)

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² Weighted N is the total number of respondents who answered the question weighted to the ND population

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

Problem Gambling

Differences in prevalence by type of gambling

	Unweighted N ¹	Weighted N ²	At risk gambling (moderate)		At risk gambling (high/very high)		Problem gambling	
			% ³	95% CI ³	% ³	95% CI ³	% ³	95% CI ³
Total sample/ population	2,973	589,946	14.6	(12.75,16.42)	4.0	(3.0, 5.0)	1.4	(0.81, 2.04)
All gambling	2,221	434,880	19.8	(17.4,22.1)	5.4	(4.0,6.7)	1.9	(1.1,2.7)
Raffles	1,563	287,243	19.6	(16.9,22.3)	6.1	(4.5,7.7)	1.7	(0.8, 2.6)
Lottery	1,244	240,958	22.0	(18.8,25.3)	7.5	(5.5,9.6)	2.0	(0.9,3.1)
Private wagering	288	69,875	30.7	(23.3,38.2)	16.6	(10.6,22.6)	2.5	(0,5.0)
Horse racing	97	18,697	34.5	(22.1,46.9)	16.2	(6.6,25.8)	2.7	(0, 6.9)
Casino table games	290	73,258	36.2	(28.5,44.0)	17.2	(11.1,23.3)	2.8	(0.1,5.5)
Charitable gambling at bars or restaurants (excluding E- tabs)	1,034	214,072	26.9	(23.3,30.6)	9.4	(7.0,11.9)	2.9	(1.5,4.3)
Sports betting	308	72,449	36.7	(29.2,44.3)	13.8	(8.4,19.2)	3.8	(0.8,6.8)
Electronic pull tab machines (E-tabs)	864	181,097	29.2	(25.1,33.3)	10.6	(7.8,13.4)	4.0	(2.2,5.8)
Bingo	377	70,407	25.9	(19.6,32.1)	11.9	(7.3,16.6)	4.1	(1.3,7.0)
Online	92	25,088	42.3	(27.7,56.9)	18.3	(6.8,29.7)	4.5	(0, 10.5)
Casino EGMs	686	140,903	34.9	(29.8,40.0)	14.1	(10.4,17.8)	4.8	(4.7, 4.9)
Financial speculation	256	77,740	27.0	(19.3,34.7)	14.1	(8.0,20.1)	2.3	(0, 5.0)

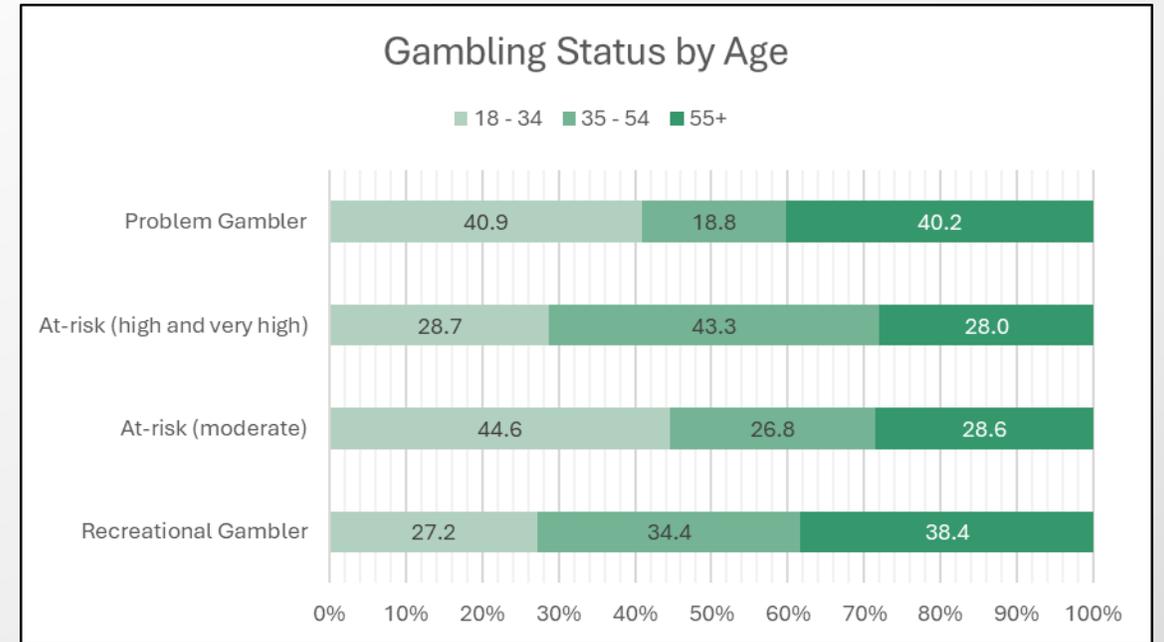
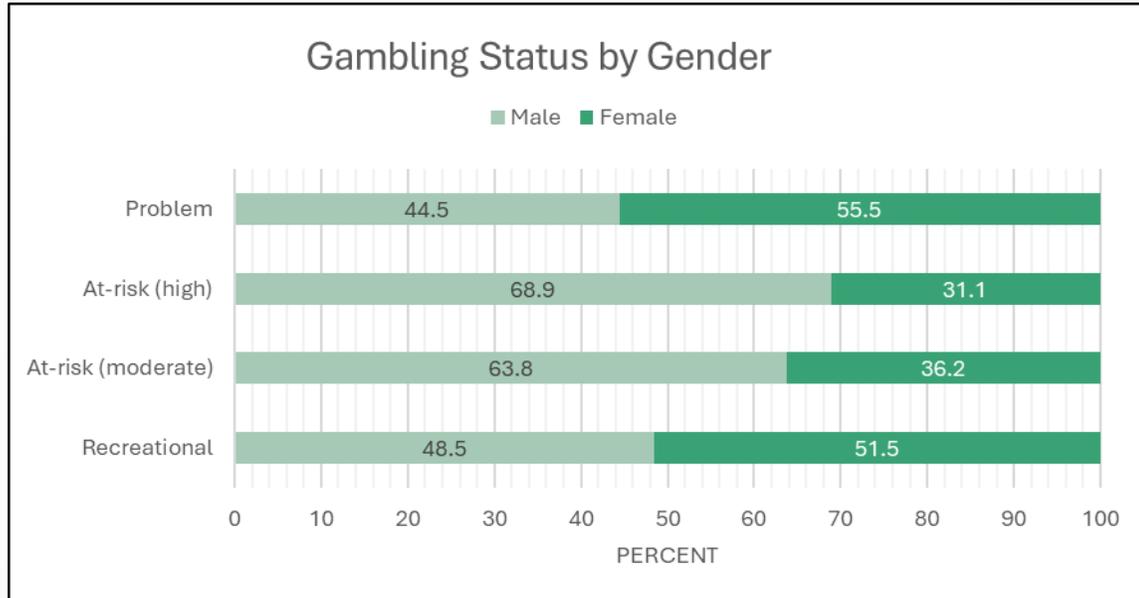
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Comparing Gambler Groups

Comparing Gambler Groups



Comparing Gambler Groups

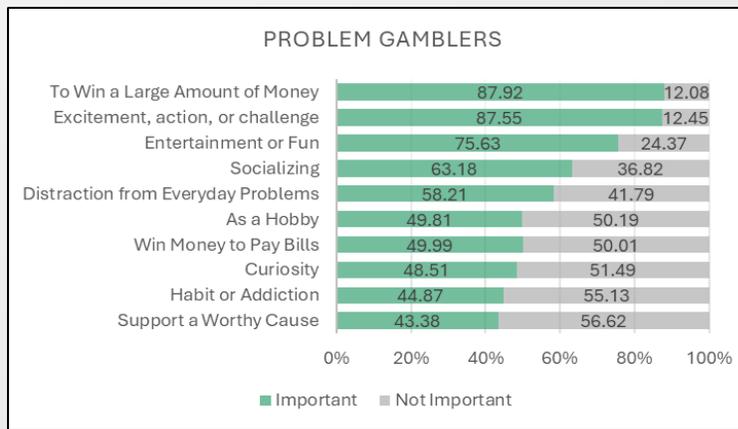
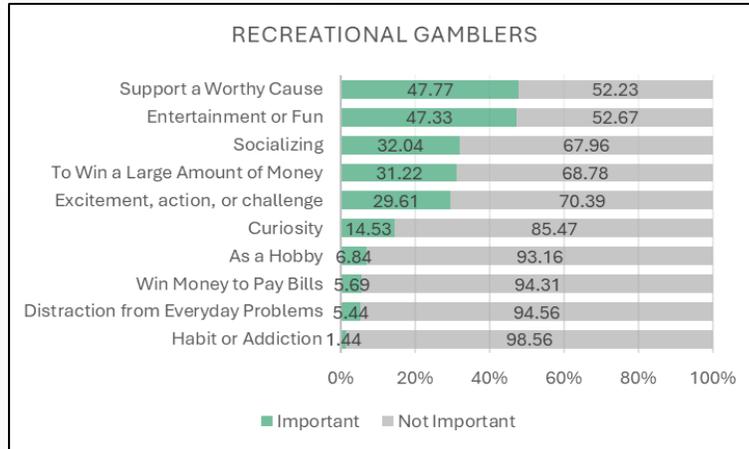
	Recreational gamblers		At-risk gamblers (Moderate)		At-Risk Gamblers (High and Very High)		Problem gamblers		p-val
	% ²	95% CI ²	% ²	95% CI ²	% ²	95%CI ²	% ²	95% CI ²	
Unweighted N¹	1,728		360		95		38		
Weighted N	317,081		86,049		23,366		8382		
Lottery	52.1	(48.78, 55.37)	61.8	(54.56, 68.98)	78.2	(66.86, 89.62)	58.0	(37.44, 78.56)	<0.0
Raffles	65.9	(62.82, 69.07)	65.5	(58.41, 72.52)	75.4	(63.48, 87.24)	61.1	(40.35, 81.86)	0.1
E-tabs	32.3	(29.19, 35.37)	61.5	(54.28, 68.73)	82.3	(71.82, 92.78)	86.2	(71.90, 100.59)	<0.0
Charitable gambling (not E-tabs)	41.1	(37.89, 44.38)	67.7	(60.77, 74.68)	86.5	(77.17, 95.90)	75.2	(56.94, 93.54)	<0.0
Casino EGMs	20.6	(17.97, 23.31)	57.3	(49.95, 64.67)	86.1	(76.49, 95.66)	80.1	(63.45, 96.72)	<0.0
Casino table games	10.2	(8.20, 12.21)	31.2	(24.26, 38.04)	54.2	(40.47, 67.88)	24.4	(6.51, 42.29)	<0.0
Private wagering	11.1	(9.06, 13.22)	25.0	(18.60, 31.49)	49.8	(36.05, 63.56)	21.1	(4.08, 38.06)	<0.0
Sports betting	10.5	(8.45, 12.50)	31.0	(24.10, 37.82)	43.0	(29.39, 56.69)	32.7	(13.14, 52.22)	<0.0
Bingo	12.9	(9.10, 15.14)	21.2	(15.11, 27.24)	35.9	(22.75, 49.08)	34.5	(14.68, 54.27)	<0.0
Horse racing	2.8	(1.69, 3.87)	7.5	(3.61, 11.48)	13.0	(3.74, 22.23)	5.9	(0, 15.80)	<0.0
Online	2.8	(1.70, 3.87)	12.6	(7.65, 17.45)	20.5	(9.14, 31.76)	18.5	(3.33, 33.76)	<0.0
Financial speculation	9.5	(7.57, 11.47)	24.7	(18.24, 31.10)	48.4	(34.44, 62.32)	21.7	(4.51, 38.84)	<0.0

Unweighted N refers to the total number of respondents who selected this category for this question

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Percentages and 95% CI are calculated using the weighted N

Comparing Gambler Groups



Comparing Gambler Groups

Differences in physical and mental health by gambling group

	Recreational gambler		At-risk gambler (moderate)		At-risk gambler (high/very high)		Problem gambler		p-value ⁴
	% ³	95% CI ³	% ³	95% CI ³	% ³	95% CI ³	% ³	95% CI ³	
Unweighted N¹	1,728		360		95		38		
Weighted N²	317,081		86,049		23,366		8,382		
General health (fair to poor)	7.5	(5.7, 9.2)	13.2	(8.10, 18.31)	12.6	(3.24, 21.88)	NSI	--	<0.0001
Level of stress (moderate to very high)	65.7	(62.54, 68.93)	69.2	(62.25, 76.17)	59.9	(46.16, 73.72)	95.9	(87.62, 100)	0.0002
Mental health problem (past 12 months)	14.0	(11.70, 16.37)	21.9	(15.61, 28.09)	15.2	(5.08, 25.32)	47.5	(26.58, 68.43)	<0.0001
Sought help (among those w/MH problem)	63.5	(54.3, 72.6)	49.7	(30.7, 68.65)	38.6	(0.9, 76.25)	NSI	---	<0.0464

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⁴ P-value from chi-square test for differences across groups

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

Comparing Gambler Groups

Tobacco, alcohol and drug use by gambling group

	Recreational gambler		At-risk gambler (moderate)		At-risk gambler (high/very high)		Problem gambler		p-value ⁴
	% ³	95% CI ³	% ³	95%CI ³	% ³	95% CI ³	% ³	95% CI ³	
Unweighted N¹	1,728		360		95		38		
Weighted N²	317,081		86,049		23,366		8,382		
Tobacco use (every day)	11.0	(8.91, 13.11)	18.3	(12.47, 24.15)	37.8	(24.12, 51.40)	41.4	(20.80, 62.08)	<0.0001
Alcohol (past 12 months)	76.2	(73.30, 79.08)	83.8	(78.16, 89.37)	92.4	(84.83, 99.96)	75.9	(57.93, 93.79)	<0.0001
Binge drinking (past 30 days)	48.1	(44.08, 52.12)	63.7	(55.32, 72.01)	75.3	(61.91,88.65)	85.1	(66.22, 100)	<0.0001
Cannabis use (past 12 months)	15.1	(12.65, 17.46)	23.6	(17.21, 30.09)	28.04	(15.54,40.54)	41.3	(20.52, 62.02)	<0.0001
Other drug use (past 12 months)	1.8	(0.91, 2.70)	9.5	(5.06,13.91)	NSI	---	NSI	---	<0.0001
Problem with alcohol or drugs (past 12 months)	1.4	(0.59, 2.15)	5.3	(1.94, 8.74)	NSI	---	NSI	---	<0.0001
Sought help (among those w/alcohol or drug problem)	53.5	(30.23, 76.78)	NSI		0		NSI		0.0301

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Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

Awareness of Services

- Majority of ND gamblers (88%) agreed that gambling addiction was a minor, moderate or serious problem in the state
 - Problem gamblers most likely to endorse this view (93%)
 - High/very high at-risk gamblers least likely to endorse this view (75%)
- 36% of ND gamblers had seen or heard media campaigns to prevent problem gambling in past 12 months
- 43% of ND gamblers were aware of the ND Problem Gambling Helpline
- 15% of ND gamblers were aware of Gambler Healing online course

Discussion

Strengths and Limitations

- Multimode survey approach and Address Based sampling allowed for inclusive sample regardless of telephone or internet access
- Use of best practices in gambling surveys reduced potential bias and enhanced validity of results
- Response rate lower than desired
- Restricted to adults living in households
- Small size of some subgroups means unreliable estimates of prevalence
- Cross-sectional design limits causal attributions

Best Practice Recommendations

- Review of international best practices in PG prevention, treatment and harm minimization
 - Services in ND include helpline, educational materials, remote and self-help interventions (GamblerND website)
 - Outpatient treatment is limited (3 certified specialist counselors)
 - No provision for residential treatment in ND

Best Practice Recommendations

- Recreational, moderate risk gamblers should be encouraged to adopt responsible gambling measures (e.g. deposit limits, time limits)
- High/very high at-risk gamblers should be offered Personalized Normative Feedback, motivational interventions
- Expand outpatient treatment in ND
- Provide residential treatment in ND
- Train healthcare providers in how to screen, refer for treatment
- Train gaming venue staff to recognize and assist those experiencing PG

Full report available at

[Gambling Prevalence Survey Final Report.pdfND](#)

Thank you!