GAMBLING BEHAVIORS, ATTITUDES, & EXPERIENCES AMONG ARIZONA ADULT RESIDENTS

SUMMARY OF SURVEY FINDINGS

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OVERVIEW

At the time this report was written in 2023, the State of Arizona had a thriving legalized and regulated gambling industry with a state lottery, 24 Class III casinos operated by federally recognized Arizona Tribes, and sports betting opened for business less than two years earlier in September 2021. Today, 25 licensed sportsbooks operate in Arizona including Internet and app-based sportsbooks allowing for event wagering and fantasy sports betting. Arizona's legalized gambling industry is an important contributor to the state economy by creating thousands of jobs and millions of dollars transferred to tribal, state, and local governments for important public services. Perhaps the most significant downside to Arizona's expansive legalized gambling environment is the impact of problem gambling on individuals, families, and communities. Efforts to reduce the negative societal impacts of gambling and problem gambling in Arizona are taking place, most notably within the Arizona Department of Gaming (ADG).

The ADG is the state agency charged with regulating tribal gaming, event wagering & fantasy sports contests, racing and pari-mutuel/simulcast wagering, and unarmed combat sports. ADG also provides and supports prevention, education, and treatment programs for people and families affected by problem gambling through its Division of Problem Gambling.

In 2023, the ADG, Division of Problem Gambling, commissioned a study to evaluate the effectiveness of its problem gambling programs, including problem gambling public awareness and prevention, gambling treatment, and voluntary casino and event wagering self-exclusion services. As a component of that evaluation, a general population survey was conducted with Arizona residents aged 21+ to better understand the

DEFINITIONS

Problem Gambling is

used within this report as an umbrella term signifying gambling behavior patterns that compromise, disrupt or damage personal, family, or vocational pursuits. Problem gambling can occur along a continuum from mild to severe.

Gambling Disorder falls on the severe range of problem gambling and is the clinical term used to describe persistent and recurrent problematic gambling behavior leading to clinically significant impairment or distress. Gambling Disorder is categorized as an Addiction Disorder and recognized as a medical condition by the American Psychiatric Association.

population's gambling behaviors, attitudes, and experiences. General population survey research is an important tool for better understanding population needs, identifying groups at higher risk for problem gambling, and tracking changes over time. The project's ultimate objective was system development by providing ADG Division of Problem Gambling staff with information to engage in meaningful program improvements. This report presents a summary review of this project's general population survey results.

RESEARCH DESIGN

This survey research utilized a probability-based panel sampling technique, a method that combines the various advantages of online survey modes with probability sampling methods. Online panels have become increasingly popular in the survey industry, as they have important advantages over traditional survey modes such as reduced cost, reduced data collection time, and very good accuracy.^{1,2,3}

The survey was fielded in March of 2023 and collected information on a wide range of gambling-related factors, including 1) gambling activities and motivations, 2) problem gambling risk, 3) information-seeking behaviors, attitudes, and knowledge of problem gambling services, 4) awareness of self-exclusion options, and 5) general attitudes and beliefs about gambling. The survey also collected information on demographics. The National Opinion Research Center (NORC) at the University of Chicago was commissioned to test and field the survey. Survey participants, limited to English-speaking individuals aged 21 years or over and living in Arizona, were recruited through AmeriSpeak's probability-based panel and several non-probability panels. The survey was constructed to take about 12 minutes to complete and collected via the web (1,257 participants) and phone calls (12 participants). AmeriSpeak utilized its TrueNorth calibration services to weigh the participant responses so that the survey was representative of the 21-and-over Arizona population. See the Technical Report⁴ for a more in-depth description of the methodology and survey instrument.¹

REPORT DESIGN

This report was designed for ease of reading by incorporating interpretive graphics, highlighting key findings, and placing more technical elements of the survey into a separate Technical Report. For statistical tests, a significance level of 5% is used to assess statistical significance. Tests are statistically significant unless otherwise

¹ To obtain this report's supplemental Technical Report, detailing survey methods, please contact Elise Mikkelsen at emikkelsen@problemgambling.az.gov.

stated in the text. On some occasions, results that are not statistically significant might be discussed if informative; this is often the case if the p-value is close to 5% and the authors believe statistical significance would have been achieved with a larger sample size. As described earlier, the sample represents Arizonians 21 years and older. However, throughout the main body of this report, we omit the age range and simply refer to the sample as Arizonians, respondents, or participants for brevity.

Within this report, comparisons are made between findings from the present survey with findings from a recent survey conducted with Nevada residents that included similar question sets and data collection strategies.⁵ Not only does the survey research in Arizona and Nevada utilize similar methodology, but the two states also have similarities relevant to evaluating problem gambling services. Both states invest in problem gambling services to form distinct gambling treatment and problem gambling prevention service programs. In State Fiscal Year 2022, ADG, Division of Problem Gambling, budget was \$2.6 million and Nevada's Department of Health and Human Services problem gambling program budget was \$2.1 million.⁶ Further similarities are found within the geographical features of each state in terms of area square miles, distribution of population centers, and expansive rural regions. Findings between the two state surveys are made only where relevant and useful as a reference point.



FIVE KEY FINDINGS

1. Gambling is a popular activity among Arizona residents.

- Eighty-five percent of respondents reported betting or spending money on at least one gambling activity within the past year. Purchasing a lottery ticket is the most common from or gambling (67%) followed by slot machine play (43%).
- Most Arizonians reported that they gambled monthly or less (62%); 13% gambled more than once a month but less than weekly, and 25% reported gambling at least once a week.

2. Online sports betting is on the rise.

- Before the legalization of sports wagering in Arizona in September 2021, about 10% of Arizonians who gambled reported ever making an online or app-based sports bet. Following legalization, the rate more than doubled to 21%.
- About one out of every three respondents who attended a collegiate or professional sporting events in the past 12 months bet money on one or more of Arizona's professional or college sports teams.

3. About 1 in 5 Arizonans age 21+ experienced gambling related problems

- Ten percent of survey respondents endorsed items on the Problem Gambling Severity Index placing them in a category suggesting they were at "Moderate Risk" for having or developing problem gambling and 8% fell into a "Severe Risk" category.
- Based on the positive predictive value of the two empirically validated problem gambling screening tools used in the survey, an estimated 3.8% to 4% of Arizona residents age 21+ are predicted to manifest a current Gambling Disorder.
- Very high rates of problem gambling risk were found among Arizona residents who reported sports betting; 39% scored in the "Severe Risk" category on the Problem Gambling Severity Index (PGSI).

4. Awareness of problem gambling services is comparatively good, although more efforts are needed.

- Thirty-five percent of Arizonians were aware of Arizona's helpline (1-800-NEXT-STEP). That is a 9-fold increase from 2010, when only 4% of Arizonians reported helpline knowledge.
- Fifty percent of Arizonians reported that if someone close to them had a gambling problem, they would know how to get help for them.
 Public awareness of gambling treatment resources was lower in Nevada compared to Arizona.
- Twenty percent of Arizonians were aware that they could self-exclude from Arizona casinos, while 15% were aware that they could self-exclude from event wagering.
- **5.** Most Arizona residents supported government and industry measures to address problem gambling issues.
 - Sixty-three percent of respondents felt the government should use revenues from gambling operators for problem gambling prevention and treatment.
 - Fifty-six percent felt the gambling industry should do more to prevent problem gambling among its patrons.

PRACTICE AND POLICY IMPLICATIONS

- There is a need to invest in efforts to reduce gambling related harms.
- Certain groups are more vulnerable to harmful gambling, suggesting intervention efforts that target higher risk groups may have the greatest impact.
- The public would benefit from more information about safer gambling and availability of self-exclusion programs and help resources.
- Screening for gambling related problems within healthcare settings are warranted.
- Culturally informed interventions may help address health disparities.

Note: See the "Practice and Policy Implications" section on page 29 for an expanded discussion.

FINDINGS OF SELECT SURVEY VARIABLES

The following sections discuss survey results from key variable sets under the headings: sample profile, gambling activities, gambling motivations, problem gambling, self-exclusion, information and assistance-seeking behaviors, and attitudes and beliefs. Within each section, the variables are explained, findings of the survey are provided, and interpretive statements are provided.

SAMPLE PROFILE

Ninety-eight percent of the sample consisted of Arizonians who have lived in the state for at least one year. Figure 1 depicts the sample in terms of gender, age, and race/ethnicityⁱⁱ. The sample is nearly evenly divided into females and males. The highest percentage of participants were in the 60+ age category (34%) and the lowest in the 21 to 29 age category (16%). Overall, the average age was 50 years old. Participants identifying their ethnicity or race as White represented the majority racial/ethnicity category (58%), followed by Hispanic (30%), Other (7%), and Black (5%). The sample also included 4% of respondents who identified as Native American. Overall, the sample closely approximated the age, gender, and racial/ethnic demographics of Arizona residents reported by the United States Census Bureau.ⁱⁱⁱ

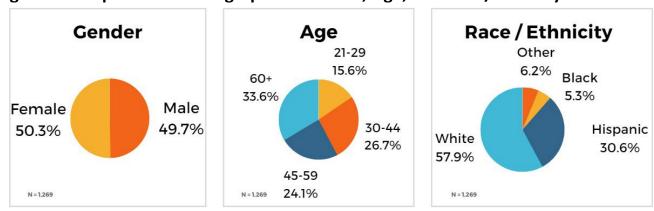


Figure 1. Respondent Demographics: Gender, age, and race/ethnicity

Figure 2 characterizes the sample in terms of the highest level of educational achievement and marital status. About 65% of the sample had at least some college education, with 12% having post-graduate degrees. Forty-four percent of the

ⁱⁱ Gender is based on identification at birth. White, Black, and Other are non-Hispanic. Other includes Asians, Multi-racial, and other races not specified.

iii United States Census Bureau. 2022 estimates. https://www.census.gov/quickfacts/AZ

sample participants were married while 33% were never married and 16% were divorced.

About 55% of the sample were working (either full-time or part-time). Of those who were not working, slightly more than half were retired.

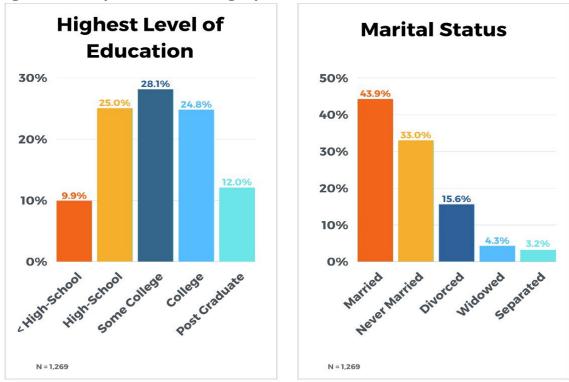
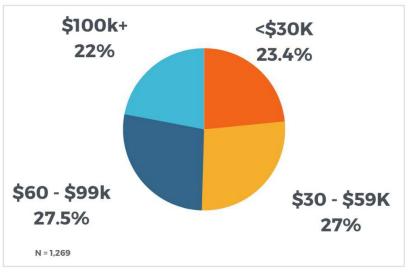


Figure 2. Respondent demographics: Education and marital status

Figure 3 shows the household income distribution. About 1 in 4 households^{iv} had incomes of \$30,000 or less and 22% of households had incomes of \$100,000 or more. Most households (55%) had incomes between \$30,000 to \$100,000.

Ninety-six percent of participants lived in metro areas, defined as regions consisting of central urban





^{iv} More accurately, the sample represents Arizona household with at least 1 adult.

cores and surrounding communities that are economically and socially integrated. Arizona also has very sparsely populated areas such that 11% of the sample participants were from rural areas.

GAMBLING ACTIVITIES

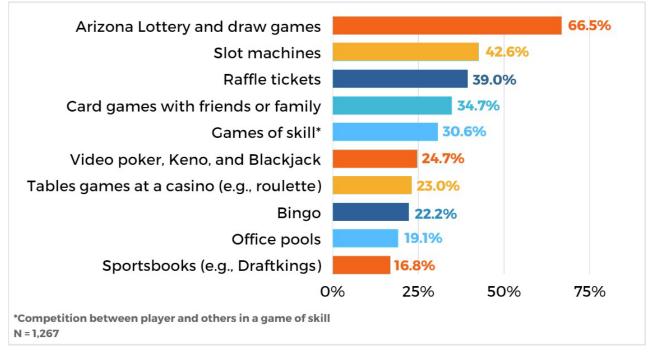
In Arizona, there are many different legal means of gambling, including a state lottery, bingo parlors, pari-mutuel wagering on horses and dogs, and wagering on sporting events and fantasy sports. The state is also home to 24 Class III tribal casinos located across the state. About 53% of survey respondents reported living within 10 miles of one of these casinos.

Eighty-five percent of respondents reported betting or spending money on at least one gambling activity (such as the lottery or slot machine) within the past year. Although males reported higher rates than females (88% versus 83%) the difference was not statistically significant. Similarly, respondents less than 44 years old reported higher rates of gambling compared to older respondents (88% versus 83%), but the difference was also not statistically significant.

In comparison, a recent study conducted in Nevada⁵ reported that only 64% of its adult population gambled during the last year. Thus, the average Arizonian was 33% more likely to have gambled compared to the average Nevadan. One explanation for this is the absence of a state lottery in Nevada. State lotteries are one of the most popular forms of gambling among the populace. Both the Arizona and Nevada surveys also asked participants the number of times they gambled in the previous month; fifty-one percent of Arizonians had gambled in the previous month (average of 2.8 days) compared to 54% for Nevadans (average of 4.2 days).

In the survey, 62% of Arizonians reported that they gambled monthly or less, 13% gambled more than once a month but less than weekly, and 25% reported gambling at least once a week. Figure 4 shows the 10 most popular types of gambling activities engaged in during the past year, with 67% of Arizonians reporting betting or spending money on the Arizona Lottery or draw games (such as Powerball), 43% reporting wagering on slot machines, and 39% on raffle tickets, which included games in support of charitable cases. The average survey respondent spent money or betted on over four types of gambling activities during the past year.

Figure 4. Gambling Activities



It is not surprising that wagering on the lottery or draw games were the most popular gambling activity in Arizona since this is a common result in many surveys on gambling activities. In Arizona, 26% of adults spent money on the lottery at least once a month and about 7% played the lottery at least once a week. What was surprising was the percentage of gamblers in Arizona that played slot machines in the past year. Although Nevada has much greater access to slot machines and other electronic gaming machines, only 3% more Nevadans reported slot machine play than Arizonans (46% compared to 43%).

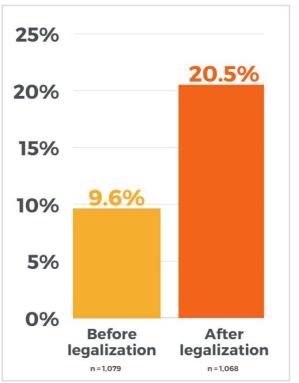
The subject of sports wagering is an active topic of conversation in the problem gambling community, given the growth of legalized sports gambling following the overturning of the Professional and Amateur Sports Protection Act (PASPA) in 2018 — the federal law prohibiting sports betting. Five years later, 33 states plus Washington, D.C., have legalized sports betting in some form, with four more joining with pending legislation. Arizona was included in this wave of legalized gambling expansion in September of 2021 with the legalization of sports betting permitted both within licensed land-based sportsbooks and through licensed Internet sportsbooks. Because of the largely unknown impact of legalized online sports betting the interests of sporting events and wagering on sports in Arizona. The survey found that approximately two years after sportsbooks, such as DraftKings Arizona, became legalized in Arizona, an estimated 17% of the adult Arizona population had placed a sportsbook wager, ranking Sportsbook as the 10th most common gambling activity

engaged in at least once over the past 12-months. Sixteen percent of Arizonians who gambled in the past year also placed wagers on an Arizona collegiate or professional sporting event during the same period^v. Males were almost 2.5 times more likely to wager on these sporting events compared to females (23% versus 9%). Younger Arizonians, less than 45, were also much more likely to wager on Arizona sporting events compared to the to those 45 years and older (25% versus 9%). A little over half (52%) of Arizonians who bet on an Arizona collegiate or professional sporting event also attended one of these events in the past year. Or, looking at the data in a different way, about one out of every three Arizonians who attended Arizona collegiate or professional sporting events.

Figure 5 depicts the impact of online or appsports betting following based the legalization of sports wagering in Arizona in September 2021. Before legalization, about 10% of Arizonians who gambled reported ever making a bet on Internet-based platforms. Following legalization, or over approximately two years, the rate more than doubled to 21%. Males were more likely than females to wager on these platforms after legalization (27% versus 14%) and younger Arizonians aged 21 to 29 were 7 times more likely to use these platforms than older Arizonians aged 60 or older (35% versus 5%). Urban Arizonians also reported higher rates of online or app-based sports betting compared to those from rural areas (23%) versus 11%); however, the results were not statistically significant.

The survey also explored changes in sports wagering on *physical* premises. Before legalization, 16.7% of Arizonians who

Figure 5. Frequency of online or app-based sports betting before and after legalization



gambled reported sports wagering on physical premises versus 16.2% after legalization. Thus, following the legalization of sports wagering in Arizona, there was a *decline* of 0.5 percentage points in wagering on physical premises. This is an interesting finding as generally when a new type of gambling activity becomes legal in a state the participation rate of that form of gambling increases due to increased

^v The reference to Arizona sports wagering here is not the same as Sportsbooks in Figure 5, which does not limit the wagering to Arizona sporting events.

ease of access to the new form of legalized gambling and increased advertising. It is possible this finding was due in part to a portion of sports betters who used to travel to places like Las Vegas to place sports bets now migrated to legalized online Sportsbooks; data from this survey support this hypothesis based on population participation rates of online sports wagering doubling in Arizona since legalization.

GAMBLING MOTIVATIONS

Figure 6 reports the most common motivations for gambling^{vi}. Winning money was the most commonly cited motivation (57%), followed by gambling for excitement/challenge (37%), and socializing with friends/family (35%). The average number of motivations was 1.3, which suggests that there is a relatively small set of motivations that drives gambling behavior.

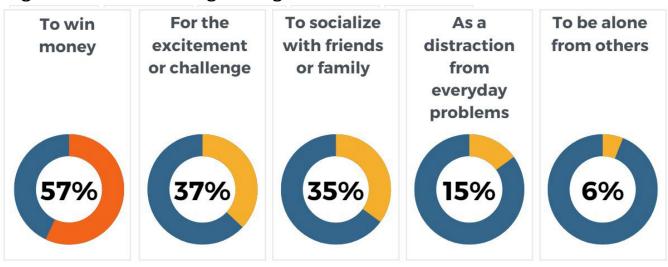


Figure 6. Motivation for gambling

N=1,098

Note: 1.11% of respondents selected "Other" as a motive

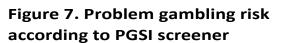
Younger gamblers (aged 21 to 29) were much more likely to be motivated by the social interactions relating to gambling (52% versus 35%). They also were more likely to be motivated by winning money (69% versus 57%). Higher frequency gamblers – those that gambled 1 to 7 days a week – were much more likely to gamble for the excitement (45% versus 37%) and they also were almost 5 times more likely (14% versus 3%) to be motivated by the solitary experience that some gambling activities might enable. Arizonians who played, on average, more than 20 hours per week of electronic games reported a higher rate of endorsing "distractions from everyday

^{vi} Survey participants were allowed to select multiple reasons, if applicable.

problems" as a motivating factor for gambling (23% versus 14%); however, this difference was not statistically significant.

PROBLEM GAMBLING

Figure 7 displays findings from questions making up the Problem Gambling Severity Index (PGSI).vii Based on the PGSI, 82% of participants endorsed responses that placed them in the "No Risk" to "Low Risk" problem gambling categories, while 10% endorsed responses placing them in the "Moderate Risk" category and 8% fell into the Severe Risk category. These findings suggest about 18% of residents Arizona experienced negative impacts related to their gambling behaviors over the past year and an estimated 4% of Arizona residents might be living with Gambling Disorder





Problem Gambling Severity Index (PGSI): Score of 0 suggests no risk; 1-2 suggests low risk; 3-7 suggests moderate risk; 8+ suggests high risk

The previously mentioned, the Nevada gambling behaviors and attitudes survey also administered the PGSI to its participants. For Nevadans, 57% screened as "No Risk", 15% as "Low Risk", 13% as "Moderate Risk", and 15% as "Severe Risk". Thus, Nevadans were twice as likely to screen as Severe Risk of problem gambling compared to Arizonians. This result is all the more significant given that 33% more Arizonians gamble. The explanation for this contrast in positive screening rates is complex and involves several factors with only a few of them investigated in the surveys. In a later section, we will discuss various attitudes and beliefs of Arizonians and Nevadans. For Arizonians, 33% viewed casinos as good places to socialize. For Nevadans, that rate increases to 45%. Also, 27% of Arizonians considered gambling a fun and harmless form of entertainment compared to 35% reported by Nevadans. Thus, Arizona residents, compared to individuals living in Nevada, may be more aware of risks

^{vii} See this survey's Technical Report for a description of the PGSI psychometric properties and discussion as to the selection of this problem gambling screening instrument.

^{viii} The positive predictive value of the PGSI is .49, meaning that about half of those who screen as "severe risk" are likely to be diagnosed with Gambling Disorder by a qualified mental health professional following a DSM-5 clinical assessment,

associated with gambling which in turn may provide them with greater protective factors.

A second validated problem gambling screening instrument was incorporated into the survey, the Brief Biosocial Gambling Screen (BBGS). This second problem gambling screening instrument was included for two primary reasons. First, it offers the ability to assess problem gambling risk using more than one validated tool. Second, BBGS findings can be compared with BBGS findings from a recent gambling behaviors survey completed in Oregon that utilized a very similar methodology.

Ten percent of Arizona respondents scored as at-risk for a gambling problem on the BBGS, meaning they endorsed at least one of the three BBGS items. This rate of 10% of the population obtaining a positive BBGS problem gambling screening compared to 8.3% in the Oregon gambling behavior survey⁷. Based on findings from the two problem gambling screening instruments incorporated into the present survey, the Arizona adult population appears to have a lower problem gambling rate than Nevada and a slightly higher rate than Oregon^{ix}.

The 10% positive BBGS rate among survey respondents implies that 3.7% of Arizonians might be living with a Gambling Disorder^x - a very similar rate that the PGSI predicts for the survey sample. Because findings from the two problem gambling screening instruments correspond closely with one another, for the rest of this report, we will focus on the findings from the PGSI as a screener of problem gambling risk due to its higher positive predictive value, a greater level of detail regarding risk levels, and a larger number of gambling-related problem behavioral indicators.

Figure 8 identifies the top 10 risk factors for screening moderate to severe risk on the PGSI^{xi}. Risk factors were selected among demographic variables, gambling activity levels, and gambling motivations. Arizonians who were motivated by "being alone" and "gambling to distract themselves from everyday problems" were 2.8 times more likely to screen as moderate to severe risk of problem gambling. Engaging in gambling activities at least once a week and gambling on five or more gambling types (e.g., slot machines, card games, etc.) were also associated with higher rates (2.6 times more and 2.1 times more, respectively). Several demographic variables

^{ix} These problem gambling rates were estimated on 3 different data sets, including one (Oregon) that was collected in 2020 during the COVID19 pandemic. As such, the authors didn't feel that the individual data sets were sufficiently similar to pool the data and statistically test differences in these problem gambling rates.

^{*} As discussed in the Technical Report, the predicted probability of the BBGS is .37, meaning that about 37% who screen as positive are likely to be diagnosed with Gambling Disorder under a full examination by a trained clinician.

^{xi} Comparisons are made using the groups classified as moderate risk plus severe risk, rather than only severe risk, in order to increase sample sizes.

(age, marital status, race, and ethnicity) were also seen to associate with higher moderate to severe gambling rates compared to the overall average.

Risk Factors for Moderate to Severe Problem Gambling	%	Times Greater Than Avg. Risk
Gambling to be alone or for distraction	48.7	2.8
Gambling more than once per week	45.2	2.6
Enagaging in five or more forms of gambling	37.9	2.1
Being between 21 - 29 years old	35.0	2.0
Having never been married	29.4	1.7
Being separated as a marital status	28.1	1.6
Playing electronic games 20+ hours per week	27.7	1.5
Gambling to win money or for excitement	26.6	1.4
Identifying as male	22.7	1.3

Figure 8.	Problem	gambling	risk	factors
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N = 1,269

In terms of wagering on sporting events, 44% of Arizonians who reported engaging in such activities scored moderate to high risk for problem gambling on the PGSI. Moreover, of those who wagered on sporting events at least once a week, 24% screened positive for moderate risk of problem gambling and 39% scored within the severe risk range of problem gambling.



ASSOCIATION BETWEEN GAMBLING-RELATED PROBLEMS AND OTHER PROBLEM BEHAVIORS

To explore the relationship between problem gambling risk and other potential behavioral problem areas, the survey asked participants, "During the past 12 months, which behaviors have you tried to quit/cut down, or had someone express concern about, or have been problematic for you?" (A list of eight potential problem areas was provided.) Figure 9 shows the results. Food or eating, shopping or spending, and Internet use were the top-3 problems faced by adult Arizonians, as well as the top-3 behaviors they tried to quit or cut down and the top-3 areas over which others expressed concern during the past year. In terms of gambling behaviors, 3% of adult Arizonians reported having problems with gambling and 4% tried to quit or cut down and a similar percentage had someone expressed concerns over it. These self-reported rates of gambling-related issues correspond to the estimated rate of Gambling Disorder within the Arizona adult population as estimated by survey responses to the two problem gambling screening instruments described above.

Behavior	Has been problematic for you (%)	Tried to quit or cut down (%)	Someone expressed concern about (%)
Food or eating	7.9	22.4	9.5
Shopping or spending	6.0	14.5	6.9
Internet use	6.0	12.5	8.1
Alcohol or drug use	4.7	9.9	5.2
Gambling behaviors	3.1	4.4	4.3
Sexual behaviors	2.7	4.1	2.8
Mobile phone gambling	1.9	4.0	4.4
Video gaming	1.5	3.9	3.3

Figure 9. Problematic issues, quit attempts, and concern expressed by others

N=: 1,269

Figure 10 compares rates of problematic areas between two groups: moderate to severe risk of problem gambling and no to low risk. The results are rather striking and demonstrate how behavioral problems often co-exist.

Behavior	Moderate to severe risk (%)	No to low risk (%)
Internet use	15.9	3.8
Shopping and spending	13.9	4.3
Alcohol or drug use	13.3	2.9
Food or eating	13.3	6.7
Mobile phone gaming	10.0	0.1
Sexual behaviors	9.5	1.3
Video gaming	4.1	1.0

Figure 10. Problematic behaviors, by gambling risk

N = 1,269

For example, Arizonians who were at moderate to severe risk of problem gambling were significantly more likely to self-report problems with Internet use (16% versus 4%), shopping and spending (14% versus 4%), and alcohol use (13% versus 3%). They also reported higher prevalence rates for all other categories – food and eating, mobile phone gaming, sexual behaviors, and video gaming.

SELF-EXCLUSION

Gambling voluntary self-exclusion is often viewed as a tool for persons with a gambling problem to assist them in stopping or controlling their gambling. It offers the ability for persons with a gambling problem to set up barriers to gambling by allowing them to be placed on lists restricting access to gambling establishments or online sites and can help reduce gambling urges by banning operators from offering promotional materials to persons on the self-exclusion list. In Arizona, the Arizona Department of Gaming, Division of Problem Gambling offers two types of Self-Exclusions: Casino self-exclusion, where an individual can exclude themselves from gambling at all Arizona casinos, and Event Wagering & Fantasy Sports (EWFS) self-

exclusion, where individuals can voluntarily exclude themselves from placing wagers or purchasing fantasy sports contest entries at any licensed Arizona facility or on Arizona licensed Internet/mobile platforms. Both exclusions provide that a person on the self-exclusion list will be prohibited from collecting any winnings or recovering any losses. The ban includes the use of any of the services or privileges of the facility such as restaurants, concerts, conventions, and hotels. The time period options are either one-year, five-year, or ten-year exclusions. Persons who enroll in the Arizona Department of Gaming's (ADG) self-exclusion programs cannot rescind their exclusion status during the period they select when enrolling into the program.

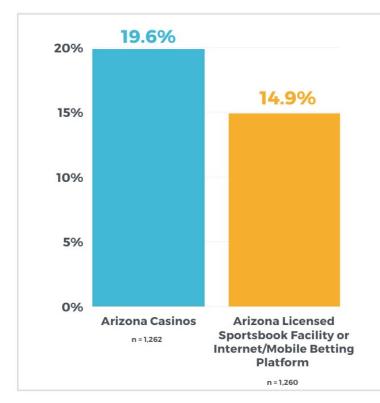


Figure 11. Awareness of self-exclusion

The survey asked respondents whether they were aware of such self-exclusion options. Figure 11 presents the results. Twenty percent of Arizonians were aware that they could self-exclude from Arizona casinos, while a smaller 15% were aware that they could self-exclude from event wagering.

The survey found that respondents who were more engaged in gambling activities had greater awareness of the ADG's selfexclusion programs. Arizonians who were identified as moderate to severe risk on the PGSI scale had an 88% higher awareness rate (40% versus 17% for no to low-risk problem gamblers) and those that gambled at least once a week had

an 85% higher awareness rate (39% versus 15% for those who gambled less frequently). These findings suggest that efforts to increase awareness of self-exclusion programs at casinos and sports wagering sites are having an impact. However, the findings also suggest more effort is needed. Ideally, all individuals whose gambling behaviors place them in a moderate to severe risk problem gambling category should be aware of the option to voluntarily self-exclude from gambling establishments and online sites.

INFORMATION-SEEKING BEHAVIOR

The survey asked participants the first place they would look for information about a gambling problem. Figure 12 displays the results. Nearly half of Arizonians would search the Internet for such information. This makes sense given the speed and convenience of online searches, as well as its anonymity and abundance of information (albeit not always the most accurate information). Twenty-three percent of Arizonians would contact the problem gambling helpline. This is an insightful result since only 35% of Arizonians were aware of the Arizona problem gambling helpline; this means that 2/3rd of Arizonians who were aware of the helpline would use it as their initial point of contact for problem gambling information. Thus, increasing problem gambling helpline awareness could materially increase the use of a preferred frontline response to problem gambling. The public's use of the gambling helpline is a preferred route to help due to the belief that gambling helpline call staff are well suited to engage callers with gambling-related issues and direct them to the most appropriate help resources based on their circumstances.

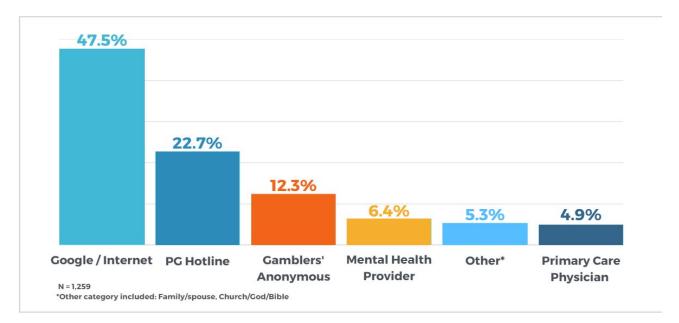


Figure 12. First place to look for information on problem gambling

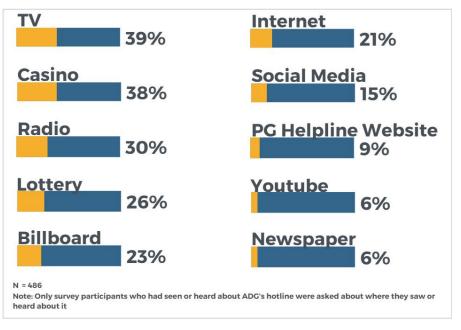
The Nevada survey also asked this question. The rank-ordering was identical (except that "Other" and "Primary Care Physicians" were interchanged). For Nevada, only 32% would first search the Internet for information, and about twice as many people would reach out to mental health providers and primary care physicians (12% and 11%, respectively) compared to Arizonians.

As mentioned previously, 35% of Arizonians were aware of Arizona's helpline (1-800-NEXT-STEP) in 2023. That is a 9-fold increase from 2010 when only 4% of Arizonians reported they were aware of the helpline (based on a problem gambling awareness survey conducted by Behavior Research Center⁸). In that 2010 survey, 5% of survey respondents who reported having gambled in the past year were aware of Arizona's problem gambling helpline, versus 3% awareness rate among non-gamblers; in 2023, that gap increased to 38% of helpline awareness for persons reporting to have gambled in the past year versus 16% for non-gamblers, potentially indicating a level of effectiveness of helpline public awareness campaigns, such as those promoted by gambling establishments, the Arizona Department of Gaming, and the Arizona Lottery.

Other subgroups also showed relatively high helpline awareness rates. Higher frequency gamblers (those that gambled weekly or more), gamblers who reported attempting to quit or cut down on gambling activities, and gamblers who screened as moderate to severe risk for problem gambling all had awareness rates of 50% or more compared to the average of 35%^{xii}. Age and income were the only demographic variables that displayed significant differences in awareness rates: Arizonians aged between 30 to 44 and those that were employed had higher awareness rates (58% and 60%, respectively).

Figure 13 displays the locations and places where Arizonians saw or heard about the 1-800-NEXT-STEP helpline. TV (39%) and casinos (38%) were the two most common sources, followed by radio (30%), lottery tickets (26%), billboards (23%), and the Internet (21%). Across almost all demographic groups, gamblers and non-gamblers, and problem gambling risk groups, TV and casinos



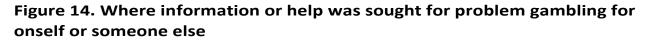


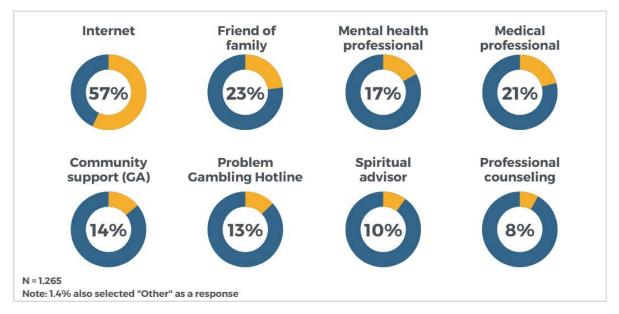
xⁱⁱ High frequency gamblers had an awareness rate of 53%, gamblers who screened as moderate to severe risk had a rate of 50%, and gamblers who reported trying to quit or cut down on gambling had a rate of 56%. All are statistically significant differences.

were the top-2 locations where the 1-800-NEXT-STEP helpline was either seen or heard. The three exceptions were for young adults (aged 21 to 29), those with less than a high school education, and those living in non-metro areas. For them, lottery tickets were the top source of 800-NEXT-STEP helpline awareness.

About 5% of respondents actually sought out information or assistance about a gambling problem for themselves or someone else over the past year.

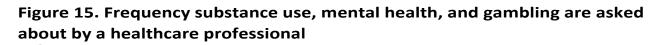
Figure 14 displays all of the sources that they utilized. (Note, respondents were allowed to select multiple options.) Accessing the Internet for information was by far the most common resource that was used by 57% of respondents. A distant second was relying on friends or family members (23%), followed by mental health professionals (21%), and medical professionals (17%). An average of 1.7 of these resources were leveraged by these Arizonians.

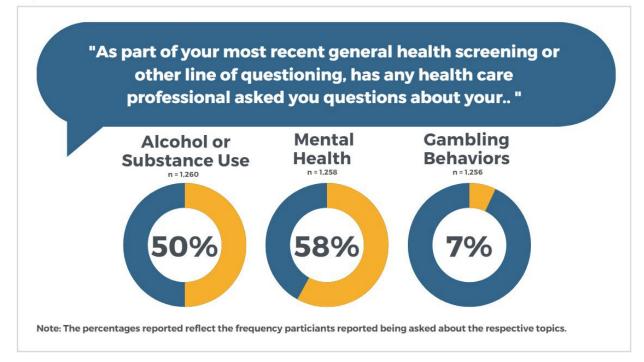




Only 17% of Arizonians who sought out information or assistance with a gambling problem reached out to medical professionals. One explanation could be that medical professionals (such as family doctors) rarely engage their patients on gambling-related issues. Supporting this hypothesis are the results presented in Figure 15, which displays the percentage of times that a healthcare professional inquired about various behavioral health topics during the respondents' most recent general health visit. Fifty-eight percent of survey respondents reported that as part of their most recent general health screening, mental health issues were screened for; fifty percent reported that their alcohol and substance use was asked about and

only 7% of respondents reported to have been screened for or asked about their gambling.

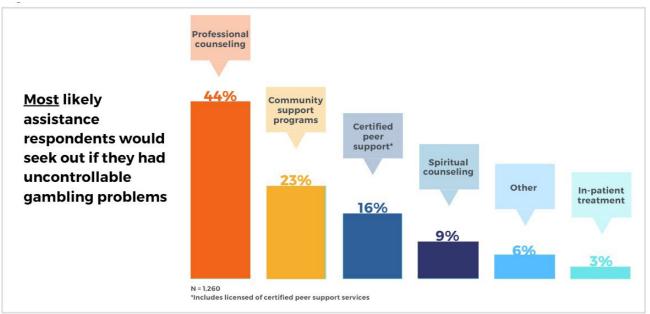




The Nevada survey also asked this question. For Nevadans, 38% of health care professionals discussed mental health issues, 29% alcohol and substance abuse, and 10% gambling behaviors. Thus, gambling behaviors are a topic that is discussed at a higher rate, but the other two topics are discussed at a lower rate.

Despite the low rate of gambling-related discussions with general health care professionals overall, it turns out that Arizonians who screen as moderate to severe risk of problem gambling on the PGSI screener are 4.5 times more likely to have gambling behaviors come up during a medical screening (18% versus 4% for no to low problem gambling risk Arizonians). There are no statistically distinguishable differences between the groups for discussions on mental health and alcohol and substance use. Thus, despite the overall low rate of gambling-related discussions, it appears that healthcare professionals were significantly more likely to have these discussions with Arizonians at higher risk of problem gambling, perhaps because these individuals are more likely to raise the issue.

As previously discussed, the survey asked all participants where they would first look for information on problem gambling (Figure 12). It then asked Arizonians who sought out information and assistance on problem gambling what resources were utilized (Figure 14). The survey also asked Arizonians that if they were to develop a gambling problem that they were unable to control, what types of assistance would they be most likely to seek. Figure 16 displays the results. Forty-four percent of Arizonians reported they would seek professional counseling, while 23% reported community support programs (such as Gambler's Anonymous), 16% peer support services, and 9% spiritual counseling. Only 3% would consider in-patient treatment.





Arizonians who screened as moderate to severe risk problem gambling were 4.5 times more likely to seek out in-patient treatment (9% versus 2% for no to low-risk groups).

ATTITUDES AND BELIEFS

The survey asked questions that explored gambling-related attitudes and beliefs held by Arizonians. Figure 17 displays the findings from questions that explored the participants' beliefs about gambling addiction. Most Arizonians agreed or strongly agreed with the statement that an addiction to gambling is a lot like an addiction to drugs or alcohol (77%) and 46% agreed or strongly agreed that gambling is a medical problem. Thus, slightly less than a majority of Arizonians recognized that addiction to gambling has health implications and requires professional medical attention and intervention, no different than any other medical problem. Slightly more than a third (37%) of Arizonians agreed with the statement that addiction to gambling is caused by a lack of willpower. Examining how these attitudes relate to demographic, gambling activities, and problem gambling factors, several observations stand out. First, higher levels of education and high-income (\$100K)

households are positively related to agreeing that a aambling addiction is like an addiction to drugs and alcohol and that gambling addiction is a medical problem^{xiii}. Second, higher frequency gamblers (those that aamble at least once a week) and gamblers who screen as moderate to severe risk gamblers were more likely to regard gambling addiction as a lack of willpower^{xiv}; males were also more likely than females^{xv} to agree with this view. Third, gamblers who attempted to guit or cut down on gambling

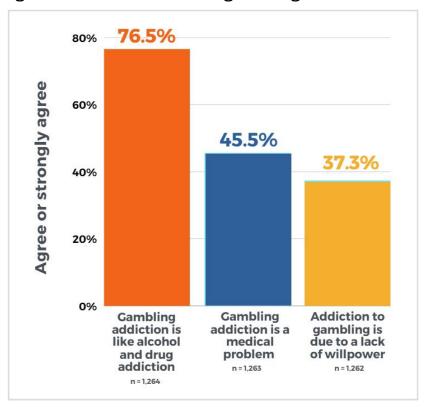


Figure 17. Attitudes about gambling and addiction

over the past year are more likely to believe that addiction to gambling is a medical problem (and hence should be treated) and that the addiction is due to a lack of willpower (and hence is a matter of exerting more self-control)^{xvi}. Although these two beliefs are not mutually exclusive, they are somewhat contradictory. Believing that addiction to gambling is a medical problem acknowledges the complex interplay of biological, psychological, and social factors that underly gambling addiction. However, believing that gambling addiction is due to a lack of willpower largely overlooks these challenges that individuals must overcome.

The Nevada survey also asked these three questions and the results were similar to Arizona respondents, with 78% of Nevadans believing gambling addiction is like alcohol and drug addictions, 44% that addiction to gambling is a medical problem, and 44% that gambling is due to a lack of willpower.

xiii For "addiction is like alcohol and drugs", the response rate for Arizonians with post graduate work or professional degrees was 89% and 83% for household incomes of \$100K or more.

xiv For "gambling addiction is due to a lack of willpower", the response rate for higher frequency gamblers was 43% and 50% for Arizonians who screened as moderate to severe risk problem gamblers.

^{xv} The response rate for males was 43% versus 32% for females.

^{xvi} The response rate for "addiction is like a medical problem" was 54% and for "addiction is due to a lack of will power" is 52%.

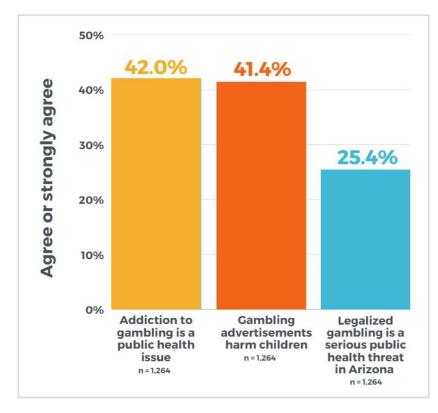


Figure 18. Attitudes about gambling and public health

The survey also examined attitudes about problem gambling and public health. Figure 18 displays the results. Less than the Arizonians majority of agreed or strongly agreed that gambling addiction is a public health issue (42%) and that gambling promotions negatively impact children (41%). Also, a quarter of Arizonians agreed or strongly agreed that legalized gambling is a serious public health threat in Arizona (25%). These are important results because these attitudes are related to willingness to support safer gambling initiatives and state-funded programs

for problem gambling public awareness and treatment services.

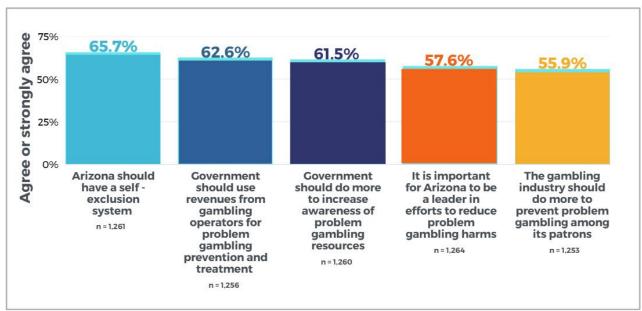
Examining these attitudes more closely, Arizonians who didn't gamble and those with higher educational levels were more likely to view gambling addiction as a public health issue compared to others^{xvii}. Also, Arizonians who tried quitting or cutting down on their gambling during the past year were more likely to hold similar views^{xviii}. This last finding suggests that these individuals recognize that problem gambling extends beyond individual impacts, which might be due to their personal experience in observing the way problem gambling can impact family, work, and community.

The Nevada survey asked two of these questions – the question regarding addiction being a public health issue and the negative impact of gambling advertisements on children. The results were also very similar (46% and 38%, respectively).

^{xvii} The response rate for Arizonians who did not gamble was 48% and the rate for those with higher education levels was 52% (for those who have a bachelor's degree) and 51% (for those with post-graduate work or professional degrees).

^{xviii} The response rate was 54%.

The survey also explored Arizonian attitudes towards governments' and gambling industries' responsibilities towards reducing gambling-related harms. Figure 19 displays the results. Overall, Arizonians firmly supported (ranging from 56% to 66%) government or industry measures to address problem gambling issues. Thus, despite previous results that reported a *minority* of Arizonians viewed addiction to gambling as a public health threat (Figure 18), a solid *majority* endorsed the importance of taking measures to address problem gambling. Figure 19 also reports that 66% of Arizonians believed that Arizona should have a self-exclusion system for Arizonians were aware that Arizona offers self-exclusion programs for both of these gambling activities, suggesting that 45% of Arizonians who want self-exclusion programs are unaware of their existence.





For the Nevada survey, the only compatible question was the one on self-exclusion. Forty-two percent of Nevadans agreed or strongly agreed that there needs to be a self-exclusion system put into place; that is about 2/3rd the support that Arizonians gave.

Examining how these attitudes vary across demographic and other factors, higher levels of education and Arizona seniors (aged 60 and over) were positively related to increased support across all statements, except for self-exclusion programs^{xix}; Arizonians with lower educational levels, as well as non-Hispanic Blacks, and

^{xix} For the four questions regarding government and casino support (read from left to right in Figure 19), the response rates for post graduate study or professional degree was 66%, 75%, 73%, and 65%. For Arizonians aged 60 and over, the response rates were 69%, 68%, 69%, and 63%, respectively.

households earning less than \$30K, were the strongest supporters of self-exclusion programs^{xx}.

Figure 20 displays the results on Arizonians' views on gambling as a form of socialization and entertainment. Thirty-three percent of Arizonians agreed or strongly agreed that casinos are good places to socialize and 27% agreed or strongly agreed that gambling is a fun and harmless form of entertainment. This last finding is noteworthy because it suggests that one in four Arizonians do not recognize the potential risks associated with gambling. The Nevada survey also asked Nevadans to assess these statements. 45% of Nevadans agreed or strongly agreed that gambling is a fundant agreed or strongly agreed that casinos are good places to socialize and 35% agreed or strongly agreed that gambling is a harmless form of entertainment, both of which are much higher than what was found in Arizona.

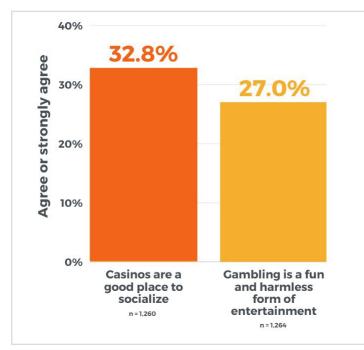


Figure 20. Attitudes about gambling and recreation

Examining these attitudes more closely, Arizonians who screened as moderate to severe risk for problem gambling, those that gambled at least once a week, and Hispanic respondents were more likely to view gambling as a good place to socialize and a fun and harmless form of entertainment, relative to others^{xxi}. Non-Hispanic Black respondents were more likely to view casinos as a good place to socialize^{xxii}.

The survey also asked questions regarding awareness, availability, and treatment of problem gambling. Figure 21 displays the results. About half of

Arizonians agreed or strongly agreed that they would know how to get help if someone they knew had a gambling problem. Forty-six percent agreed or strongly

^{xx} The response rates were HS graduate education or equivalent (55%), Less than HS (48%), Non-Hispanic Black (45%), and HH earning less than \$30K (43%).

^{xxi} The response rates for "viewing casinos as good places to socialize" were 43% for higher frequency gamblers, 44% for moderate to severe risk gamblers, and 41% for Hispanics. The response rates for "viewing gambling as a harmless form of entertainment", were 39% for higher frequency gamblers, 38% for moderate to severe risk gamblers, and 32% for Hispanics.

^{xxii} The response rate for Non-Hispanic Blacks was 47%.

agreed that problem gambling treatment services were available in their community, and 39% agreed or strongly agreed that treatment for problem gambling is effective in helping people stop or control their gambling. These results highlight the need for increased public awareness of problem gambling resources and enhanced education on the effectiveness of problem gambling treatment. In addition, the public must be better informed about the accessibility of problem gambling treatment services, both in their local communities and those that are accessible to all Arizonians via telehealth options^{xxiii}.

The Nevada survey also asked Nevadans to evaluate these three statements. Public awareness of gambling treatment resources was lower in Nevada compared to Arizona suggesting that although there is room for improvement in Arizona, efforts to educate the public about problem gambling help resources are having a greater impact than Nevada's efforts.

Arizonians who gambled more than once per week and who had at least a bachelor's degree were more likely to agree or strongly agree with all of these statements^{xxiv}. Younger Arizonians (those aged 21 - 29) were more likely to be aware of available treatment options and their effectiveness^{xxv}. Several racial/ethnic groups exhibited higher propensities for agreement. Non-Hispanic Black respondents were the most likely group to know how to help someone who had a gambling problem (61% vs the overall average of 50%). Hispanic respondents were the most likely group to agree that problem gambling treatment is effective at stopping or controlling gambling (54% vs the overall average of 46%).

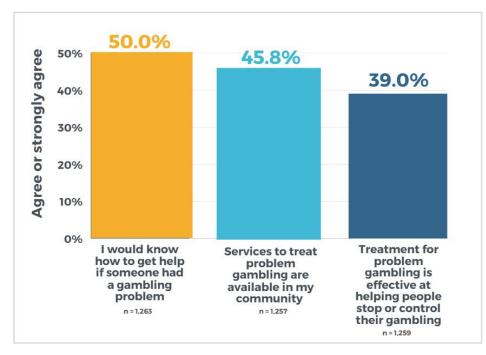
There were several other areas that the survey examined. About 20% of Arizonians agreed or strongly agreed that gambling is an important part of cultural life in Arizona. Nevadans' response rate to this statement was 3 times higher (62%). This result is not surprising given the outsized role that the gambling industry has in Nevada. About 20% of Arizonians have been negatively affected by the gambling behaviors of someone they know (e.g., a friend, family member, and coworker). Arizonians who have tried to quit or cut down on their gambling and those who screened as moderate to severe risk were significantly more likely to agree or strongly agree with that statement (36% and 33% versus the overall average of 19%). The response rate for Nevadans to this statement was 30%. That is somewhat surprising given the much higher rate of Nevadans who screened for severe risk of problem gambling (15% versus 8% for Arizonians). Finally, 6% of Arizonians

^{xxiii} 34% of Arizonians living in rural areas, compared to 47% who lived in urban and suburban areas, said they agreed or strongly agreed that problem gambling treatment services were available in their communities.

^{xxiv} From left to right (Figure 21) the response rates for higher frequency gamblers was 57%, 53%, and 45%. For those with higher levels of education, the response rates were 57% (bachelor's degree), 53% (post graduate work or professional degree), and 45% (bachelor's) degree.

^{xxv} The response rate for Arizonians aged 30-44 was 59%.

(compared to 13% of Nevadans) agreed or strongly agreed that the more a person gambles, the better his or her odds are of coming out ahead. Interestingly, 26% of Arizonians who attempted to reduce their gambling in the past year and 19% of Arizonians who screened as moderate to severe risk for a gambling problem harbored this incorrect assumption.





PRACTICE AND POLICY IMPLICATIONS

There is a need to invest in efforts to reduce gambling-related harms.

Survey findings suggest a need to expand upon programs and strategies aimed at reducing gambling-related harms. Almost 1 in 5 adults reported negative impacts related to their gambling behaviors over the past year and an estimated 3.8% to 4% of Arizona residents might be living with Gambling Disorder. Problem gambling-related harms are diverse, ranging from risks to homelessness, domestic violence, debt, family breakdown, loss of productivity, criminality, and negative impacts on emotional and physical health. For these reasons, problem gambling is increasingly being described as an important public health issue that extends beyond the individual to include interpersonal, community, and societal levels of impact^{xxvi}. Further investments to mitigate gambling-related harms should result in decreased human suffering along with societal economic and health benefits.

Certain groups are more vulnerable to harmful gambling, suggesting intervention efforts that target higher-risk groups may have the greatest impact.

Certain groups are more vulnerable to harmful gambling. Survey findings identified the following groups as having higher than average problem gambling risk levels: young adults, males, single persons, Hispanics, and certain player types such as sports betters, frequent gamblers, and those that engage in multiple gambling activities. Problem gambling prevention and awareness efforts that speak to these audiences should be considered when developing new problem gambling service initiatives or new gaming industry responsible gambling materials.

The public would benefit from more information about safer gambling and the availability of self-exclusion programs and helpful resources.

Survey data suggested that a problematic number of persons who gamble may be at increased risk for developing a gambling problem due to faulty gambling beliefs. For example, 6% of gamblers believed that the more a person gambles, the better his or her odds are of coming out ahead, and 19% of moderate to severe problem gamblers endorse this view. Further, 27% of respondents endorsed statements

xxvi Latvala, T., Lintonen, T., & Konu, A. (2019). Public health effects of gambling–debate on a conceptual model. BMC public health, 19, 1-16.

suggesting they do not recognize the potential risks associated with gambling. Many persons who gambled also were not aware of voluntary self-exclusion programs offered by ADG nor help resources in the event they needed it. These findings suggest more effort is needed to educate players about safer gambling practices and available tools, common faulty gambling beliefs, and resources for information and help.

Screening for gambling-related problems within healthcare settings is warranted.

This study highlights the need to screen for gambling disorders within healthcare settings. Strategies should include a systematic assessment of addiction comorbidity and other guidelines for primary caregivers, physicians, and behavioral healthcare workers. Several brief screeners can be used within primary care or medical settings, such as those used in this study.

Culturally informed interventions may help address health disparities.

Within the survey, individuals identifying as Hispanic were significantly more likely to score positively on problem gambling screens than other ethnic groups. Grants and other programs to address health disparities should utilize culturally appropriate strategies to address disadvantaged groups and address behavioral addictions.

x^{vii} See this project's Technical Report for a description of the screening measures used including instrument questions and references to scoring and interpretation.

LIMITATIONS

Several limitations to this study are important to note. First, this study relied on a probability-based panel designed to be representative of the average Arizona household combined with nonprobability online interviews that were weighted to account for potential bias associated with the nonprobability sample. Although this sampling method has several advantages over other survey methods, there may be some sampling bias. Second, only Arizona residents were eligible to participate in this survey. It is unclear whether the results of this Arizona study generalize to other populations. Lastly, this study was fielded approximately three years after the first COVID-19 stay-at-home orders were issued and before the World Health Organization declared an end to the global public health emergency for COVID-19 on May 5, 2023. It is unknown if societal impacts created by the COVID-19 pandemic influenced responses.



CONCLUSION

Gambling is a popular activity among Arizona residents and an important source of revenue for Arizona tribes and the State of Arizona. A significant downside to widespread access to legalized gambling, including newly legalized Internet and app-based sports betting, is its contribution to public harm resulting from problem gambling. Problem gambling includes all gambling behavior patterns that compromise, disrupt, or damage personal, family, or vocational pursuits. The current probability-based panel survey of Arizona residents, where 18% of respondents scored within a problem gambling moderate to high-risk range suggests thousands of Arizonans may be at some risk of gambling-related harm. Fortunately, Arizona tribes and state government policymakers have invested in programs to reduce gambling-related harm, a policy that this survey showed is widely supported by the public. Survey findings also demonstrated that ADG, Division on Problem Gambling, programs have made progress in increasing the public's awareness of available problem gambling services. However, the survey findings demonstrate greater investment and efforts in problem gambling services are needed to better address problem gambling, thereby, improving Arizona's economic and public health.



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