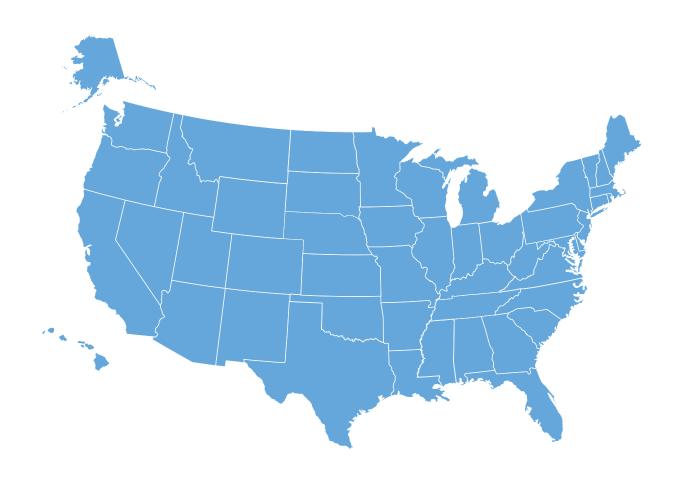


### **National Detailed Report**





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# NATIONAL SURVEY on GAMBLING ATTITUDES and GAMBLING EXPERIENCES 2.0

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### **Special Thanks**

This project was made possible by a generous donation from Entain Foundation US, with additional support from Charities Aid Foundation UK and Playtech. They had no input in the study or this report.



#### From the Executive Director

The National Council on Problem Gambling (NCPG) is proud to release its National Detailed Report from the second National Survey of Gambling Attitudes and Gambling Experiences (NGAGE 2.0). This research project meets a critical need for data on the impact of expanded gambling in general in the US and expanded sports betting in particular.

This report provides the first opportunity to measure national changes in gambling attitudes and experiences from the 1.0 baseline study in 2018. All the information from NGAGE 1.0, including detailed reports on each state, is available at www.ncpgsurvey.org.

I would like to again thank the Entain Foundation US for their support for the first two iterations of the NGAGE project. Their vision and commitment to responsible gambling is greatly appreciated.

Despite the challenges presented by the COVID-19 pandemic in 2021, NCPG worked with Ipsos, an international market research and consulting firm, to conduct this survey. Our goal was to better understand American experiences and attitudes about various forms of gambling and to measure changes as gambling expands. The survey questions address a broad range of issues including gambling participation, rates of problematic and positive play behavior, and public beliefs and opinions about problem gambling. This research also includes an in-depth look at trends in and attitudes about sports betting and fantasy sports betting, providing the most detailed information to date in emerging US research about these fields. We stress, however, that this survey is NOT a study of the prevalence of gambling addiction.

NCPG's findings show that the risk to individuals for gambling problems has certainly grown between 2018 and 2021 – especially for young males – but that causes are complex and include the impact of the pandemic on gambling behavior. Younger age and higher education remain strongly correlated with sports betting, unlike other forms of gambling. And there is a significant overlap between those who frequently engage in gambling and online investment trading. Americans continue to misunderstand and stigmatize gambling addiction, but also strongly support responsible gambling measures by government and gambling operators.

NCPG will use this evidence-based data to continue to advocate for programs and services to assist people and families affected by problem gambling and gambling addiction. We call on individuals, communities, the gambling industry, and state, tribal and the Federal governments to work together to allocate more resources to address this public health issue.

Keith Whyte

Executive Director, National Council on Problem Gambling

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# I. INTRODUCTION AND EXECUTIVE SUMMARY

### INTRODUCTION AND EXECUTIVE SUMMARY

In 2018 the National Council on Problem Gambling (NCPG) conducted the first National Survey on Gambling Attitudes and Gambling Experiences (NGAGE). At the time of that survey, lotteries existed in 45 states and the District of Columbia, casinos owned or operated by private corporations, state governments, or Native American tribes existed in 43, while legal sports betting was limited to Nevada and New Jersey. Horse racing tracks operated in 30 states while other forms of legalized gambling, such as charitable raffles, bingo and pull-tabs or breakopens were permitted in many states. Online gambling of any type was legal only in a handful of states; it was, however, readily available (whether legally or illegally) to anyone with a computer (National Council on Problem Gambling, 2021).

For most forms of gambling, little had changed as of April 2021. Lotteries had expanded by one additional state--Mississippi (North American Association of State and Provincial Lotteries, 2021). Casinos were also found in one additional state (Arkansas) for a total of 44 states, two of which (New Jersey and Pennsylvania) had authorized online casinos (American Casino Guide, 2021).

Sports betting, however, has undergone drastic changes. In May 2018 the U.S. Supreme Court overturned the federal Professional and Amateur Sports Protection Act, in effect allowing states to decide the legality of sports betting in their jurisdiction (U.S. Supreme Court, 2021). States did not hesitate to take advantage of the opportunity: the data presented in this report was collected in April 2021, a time when legal sports betting was available in 21 states. From that time through February 2023 it became available in an additional 11 states plus the District of Columbia, and is authorized but not yet operational in an additional three (Legal Sports Report, 2023). These 35 states (plus D.C.) account for approximately 57 percent of the U.S. population.

With the rapid expansion of sports betting, NCPG decided to undertake a second NGAGE study. Much of the survey duplicated the first study though several questions were added (most notably a section on investment practices) and some that had proven less valuable in 2018 were deleted. Funding constraints resulted in a drop in the sample size from 3,000 to 2,000, and the state-by-state data that was reported in 2018 could not be collected in 2021.

Neither the 2018 nor 2021 NGAGE studies were designed to assess the prevalence of gambling disorders as defined by the American Psychiatric Association's Diagnostic and Statistical Manual, Fifth Edition (DSM-5). The NGAGE 2.0 results should not be used as a proxy for a prevalence study. While the 2021 survey was taken when legalized sports gambling had become widely available, in most of the country it was still in its infancy. The findings of this report relating to sports gambling therefore should be regarded as preliminary; participation and attitudes may well change as the industry matures. In addition, the survey was taken during the COVID-19 pandemic, an event that (as discussed below) resulted in dramatic changes in gambling behavior. It is impossible to definitively assess the degree to which the changes noted in this report are due to the pandemic or to the expansion of sports betting. We cannot know what sports betting in the U.S. would have looked like had the pandemic not occurred, nor should we speculate on how Americans might respond during recovery. These questions must await a third NGAGE survey. What we consider the most important findings of this study follow.

### **Key Findings**

- 1) The number of people displaying risky gambling behavior increased from 2018 to 2021. The number replying that they experienced at least one of four potentially problematic behaviors "many times" rose from 7 percent in 2018 to 11 percent in 2021, an increase of approximately eight million people.
- 2) The greatest predictors of risk identified in this study include participation in many different gambling activities, agreeing that gambling is a good way to make money,

I.
INTRODUCTION
AND EXECUTIVE
SUMMARY

- participation in fantasy sports or traditional sports betting, frequently trading investments, and being under the age of 45. Those gambling on 10 or more activities were three times more likely to show signs of problematic behavior than the average gambler and seven times more likely than those gambling on between one and six activities.
- 3) Young adults continue to be at a high risk of gambling problems. One-quarter of those under the age of 35 reported frequently experiencing at least one problematic play behavior (of the four assessed in this study) compared to 3 percent of those 55 or older. And while problematic play remained constant for those 45 and older between the 2018 and 2021 surveys, it increased substantially for those under 45.
- 4) **Gambling remains a popular American pastime.** Despite the pandemic-related disruptions in the gambling industry during 2020 and 2021, overall gambling participation showed no significant change from 2018 (73%) to 2021 (71%).
- 5) The status of sports betting legalization in a state appears to have made little difference on sports gambling participation in that state. The percentage of adults making sports wagers was virtually identical between those living in states where it was legal (25%) and those residing in states where it was not (26%). And among those who did bet on sports, the frequency of play, types of bets made, and size of bets showed few major differences. However, in many states legalized sports betting was still very new, and the impacts of widespread legalization may well take more time to become apparent.
- 6) Online wagering grew at a rapid rate. While online wagering was legalized in only a few states (mostly in limited forms), online gambling participation grew from 15 percent of the adult population in 2018 to 25 percent of the population in 2021, meaning that 25 million more people were gambling online in 2021 than were three years earlier.
- 7) **Some forms of gambling showed significant growth.** Lotteries, casino attendance, gaming machines, and card games showed little change, while sports betting, fantasy sports betting, online wagering, betting on parimutuel racing, roulette, and craps experienced increases in annual participation of 5 percent or more. The only form of gambling that showed a significant decline in participation was raffles, which declined from 41 percent to 36 percent.
- 8) The COVID-19 pandemic had a major effect on gambling behavior. Almost half of the respondents reported gambling less during the pandemic while 18 percent reported gambling more and the remaining 36 percent gambling the same. Increases in gambling were found to be strongly associated with problematic play and were concentrated heavily in young adults, the portion of the population historically most prone to problematic gambling behavior.
- 9) People who traded investments frequently also gambled frequently with high levels of problematic play. More than two-thirds of those trading weekly or more also reported needing to gamble more for the same feeling of excitement, lying to hide their gambling, and feeling restless or irritable when trying to quit or cut down on their gambling.
- 10) A large share of the population continues to misunderstand or stigmatize problem gambling. A majority continue to attribute gambling problems at least in part to moral weakness and/or lack of willpower. Along with almost all other measures of public opinion and beliefs on gambling, these numbers are virtually unchanged from 2018.

### 2. METHODOLOGY

### 2. METHODOLOGY

The 2021 NGAGE survey used methodology identical to the 2018 survey. NCPG designed the survey in consultation with the survey vendor Ipsos, the third-largest global market and opinion research group. Ipsos then conducted an online survey of people throughout the continental United States, Alaska, and Hawaii. Survey respondents were drawn from panels recruited by Ipsos and supplemented with panels obtained from other members of the market research industry. Ipsos conducted all fieldwork, including sample sourcing, data collection and hosting the survey online.

Through these panels, Ipsos collected a national sample of 2,000 adults (over 18) between April 12 and April 29, 2021. The timing of the survey was deliberately selected to follow the NCAA basketball tournament ("March Madness" or the "Final Four"), an event that attracts billions of dollars in gambling handle (Yakowicz, 2021). Respondents could choose to take the survey in either English or Spanish. Ipsos designed the survey to allow for easy completion on any device type, including computers, smartphones, and tablets. Quotas were established during fielding to ensure the sample was representative of key demographics such as gender, age, and Hispanic/non-Hispanic proportions. The data were further weighted post-fieldwork to ensure proper representation of differing levels of educational attainment. In some charts and tables, however, categories may not add up to 100 percent because not everyone answered all demographic questions—this most often happens with questions about household income. All demographic survey data were matched to data from the U.S. Census Bureau.¹

The 2018 survey, however, was based on a national sample of 3,000 adults. While the smaller sample size in 2021 had very little effect on overall results (the "credibility interval" as defined below only drops from +/- 2.0 percent to +/- 2.5 percent), it does mean that the sample sizes of certain demographic subgroups drop below the level where statistical inference can be reliably made. This is most notably true for breakdowns of specific racial or ethnic groups, and as a result this report contains many fewer such comparisons than did the 2018 NGAGE survey.

Questions within each section of the survey were presented to each respondent in random order to eliminate any bias resulting from the order of the questions. For example, within the section on gambling participation, one participant might be asked about bingo first and sports betting second, while the next might be asked about roulette first, lottery second, with bingo being sixth and sports betting tenth.

For the most part, questions asked in 2021 were identical to those asked in 2018, and every question asked in both surveys was worded identically. In 2021, however, new questions were asked about financial investments, the effects of the COVID-19 pandemic, and other subjects which meant that other questions had to be dropped so as not to increase the burden on respondents.

<sup>1</sup> The survey was taken prior to release of data from the 2020 census, precluding use of gender designations other than male or female.

2. METHODOLOGY

Ipsos measures the precision of their online surveys using Bayesian credibility intervals, an approach similar to classical confidence intervals or margin of error that attempts to account for the uncertain probability of an individual being included in an online panel.<sup>2</sup> For this survey, the national sample (n=2,000) has a credibility interval of plus or minus 2.5 percentage points for all respondents. The credibility interval will be wider among subsets of the sample population, as follows:

Sample of 1,000: credibility interval is +/- 3.5 percent Sample of 500: credibility interval is +/- 5.0 percent Sample of 200: credibility interval is +/- 7.9 percent

Given the size of the national sample, most comparisons will show differences that are statistically significant. However, in many cases, these differences will be so small as to have little, if any, practical significance. For this reason, levels of statistical significance will not be routinely cited in this report, allowing a focus on differences large enough to be meaningful for public policy, public health, or program development.

As with all sample surveys and polls regardless of sample methodology, this study is subject to other sources of error, including, but not limited to, coverage error and measurement error.

<sup>2</sup> For a detailed discussion of credibility intervals, see Gelman et al. (2003).

## 3. GAMBLING IN THE U.S.

### 3. GAMBLING IN THE U.S.

Gambling remained a common American pastime in 2021, with 71 percent of American adults reporting gambling on at least one activity in the past year. This figure is virtually unchanged from the 2018 NGAGE survey where 73 percent reported a past year bet. Nor is there much evidence of change in the frequency of gambling. In 2021, 27 percent of the sample reported betting on at least one gambling activity once a week or more<sup>3</sup>, again a figure virtually unchanged from the 24 percent reporting weekly gambling in 2018 (Figure 3-I). At the other end of the spectrum, 16 percent of the population reported having never gambled in 2021 compared to 12 percent in 2018.

Many Americans, in fact, reported betting on more activities in 2021 (Figure 3-2). The number reporting betting on five activities or more grew from a cumulative 29 percent to 37 percent, while the number reporting betting on just one activity dropped from 16 percent in 2018 to 9 percent in 2021. The average gambler bet on three activities in 2018, but this figure grew to five by 2021.

The lottery remained the most popular form of gambling, with two in three Americans (64%) reporting a lottery purchase in the past year (Figure 3-3). Spending money at a casino ranked second (37%), very slightly ahead of raffles (36%) and playing a slot machine or other type of gaming machine (32%). Approximately one in four Americans reported betting on a card game (26%), pull-tabs (24%), or bingo (25%), making a sports bet (26%), playing fantasy sports for money (24%) or wagering online (25%). Smaller numbers wagered on a horse or dog race (21%), spinning wheel/wheel of fortune games (20%), roulette (19%), or craps or other dice games (19%).

The likelihood of gambling on the most popular forms changed very little, if at all, from 2018 to 2021. The most notable exception was a decline in participation in raffles, which may well reflect their frequent use as a charitable fundraiser. Many events (such as school fundraisers) that would feature raffles were likely shut down due to the COVID-19 pandemic.

However, the less common forms of gambling without exception showed sizeable increases in participation from 2018 to 2021. Sports betting participation, for example, increased from 20 percent of adults to 26 percent, an increase of 30 percent in just 2½ years. Put another way, these data suggest that 15 million more American adults were betting on sports in the year preceding the April 2021 survey than in the year preceding the November 2018 survey. Similarly, participation in fantasy sports grew by 18 million, and online wagering saw more than 25 million additional participants. Perhaps the most surprising increase was in parimutuel racing, which grew from 14 percent to 21 percent, or a factor of 1.5. The potential reasons for these increases are discussed in the following sections on individual gambling activities, but in general the data seem to suggest a relationship between participation in these activities and the overall growth in online gambling as discussed in section 6J.

<sup>3</sup> This is admittedly an imperfect measure of overall gambling frequency, as, for example, a respondent could have not gambled on a single activity on a weekly basis, but yet have made fewer regular wagers on a variety of activities resulting in an overall frequency of weekly or more.

### 3. GAMBLING IN THE U.S.

### 3A. The Demographics of Gambling

As was the case in 2018, the demographic influence on overall gambling in 2021 was relatively small. Men continued to be slightly more likely to gamble than women by a 75 percent to 67 percent margin, levels virtually unchanged from the earlier survey. Men are also more likely to participate in multiple forms of gambling, with men accounting for two-thirds of those gambling on seven or more activities. Similarly, differences in gambling participation by annual household income (Figure 3-4) and educational attainment (Figure 3-5) remained both small and relatively unchanged, though as in 2018 those without a high school diploma and those with annual incomes under \$25,000 are somewhat less likely to gamble than those of higher socio-economic status.

Age differences narrowed somewhat, largely due to increased gambling participation by those under the age of 45 (Figure 3-6). The lowest gambling participation is now found in those 65 or older, though more than two-thirds of that age group reported past year gambling in 2021. Gambling in the remaining age groups ranges from 74 percent of those between 18 and 24 to 81 percent of those between 35 and 44, differences that are at best marginally statistically significant and of little or any practical significance.

Racial and ethnic differences are slight, with gambling participation ranging from 78 percent for Blacks to 70 percent for Whites (Figure 3-7). This pattern also has changed little since 2018.<sup>4</sup>

As was true in 2018, though, demographics do play a significant role in predicting what types of gambling respondents participate in. Men are more likely to participate in every form of gambling measured by the survey, making up two-thirds or more of the participants in dice games, roulette, sports betting (both traditional and fantasy), parimutuel racing, cards, and spinning wheel games (Figure 3-8). While men are more likely than women to purchase lottery tickets, the difference is slight, with men and women making up 52 percent and 48 percent of lottery players, respectively. These differences have changed only slightly from 2018.

Age differences are also striking (Figure 3-9). Nongamblers are older, on average, than those gambling on any activity, with a median age of 49. Lottery players have the highest median age (44) among gambling participants, followed by casino-goers (40), raffle players (39), and gaming machine players (38), with every other activity having a median age between 34 and 36. It is noteworthy, though, that the median age of those activities previously favored by older players noticeably declined from 2018 to 2021. Gaming machine players, for example, had a median age of 44 in 2018, but by 2021 that had dropped to 38. Declines in the median age also occurred in lottery players, raffle players, those spending money at a casino, pull-tab players, bingo players, and card players. The data suggest that these changes may be due to the overall growth in online gambling, which will be discussed in section 6J.

These data reflect both a continued tendency for younger adults to participate in more gambling activities than older adults and an increase in the number of gambling activities played by younger adults that was not matched by older adults (Figure 3-10). In 2021 gamblers under the age of 45 participated in an average (median) of seven activities, while those 45 or older participated in an average of three. And while the number of activities of those 45 or older was unchanged from 2018, it rose from five to seven for those under 45. The increase in number of activities was particularly striking for the youngest gamblers—the median number of activities for those between 18 and 24 rose from four in 2018 to eight in 2021.

<sup>4</sup> Data for Native Americans and people of Asian ancestry have been omitted from this report because of their small sample size. In addition, respondents were permitted to enter multiple racial/ethnic groups.

# 4. PROBLEMATIC GAMBLING BEHAVIOR

### 4. PROBLEMATIC GAMBLING BEHAVIOR

Both the 2018 and 2021 NGAGE surveys included four specific measures of gambling-related problems. These items are all included in the criteria for gambling disorder established in the fifth edition of the Diagnostic and Statistical Manual (DSM-5) (American Psychiatric Association, 2013). The selected items are also included in either the Brief Biosocial Gambling Screen (Gebauer, LaBrie, & Shaffer, 2010) or the Lie/Bet questionnaire for screening pathological gambling (Johnson, et al., 1997). The resulting survey questions were:

- How often have you needed to gamble with larger amounts of money or with larger bets in order to get the same feeling of excitement?
- How often have you felt restless or irritable when you tried to cut down or stop gambling?
- How often have you relied on others to pay your gambling debts or to pay your bills when you had financial problems caused by your gambling?
- How often have you lied to hide your gambling?

Questions regarding problematic gambling behavior were only asked of respondents who reported some form of gambling in the past year.

Respondents were instructed to consider only their behavior in the past 12 months. All questions could be answered "No, not in the past 12 months," "once," "a few times," or "many times." Only those reporting participation in at least one of the gambling activities listed in section 3 were asked these questions.

As was the case in 2018, we did not calculate a prevalence rate for gambling disorder. The literature continues to lack studies that validate the use of online panels for prevalence studies based on the DSM. In addition, Mishra and Carleton (2017) reported finding unusually high prevalence rates in four studies using online crowdsourcing platforms. While our sample was not crowdsourced, the similarities were sufficient to give us pause. More recently Pickering and Blaszczynski (2021) found that "substantially overinflated problem gambling rates" were found in a review of gambling studies conducted through online panels.

The number of gamblers reporting some level of problematic activity grew from 2018 to 2021, and for three of the four indicators grew by a substantial amount (Figure 4-I). There was a small increase in the number reporting that they needed to gamble with larger amounts of money or with larger bets—that figure grew from 27 percent in 2018 to 31 percent in 2021, a difference that while statistically significant is not large enough to be a cause for concern by itself. However, the number reporting feeling restless or irritable when trying to quit or cut down on gambling rose from 19 percent of gamblers in 2018 to 31 percent in 2021, and the number lying to hide their gambling grew from 17 percent to 31 percent. Most notably, the number reporting reliance on others to pay gambling debts or bills more than doubled from 12 percent to 27 percent.<sup>5</sup>

<sup>5</sup> The reader may choose to temper their concern over this finding with the author's belief that the wording of the question may be problematic. The question is long and complicated, and it is possible that some respondents skipped over or did not fully absorb the final phrase: "because of your gambling." During the pandemic many people experienced financial distress for a variety of reasons, and it is possible that responses reflected those other reasons in addition to or instead of their gambling. It should also be noted that the question does not address the amount borrowed from or paid by the "other" in question, and in at least some cases it is likely that the amounts paid by others were relatively insignificant. Nevertheless, it is also very likely that some of these cases represent harm that is both directly related to gambling and involved significant amounts of money.

4. PROBLEMATIC GAMBLING BEHAVIOR

The number reporting problematic behaviors "many times" showed a similar pattern (Figure 4-2). The percentage answering "many times" to three of the four behaviors doubled for the questions about lying about gambling and more than doubled for feeling restless or irritable when trying to quit or cut down and relying on others to pay debts or bills. The number giving this response to the question about "needing to gamble more for the same feeling of excitement" was unchanged from 2018 to 2021. It should be emphasized, however, that the vast majority of gamblers (89%) did not report experiencing any of the indicators "many times."

The presence of problematic behaviors strongly correlates with the number of different gambling activities in which an individual participates (Figures 4-3 to 4-6). Agreement with any of the four indicators is rare for those gambling on one or two activities, while a response of "many times" is virtually unknown within this group. At the other extreme, each indicator received affirmative responses from 80 percent or more of those gambling on 10 activities or more. Within that group, those responding "many times" ranged from 12 percent for needing to gamble with larger amounts of money to get the same excitement to 20 percent for relying on others to pay debts or bills because of gambling.

As in 2018, there is a strong relationship between responses to questions about problematic behavior and age (Figure 4-7). In 2021, the number reporting no problematic behavior ranged from a high of 91 percent of those 65 or older to a low of 24 percent of those 18 to 24. In addition, the numbers reporting no problematic play remained relatively constant over time for those 45 and older, while problematic play for those under 45 almost doubled. The numbers experiencing at least one indicator "many times" showed a similar pattern (Figure 4-8). Almost one in four adult gamblers under 25 provided this response, with that number declining to 1 percent of those 65 and older. Again, the survey found a strong division between those under 45 and those 45 or older. If we look at individual behaviors, this pattern persists (Figure 4-9). Those under 45 are four times more likely to answer "many times" to the indicator "needing to gamble more for the same feeling of excitement" and 10 times more likely to answer "many times" to the indicator "relying on others to pay debts or bills" compared to those 45 or older.

Gender differences are also significant, with males much more likely to report problematic play than females (Figure 4-10). For each of the four indicators, men were more likely to report experiencing problems "once or more" by a margin of 14 percent or slightly more. Overall, 76 percent of women reported experiencing none of the four gambling-related problems compared to 60 percent of men.

As in 2018, the number of people reporting no problematic play showed at best a weak relationship with household income (Figure 4-II). It is worth noting, however, that within the highest income group (\$100,000 or more) the number reporting no problematic play declined from 65 percent in 2018 to 53 percent in 2021, making that group the most likely income segment to have experienced some level of potentially problematic play.

### 5. POSITIVE PLAY

### 5. POSITIVE PLAY

The Positive Play Scale is an index developed, in the words of its authors, to assess "the extent to which a consumer base has positive beliefs about gambling and gambles in a positive manner" (Wood, Wohl, Tabri, & Philander, 2017). The full scale consists of four subscales: Honesty and Control, Pre-commitment, Personal Responsibility, and Gambling Literacy. Limitations on questionnaire lengths precluded the use of the entire Positive Play Scale for this study and the 2021 survey included only the items in the Honesty and Control and Gambling Literacy subscales.<sup>6</sup>

As with questions regarding problematic gambling, positive play questions were only asked of those reporting some level of past year gambling experience.

The Gambling Literacy subscale includes the following three items:

- 1. "Gambling is not a good way to make money."
- 2. "My chances of winning get better after I have lost."
- 3. "If I gamble more often it will help me to win more than I lost."

The Honesty and Control subscale also includes three items:

- 1. "In the last month, I felt in control of my gambling."
- 2. "In the last month, I was honest with my family and/or friends about the amount of money I spent gambling."
- 3. "In the last month, I was honest with my family and/or friends about the amount of time I spent gambling."

For each item, respondents were asked if they strongly agreed, agreed somewhat, were neutral, disagreed somewhat, or strongly disagreed.

As in 2018, many respondents disagreed with each of the three items on the gambling literacy subscale (Figure 5-1), suggesting that a lack of understanding of the fundamental probabilities underlying gambling remains common among American adults. Only half (51%) of past year gamblers disagree that "gambling is a good way to make money," and only 29 percent disagree strongly. Similarly, a small majority disagree that "gambling more often will help them win" (55%) or that their "chances of winning get better" after they lose (53%).

All three items on the gambling literacy subscale decreased in "positivity" from 2018 to 2021, suggesting a decrease in understanding of how gambling works (Figure 5-2). The number of gamblers disagreeing that "gambling is a good way to make money" dropped by 14 percent, the number disagreeing with the statement "my chances of winning get better after I've lost" dropped by 16 percent, and disagreement with the concept that gambling more often will help them to win more than they lose dropped by 18 percent.<sup>7</sup>

<sup>6</sup> The 2018 survey included the Gambling Literacy and Personal Responsibility subscales. However, as the responses to the Personal Responsibility questions showed very little variation and were almost universally endorsed, it was decided to replace it with the Honesty and Control items in the 2021 NGAGE survey.

<sup>7</sup> It should be acknowledged that there is some degree of truth in the statements that "my chances of winning get better after I've lost" and "If I gamble more often it will help me to win more than I lost." In games with an element of skill, such as most card games and sports betting, some gamblers will become better with experience. However, it is also possible, and perhaps likely, that many gamblers overestimate their skill and underestimate the role that chance plays in such games and may well give more credence to these statements than is warranted.

### 5. POSITIVE PLAY

Items on the honesty and control subscale received somewhat greater endorsement than those relating to gambling literacy (Figure 5-3), with about two thirds of past year gamblers agreeing to each item. It is worth noting that for each item, between 20 percent and 25 percent of respondents gave an answer of "neutral" (Figures 5-4 to 5-6). But whatever interpretation is placed on "neutral," it is striking that one in three American gamblers could not agree with feeling in control of their gambling behavior, and that only half could strongly agree with the statement. It is clear that many Americans feel some degree of discomfort about their gambling.<sup>8</sup>

Gender differences on these positive play questions are consistent but relatively small. For all three gambling literacy questions, women score more "positively" than men (Figure 5-7), with differences ranging from 8 percent on "gambling is a good way to make money" and "my chances of winning get better after I've lost" to 10 percent on "If I gamble more often, it will help me to win more than I lose." However, on the honesty and control questions, men score more "positively" than women (Figure 5-8). These differences are quite small (though statistically significant), ranging from 4 percent for "I felt in control of my gambling" to 6 percent for "I was honest about the time I spent gambling."

Age differences, though, are much greater, and (for the gambling literacy scale at least) have increased since 2018. In 2021 two out of three gamblers 65 and older (68%) strongly disagreed that "If I gamble more often, it will help me to win more than I lose" compared to only one in five (19%) of those between 18 and 24 (Figure 5-9). And while the number strongly disagreeing remained constant for those over 65 from 2018 to 2021, for those under the age of 45 strong disagreement was cut roughly in half. Similarly, older Americans are much more likely to strongly disagree that "gambling is a good way to make money" (Figure 5-10), and this discrepancy has increased over time.

Positive play as measured by the honesty and control items also increases with age. Most notable is strong agreement with feeling in control of gambling behavior, which ranges from only 28 percent of those between 19 and 24 to 70 percent of those 65 or older (Figure 5-II). Differences in honesty about money spent gambling (Figure 5-I2) and time spent gambling (Figure 5-I3) show a similar pattern, albeit one of smaller magnitude.

Given the findings of the relationship between problematic behavior and the number of gambling activities, it is not surprising to find that for the gambling literacy subscale, positive play decreases as the number of activities goes up. While three out of four of those gambling on just one activity disagree that "gambling is a good way to make money," only one in four of those gambling on 10 or more activities disagrees with this statement (Figure 5-14). The discrepancies are even greater on the other two "gambling literacy" indicators (Figures 5-15 and 5-16), with the number disagreeing that "If I gamble more often it will help me win more than I lose," declining from 72 percent of those gambling on one activity to 20 percent of those gambling on 10 or more.

It may come as a surprise, however, that this pattern does not exist for the items on the honesty and control subscale. The number saying that in the last month they felt in control of their gambling was almost identical for those gambling on nine activities or fewer, though it did decline by roughly 10 percent (to 60%) for those gambling on 10 activities or more (Figure 5-17). For the items about lying about time or money spent gambling, the differences are even smaller (Figures 5-18 and 5-19). In fact, the lowest rate of agreement with these statements was among those gambling on only one activity.

<sup>8</sup> At the same time, the author must caution about reading too much into these responses; some feeling of not being in control does not necessarily translate to negative consequences or addiction.

### 6. GAMBLING ACTIVITIES

As in the 2018 report, the large sample size of the 2021 NGAGE survey allows an examination of the characteristics of those participating in the more common forms of gambling. This section includes discussion of those forms of greatest interest to policymakers along with a sufficient sample size for reasonably reliable analysis.

### **6A. Sports Betting**

Sports betting in the United States occurs in three forms. The first, "traditional" sports betting, involves a wager on the outcome of a sports event or an occurrence within an event. These are frequently social bets with another individual. When done with a casino, bookmaker, or other gambling establishment, they are bets against the house (as opposed to bets against other players) involving odds set by professional oddsmakers.

The second is fantasy sports. In its original form, fantasy sports are a social event where players get together in a league where each contestant "drafts" a team of active players in a professional sport. Winners and losers in a fantasy sports league are determined by the actual performance of the players drafted onto each fantasy team over the course of a season. In recent years fantasy sports evolved to include leagues run over the internet where players never actually meet, and finally to daily fantasy sports (DFS) where the contests are played over a shorter time such as a week or even a day and are organized by for-profit businesses. DFS contests can involve thousands of players who compete for large cash prizes.

The third form of sports betting is sports contests, where players compete against each other (rather than against the house) by picking winners for a series of games, with prizes going to those who pick the most winners. One prominent form of sports contests are the pools surrounding the NCAA men's basketball tournament ("March Madness").

Americans participate in these three forms in relatively equal numbers. Twenty-seven percent of Americans reported participating in a sports contest in the past year, 26 percent in traditional sports betting, and 24 percent in fantasy sports. Most (81 percent of sports bettors) participate in more than one form, with 56 percent of sports bettors participating in all three (Figure 6A-I). Participation in multiple forms of sports betting increased substantially from 2018, when 63 percent of sports bettors participated in one form and 39 percent in all three. Overall, 33 percent of Americans participated in at least one type of sports betting in the past year, a slight increase over the 29 percent reported in 2018. It is worth noting that there are very few who bet on fantasy sports only. This group constituted only 5 percent of the sports betting population.

The debate on legalization of sports betting has focused almost entirely on traditional sports. The federal Uniform Internet Gambling Enforcement Act (which made it illegal to gamble over the internet) included a specific exemption for fantasy sports (Griffin, 2015). Sports contests that involve some type of fee or buy-in are likely illegal in most states, though some states exempt "social bets" where all entry fees go back to participants with no profit to the contest manager (Hython, 2019). However, enforcement actions against sports contests are exceedingly rare, as the \$10 billion plus in annual wagering on the NCAA men's basketball tournament would seem to indicate (ibid). The remainder of this report will focus on traditional sports betting and fantasy sports.

### **6B.** Traditional Sports

As discussed in the introduction, between the 2018 and 2021 NGAGE surveys, the number of states where sports betting is legally permitted rose from two to 21. Accordingly, the 2021 survey placed a great emphasis on assessing the effects of widespread legalization of sports betting participation and the characteristics, beliefs, and behaviors of sports bettors. While the 2021 sample size was not large enough to permit analysis of individual states, it was possible to compare aggregate data from the 21 states where sports betting had been legalized at the time of the survey to the remainder of the country. We must caution, however, that in several states the legalization of sports betting was recent enough that its full impact may not be reflected in the data.

Overall participation in sports betting grew considerably from November 2018 to April 2021, from 20 percent of the adult population to 26 percent, or by approximately 15 million people. While it is tempting to attribute this growth to the increased legalization of sports betting, the dynamics of this growth are more complicated. In fact, the 2021 survey showed that the percentage of the population participating in sports betting was virtually the same in the states that legalized sports betting (25%) as in those states that did not (26%). Legalization by itself cannot be said to have caused the increase. It is possible, of course, that factors such as increased advertising and the national attention given to the legalization debate resulted in more people becoming interested in sports betting, but it would seem unlikely to result in equal participation regardless of legal status.

### **Demographics**

Sports betting continues to be a male-dominated activity (Figure 6B-I). In 2018, men were more than twice as likely to bet on sports by a 28 percent to 12 percent margin, a 16 percent difference. In the two and a half years between surveys, the gap increased to 21 percent, with the difference now standing at 37 percent to 16 percent. Among those who do gamble on sports, men are also more likely to gamble on sports weekly or more often by a 27 percent to 18 percent margin (Figure 6B-2) with women more likely to gamble on sports only once or twice a year by a 28 percent to 21 percent margin.

As it was in 2018, age is the strongest predictor of sports betting behavior. Age differences, though, increased in the period between surveys, with the likelihood of someone age 45 or older participating in sports betting remaining constant or slightly declining while the number of adults under 45 wagering on sports increasing by considerable margins (Figure 6B-3). The share of the 35- to 44-year-old population betting on sports, for example, rose from 27 percent in 2018 to 40 percent in 2021, while the share of those between 45 and 54 remained steady at 19 percent. Put another way, in 2018 those under the age of 45 made up 67 percent of all adult sports bettors. By 2021 their share had risen to 80 percent of all sports bettors and 82 percent of weekly sports bettors.

Another difference that increased from survey to survey was the greater propensity of those with higher socio-economic status to participate in sports betting. Almost half of those with graduate or professional degrees (47%) reported a past year sports bet in 2021, almost twice that of any other group (Figure 6B-4). Below this level of education, sports betting percentages showed little difference in the 2021 survey. Similarly, the likelihood of betting on sports grows considerably among those with household incomes greater than \$100,000 a year (Figure 6B-5), with the highest participation found in those with incomes in excess of \$150,000 (49%). These upper income groups are also where the growth in sports betting is concentrated; the number of sports bettors grew from 28 percent of the \$100,000-\$150,000 income group in 2018 to 39 percent in 2021, while sports bettors grew from 28 percent of those making \$150,000 or more to 49 percent.

### **Sports Betting Behavior**

Professional football continues to dominate American sports betting, but not to the same degree that it did in 2018 (Figure 6B-6). In 2018, two-thirds (65%) of sports bettors reported wagering on professional football, but in 2021 that number had dropped to 46 percent. College football also saw a decline in interest, with betting declining from 36 percent of sports bettors to 29 percent. Basketball (both college and professional) and baseball betting remained relatively stable. However, wagering on sports that were less popular in 2018, without exception, saw substantial growth. Most notable are soccer, where wagering went from 17 percent of sports bettors to 27 percent, and e-sports, which grew from 11 percent to 20 percent. The number of sports bet on remained constant, however, with a majority of sports bettors (51%) making wagers on only one or two different sports (Figure 6B-7).

The survey also asked sports bettors about wagers on several major sporting events (Figure 6B-8). Not surprisingly, the greatest number (47%) bet on the Super Bowl, followed by the National Basketball Association championship (33%), the NCAA men's basketball tournament ("March Madness" - 27%), baseball's World Series (23%), the National Hockey League's Stanley Cup playoffs (16%), and the NCAA women's basketball tournament (13%). Perhaps more surprising is that one in four sports bettors (26%) did not wager on any of these events. It is possible, though, that wagering on any of these events was affected by scheduling changes, venue changes, and other disruptions caused by the COVID-19 pandemic.

The frequency with which gamblers make sports bets increased from 2018 to 2021 (Figure 6B-9), with the number reporting betting weekly or more frequently rising from 18 percent to 25 percent and a corresponding decrease in those wagering only once or twice a year from 31 percent to 27 percent. It is possible that the decrease in infrequent betting resulted in part from pandemic-related travel restrictions and venue closures, causing infrequent bettors to stop betting altogether. As previously noted, women were less likely than men to bet on sports by a considerable margin; in addition, those women who do bet on sports bet less frequently than do male sports bettors (Figure 6B-10). While 27 percent of male sports bettors report betting weekly or more, only 18 percent of female sports bettors wager that frequently. Women are also more likely to only bet once or twice a year than men by a 28 percent to 21 percent margin.

The average amount bet at any one time was largely unchanged (Figure 6B-II), with the median bet size in 2021 remaining the same as in 2018 (\$30). This should not be taken as evidence that the total amount wagered, or wagered at any one time, was unchanged, as it is possible that on a given day in 2021 respondents could have wagered on more or fewer games than they did in 2018.

Bets on the outcomes of games remain the most popular form of sports betting (Figure 6B-12), though the number of sports bettors making this type of wager declined from 85 percent in 2018 to 74 percent in 2021. Over the same period the number making proposition, or "prop" bets, <sup>10</sup> increased from 40 percent to 46 percent, while the number making "parlay" bets<sup>11</sup> decreased slightly from 22 percent to 17 percent.

<sup>9</sup> It is possible that these data were affected by the timing of the survey. The 2018 survey was taken in November when both professional and college football were in midseason. The 2021 survey was taken in April, when professional football had been idle for two months and college football for three.

<sup>10</sup> Prop bets are bets made on events taking place within a game and do not involve picking the winner or loser of a game. For example, during a football game one could bet on whether the next play will be a run or a pass, or on the total number of goals that will be scored during the first period of a soccer match.

<sup>11</sup> Parlay bets require selecting the winners of multiple games. One could, for example, attempt to pick the winners of every NFL game played on a given weekend. Picking all correctly would result in a very high payout, though the chance of success is extremely low.

### **Sports Betting and Problematic Play**

A clear relationship exists between sports betting and problematic play, though we must hasten to add that the data are not sufficient to determine any causal relationship. Sports bettors, for example, are five times more likely than gamblers who do not bet on sports to say that they needed to gamble more for the same feeling of excitement "many times" (10% to 2%, Figure 6B-13). They are six times more likely to have frequently lied to hide their gambling (12% to 2%), four times more likely to have felt restless or irritable many times when trying to quit or cut down on gambling (13% to 3%) and an astounding 13 percent more likely to have frequently relied on others to pay debts or bills as a result of gambling (13% to 1%). Looked at another way, almost four out of five gamblers who reported often needing to gamble more for the same feeling of excitement (78%) were sports bettors, as were almost the same number (79%) of those frequently feeling restless or irritable when trying to quit or cut down. Sports bettors made up an even greater share (86%) of those lying to hide their gambling "many times" and almost all (96%) of those frequently relying on others to pay their debts or bills (Figure 6B-14).

It will likely not surprise many that those who bet weekly or more often on sports are more likely to experience frequent problems than those who bet on sports less frequently (Figure 6B-15). It may also not be a surprise to learn that male sports bettors are more likely to experience frequent problems than female sports bettors, with the notable exception of lying to hide their gambling (Figure 6B-16) or that young sports bettors experience frequent problems at a higher rate than those 35 or older (Figure 6B-17). Furthermore, sports bettors bet on many more other activities than do those who gamble, but not on sports (Figure 6B-18); sports bettors wagered on a median of 10 different gambling activities compared to a median of two activities for those gamblers not betting on sports. (The survey had no respondents who bet solely on sports.) As discussed earlier (Figures 4-3 through 4-6) a strong correlation exists between the number of activities bet on and problematic behavior.

Causal relationships are likely to be complex: Are those participating in risky behavior more likely to do so because they bet on sports, or because they are young, or because they bet on many things in addition to sports? Age alone does not suffice as an explanation, as elevated levels of problematic behavior exist for sports bettors even when the analysis is limited to those under 35 (Figure 6B-19). Is their betting on other activities risky as well? Is there a multi-factor synergistic effect? The data hint that young male sports bettors would be at a particularly high level of risk, but the size of the data set is not sufficient to confirm or disprove this sort of speculation. The pandemic provides a further complication: 74 percent of those who reported betting more during the pandemic made bets on sports compared to 39 percent of those betting less and 21 percent of those saying their gambling was unchanged. As discussed in section 8, pandemic-related changes in gambling are also associated with both age and sports betting. All of these relationships would be fruitful endeavors for future research.

Sports bettors also score lower on some positive play indicators than do gamblers who do not bet on sports. Non-sports bettors are roughly twice as likely as sports bettors to show positive play indicators on each of the gambling literacy indicators (Figure 6B-20). However, for two of the three items there is no difference between those betting weekly or more on sports and those betting on sports less frequently. The exception is "If I gamble more often it will help me to win more than I lose," where less frequent sports bettors are almost twice as likely to disagree than weekly sports bettors. The honesty and control indicators show a very different pattern, though, with little difference between weekly sports bettors, less frequent sports bettors, and non-sports bettors on all three indicators (Figure 6B-21).

### **Effects of Legalization**

As discussed previously, the level of sports betting participation did not differ between states where sports betting has been legalized and those in which it has not, suggesting that legalization by itself does not lead to a major increase in sports betting. But has legalization led to changes in the way people bet on sports? For the most part, it appears the answer is "no."

There is little difference in the sports that gamblers in each group bet on, with pro football being the dominant activity in states where sports betting is legal and those where it is not (Figure 6B-22). Those small differences that do exist could possibly be explained by extraneous factors such as the presence or absence of a team playing that sport in a particular state. Similarly, there is no difference in the age of sports bettors between the two groups (Figure 6B-23), the types of sports bets made (Figure 6B-24), the venue where the bets take place (Figure 6B-25), or the average amount wagered on the outcome of a game (Figure 6B-26). There does, however, appear to be a difference in the frequency with which sports bets are made (Figure 6B-27). Those in states where sports betting is legal are more likely to bet monthly or more than those in other states by a margin of 56 percent to 46 percent.

Most importantly, there is no evidence that the legalization of sports betting has led to any overall increase in problematic play, with no statistically significant differences in either those answering once or more (Figure 6B-28) or those responding "many times" (Figure 6B-29) to any of the four problematic play indicators. Similarly, there appear to be few differences in positive play indicators between the two groups of states (Figures 6B-30 and 6B-31). For those two items where differences do appear, responses are inconsistent: More sports bettors answer yes to "if I gamble more often it will help me to win more than I lose" in states where sports betting is legal, but fewer in those states agree that "in the last month I was honest about the amount of money I spent gambling."

It must be cautioned that legal sports betting in most states was in its infancy at the time the survey was taken—it may simply take more time for differences to manifest. Effects that might have otherwise occurred may also have been hidden by the major impact that the COVID-19 pandemic has had on gambling behavior (see section 8). Continued monitoring of the effect of sports betting on public health is essential.

### **6C. Fantasy Sports**

Fantasy sports differ from traditional sports betting in that they do not rely on the outcome of a game. Instead, participants select "teams" of individual players, with the outcome of the wager depending on the statistical performance of the teams over a given time period. Two principal types of fantasy sports exist in the U.S. "Traditional" fantasy sports originated around 1960, with leagues forming around golf, football, and baseball (Wikipedia, 2021). These contests involved small leagues<sup>12</sup>, often of friends or acquaintances, with a league "commissioner" who devised a scoring system and tallied statistics over the course of a season. While small social leagues still exist, the internet boom led to fantasy sports becoming less the domain of hobbyists and more that of business (ibid). Fantasy sports leagues are now often organized by media giants such as ESPN (ESPN, 2021). Daily fantasy sports, on the other hand, are played using the internet over a shorter period of time, such as a week or even a day of a season and are largely the domain of large corporations such as DraftKings and FanDuel.

As discussed in section 3, participation in fantasy sports grew from 17 percent of adult Americans to 24 percent between 2018 and 2021, or an increase of 19 million fantasy sports players in just a two and a-half year period. This increase would seem to suggest that traditional sports betting and fantasy sports readily coexist and that fantasy sports was not just a second choice when traditional sports betting was unavailable. This supposition is further confirmed by the tremendous overlap between

<sup>12</sup> In 1988 USA Today estimated that a typical league included 8 to 12 players (Shuster, 1988).

traditional sports betting and fantasy sports betting—more than four out of five (83%) of those betting on fantasy sports bet on traditional sports as well.

The same period also saw a large increase in the share of fantasy sports players betting only on daily fantasy sports (34% to 44%, **Figure 6C-I)**. The number playing only traditional fantasy sports remained relatively steady at 40 percent in 2021 compared to 44 percent in 2018, while those playing both traditional and daily fantasy sports declined from 22 percent to 16 percent.

Of those playing traditional fantasy sports, about two-thirds (64%) now play online all of the time or in combination with offline play (Figure 6C-2), while the remaining 36 percent play offline only. One in five (22 percent) play both online and offline.

Fantasy sports continue to be dominated by professional football (Figure 6C-3), though as with traditional sports betting, that domination is not as great in 2021 as it was in 2018. Professional basketball (32 percent) and baseball (30 percent) rank second and third, respectively, with college football, college basketball, and soccer not far behind. The rise in fantasy soccer is particularly notable; participation in fantasy soccer almost doubled from 15 percent of fantasy sports players in 2018 to 28 percent in 2021. The majority of players (57 percent) wager on only one or two sports (Figure 6C-4).

The median traditional fantasy sports player participates in two leagues annually (Figure 6C-5), a figure unchanged from 2018. The number playing in just one or two leagues has gone down slightly, from 59 percent to 51 percent, with a corresponding increase in the number playing in seven leagues or more (13% to 20%). The cost of participating in a fantasy sports league appears to have increased considerably, however. In 2018 half of the traditional fantasy sports players reported that, on average, each of their leagues cost \$50 or less to enter, with 12 percent reporting an average cost of more than \$100. In 2021 only 36 percent reported an average cost of \$50 or less, with 41 percent reporting average costs in excess of \$100.

The frequency of betting on daily fantasy sports declined from 2018 to 2021, with weekly or more frequent play declining from 41 percent of participants to 27 percent (Figure 6C-6). The amount wagered per contest, however, increased significantly. In 2018 half of the daily fantasy sports participants reported spending an average of \$25 or less per contest; in 2021 only 33 percent reported wagers of this size, with the median wager increasing from \$25 to \$75. The number spending more than \$100 per wager grew from 12 percent to 30 percent of participants.

The growth in fantasy sports play was fueled by younger players. In 2018, 33 percent of those between the ages of 18 and 24 played fantasy sports. This number grew to 44 percent in 2021 (Figure 6C-7). In addition, participation among 35- to 44-year-olds grew from 34 percent to 40 percent. Participants continue to be overwhelmingly male at 70 percent, with females making up 30 percent of players.

Like traditional sports bettors, fantasy sports participants skew towards higher levels of income (Figure 6C-8) and education (Figure 6C-9). Growth in fantasy sports participation is heavily concentrated in those with household incomes of \$100,000 or more, with participation among those with incomes of \$100,000 to \$150,000 growing from 22 percent to 40 percent, while those with incomes of \$150,000 or more increased their participation from 28 percent to 51 percent. While participation among the less affluent also grew, it increased at a much lower rate. Similarly, the greatest growth in participation was seen in those with graduate or professional degrees. In this group participation almost doubled from 24 percent in 2018 to 46 percent in 2021. Participation among those with less education also grew, but at a much lower rate; fantasy sports wagering among those with a bachelor's degree increased from 22 percent to 26 percent.

<sup>13</sup> It is possible that the rapid growth in upper income participation at least partially explains the sizeable increase in the amount of the average daily fantasy sports wager discussed in this section, though the limited sample size restricts further exploration.

Fantasy sports players, particularly those playing daily fantasy sports, continue to report higher levels of problematic play than those gamblers who do not bet on fantasy sports (Figure 6C-10). For example, 17 percent of daily fantasy sports players reported lying to hide their gambling "many times" compared to 11 percent of those betting on traditional fantasy sports and 2 percent of those not playing fantasy sports. Similarly, 15 percent of daily fantasy players reported needing to gamble more for the same feeling of excitement "many times" as compared to 7 percent of traditional fantasy sports players and 2 percent of non-fantasy sports gamblers. As with traditional sports betting, however, these findings are highly correlated with the disproportionately high number of fantasy sports players who are young males and the propensity of fantasy sports participants to bet on many different gambling activities—69 percent of fantasy sports players reported gambling on 10 activities or more in the past year as opposed to only 3 percent of gamblers who did not bet on fantasy sports.

Large differences between fantasy sports players and gamblers not betting on fantasy sports are also seen in the gambling literacy positive play indicators questions (Figure 6C-II), though the differences between traditional and daily players are far less pronounced than those seen with problematic play. The magnitude of difference is greatly diminished for the questions relating to honesty and control, however (Figure 6C-I2), with no meaningful differences between all three groups in questions relating to honesty about time and money spent gambling. Those not betting on fantasy sports are more likely to feel in control of their gambling behavior than both traditional and daily fantasy sports players, with agreement on that statement by 73 percent of non-fantasy sports players, 64 percent of traditional fantasy sports players and 59 percent of daily fantasy sports players. Even this difference, however, is smaller than the differences seen for either gambling literacy or problematic play.

### 6D. Lottery

Almost two out of three American adults (64%) purchased a lottery ticket<sup>15</sup> in the year prior to the April 2021 survey, a rate virtually unchanged from the 66 percent reported in November 2018. Nine out of ten (90%) American gamblers included the lottery as one of their past year gambling activities. Many lotteries reported sales declines during the initial stages of the pandemic as customers limited routine activities such as commuting and shopping trips (e.g. Racioppi, 2020, CGTN America, 2020), but later recovered, in some cases reporting record sales (e.g. WTVD, 2021, Associated Press, 2021). Most lottery venues, such as convenience stores, gas stations, and grocery stores, did not have to close during the pandemic (though many bars and restaurants, which sometimes sell lottery tickets, did). While customers may have reduced their shopping trips, the closure of other gambling venues may have led to the purchase of lottery tickets as a substitute for these other activities.

Overall, 55 percent of survey respondents reported playing a draw game (such as Powerball or Mega Millions) in the past year, while 54 percent purchased an instant or scratch ticket and 36 percent played a daily numbers or keno-style game such as Daily 3 or Pick 4. The majority played more than one type of game (Figure 6D-I), with almost half (47%) playing all three. Frequency of play for each type of lottery game was virtually unchanged from 2018 (Figures 6D-2 to 6D-4), with weekly or more players making up about 20 percent of each game type.

For almost one in four lottery players (23%), lottery games were the extent of their gambling in the past year, or, to look at it another way, the lottery was the only game played by one in five (19%) of America's gamblers.

<sup>14</sup> These categories are not mutually exclusive, given the significant number playing both daily fantasy sports and traditional fantasy sports.

<sup>15</sup> Lottery, in the context of this report, refers to "traditional" lottery games such as scratch tickets and lotto games. It does not include state lottery-operated sports betting or gaming machines. It is a composite measure; respondents were asked if they had purchased scratch/instant tickets, draw games such as Powerball, or numbers games such as Daily 3 or Pick 4. Anyone answering "yes" to one or more of these three items was counted as a lottery player.

The high proportion of gamblers playing the lottery (90%) means that the demographic characteristics of lottery players are virtually identical to that of all American gamblers. As such, while the demographics of lottery players is summarized in **Figures 6D-5 through 6D-8**, they will not be the subject of further analysis. Similarly, the rates of problematic play and positive play will be, for all practical purposes, the same as those discussed for all gamblers in sections 4 and 5.

#### **6E.** Casinos

The percentage of Americans reporting spending money at a casino was unchanged from 2018 to 2021 at 37 percent. The frequency of attendance, however, increased (Figure 6E-I), with the number visiting weekly or more often almost doubling from 8 percent to 14 percent. Correspondingly, the number visiting at least once a year but less often than once a month declined from 73 percent of casino visitors in 2018 to 66 percent in 2021. At first glance, this might seem counterintuitive given pandemic-related closings and restrictions. Other data from the survey shed some light on this finding, though by no means paint a complete picture.

First, when asked where they had gone to casinos in the past year, the number dropped in almost every category between 2018 and 2021 (Figure 6E-2), with the most notable drops found in visits to casinos in their home state (65% to 59%), a neighboring state (35% to 29%) and Nevada (30% to 24%). As respondents could answer "yes" to more than one destination, this suggests that while people continued to visit casinos and even increased their total visits, they limited their trips to fewer destinations.

A look at the demographics of casino visitors sheds additional light, with the most notable change being in the age of those reporting casino spending (Figure 6E-3). Casino attendance among 18- to 24-year-olds grew from 28 percent of that age group in 2018 to 42 percent in 2021, contradicting earlier research that concluded that relatively few young adults found casinos to be attractive destinations (e.g. Rose, 2016, Schwartz, 2019). This is consistent with other findings from the 2018 and 2021 NGAGE surveys showing increases in overall gambling in this age group (most notably sports betting). As reported in section 6, they are also one of the most likely groups to report increased gambling during the pandemic. Participation also increased among those between 25 and 44, albeit at a lower rate. At the same time, it dropped among those aged 55 or older.

Increases in casino gambling were most pronounced in those with household incomes of less than \$25,000 (28% to 34%) and those with incomes of \$100,000 to \$150,000 (45% to 49%) or over \$150,000 (49% to 54%) (Figure 6E-4). The increase in the lowest income group can be explained in part by age—roughly one in five of those with incomes under \$25,000 are also under the age of 25. Similarly, growth in casino attendance was seen in those with educational attainment of a high school diploma or less and those with graduate degrees (Figure 6E-5). Again, the number with a high school diploma or less is disproportionately made up of young adults who might not have completed their education.

Relatively small changes were seen in responses to a question about the reasons for visiting a casino (Figure 6E-6). Almost half (44%) said they went mostly to gamble, but also to socialize, while 30 percent said they went just to gamble. Smaller numbers said they went mostly to socialize (22%) or to socialize and enjoy the amenities only (4%).

As in 2018, those reporting casino visits in 2021 were more likely to display problematic gambling behavior than gamblers who did not visit casinos (Figure 6E-7). However, the gap between the two groups was notably greater in 2021 than in 2018. For example, in 2018 4 percent of casino visitors reported needing to gamble more for the same feeling of excitement "many times." That number

doubled to 8 percent in 2021, while remaining constant at 2 percent for gamblers who did not visit a casino. Similar differences were found with the other three problematic gambling indicators.

Does one's reason for going to a casino affect the likelihood of problematic play? Those who go mostly or exclusively to socialize appear to be no more or less likely to experience problems than those who go mostly or exclusively to gamble (Figures 6E-8 to 6E-II). This question by itself, though, does not thoroughly assess any relationship between socialization and problematic play. Going to socialize, for example, does not necessarily mean one goes with or leaves with other people; it could mean interacting with others whom one meets at the casino who play problematically. This question needs to be explored further to determine the efficacy of social interaction as a protective factor.

There is, however, very definitely a relationship between the frequency of casino visits and problematic behaviors. For all four indicators, the likelihood of some degree of problematic behavior increases substantially as the frequency of casino visits goes up (Figures 6E-12 to 6E-15). For example, 33 percent of those visiting a casino only once or twice a year answered, "at least once in the past year" to "How often did you need to gamble with larger amounts of money to get the same feeling of excitement?" This figure increases as visits increase, finally reaching 78 percent for those coming to a casino weekly or more often.

Casino visits are also associated with decreasing gambling literacy (Figure 6E-16). Gamblers who did not visit a casino are more likely to correctly disagree that "my chances of winning get better after I've lost" than those who do visit casinos by a margin of 67 percent to 40 percent. Similarly, 68 percent of non-casino gamblers disagree with the statement "If I gamble more often it will help me to win more than I lose" compared to 44 percent of casino gamblers. The gap between the two groups narrows considerably, though, when we examine agreement with the proposition that "Gambling is not a good way to make money," where non-casino gamblers are more likely to agree than casino gamblers by a 73 percent to 64 percent margin.

### **6F. Gaming Machines**

The percentage of American adults playing gaming machines (more often referred to as "slots," "video lottery terminals" or "VLTs") remained constant at 32 percent from 2018 to 2021. These machines are commonly associated with casinos, and a strong majority (Figure 6F-I) of those playing these devices did play them there. However, substantial numbers also reported playing machines at bars or restaurants (27%), convenience stores (21%), or a racetrack or "racino" (13%). One in three (33%) machine players wagered on "virtual slots" online. It is possible that growth in online slot play is related to the smaller number of machine gamblers playing at casinos in 2021. This is speculative—while overall online gambling has grown, the survey did not ask about virtual slot play in 2018. The number reporting playing slots at casinos declined from 86 percent of all machine gamblers in 2018 to 66 percent in 2021.

As with casino visits, the frequency of gaming machine play increased (Figure 6F-2), with monthly play (or more often) growing from 28 percent of machine players in 2018 to 41 percent in 2021, while those playing less frequently than once a month declined from 72 percent to 59 percent.

As with sports betting and casino gambling, participation among younger adults grew considerably while the participation of older adults remained the same or declined (Figure 6F-3). The lower rates of play among those 55 or older is noteworthy given the stereotype of gray-haired slot players. We cannot at this point tell if this is indicative of a long-term trend or a temporary reaction to factors such as the higher risk to older adults of serious complications from COVID-19 infections that would keep them

from many social settings. There was little change in the income distribution of gaming machine players from 2018 to 2021 (Figure 6F-4), with those with annual household incomes of \$100,000 or more continuing to be the most likely to play.

As is also the case with casino gambling and sports betting, machine players are more likely to report problematic play behavior than those gamblers who do not bet on gaming machines, and as with those other forms of gambling, the gap increased from 2018 to 2021 (Figure 6F-5). For example, in 2018 machine gamblers were more likely than non-machine gamblers to report lying to hide their gambling by a 5 percent to 1 percent margin. By 2021 the gap between the groups had grown to 12 percent versus 1 percent.

#### 6G. Cards

The number of Americans playing cards for money changed very little from 2018 (23% of all adults) to 2021 (26%). However, there was a sizeable decline (77% to 60%) in the number playing blackjack (Figure 6G-I). Poker play changed very little (60% to 57%) while sizeable increases were seen in pai gow (8% to 13%), baccarat (7% to 17%), and cribbage (6% to 14%). It is very possible that the growth in the less popular card games is related to growth in online gambling. While we did not specifically ask about online card play, online play of table games (which includes card play) almost tripled from 3 percent to 8 percent of all adults. It is possible that those playing card games online might be tempted to try games they would not otherwise play because of easy availability and the removal of the embarrassment of playing poorly in a live casino setting.

The frequency of card play increased, however, with the share of card players playing monthly or more growing from 31 percent in 2018 to 46 percent in 2021 (Figure 6G-2). This might also be a consequence of the growth in online gambling due to the convenience of not having to travel to a physical facility, particularly for those who would usually play cards at a destination casino.

The decline in blackjack play largely reflects a decline in play of the game in casinos (Figure 6G-3) from 79 percent of blackjack players to 65 percent. The number playing in someone's home remained steady, while play at card clubs or racetracks and bars or restaurants grew by a sizeable number. Most players, however, still play at casinos.

Poker play saw an even greater decline in casino play from 79 percent of poker players to 53 percent (**Figure 6G-4**). However, overall play remained steady due to growth in the number playing in someone's home (38% to 47%), at a card club or racetrack (11% to 27%) or at a bar or restaurant (9% to 21%).

Card play increased considerably among young adults, with participation growing from 28 percent of 18- to 24-year-olds in 2018 to 39 percent in 2021, and from 35 percent of 25- to 34-year-olds to 42 percent (Figure 6G-5). It declined among older Americans though, dropping from 18 percent to 8 percent among 55- to 64-year-olds and 11 percent to 8 percent among those 65 or older. Again, it is quite possible for the growth in young adults to be related to the growth in online gambling.

### 6H. Parimutuel Wagering

Parimutuel wagering, which in the recent past encompassed horse racing, dog racing, and jai alai, had, by the 2021 survey, been reduced almost entirely to horse racing. As recently as the late 1980s, more than 60 dog tracks operated in 11 states, but at the time of the 2018 NGAGE study the number had shrunk to 17 tracks in six states (Li, 2020). By the time of the 2021 survey, dog racing had been further reduced to four tracks in three states. During the 1980s bettors could wager on jai alai at 14 frontons in four states, but the last of these closed in December 2021 (Fernandez & Bellamy-Walker, 2021). Horse racing (including thoroughbred racing and harness or standardbred racing) occurred at more than 100 tracks as of December 2021 (Wikipedia, 2021). The traditional model of parimutuel racing remains dominant. However, a new system of "exchange wagering," where individuals bet with each other while the race is on, is increasingly popular in Europe and has been introduced in a few U.S. locations (Franklin, 2021).

Parimutuel betting on horse or dog races grew from 14 percent of U.S. adults in 2018 to 21 percent in 2021. This growth was largely fueled by an influx of young bettors (Figure 6H-I). The percentage of 18 to 24-year-olds more than doubled from 16 percent to 36 percent during this period, with sizeable increases also seen in the 25 to 34 and 35 to 44 age groups. Sixty-eight percent of race bettors were male. It is worth noting that 84 percent of those betting on races also bet on sports.

This increased interest in racing came about during a year in which many tracks were closed to spectators (Hobson, 2020). Most tracks, however, continued to race, relying on revenue from off-track and online wagering. The NGAGE surveys show that participation in online racing increased from 2 percent of the U.S. adult population in 2018 to 5 percent in 2021, suggesting that growth in online gambling has significantly affected the racing industry. While the legal status of online horse race betting in the United States is complicated, it is legal in many more states than is any other form of internet gambling (Johnson T., 2019). It is very possible that the convenience of internet wagering as opposed to having to be physically present at a track or offtrack betting parlor led to the increased interest in horse racing. Undoubtedly, many fewer people would bet on sports if they were required to be present at the stadium, so it should come as no surprise that the same holds true for racing.

### 61. Bingo

The game of bingo saw its popularity grow from 20 percent of adults in 2018 to 25 percent in 2021. Growth was concentrated among young adults, led by an increase in 18 to 24-year-old bingo players from 25 percent to 42 percent (Figure 61-1). Despite the stereotype of the senior citizen bingo players, the vast majority are younger players: bingo players between 18 and 24 alone outnumber those 65 or older by more than two to one. In a further blow to bingo stereotypes, while 20 percent of adult women reported playing bingo in the past year, they were outnumbered by 30 percent of men. As will be further discussed in section 6J, online bingo play made a substantial contribution to bingo growth, with online betting on bingo growing from 3 percent to 8 percent of the American public.

<sup>16</sup> Arkansas, Iowa, and West Virginia (ibid.)

<sup>17</sup> Parimutuel wagering is a system whereby all wagers are entered into a pool. The operator takes a fixed percentage of the pool for taxes, operating costs, and profit. The remainder of the pool is shared by those placing winning bets.

### 6J. Online Gambling

Online gambling differs from the other activities discussed in this section in that it is not a game per se, but a means of playing a game or wagering on one. The activities on which one can make an online wager include virtually all wagers that can be made as in-person transactions as well as a few (notably eSports) that exist almost exclusively in an online form. As previously mentioned, overall growth in online gambling has been dramatic, with 66 percent more people reporting an online wager in 2021 than did in 2018, and one out of every four survey respondents reporting a past year online bet.

Online gamblers tend to limit their online play to a small number of activities, with half betting on one or two types of online gambling and three quarters betting on four or fewer. When we look at the totality of their gambling, however, their gambling activity is broad, with half betting on twelve forms of gambling or more. These two findings together suggest that online gamblers have an active offline gambling life as well. The frequency with which they play online is evenly distributed, with one quarter each playing weekly or more, a few times a month, several times a year, or once or twice a year (Figure 6J-1). The frequency of online wagering showed little change from the 2018 survey.

Sports betting and poker were the most popular activities for online betting (Figure 6J-2), with 38 percent reporting an online sports bet and 37 percent of online gamblers playing poker. Other popular online activities included virtual casino table games such as roulette, blackjack, or craps (31%), bingo (30%), virtual slots (28%) and fantasy sports (27%). The greatest growth in online gambling occurred in table games (23% to 31%), bingo (23% to 30%), racing (13% to 21%), and eSports (15% to 21%), figures that very likely explain much of the overall growth in wagering on these activities (see Section 3).

As opposed to the stereotypes relating to bingo, some commonly held about online gambling are true: online gamblers are overwhelmingly young and male. For age groups under 45, the percentage participating in online gambling is 40 percent or more but declines to 21 percent for those between 45 and 54 and less than 10 percent for those 55 or older (Figure 6J-3). Put another way, online gamblers under the age of 45 outnumber those 45 or older by more than four to one. And while 16 percent of women gambled online in 2021, they were vastly outnumbered by the 35 percent of men using that mode of gambling (Figure 6J-4). When we look at household income, we find that online gambling is most common among those with incomes between \$100,000 and \$149,000 (35%) and incomes of \$150,000 or more (49%) compared to between 20 percent and 26 percent for those with incomes lower than \$100,000 (Figure 6J-5).

Online gamblers are more likely to display problematic gambling behavior than those who confine their gambling to offline activities (Figure 6J-6). Online gamblers, for example, were far more likely (15% to 1%) to report frequently lying to hide their gambling than those only betting offline. This does not necessarily demonstrate a causal relationship, however. As previously discussed, problematic gambling behavior is also strongly associated with betting on a wide range of activities, and as referenced above, those gambling online bet on an average (median) of 12 activities. Online gamblers are also disproportionately young, which as we have seen is also strongly associated with problematic behavior. The factors relating to problematic behavior identified in this report - age, gender, number of gambling activities, sports betting, online betting - are so strongly correlated with each other as to make conclusions about causes of problematic behavior impossible.

<sup>18</sup> Theoretically, this proposition could be tested by comparing the problematic behavior of online gamblers with that of offline only gamblers who bet on many activities. However, the number of such individuals in the sample was too small for a valid comparison.

### 7. GAMBLING AND INVESTING

### 7. GAMBLING AND INVESTING

The 2021 survey included several questions about respondent's investment activity. Overall, 38 percent of respondents answered that they held stocks, bonds, mutual funds, or other investment instruments. <sup>19</sup> When asked about trading frequency, one in five investors (20%) reported trading weekly or more often, 29 percent a few times a month, 22 percent several times a year, and 29 percent once or twice a year or less (Figure 7-I). For convenience, those trading weekly or more will be called "frequent traders" in the remainder of this section. <sup>20</sup>

Overall, investors are more likely to gamble than non-investors (Figure 7-2), with 84 percent of investors reporting past year gambling compared to 70 percent of non-investors. The difference is even more striking when we look at frequent traders, with 93 percent of those trading weekly or more often also reporting some past year gambling activity. In addition, there is a strong relationship between trading frequency and the number of gambling activities in which an individual participates (Figure 7-3). More than half of frequent traders (53%) reported gambling on 11 or more different activities compared to 23 percent of those trading less frequently and 16 percent of non-investors.

In section 4 we reported that problematic gambling was strongly associated with the number of past year gambling activities, which would suggest that frequent investors are more prone to potentially problematic gambling behavior. The survey data bear this out: frequent traders were more than twice as likely to experience any of the four problematic behaviors than gamblers overall (Figure 7-4). For example, while 31 percent of all gamblers reported lying to hide their gambling once or more, 68 percent of frequent investors reported this behavior. Similarly, frequent traders were more likely to have relied on others to pay debts or bills by a 59 percent to 27 percent margin. Even more striking is the difference in those reporting problematic behaviors "many times" (Figure 7-5). 22 percent of frequent traders answered "many times" to two or more of the indicators compared to only 4 percent of gamblers overall. And while those trading weekly or more appear to be at the highest risk for problematic gambling, those trading one to three times a month are not all that far behind (Figure 7-6). While only 25 percent of those trading once or twice a year reported lying to hide their gambling at least once, that number grows to 35 percent of those trading several times a year, 55 percent of those trading one to three times a month, and 68 percent of those trading weekly or more.

<sup>19</sup> It is possible that some of those reporting no investments may, in fact, be involved in financial markets through pension funds or other holdings where they do not directly buy or sell.

<sup>20</sup> Frequent trading should not be confused with "day trading," which is a specific investment strategy that is not necessarily tied to the frequency of trading.

### 8. EFFECTS OF THE COVID-19 PANDEMIC

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The COVID-19 pandemic resulted in severe restrictions in the availability of some forms of gambling throughout the United States in 2020 and 2021, most notably among casinos and other venues that normally attract large numbers of customers attending in person (American Gaming Association, 2021). Other forms of gambling, such as lotteries and online gambling, did not face similar restrictions, and may have benefited from the limited availability of other forms of gambling.<sup>21</sup>

In an attempt to gauge the impact of the pandemic on gambling behavior, those reporting past year gambling were asked if during the pandemic they gambled more, less, or about the same as before the pandemic.<sup>22</sup> This, of course, excludes those who stopped gambling entirely during the pandemic. However, the number reporting gambling, but not in the past year, was virtually unchanged from 2018 (15 percent) to 2021 (13 percent), suggesting that the number that stopped gambling due to the pandemic was relatively small.

Almost half of the respondents reported gambling less during the pandemic (Figure 8-1), with another 36 percent reporting gambling the same and just under one in five (18 percent) reporting gambling more. Men were more than twice as likely to report gambling more during the pandemic than women (23% to 12%) (Figure 8-2) while women were more likely to report gambling less by a margin of 51 percent to 43 percent. <sup>23</sup>

Those increasing their play are disproportionately found at both ends of the socioeconomic scale. The highest rate of increased play is found among those with annual household incomes of \$150,000 or more (32%), followed by those with incomes under \$25,000<sup>24</sup> (21%) and those with incomes between \$100,000 and \$150,000 (20%) (Figure 8-3). Income seems to have little relationship with decreased play, however (Figure 8-4). Similarly, those with graduate degrees are the most likely to report increased play (29%) followed by those who have not completed high school (23%) (Figure 8-5), and as with income there is little apparent relationship between educational attainment and reducing gambling during the pandemic (Figure 8-6).

More notable are the differences relating to age. Four out of five (82%) of those reporting increased gambling during the pandemic are under the age of 45. One in four (27%) of those between 18 and 44 increased their gambling compared to only 7 percent of those 45 or older (Figure 8-7). There is, however, little relationship between age and the propensity to gamble less during the pandemic (Figure 8-8), while those 55 or older were the most likely not to change their play (Figure 8-9).

 $<sup>21\,</sup>$   $\,$  The effect of the pandemic on lottery sales is discussed further in section 7D.

<sup>22</sup> This measurement is less than perfect as it relies on the respondent's recollection, which may or may not correspond to their actual behavior.

<sup>23</sup> This finding is consistent with a literature review by Quadros, et, al, (2021), which concluded that "female genders are at a higher risk of fear of COVID-19 infection ... whereas males were reported as having irresponsible attitudes toward the COVID-19 pandemic...."

<sup>24</sup> Many of those in the lowest income group are young adults whose low incomes and/or lower levels of education may reflect their continued status as students.

As discussed earlier in this section, young adults are the most likely group to report increased gambling, suggesting that higher rates of increased gambling may be a reflection of age rather than of income or educational attainment.

### 8. EFFECTS OF THE COVID-19 PANDEMIC

The importance of these data becomes clear when we examine the relationship between gambling during the pandemic and problematic play, as only 14 percent of those who increased their gambling during the pandemic answered "not in the past year" to each of the four problematic play indicators (Figure 8-10). By contrast, 70 percent of those who reported their gambling as unchanged also reported no problematic play. What might be more surprising, though, is that only half of those who reported gambling less reported no level of problematic play, a rate substantially lower than those whose gambling was unchanged. The data collected in this survey shed little light on this finding, but it is possible that the reduction in gambling was motivated by factors such as financial or other pandemic-related stress which in turn resulted in problematic behavior. It is quite possible, for example, that someone compelled by finances to cut back on gambling could have "felt restless or irritable" as a result. It is also possible that similar stresses led others to gamble more, with the stress being a contributor to high levels of problematic play. In addition, fully half of those gambling more answered affirmatively to all four indicators, as did 23 percent of those gambling less and 10 percent of those whose gambling was unchanged (Figure 8-11). The pattern of problematic play being most common among those gambling more and least common among those whose gambling was unchanged is consistent between each individual indicator (Figures 8-12 and 8-13).

The same pattern is found in the gambling literacy items on the Positive Play Scale (Figure 8-14), though on these items the behavior of those gambling less is much closer to those whose gambling did not change than for problematic play. Surprisingly, though, the differences in behavior virtually disappear when we look at the three honesty and control items in the Positive Play Scale (Figure 8-15).

### WHAT GROUPS ARE MOST AT RISK?

9.

#### 9. WHAT GROUPS ARE MOST AT RISK?

The data presented earlier in this report make it clear that some groups are at greater need of problem gambling-related education, prevention, and treatment services than others. There is no perfect measure of risk, and the limitations of sample size and survey length present in this project make any measure of risk a blunt instrument. However, analysis of the four indicators of problematic play included in the survey reveals differences large enough to indicate a clear hierarchy that can aid in the determination of critical audiences for programs and services.

The four indicators of problematic play used in both the 2018 and 2021 surveys were:

- needing to gamble more for the same feeling of excitement
- relying on others to pay their debts or bills because of gambling
- lying to hide their gambling
- feeling restless or irritable when trying to cut down on their gambling

It is unlikely that answering "once" to any of these questions indicates a gambling disorder, nor is answering "many times" to any one question (or even all four) sufficient for a diagnosis. However, as each of these questions has been validated as an indicator for a brief diagnostic tool, it is likely that someone answering "many times" to any of these indicators is at greater risk than someone answering "no" to all four, and that a ranking of groups based on this measure can be of help in the identification of the most critical audiences (see Table 1, next page).

The number of gambling activities pursued in the past year exhibits the most striking differences in degree of risk. Almost half (45%) of those gambling on ten or more of the activities covered by this survey answered "many times" to at least one of the four indicators, three times the 15 percent of all past year gamblers and almost eight times the 6 percent of those gambling on six activities or fewer. These data suggest that researchers should consider the inclusion of this measure in screening, diagnostic, or prevalence instruments.

Perhaps not surprisingly, age also shows up as a clear distinguishing factor. Those between the ages of 18 and 34 are nine times more likely than those 55 or older (27 percent to 3 percent) to answer "many times" to one of the four indicators. Gender, while still showing a clear difference, is a less strong indicator, with 19 percent of males answering "many times" versus 11 percent of females.

Some types of gambling appear to attract at-risk participants more than others. Foremost among these is participation in fantasy sports—40% of fantasy sports players answered "many times" to at least one problematic play indicator. Other forms of gambling showing higher risk of problematic play include traditional sports betting (33%), gaming machine play (29%), and spending money at a casino (26%). We must emphasize, though, that this is not evidence that these forms of gambling "cause" risky gambling behavior. Participation in these activities is strongly correlated with other risk factors identified in this report, notably gambling on 10 or more activities and being under the age of 35. It may well be that these activities attract those already most prone to risky behavior, suggesting that providers of these gambling activities bear a responsibility to provide their customers with awareness and education on how to lower their risk and for identifying players showing signs of problematic play. It is also worth noting the high level of risky gambling by those who frequently (weekly or more) trade their investment holdings (43%).

Finally, the highest level of problematic play (50%) was found in those who reported gambling more during the COVID-19 pandemic. While those particular circumstances may be unlikely to be repeated, this finding points to how larger environmental factors can affect the development of risky behavior.

### 9. WHAT GROUPS ARE MOST AT RISK?

Table I: % answering "many times" to at least one problematic gambling indicator

Past year gamblers who	Percentage of past year gamblers
Gambled more during pandemic	50%
Gambled on 10 or more activities	45%
Trade investments weekly or more often	43%
Past year fantasy sports bettor	40%
Agree gambling is a good way to make money	36%
Past year traditional sports bettor	33%
Male 18-34	30%
Past year gaming machine player	29%
Age 18-34	27%
Past year casino spending	26%
Female 18-34	23%
Past year online gambler	20%
Male	19%
ALL PAST YEAR GAMBLERS	15%
Female	11%
Gambled on 6 activities or less	6%
Age 55 or older	3%

### **10. PUBLIC OPINION**

As did the 2018 survey, the 2021 survey included questions about the American public's knowledge and beliefs about problem gambling and its opinions on matters relating to public policy. These questions were asked of all respondents, gamblers and nongamblers alike.

Overall, the beliefs and attitudes presented here show remarkably little change from the earlier survey despite the considerable changes in gambling behavior and problematic play discussed earlier in this report. The 2018 report found that "taken as a whole, the answers to these questions reveal considerable differences of opinion among the American public, substantial confusion over the nature of problem gambling, and the continuing existence of stigma associated with gambling disorder." The 2021 survey reinforces these conclusions.

### 10A. Beliefs About Problem Gambling

The slow rate of change in public opinion is illustrated well by agreement with the statement: "Addiction to gambling is a lot like addiction to drugs or alcohol." (Figure 10A-1). Three in four respondents agreed with the statement in both 2018 and 2021 (75% and 74% respectively). Agreement with this statement continued to be strongest among older Americans (Figure 10A-2).

In both 2018 and 2021, respondents were presented with nine conditions that might be believed to "cause" a gambling problem. Some of these items would likely be considered credible by many, if not most, experts in the field (such as "a traumatic event in someone's life") while others would be widely rejected (such as "moral weakness"). For each of the nine, respondents could say the condition was "very likely," "somewhat likely," "somewhat unlikely" or "very unlikely" to cause a gambling problem. Respondents could answer "likely" or "unlikely" to as many of the conditions as they wished and were not asked to rank the conditions.

The conditions that respondents were asked to rate are:

- Moral weakness
- Having an addictive personality
- Not having enough willpower
- Being around people who gamble a lot
- Having a parent or other family member who gambles
- A traumatic event in someone's life
- A person's genetics or other medical condition
- Seeing a lot of ads promoting gambling
- Winning a lot of money

As discussed in section 2, the order of these statements was randomized for each respondent, so that about 11 percent would see, for example, "moral weakness" listed first, another 11 percent see it listed second, and so on.

The results of this exercise are summarized in Figure 10A-3. All but one of the conditions were endorsed (i.e., answered "very likely" or "somewhat likely") by half or more of the survey participants, the exception being "a person's genetic or other medical condition." As with other indicators of public opinion, results were virtually unchanged from 2018.

The most widely endorsed item was "having an addictive personality," which was supported by 80 percent of respondents in 2021. Many mental health professionals disavow the existence of an addictive personality (see, for example Kerr, 1996 and Szalavitz, 2015), yet this conclusion clearly has not reached the general public.

This belief may well be problematic. As Szalavitz (op. cit.) writes, "The 'addictive personality' is seen as a bad one: weak, unreliable, selfish and out of control. The temperament from which it springs is seen as defective, unable to resist temptation." It may also contribute to a view of the person with an addictive disorder as "different from me" and the belief that "I don't have an addictive personality; therefore it can't happen to me."

"Being around people who gamble a lot" was cited as a likely cause by 78 percent of survey respondents. While it is possible that frequent gambling or maladaptive gambling could lead to association with other frequent gamblers (and certainly regular attendance at a gambling venue leads to being around people who gamble a lot), there is no evidence that it is a cause of gambling problems. One does not develop a gambling problem because they adopt frequent gamblers as role models or because the condition is contagious. It is not a healthy belief, as it may lead to a belief that all one has to do to "treat" a gambling problem is to stop associating with other gamblers.<sup>21</sup>

"Winning a lot of money," also known as the "big win," has long been cited as contributing to gambling disorders, and 75 percent of survey participants agreed that this may well contribute to a gambling problem. The scientific literature is to some degree divided on the subject. Clinicians and researchers have noted the frequency with which a winning experience is mentioned in treatment situations (see Rosenthal, 1992). More recent empirical studies, however, have called this into question (Weatherly, Sauter, & King, 2004), (Anselme & Robinson, 2013).

"Not having enough willpower" is cited as a cause by 74 percent of respondents. There is scientific evidence that gambling disorders are accompanied by a lack of willpower, though it is unlikely that the general public has the same understanding of willpower as researchers and practitioners (Brevers & Noel, 2013). It is also not clear that the loss of control as understood by professionals is a cause of a gambling disorder, a symptom, or a consequence.

A large majority of the public (74 percent) agrees that "having a parent or family member who gambles" is likely to cause a gambling problem. It is not clear, though, whether respondents believe that this is due to shared genetic makeup, living in a family where gambling is to some degree accepted, or having gambling role models. It is also possible that some responded to the question in the context of excessive gambling, while others thought of it as a family member who gambles at all.

Somewhat fewer (61 percent) endorse the premise that "seeing a lot of ads promoting gambling" can cause a gambling problem. Griffiths (2005), in a review of literature on the effects of advertising on excessive use of both gambling and alcohol, concludes that "there is no evidence that this (a ban on advertising) would work." In a more recent review of the literature, Binde (2014) concludes that "the impact of advertising on the prevalence of problem gambling is in general likely to be neither negligible nor considerable, but rather relatively small.... Only in particular conditions such as extensive advertising for especially risky forms of gambling that are offered in an immature market with few if any player protection features (such as stake limits and possibilities for self-exclusion), may one assume that advertising in itself substantially contributes to problem gambling." Some would argue that this describes the US sports betting market between 2018 and 2021.

<sup>21</sup> That said, it is certainly true that changing one's social circle from frequent gamblers and gambling venues to non-gambling places and individuals who live sober lifestyles is a very important component of recovery.

Clinicians have long noticed that many receiving treatment for a gambling disorder have a history of a traumatic event or events. This observation appears to be confirmed in the research literature (Kausch, Rugle, & Rowland, 2003), (Scherrer, Xian, Kapp, & Waterman, 2007). This view is supported by a small majority (56 percent) of survey respondents.

"Moral weakness" is also cited by just over half (53 percent) of those participating in the survey<sup>22</sup>. Its endorsement is problematic on at least three counts. First, a condition seemingly caused by moral weakness may not be one that would lead someone to see a trained professional or recommend that someone else do so. One does not generally go to a medical professional to get morally stronger. Second, it is certainly stigmatizing, likely contributing to reluctance to disclose a problem or to seek help. Third, it is likely that very few people think of themselves as morally weak, which could in turn dispose them to believe that they are not susceptible to a problem "caused" by moral weakness.

The final item on the list of possible causes was "a person's genetics or other medical condition." In 1984 Henry Lesieur and Robert Custer wrote that "[t]he medical model of pathological gambling is coming to dominate the public image of the problem gambler. The new image is replacing the previous one of sinner or criminal" (Lesieur & Custer, 1984). Given current levels of misunderstanding, it is unlikely that this statement was true in 1984. It was certainly not true in 2018, when it was endorsed by only 43 percent of our survey respondents, and 2021, when it was endorsed by only 44 percent. The scientific literature, however, strongly supports this concept (Gyollai, et al., 2014).

In addition to questions about the cause of problem gambling, respondents were asked two questions designed to indicate the level of stigma associated with the disorder. First, they were asked for their agreement with the statement "People with a gambling problem are to blame for their problems." Half (49 percent) agreed with this statement, a number virtually unchanged from the 51 percent agreeing in 2018 (Figure 10A-4). One in four (24 percent) disagreed, with the remaining 28 percent answering "neutral."

The second question asked for agreement with "People with a gambling problem are below average in intelligence." While agreement in 2021 remained relatively low at 16 percent, this was noticeably higher than the 10 percent agreeing in 2018 (Figure 10A-5).

### 10B. Perceptions and Knowledge of Treatment

The 2018 and 2021 NGAGE surveys included four identical questions pertaining to awareness and perception of problem gambling related services. Answers to all four questions changed little between the two surveys.

Respondents were asked if they agreed or disagreed that "Services to treat compulsive gambling are available in my community." Slightly more than four in ten (43 percent) in the 2021 survey agreed (Figure 10B-I), a small (though statistically significant) increase over the 38 percent agreeing in 2018. The number disagreeing was virtually unchanged, with 15 percent disagreeing in 2018 and 16 percent in 2021, while the number selecting "neutral" declined from 47 percent to 42 percent.

It is important to recognize that there is no way to evaluate the accuracy of these responses. Not every community has dedicated problem gambling services, and therefore an answer of "no" might well be correct. At the same time, an answer of "yes" might be incorrect, might be referring to more general social services or the availability of religious or spiritual services, or might reflect awareness of a state or national helpline even though treatment is not available in a respondent's locality. However, the

<sup>22</sup> As "moral weakness" is not a concept that lends itself to a precise definition or to scientific measurement, there is very little in the scientific literature about its validity as a cause of a gambling problem.

large number providing a neutral response speaks to an overall lack of awareness, and one is unlikely to seek treatment if they are not aware it exists.

In 2021, by a margin of 46 percent to 29 percent, past year gamblers are more likely to claim awareness of services than nongamblers (Figure 10B-2). It is entirely possible that this is due to awareness promotions done in conjunction with gambling venues, such as inclusion of helpline numbers on lottery tickets or the placement of information at casinos or racetracks. Certainly gamblers are much more likely to see such information than nongamblers. It is also possible that gamblers are more likely to notice this type of information. Awareness is even greater among those reporting risky gambling behavior; 63 percent of gamblers who experienced at least one of the four problematic behaviors "many times" said that problem gambling services were available in their community compared to 43 percent of those who reported no frequent problematic behavior. This may result from some combination of more frequent exposure to venues where helpline numbers or other awareness messaging is displayed, greater salience of the message to those experiencing some level of problematic behavior, or greater availability of services in localities with more gambling opportunities.

A related question in 2021 asked for agreement that "if someone close to me had a gambling problem, I would know where to get them help." While at first glance this may seem close, if not identical, to the previous question, one could agree with the latter statement by citing resources not specifically designed for problem gambling, such as speaking with a religious leader or family doctor. Alternatively, someone could know that services exist but not know how to access them. However, the percentage agreeing with this statement (45 percent) is almost identical to the percentage agreeing with the previous one about availability of services (43 percent) (Figure 10B-3). Overall, 66 percent of those agreeing that services were available in their community also agreed that they knew where to get help for someone close to them.

Awareness of services in itself is not sufficient to ensure that someone would take advantage of these services or encourage someone else to do so. They must also feel that accessing services is an appropriate thing to do and is likely to be effective. Three questions addressed this issue.

The first was "If someone in my family had a gambling problem, I would advise them not to discuss it with anyone outside the family." This question speaks both to cultural norms surrounding help-seeking and to the stigma associated with gambling disorders. One in four 2021 respondents (26 percent) agreed with this statement, up from 19 percent in 2018 (Figure 10B-4). However, agreement with this statement rises to 53 percent among those reporting at least one problematic gambling behavior "many times," suggesting that stigma is the greatest among those most likely to need services.

The second question asked for agreement with "People with a gambling problem are unlikely to recover or get better." Agreement with this statement rose slightly from 19 percent in 2018 to 24 percent in 2021 (Figure 10B-5). However, another 32 percent of 2021 respondents replied that they were neutral about the statement, meaning that, taken together, more than half either agreed that treatment was not effective or had some degree of doubt about prospects for recovery. Fewer than one in five (17 percent) of Americans strongly disagreed with the statement. There is clearly not widespread belief in the effectiveness of gambling treatment, and those who doubt the efficacy of treatment are unlikely to enter treatment or to recommend it to someone else. In addition, 49 percent of those with frequent problematic gambling behavior (answering at least one of the four questions with "many times") agreed that those with a gambling problem were unlikely to recover. Finally, in 2021, adults under

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the age of 45 are the most likely age group to doubt the possibility of recovery (Figure 10B-6), with 30 percent agreeing that those with a gambling problem are unlikely to recover compared to 21 percent of those between 45 and 54 and 13 percent of those between 55 and 64. Those at the greatest risk—young adults and those exhibiting potentially problematic behaior—are the most likely to doubt the possibility of recovery.

The third question addressed the meaning of the term "recovery." Respondents were asked "When you hear the word 'recovery,' as in 'this person is in recovery from a gambling addiction,' what does 'recovery' mean to you?" Six options were presented: "That person no longer gambles," "That person successfully has their gambling under control," "That person is trying to stop gambling," "That person has a mental illness," "Something else," or "Don't know." Multiple responses were permitted.

The most common response was "that person is trying to stop gambling" at 46 percent, followed by having gambling under control at 38 percent and no longer gambling at 30 percent (Figure 10B-7). A large share of the public does not have the same understanding of recovery as those who work in the field or those who are in recovery, which further complicates conveying a message about the benefits and likelihood of recovery.

#### 10C. Morality of Gambling

Respondents were asked if gambling was immoral and if it was against their religion.

Overall only 17 percent of 2021 respondents agreed that gambling was immoral, a number virtually unchanged from the 14 percent agreeing in 2018 (Figure 10C-1). A slightly larger number (20 percent in 2021) agreed that it was against their religion (Figure 10C-2).

It might surprise some to learn that 71 percent of those agreeing that gambling is immoral also reported having gambled in the past year. Even more surprising, 64 percent of those strongly agreeing that gambling was immoral also reported past year gambling. At the same time only 20 percent of nongamblers replied that gambling was immoral. This could certainly reflect hypocrisy, but could also reflect a view that the morality of gambling is not absolute, that some gambling is immoral while other gambling is not, or disagreement about what constitutes gambling. This last possibility is covered further in the next section.

#### 10D. What is Considered Gambling?

A 1999 Gallup Poll found that 78 percent of Americans considered buying a lottery ticket to be gambling (encyclopedia.com, 2022). While lottery play clearly meets generally accepted legal criteria for gambling—players risk something of value on a game of chance in order to possibly win something of value—it may come as a surprise that one in five Americans in 1999 did not agree that playing the lottery was gambling. This finding is more than a curiosity; it raises the question of what the public thinks of when the word "gambling" is used.

To further explore this question, the 2021 NGAGE survey asked if respondents considered each of 12 activities to be gambling, 11 of which are commonly referred to as a form of gambling with the twelfth being regular trading of stocks and bonds. Every one these activities was considered not to be gambling by 25 percent or more of those answering the survey (Figure 10D-1).

Playing table games such as roulette and craps, sports betting, playing cards for money, and wagering online were considered gambling by between 73 and 75 percent, with spinning wheel games, slot

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machines, and lottery games considered gambling by 66 to 69 percent. Smaller numbers believed bingo (55 percent), sports contests (53 percent), fantasy sports (52 percent) and raffles (41 percent) to be gambling, with the lowest share (34 percent) agreeing that regular stock and bond trading was gambling. However, 94 percent identified at least one of these items as gambling.

Agreement that these activities constitute gambling is strongly related to the age of the respondent (Figures 10D-2 to 10D-6). While 92 percent of those 65 or older considered betting on sports outcomes to be gambling, that figure drops to 50 percent of those between 18 and 24, while only 26 percent of 18 to 24 year-olds consider fantasy sports to be gambling. And while 89 percent of those 65 or older consider playing slots or gaming machines to be gambling, that view is shared by only 53 percent of 25 to 34 year-olds and 42 percent of those between 18 and 24. Gender differences, however, are small to nonexistent (Figure 10D-7).

It also appears that those who participate in an activity are less likely to see it as gambling than those who do not. For example, while 75 percent of those who say they have never bet on a slot machine consider that to be gambling, an average of only 56 percent of those who played a slot machine once or more in the past year share that view. The smallest number considering it to be gambling are those playing a few times a month (43 percent), though the number increases to 62 percent of those playing weekly (Figure 10D-8). A similar trend is found in sports betting, considered gambling by 82 percent of those who have never done it but by only 50 percent of those gambling on sports a few times a month and 57 percent of those gambling on sports weekly or more (Figure 10D-9). Those with no investments and those who trade only once or twice a year are almost equally likely to consider regular trading to be gambling (38 percent and 42 percent, respectively) while 19 percent of those trading a few times a month or more agree (Figure 10D-10).

Survey data do not allow more than speculation about why activities are not considered to be gambling by many. It may be that activities such as sports betting and card playing aren't considered to be gambling because of a perceived element of skill, or that something is only gambling if it is done to something perceived as excess, or that activities a respondent does are not gambling but the things they do not do are gambling. No matter the reason, though, the data strongly suggest a need for care when speaking to the public about "gambling."

#### **I0E. Public Policy**

In both 2018 and 2021, respondents were asked whether the gambling industry and the government should do more to help people with a gambling addiction. They were also asked similar questions specific to sports betting.

As in 2018, the public is much more supportive of asking the gambling industry to do more about gambling addiction than they are of asking the government to do so by a 64 percent to 51 percent margin (Figures 10E-1, 10E-2). In both cases, however, support for each doing more increased from 2018, with support for industry action growing from 52 percent to 64 percent and support for government action growing from 43 percent to 51 percent. While it might be tempting to think that this increase resulted from increased awareness in states legalizing sports betting, this appears not to have been the

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case. Support for increased efforts by both government and industry does not differ between states with legal sports betting and those without (Figures 10E-3, 10E-4).

Three questions were asked specifically about sports betting. The first asked "If your state was to legalize or has legalized sports betting, how important is it to require operators to implement responsible gambling measures?" Fifty-seven percent of respondents believed it to be somewhat or very important, down slightly from 63 percent in 2018 (Figure 10E-5), with 22 percent calling it somewhat or very unimportant and the remaining 21 percent expressing no opinion. Support was lowest among nongamblers, with 53 percent calling it important compared to 57 percent of past year sports bettors and 70 percent of those who gambled but not on sports. A large number of nongamblers (37 percent) expressed no opinion on the subject (Figure 10E-6).<sup>25</sup>

In both 2018 and 2021 there was little change for the second question: "If your state was to legalize or has legalized sports betting how important is it to set aside revenues to treat people who develop gambling problems?" Here 52 percent believed it to be very or somewhat important in 2021 compared to 53 percent in 2018 (Figure 10E-7). Again, support was greatest among those who gambled but not on sports, with a high level of no opinion among nongamblers. Nongamblers were also the most likely to consider treatment funding unimportant at 39 percent, compared to 35 percent for sports bettors and 27 percent for non-sports gamblers (Figure 10E-8).

The third proposition, "If your state was to legalize or has legalized sports betting, how important is it to set aside some of the revenues to pay for public awareness campaigns designed to educate the public about the risks of gambling and the help that is available?" was felt important by 56 percent, an identical number to the level of support in 2018 (Figure 10E-9). Here the level of support is by far greatest among past year gamblers who do not bet on sports. Seventy-three percent of this group felt funding for awareness campaigns was important compared to 53 percent of sports bettors and 40 percent of nongamblers (Figure 10E-10).

<sup>25</sup> This question does assume that respondents have some awareness of "responsible gambling" and what it means. The high level of "no opinion" among nongamblers may be more indicative of lack of exposure to the term than of apathy.

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## II. IMPLICATIONS FOR PUBLIC POLICY AND DIRECTIONS FOR FUTURE RESEARCH

Between 2018 and 2021 three events drastically changed the landscape of gambling in the United States. The first was the rapid expansion of legal sports betting, the second event the jump in the number using the internet to gamble, and the third the COVID-19 pandemic. All coincided with a significant increase in potentially problematic play. The data—most notably the similarity in overall gambling behavior and problematic play between states with legal sports betting and states without—suggest that the pandemic had by far the greatest impact. However, we do not know whether the changes in gambling behavior and problematic play will persist as the pandemic eases and/or society adjusts to the presence of COVID-19. Furthermore, legal sports betting is still in its infancy everywhere but Nevada. We do not know if participation will increase with greater acceptance and familiarity, or if participation will decline as the novelty wears off. In addition, we do not know if problematic play will continue to increase or if it will level off or even come down as society adjusts to its presence.<sup>26</sup>

In the report of findings from the 2018 NGAGE survey (National Council on Problem Gambling 2021, op.cit.), we concluded that "The prevalence of gambling in jurisdictions where it is prohibited (notably sports betting) suggests the limitations of policies based on prohibition." The data from the 2021 survey, most notably the lack of discernable differences between states with and without legal sports betting, reinforce that conclusion. Prohibition of gambling or any particular form of gambling cannot be seen as an effective strategy for reducing excessive or disordered gambling, especially in an era where internet gambling is a few keystrokes away from anyone regardless of its legal status. It does not negate the need for programs for the prevention, awareness, and treatment of problem gambling. At the same time, the data suggest that the diversion of gamblers from illegal offshore sites to legal facilities in-state by itself does not reduce problem gambling without effective programs and without regulation that goes beyond the the gambling operator's financial integrity.

Problematic play is clearly associated with age, the number of gambling activities in which one participates, and sports and fantasy sports betting. While the data collected for this report do not permit an assessment of relative causality, they do suggest target audiences for efforts at awareness, prevention, and encouraging treatment.

Problematic play is also associated with measures of gambling literacy. Problematic behavior, for example, is strongly linked to a belief that gambling is a good way to make money. Efforts to increase awareness of how gambling actually works may well be an effective strategy for the prevention of gambling problems.

In addition to having the highest level of problematic play of any demographic group, young adults are also the most likely to hold misconceptions about how gambling works and the likelihood of recovery from a gambling disorder. In addition, they are the least likely to believe that many common forms of gambling are, in fact, gambling. Finally, the media consumption of young adults differs significantly from that of their elders (e.g., Adgate). A major collaborative effort between experts in problem gambling and communications professionals is essential.

The association of frequent play with problematic behavior, while not surprising, suggests the potential of communications efforts directed at venues targeting frequent players such as player's clubs and VIP programs.

<sup>26</sup> The possibility that problematic play will increase then decrease over a social adjustment period is given credence by a study by Christian and Ladouceur (2006). They studied the effects of the opening of a casino in a new market in Quebec over a four year period, comparing it to the same period in a city without a nearby casino. They concluded that while the casino city experienced an increase in indicators of problematic play in the first year after opening, the trend did not continue over 2-and 4-year follow-ups. That said, sports betting is not the same as casino gambling.

The association of frequent investment trading with problematic gambling both bears further study and suggests the need for treatment and prevention professionals to incorporate questions about investment activity into their practice. It also suggests a need for a mutually beneficial collaboration between those active in the problem gambling field and investment professionals.

The 2018 survey report concluded that "Gambling disorders continue to be highly misunderstood and stigmatized. Both factors likely contribute heavily to a reluctance to seek or recommend treatment. In addition, awareness of treatment resources is low. Greater efforts need to be made to convey the realities of problematic gambling, the effectiveness of treatment, and its availability." This statement is every bit as true in 2021 as it was in 2018.

The continued high public participation in lotteries underscores their importance in problem gambling awareness and prevention. This is not because lotteries carry an elevated level of risk, but because 90 percent of all gamblers play the lottery at some point. As such, lotteries have the potential to reach almost all Americans who choose to gamble.

Comparison of the 2018 and 2021 NGAGE studies reveals considerable change in the profile of gambling in America. Our understanding of these changes is in its infancy and there is every reason to believe that we have not seen the last of them. Continued research is certainly essential, but so is increasing awareness that yesterday's public policy is not an adequate response to today's realities. Doing so will require a collaborative effort between governments, the gambling and gaming industries, non-governmental service providers, researchers, other affected industries, and the recovery community.

Americans gamble in many different ways. Some of these are legal, some clearly not, and some are of questionable legality. Most Americans participate in gambling in some way, including residents of every state, young, old, white and and people of color, and of every portion of the socio-economic status. And while some groups are more likely to experience problematic gambling than others, no age, income, socio-economic, or ethnic group is exempt. Problem gambling is still too often seen as a personal or moral problem, and too much effort is still expended in attributing blame and denying responsibility. It is a serious public health issue demanding a comprehensive solution that involves governments at all levels, the gambling industry, professions such as medicine, law, education and finance, the non-profit sector, and more.

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## QUESTIONNAIRE **SECTION I: SCREENERS** YEAR/MONTH. WHAT IS YOUR DATE OF BIRTH? YEAR/ MONTH \*\*\*\*\* TERMINATE IF UNDER 18 YEARS OLD WHAT IS YOUR GENDER? □ Male ☐ Female PLEASE INSERT YOUR ZIPCODE: Used to determine state of residence The next question will be about race and ethnicity. A "Prefer not to answer" option is available for you to select, at your discretion. Collecting such information enables us to provide a more refined research analysis. Participation is always voluntary, and your responses are used for research purposes only, combined with the answers from all other participants. We will provide our client only anonymous, aggregated results. The data will be held for no longer than 12 months. Do you accept the collection of race and ethnicity related data? Select only one ☐ Yes, I accept. No, I don't accept. **TERMINATE** ARE YOU OF HISPANIC, LATINX OR SPANISH ORIGIN? □ Yes □ No ☐ Prefer not to answer WHAT IS YOUR RACE? Select all that apply □ White ☐ Black or African American ☐ American Indian or Alaska Native ☐ Asian ☐ Pacific Islander Other race

☐ Prefer not to answer

#### **SECTION 2: INVESTMENTS**

6.	DC	YOU HOLD	ANY INVESTMENTS SUCH AS GICS, BONDS, STOCKS, MUTUAL FUNDS OR ETFS?
		Yes	□ No
[0]	NLY	' ASK 12-14 if	II=Yes]
12.	WI	Online Self Di Online Robo	ACCOUNT/S DO YOU USE TO MANAGE YOUR INVESTMENTS? (check all that apply) irected  Hine" Account
13.	WI	I seek larger re I take advanta	SCRIBES HOW YOU MANAGE YOUR PORTFOLIO IN THIS ACCOUNT?  turns over an extended period through buying and holding  ge of both rising and falling markets to enter and exit positions over a shorter timeframe,  more frequent profits.
14.		Weekly, or mo 1 to 3 times a Several times a 1 to 2 times a	month, but not weekly  year, but not monthly  year
		Less often than	n once a year

#### **SECTION 3: GAMBLING ACTIVITIES**

The next question is about different types of gambling/wagering activities. To be clear, we are asking you about gambling with real money. Gambling with real money refers to gambling/paying for your bets with your own cash, money you borrowed, credit/debit cards or cryptocurrency.

In the United States, people can gamble on many different things. Even if you think you do not gamble, please read closely through each of the following questions to tell us which activities might or might not apply to you.

Note: Now, we'd like you to answer the rest of the survey based on your current routines and experiences. We understand that your usual activities may have changed due to the COVID-19 situation, but it is important that you think about what you have "actually" done, not with what you might have done if it was a 'normal' year.

I. How often, if at all, do you currently bet on or play these gambling/wagering activities using real money? Gambling with real money refers to gambling/paying for your bets with your own cash, money you borrowed, credit/debit cards or cryptocurrency.	Weekly, or more often	I-3 times a month, but not weekly	Several times a year, but not monthly	I-2 times a year	Less often than once a year	Never done/ Have not done this
A. Buying any lottery draw game tickets (i.e. Powerball, Mega Millions, or other state lotto draw games)						
B. Buying any daily numbers or Keno-style lottery games (Pick 3, Pick 4, Keno, Quick Draw, Fast Play Games)						
C. Buying any instant (scratch-off) tickets						
D. Playing Bingo at a Bingo hall or Bingo gaming center						
E. Wagering money on horse or dog races (either live races or through off-track betting)						
F. Buying any pull-tabs or break-open tickets						
G. Buying any raffle tickets (e.g. charity raffles, fundraising tickets, but NOT including any state lottery operated raffles)						
H. Betting on sporting events/sports outcomes (e.g. point spreads, futures bets, prop bets, or bets on the result of a sporting event like an NFL, NBA, or NFL game, etc. Note: This does NOT include Fantasy Sports)						
I. Playing Fantasy Sports (either Daily Fantasy Sports (DFS) or traditional, season-long leagues. Note: this does not include playing in free fantasy leagues/contests)						
J. Entering sports contests like March Madness Brackets, NFL Survivor Pools, MLB Beat the Streak, "Pick'em" contests, etc. (Note: This does NOT include sports betting (i.e. making single outcome or parlay bets) or fantasy sports.)						
K. Wagering money gambling online/on a website, or app on a mobile device						
L. Wagering money on card games of any type (i.e. card games found at casinos or any other card games)						

II. HOW OFTEN, IF AT ALL, DO YOU CURRENTLY BET ON OR PLAY THESE GAMBLING/WAGERING ACTIVITIES USING REAL MONEY? GAMBLING WITH REAL MONEY REFERS TO GAMBLING/PAYING FOR YOUR BETS WITH YOUR OWN CASH, MONEY YOU BORROWED, CREDIT/EBIT CARDS OR CRYPTOCURRENCY.	Weekly, or more often	I-3 times a month, but not weekly	Several times a year, but not monthly	I-2 times a year	Less often than once a year	Never done/Have not done this
M. Wagering money on Roulette						
N. Wagering money on Craps, or any other dice games						
O. Wagering money on Big Six/Wheel of Fortune, paddlewheel, or other spinning wheel type games						
P. Spending money on slots, VLTs, or any other type of gaming machine						
2. HOW OFTEN, IF AT ALL, DO YOU SPEND MONEY AT A (FOR ANY REASON, GAMBLING OR OTHERWISE)?	CASIN	0				
☐ Weekly, or more often						
☐ 1 to 3 times a month, but not weekly						
☐ Several times a year, but not monthly						
☐ 1 to 2 times a year						
☐ Less often than once a year						
☐ Never done/Have not done this						
ASK 3 IF ANY GAMBLING ON ANY ITEM IS REP	ORTE	ONO	QUESTI	ONS I	OR 2	
3. OVERALL, DURING THE COVID-19 PANDEMIC, WOULD	YOU S	AY TH	AT			
☐ I gambled more than I did before the pandemic						
☐ I gambled less than I did before the pandemic						
☐ I gambled about the same as I did before the pandemic						

#### **SPORTS BETTING**

ASK THIS BLOCK IF I to 2 times a year or more often AT QIH for "Bet on Sporting Events"

	The next few questions are about Sports Betti	ng.				
4.	YOU SAID THAT YOU HAVE BET ON ON IN THE PAST YEAR FOR REAL MO			HESE SPC	ORTS HAVE	YOU BET
	□ Professional Football		College Football			
	☐ Professional Basketball		College Basketball			
	□ Baseball		Ice Hockey			
	□ Golf		Soccer			
	☐ Tennis		eSports (bets on video game lea	gues or tour	rnaments)	
	☐ Motor Racing (i.e. NASCAR, Formula 1,	etc.) 🗆	Combat Sports (i.e. UFC, M.	MA, etc.)		
	☐ Some other sport					
			otball, College Basketball, OR Ice Hockey SELECTE			
5.	AND WHICH OF THE FOLLOWING S REAL MONEY? (CHECK ALL THAT AF		S EVENTS DID YOU BET C	N IN TH	E PAST YEA	AR FOR
	☐ The Super Bowl		NCAA men's basketball tou	rnament		
	□ NCAA women's basketball tournamer	nt 🗆	Baseball's World Series			
	☐ The NBA championship		The Stanley Cup			
	□ None of the above					
	6. HOW OFTEN DO YOU MAKE SP THROUGH THE FOLLOWING WAYS		BETS	I often bet this way	I bet this way occasionally	I never bet this way
	At a "brick and mortar" sportsbook (i.e. not online, but in a casino or an actual bu	ilding)				
	Through an online sportsbook (i.e. on a we	bsite an	ed/or mobile app)			
	With a state lottery (not including instant or scratch games with specific	orts-rela	ated themes)			
	Betting against friends, family, and/or collection	agues				
	Through a bookie/bookmaker (Note: this does not include online websites or c	casino/pi	hysical sportsbooks)			

<ol><li>THERE ARE DIFFERENT BET TYPES F</li></ol>	FOR SPORTS WAGERING	3:
---	---------------------	----

Single bets on the outcome of a game: a bet with only one outcome in which a particular team must win for you to win the bet. (e.g. Team A to beat Team B in a game, Team A to win the Championship etc.)

Single bets on events within a game: also known as a "prop" bet, this is a bet with only one outcome in which some event must take place during a game for you to win the bet. (e.g. a touchdown must be scored in the first 5 minutes or a

	particular player must score 20 or more points,)								
	<b>Parlay:</b> a bet with two or more outcomes in which all outcomes must occur for you to a game AND Team C to beat Team D in another game – both need to happen for you to with the contract of the second secon		g. Tean	n A to l	beat Tea	ım B is			
	WHICH OF THE FOLLOWING BET TYPES HAVE YOU MADE IN THE PA	ST YE	AR? S	elect al	l that ap	pply.			
	☐ Single bet on the outcome of a game								
	☐ Single bets on events within a game (i.e. "prop" bets)								
	□ Parlay bets								
8.	8. THINKING ABOUT A TYPICAL BET THAT YOU WOULD MAKE, WHAT IS THE AVERAGE SIZE OF THE WAGER (OR VALUE OF THE WAGER IN DOLLARS) YOU WOULD MAKE FOR EACH OF THE FOLLOWING BET TYPES?								
	When you think about this, please only consider the amount you have actually bet, not	any wi	inning	s.					
	For example, if I bet \$20 on a game and the bet was successful, I have still bet only \$20	in tota	ıl.						
	8A. SINGLE BET ON THE OUTCOME OF A GAME	_							
	8B. SINGLE BET ON AN EVENT WITHIN A GAME	_							
	8C. PARLAY BET	_							
[_	ASK 9 TO ALL]								
LI	A RECENT SUPREME COURT DECISION OPENED THE DOOR FOR TATES TO LEGALIZE SPORTS BETTING. IF YOUR STATE WAS TO EGALIZE SPORTS BETTING, OR ALREADY HAS LEGALIZED SPORTS ETTING, HOW IMPORTANT DO YOU FEEL IT IS TO	Very important	Somewhat important	Somewhat unimportant	Very unimportant	No opinion			
Re	equire sport betting operators to implement responsible gambling measures								
	et aside some of the sports betting revenues to treat individuals who develop								

Set aside some of the sports betting revenues to pay for public awareness campaigns designed to educate the public about the risks of gambling and the help that is

available

ASK THIS BLOCK IF I to 2 times a year or more often AT QII for "Bet on Fantasy Sports"

#### **FANTASY SPORTS**

	The	e next few questions are about Fantasy Sports.		
10.		OU SAID THAT YOU HAVE PLAYED FA NTASY SPORTS HAVE YOU PLAYED I		ASY SPORTS BEFORE. WHICH OF THESE TYPES OF THE PAST YEAR?
		Played only Daily Fantasy Sports (DFS)	, thr	ough a site like Draft Kings, FanDuel, etc.
		Played only in traditional, season-long Fa	ntas	sy Sports leagues
		Played both traditional, season-long leagu	ies a	and Daily Fantasy Sports (DFS)
П.		HICH OF THE FOLLOWING SPORTS I IE PAST YEAR? Check all that apply)	HAV	'E YOU PARTICIPATED IN FOR FANTASY SPORTS IN
		Professional Football		College Football
		Professional Basketball		College Basketball
		Baseball		Ice Hockey
		Golf		Soccer
		eSports (bets on video game leagues or to	urn	aments)
		Combat Sports (i.e. UFC, MMA, etc.)		Motor Racing (i.e. NASCAR, Formula 1, etc.)
		Some other sport		
				ayed in both" TO 10. ELSE SKIP
12.	CC			ES YOU PLAY DAILY FANTASY SPORTS (DFS) TEN WOULD YOU SAY YOU PARTICIPATE IN DFS
		Weekly, or more often		
		1 to 3 times a month, but not weekly		
		Several times a year, but not monthly		
		1 to 2 times a year		
		Less often than once a year		
13.		N AVERAGE, HOW MUCH DO YOU SE AILY FANTASY SPORTS (DFS) CONTES		

# ASK 14-16 IF SELECTED "Played in traditional" or "Played in both" AT 10. ELSE SKIP

14.	ON AVERAGE, WHAT IS THE TOTAL AMOUNT EACH OF YOUR TRADITIONAL, SEASON-LONG FANTASY SPORTS LEAGUE(S) TYPICALLY COST TO PLAY? THIS WOULD INCLUDE LEAGUE BUYIN/ENTRY FEES, WEBSITE HOSTING FEES, AND ANY ADDITIONAL FEES THAT GO TOWARDS THE LEAGUE PRIZE(S).
15.	HOW MANY TRADITIONAL, SEASON-LONG FANTASY SPORTS LEAGUES DID YOU PARTICIPATE IN FOR REAL MONEY OVER THE PAST 12 MONTHS?
15/	AND OF THE TRADITIONAL, SEASON-LONG FANTASY SPORTS LEAGUES YOU PARTICIPATE IN HOW DO YOU PLAY?  All leagues are online through a website like Yahoo, ESPN, etc.  All leagues are played offline, with friends/colleagues, with scores tallied up by hand  Some leagues are online and some are offline
	ASK THIS SECTION IF I to 2 times a year or more often AT QIL for "Wager Money on Card Games"
C/	ARD GAMES
The	next few questions are about playing Card Games.
16.	YOU SAID THAT YOU HAVE WAGERED MONEY ON CARD GAMES. WHAT TYPE OF CARD GAME HAVE YOU WAGERED MONEY ON IN THE PAST YEAR? (Check all that apply)
	□ Poker (traditional, 5-card, Hold'em, etc.)
	□ Blackjack
	□ Baccarat
	□ Pai Gow
	□ Cribbage
	□ Some other card game
17.	WHERE HAVE YOU PLAYED THESE CARD GAMES IN THE PAST YEAR? SELECT ALL THAT APPLY, AND THEN CLICK "NEXT".
	☐ Casino ☐ Card club or a racetrack
	☐ Someone's home ☐ Bar or restaurant
	□ Somewhere else

ASK THIS BLOCK IF I to 2 times a year or more often AT QIP for "Spend money on slots, VLT's or any other type of gaming machine"]

#### **SLOTS - VLTS**

The next question is about playing Slots, VLTs, or other Gaming Machines.

18.	MA				ON SLOTS, VLT'S, OR OTHER TYPES OF GAMING OTS, VLT'S, OR GAMING MACHINES IN THE PAST
		Casino		Ra	acetrack
		Bar or restaurant		C	onvenience store
		Virtual slots on the Internet or your more Some other location	obil	e d	evice
					imes a year or more often AT QIK for e/on a website, or app on a mobile device
10	<b>1LI</b>	NE GAMBLING			
	The	e next questions are about gambling online	on a	a w	ebsite, or app on a mobile device.
19.	AN	I APP ON A MOBILE DEVICE. WHA	ТТ	ΥP	NEY GAMBLING ONLINE, ON A WEBSITE, OR USING ES OF GAMBLING/WAGERING HAVE YOU DONE IN THE PAST YEAR? (Check all that apply)
		Slots			Poker
		Table games (e.g. Blackjack, Roulette, etc.,	)		
		Lottery tickets that I purchased through	gh a	we	bsite (e.g. Mega Millions, Powerball or Scratch card style games)
		Bingo			Sports bets
		Fantasy sports			Bets on non-sporting events (e.g. The Bachelor, Oscars, elections, etc.,
		Bets on horse races			eSports (bets on video game leagues or tournaments)
		Bets on virtual sports			Raffle tickets
		Other			
20.	ON DO	A SOCIAL CASINO OR CASUAL (	GAM	1ES	Y TO BUY CREDITS, TOKENS OR VIRTUAL CURRENCY S SITE/APP (E.G. SLOTTOMANIA, ZYNGA SLOTS, OTS, POKER, BLACKJACK OR OTHER GAMBLING
		Weekly, or more often		1	to 3 times a month, but not weekly
		Several times a year, but not monthly		1	to 2 times a year
		Less often than once a year		Ιŀ	nave never done this

# ASK THIS BLOCK IF I to 2 times a year or more often AT 2 for "Spent money at a casino"

#### **CASINOS**

The next couple of questions are about Casinos.

21.	OU SAID THAT YOU HAVE SPENT MONEY AT A CASINO. WHICH OF THESE BEST DESCRIBES HE REASONS YOU'VE BEEN TO A CASINO IN THE PAST YEAR?
	Just to gamble
	Mostly to gamble, but also to socialize with friends or enjoy other amenities like restaurants, bars, shows, etc.
	Mostly to socialize with friends and enjoy the amenities, but sometimes also to gamble
	Never to gamble, only to socialize with friends and enjoy the amenities
22.	HAT TYPES OF CASINOS HAVE YOU BEEN TO IN THE PAST YEAR?  beck all that apply)
	A casino in my home state
	A casino in a neighboring state
	A casino in Las Vegas or elsewhere in Nevada
	A casino in Atlantic City
	A casino somewhere else in the U.S. (not mentioned above)
	A casino outside the U.S.
	A casino on a riverboat or at a dockside (in the U.S. or any other location)
	A casino on a cruise ship (in the U.S. or any other location)

# ASK THIS BLOCK IF I to 2 times a year or more often AT QIJ for "Entered sports contests

#### **SPORTS CONTESTS**

The next couple of questions are about Sports Contests (e.g. like March Madness Brackets, NFL Survivor Pools, MLB Beat the Streak, "Pick'em" contests, etc.)

23.	YOU SAID THAT YOU HAVE ENTERED SPORTS CONTESTS. HOW HAVE YOU PLAYED THESE TYPES OF SPORTS CONTESTS IN THE PAST YEAR? Select all that apply.
	☐ In an office pool
	☐ Online with people I did not previously know
	☐ In pools with other people I know (i.e. not as part of an office pool)
24.	WHAT IS THE LARGEST AMOUNT YOU HAVE EVER SPENT TO ENTER A SPORTS CONTEST?

#### ASK 25 and 36 TO "PAST YEAR GAMBLERS" ONLY

#### PROBLEMATIC GAMBLING INDICATORS AND POSITIVE PLAY

For the next few questions, we'd like to ask about your personal gambling experience in the past 12 months. These questions do not have right or wrong answers, so please give us the answer that comes closest to your own experience.

	No, not in the past 12 months	Once	A few times	Many times
25. How often have you needed to gamble with larger amounts of money or with larger bets in order to get the same feeling of excitement?				
26. How often have you felt restless or irritable when you tried to cut down or stop gambling?				
27. How often have you lied to hide your gambling?				
28. How often have you relied on others to pay your gambling debts or to pay your bills when you had financial problems caused by your gambling?				

#### **POSITIVE PLAY**

For the next few questions, we'll show you some statements people have made about their gambling. For each one, please say how much you agree or disagree with the statement. These questions do not have right or wrong answers, so please give us the answer that comes closest to your own experience.

	Strongly Agree	Agree Somewhat	Neutral	Disagree Somewhat	Strongly Disagree
29. Gambling is not a good way to make money					
30. If I gamble more often, it will help me to win more than I lose					
31. My chances of winning get better after I have lost					
32. I gamble for entertainment, not to win money					
33. In the last month, I felt in control of my gambling behavior					
34. In the last month, I was honest with my family and/or friends about the amount of money I spent gambling					
35. In the last month, I was honest with my family and/or friends about the amount of time I spent gambling					
36. Gambling is a good way to make money					

#### **GENERAL PERCEPTIONS OF GAMBLING [ASK EVERYONE]**

Now we'd like your opinion about some statements relating to gambling in the United States. Regardless whether you gamble or not, we are looking for everyone's opinion.

For each statement, please tell us how much you agree or disagree with the statement. These questions do not have right or wrong answers, so please give us the answer that comes closest to your personal opinion.

HOW MUCH DO YOU AGREE OR DISAGREE WITH THE FOLLOWING STATEMENTS ABOUT GAMBLING?? [RANDOMIZE ROWS]	Strongly Agree	Agree Somewhat	Neutral	Disagree Somewhat	Strongly Disagree
37. Addiction to gambling is a lot like addiction to drugs or alcohol					
38. Gambling is immoral					
39. Gambling is against my religion					
40. Services to treat compulsive gambling are available in my community					
41 The gambling industry should do more to help people with a gambling addiction					
42. The government should do more to help people with a gambling addiction					
43. If someone close to me had a gambling problem, I would know where to get them help					
44. If someone in my family had a gambling problem, I would advise them to not discuss it with anyone outside the family					
45. People with a gambling problem are to blame for their problems					
46. People with a gambling problem are unlikely to recover or get better					
47. People with a gambling problem are below average in intelligence					

CON	HOW LIKELY DO YOU BELIEVE EACH OF THESE NDITIONS ARE TO CAUSE A GAMBLING PROBLEM?	Somewhat Likely	Somewhat Unlikely	Very Unlikely		
Mora	al weakness					
Havii	ng an addictive personality					
Not	having enough willpower					
Being	g around people who gamble a lot					
Havii	ng a parent or other family member who gambles					
A tra	umatic event in someone's life					
А ре	rson's genetics or other medical conditions					
Seeir	ng a lot of ads promoting gambling					
Winr	ning a lot of money					
	That person is trying to stop gambling ☐ That person has a m	fully has the ental illness	eir gamblin	g under cor		
	Buying lottery game tickets (i.e. Powerball, Mega Millions or scratch	h-off tickets)				
	☐ Playing Bingo at a Bingo hall or Bingo gaming center					
	☐ Buying raffle tickets (e.g. charity raffles, fundraising tickets)					
	☐ Betting on sporting events/sports outcomes including horse or dog racing					
	□ Playing Fantasy Sports					
	Entering sports contests like March Madness Brackets, NFL Su "Pick'em" contests, etc.	ırvivor Pool	s, MLB Bea	at the Strea	k,	
	Wagering money online/on a website, or app on a mobile device	e				
	Wagering money on card games of any type (i.e. card games found	d at casinos o	r any other co	ard games)		
	Wagering money on other casino style games of any type (i.e. re	oulette, Craps	, or any othe	r dice games)		
	☐ Wagering money on Big Six/Wheel of Fortune, paddlewheel, or other spinning wheel type games					
	Playing slots, VLT's, or any other type of gaming machine					
	□ Regularly trading GICs, Bonds, Stocks, Mutual Funds or ETFS					
	None of the above					

#### **DEMOGRAPHICS**

The remaining questions are for classification purposes only. Your individual responses will never be shared, and will remain anonymous at all times.

The remaining questions are for classification purposes only. Your individual responses will never be shared, and will remain anonymous at all times.

#### 51. HOW OLD ARE YOU?

\_\_\_\_\_

	<b>52</b> .	WHAT IS THE HIGHEST	DEGREE OR LEVEL	OF SCHOOL YO	OU HAVE COMPLETED
--	-------------	---------------------	-----------------	--------------	-------------------

Sel	ect only one
	Education through Grade 12 [
	Grade 4 or less
	Grade 5 to 8
	Grade 9 to 11
	Grade 12 (no diploma)
	Regular High School Diploma
	GED or alternative credential
	College or Some College [Expandable Header]
	Some college credit, but less than 1 year
	1 or more years of college credit, no degree
	Associate's degree (AA, AS, etc.)
	Bachelor's degree (BA, BS, etc.)
	Master's degree (MA, MS, MBA, etc.)
	Professional degree (MD, DDS, JD, etc.)
	Doctorate degree (PhD, EdD, etc.)

### 53. PLEASE INDICATE YOUR ANNUAL HOUSEHOLD INCOME BEFORE TAXES. ☐ Less than \$5,000 □ \$5,000-\$9,999 □ \$10,000-\$14,999 □ \$15,000-\$19,999 □ \$20,000-\$24,999 □ \$25,000-\$29,999 □ \$30,000-\$34,999 □ \$35,000-\$39,999 □ \$40,000-\$44,999 □ \$45,000-\$49,999 □ \$50,000-\$54,999 □ \$55,000-\$59,999 □ \$60,000-\$64,999 □ \$65,000-\$69,999 □ \$70,000-\$74,999 □ \$75,000-\$79,999 □ \$80,000-\$84,999 □ \$85,000-\$89,999 □ \$90,000-\$94,999 □ \$95,000-\$99,999 □ \$100,000-\$124,999 □ \$125,000-\$149,999 □ \$150,000-\$199,999 **\$200,000-\$249,999** □ \$250,000 or more

☐ Prefer not to answer

Figure 3-I

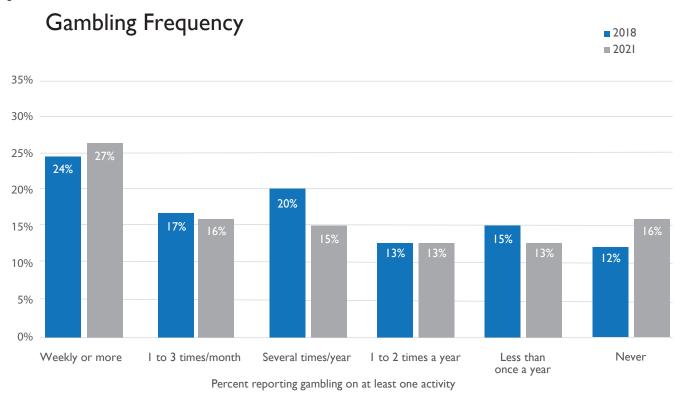
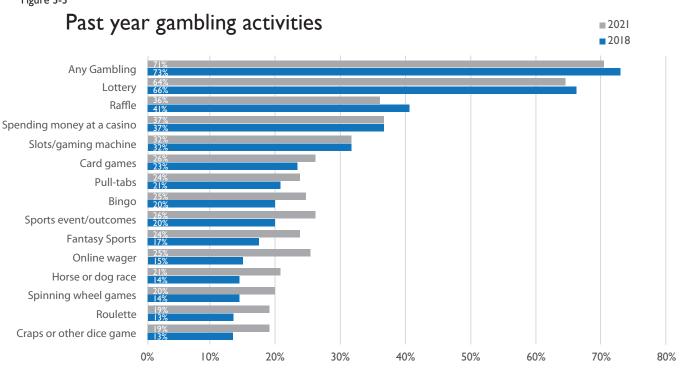
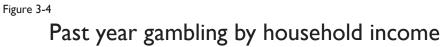


Figure 3-2









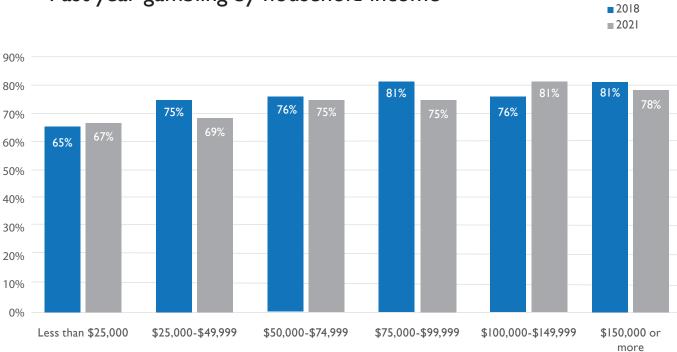
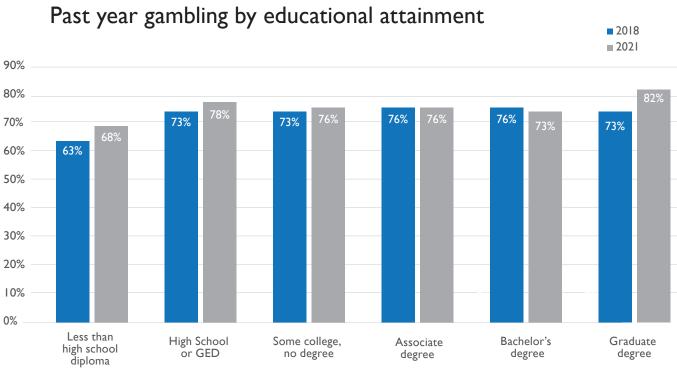


Figure 3-5



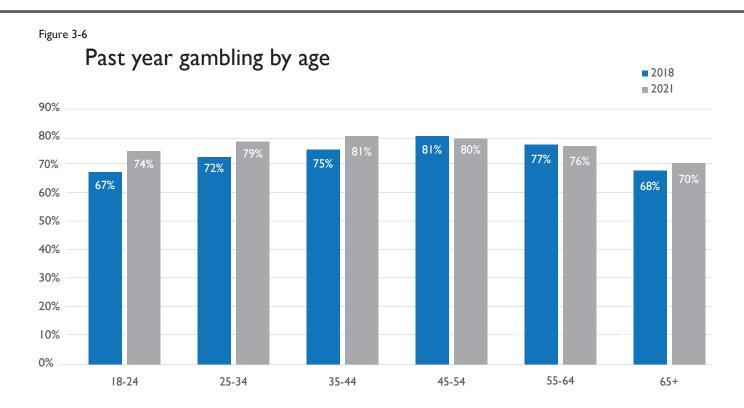
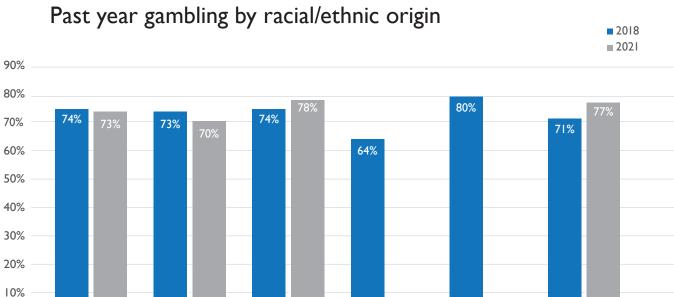


Figure 3-7

0%

Latinx



Note: \* Indicates omission due to small sample size

Black

\*

Native American

\*

Asian

Other

Gambling participation by gender

White

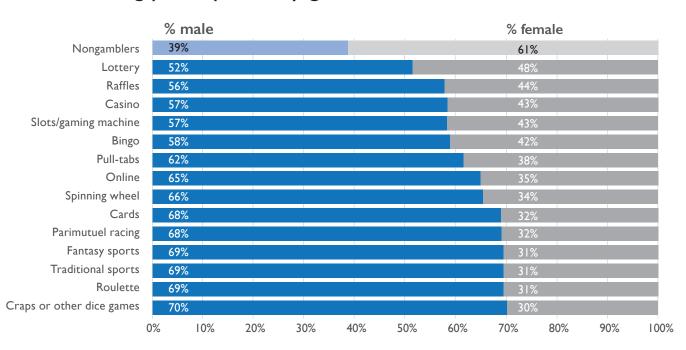


Figure 3-9

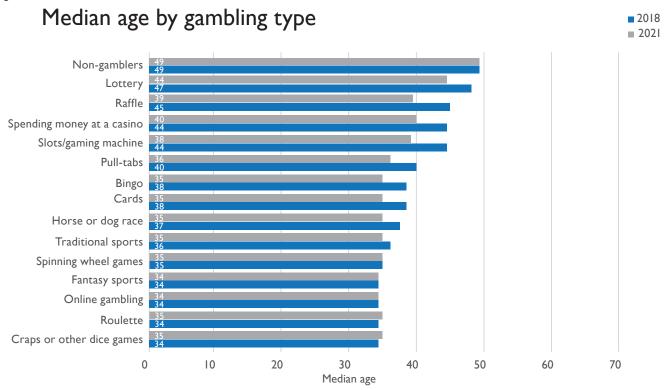


Figure 3-10

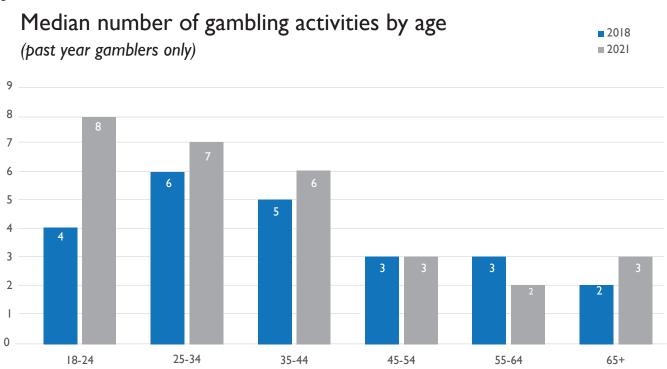
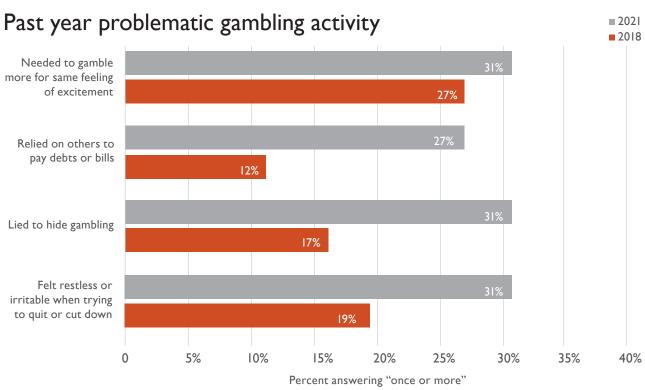


Figure 4-1





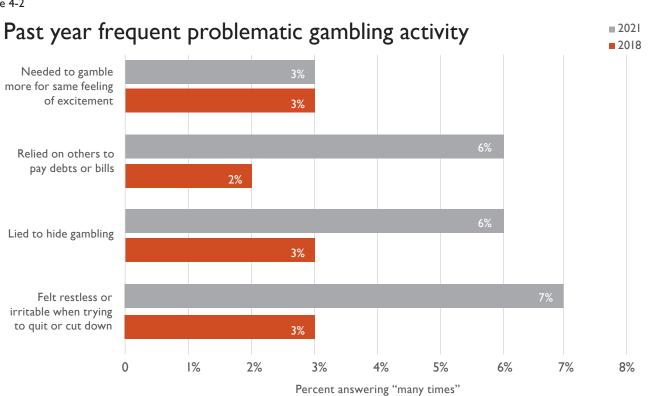
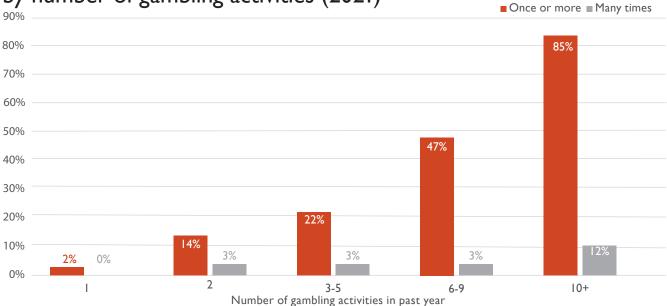
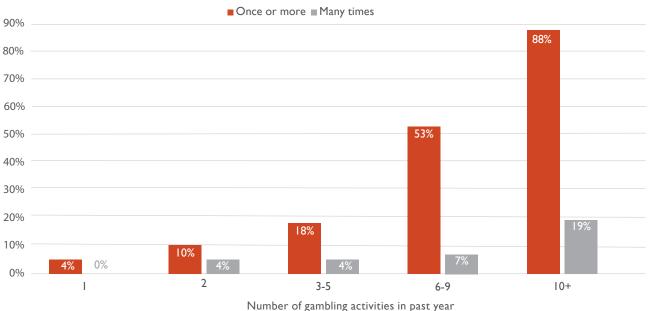


Figure 4-3

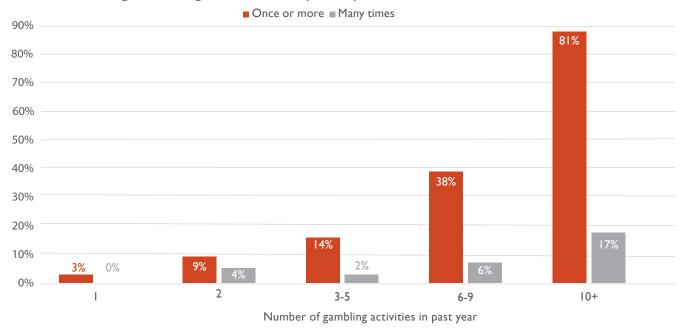
Percentage of gamblers reporting "needing to gamble with larger amounts to get the same feeling of excitement" by number of gambling activities (2021)



Percentage of gamblers "reporting feeling restless or irritable when trying to cut down or stop" by number of gambling activities (2021)



Percentage of gamblers reporting lying to hide their gambling by number of gambling activities (2021)



Percentage of gamblers reporting relying on others to pay gambling debts or bills because of gambling by number of gambling activities (2021)

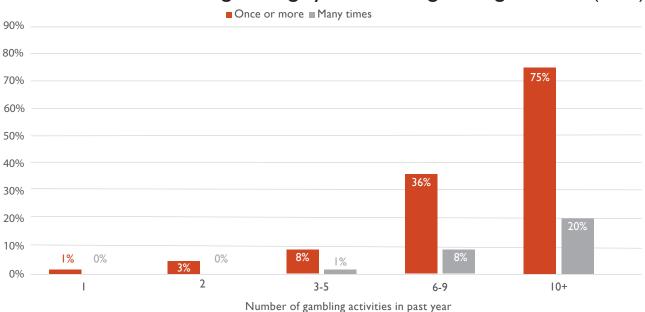


Figure 4-7

### Percentage of gamblers showing no problematic play by age

■ 2021 ■ 2018

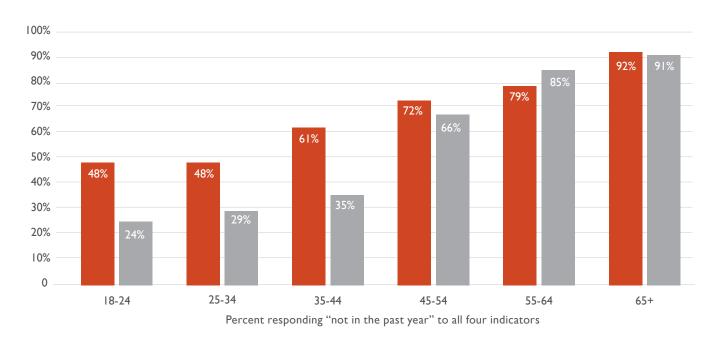


Figure 4-8

# Percentage of gamblers answering "many times" to at least one problematic play indicator by age

■ 2021 ■ 2018

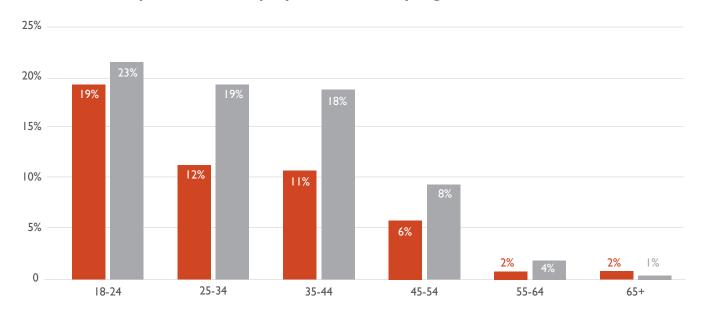


Figure 4-9

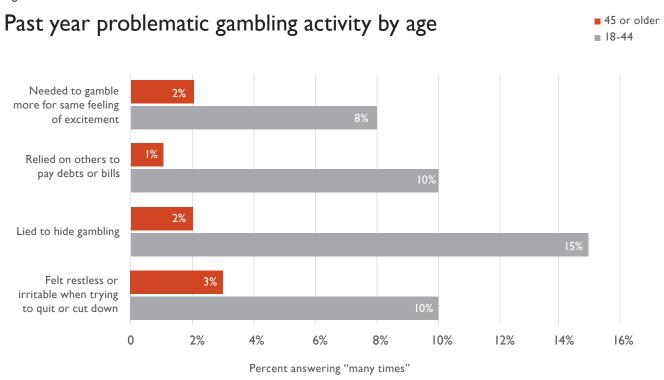


Figure 4-10

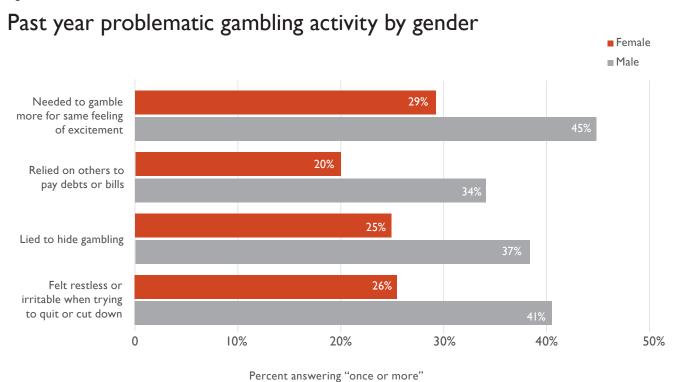
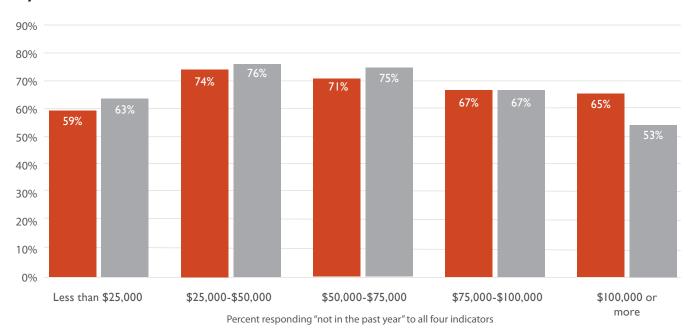


Figure 4-11

# Percentage of gamblers showing no problematic play by annual household income

■ 2021 ■ 2018





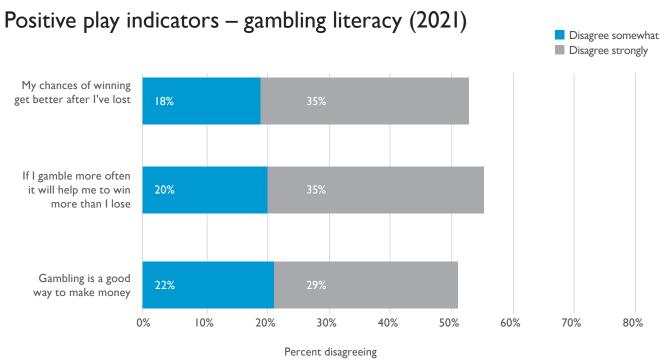


Figure 5-2

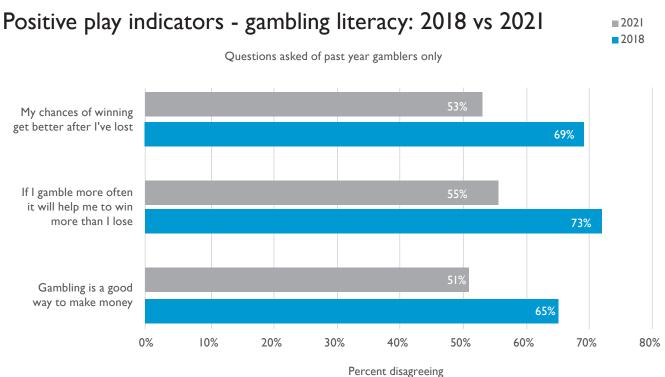
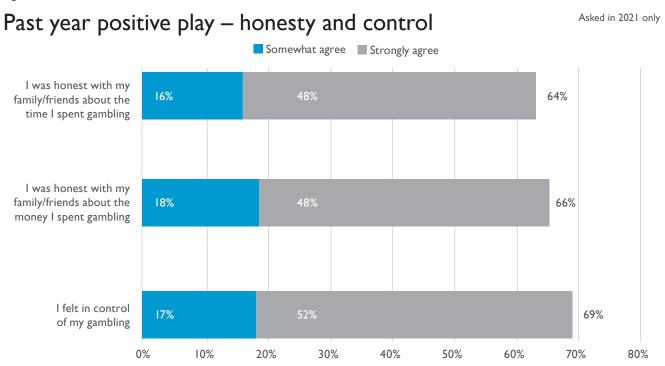
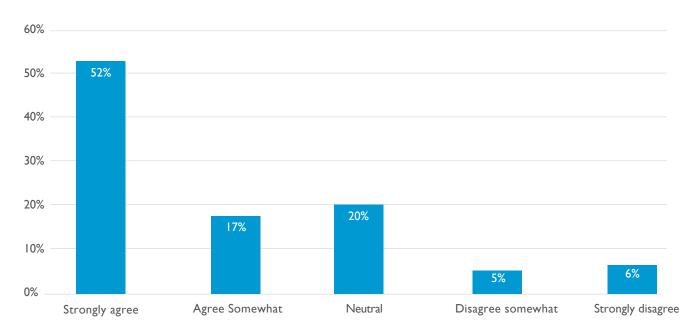


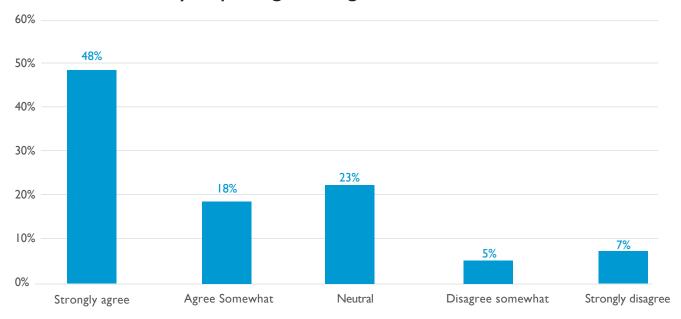
Figure 5-3



"In the last month, I felt in control of my gambling behavior"



"In the last month, I was honest with family/friends about the amount of money I spent gambling"



"In the last month, I was honest with family/friends about the amount of time I spent gambling"

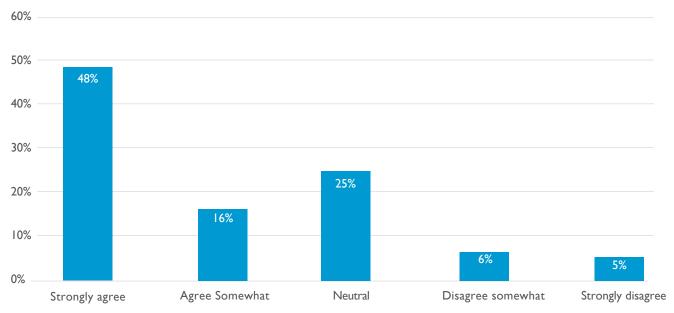


Figure 5-7

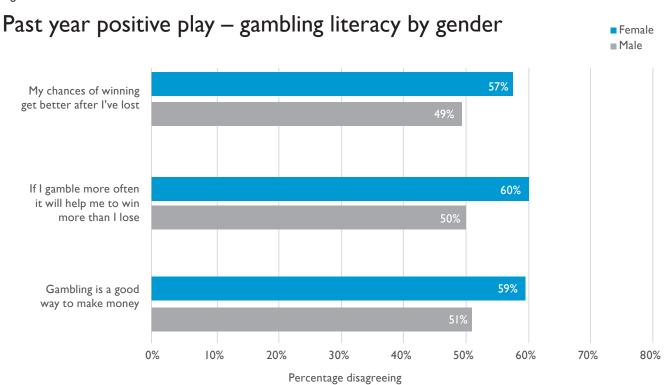


Figure 5-8

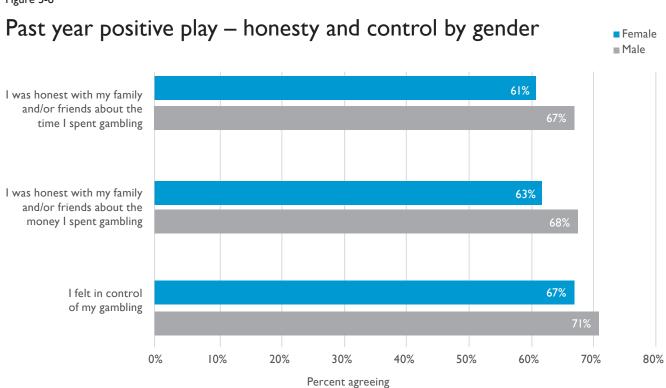
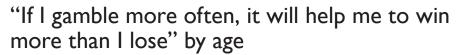


Figure 5-9



■ 2018 ■ 2021

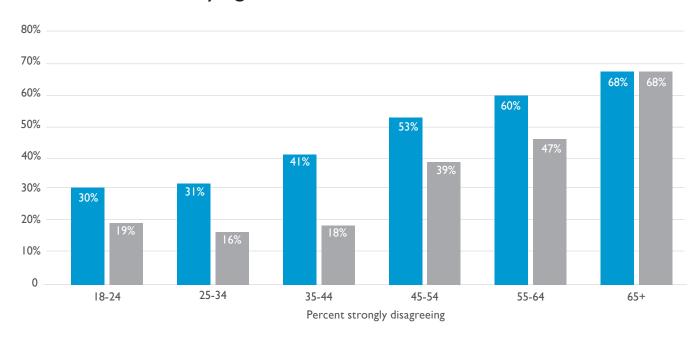
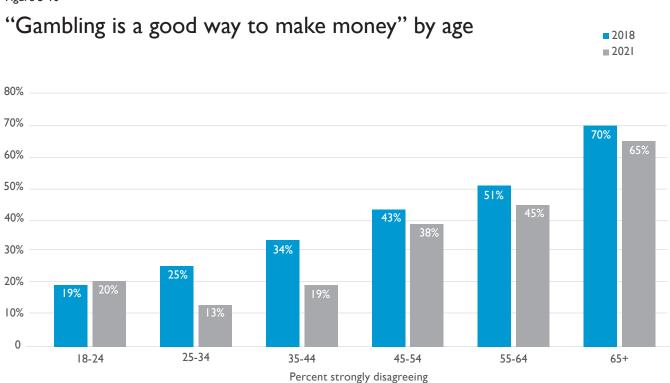
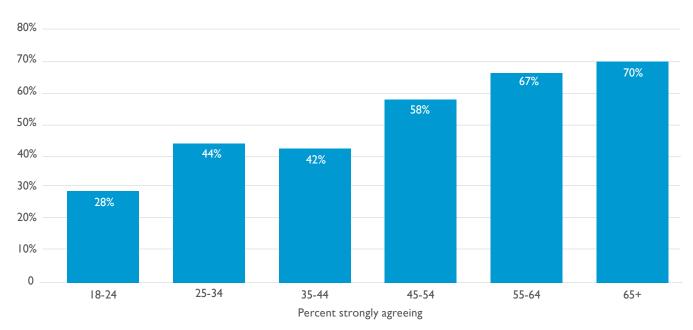


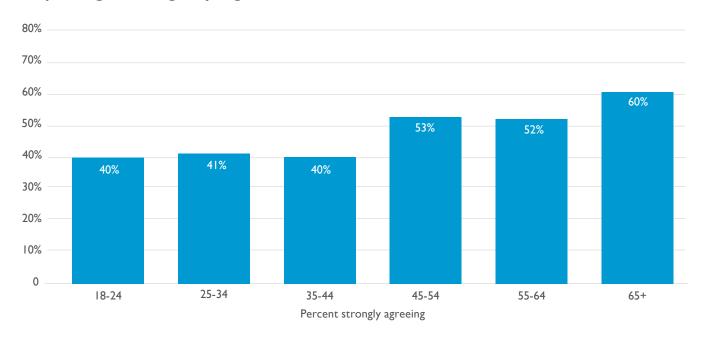
Figure 5-10



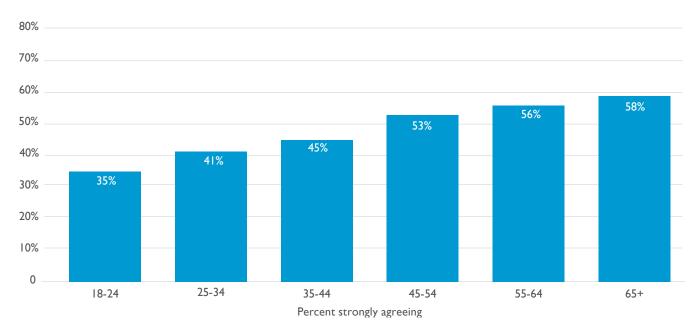
"In the last month I felt in control of my gambling behavior" by age (2021)



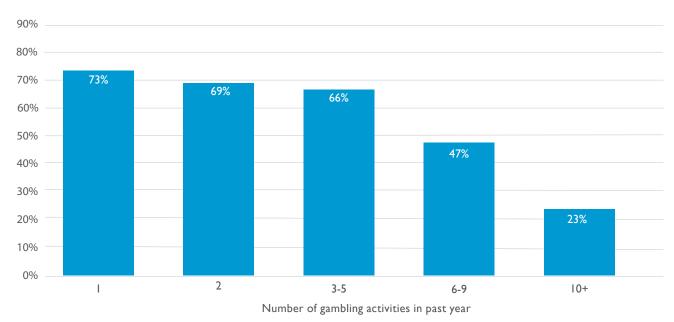
"In the last month I was honest about the amount of money I spent gambling" by age



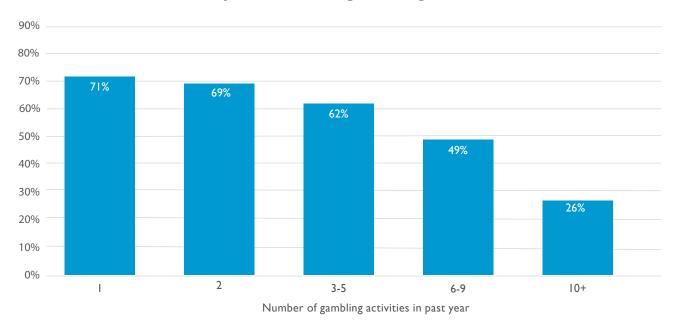
"In the last month I was honest about the amount of time I spent gambling" by age



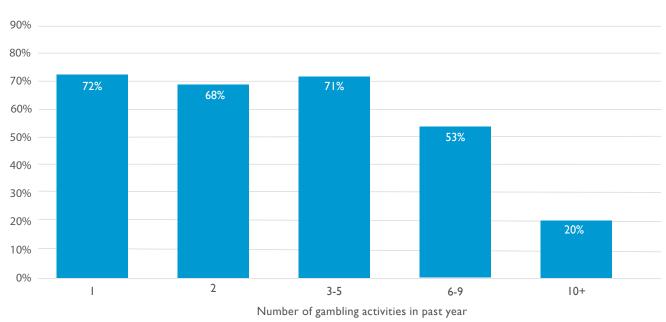
Percentage of gamblers disagreeing that "gambling is a good way to make money" by number of gambling activities



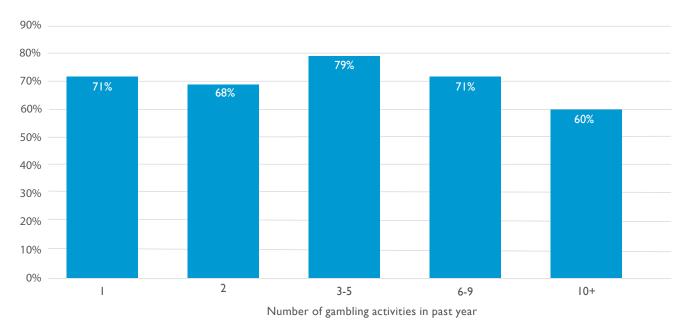
Percentage of gamblers disagreeing that "my chances of winning get better after I've lost" by number of gambling activities



Percentage of gamblers disagreeing that "if I gamble more often, it will help me win more than I lose" by number of gambling activities



Percentage of gamblers agreeing that "In the last month I felt in control of my gambling" by number of gambling activities



Percentage of gamblers agreeing that "In the last month I was honest about the amount of money I spent gambling" by number of gambling activities

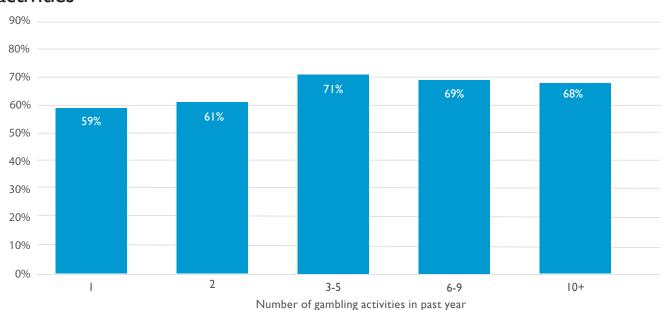


Figure 5-19

# Percentage of gamblers agreeing that "In the last month I was honest about the amount of time I spent gambling" by number of gambling activities

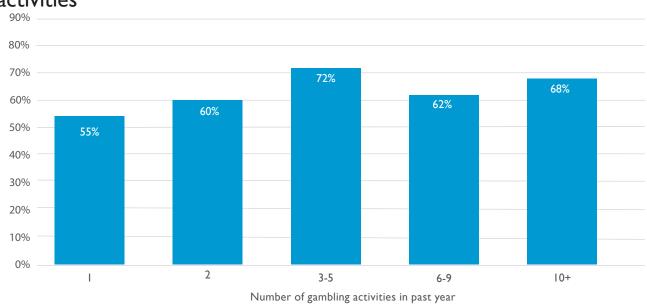
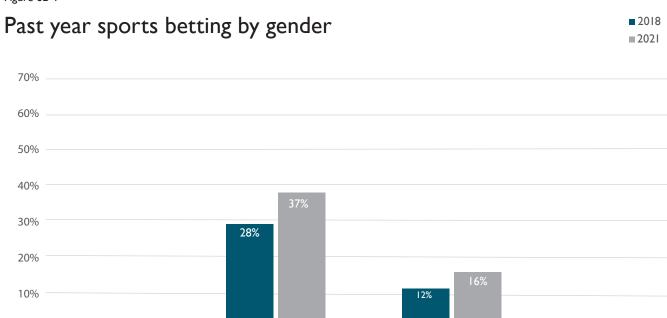


Figure 6A-I Type of sports betting **2018 ■**2021 70% 60% 50% 40% 30% 20% 13% 10% 0% **Traditional** Traditional & Contests Fantasy & **Traditional** Traditional, Contest **Fantasy** Only Only Contests Only & Fantasy Fantasy, Contests

Figure 6B-I

0%



Male

Female

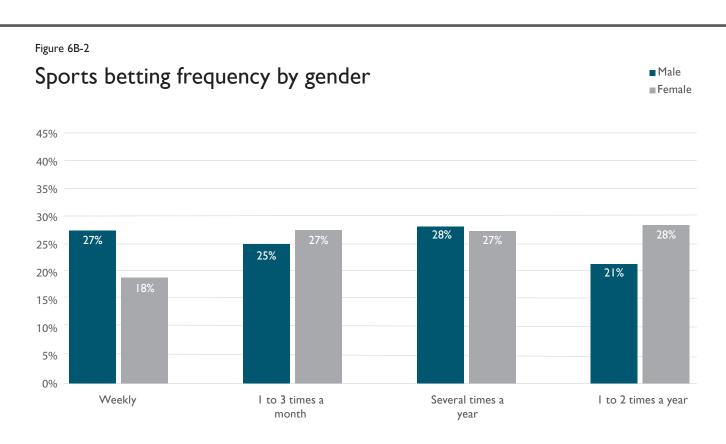


Figure 6B-3

### Past year sports betting by age

2018 **■**2021

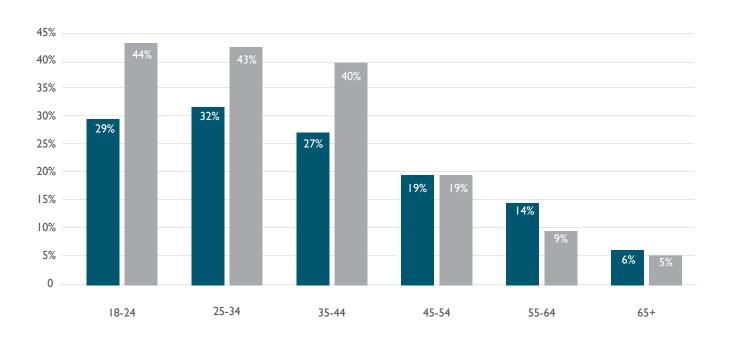


Figure 6B-4

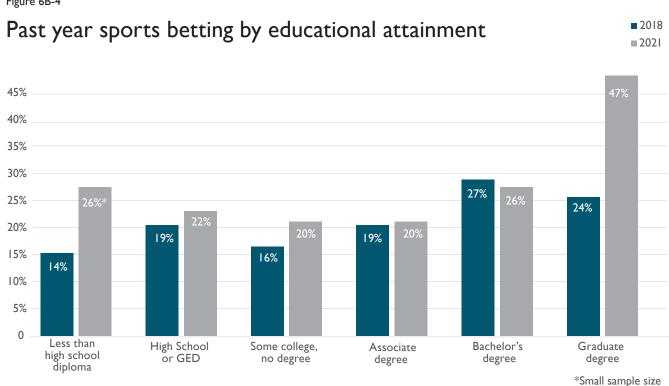


Figure 6B-5

### Past year sports betting by household income

**2018 ■**2021

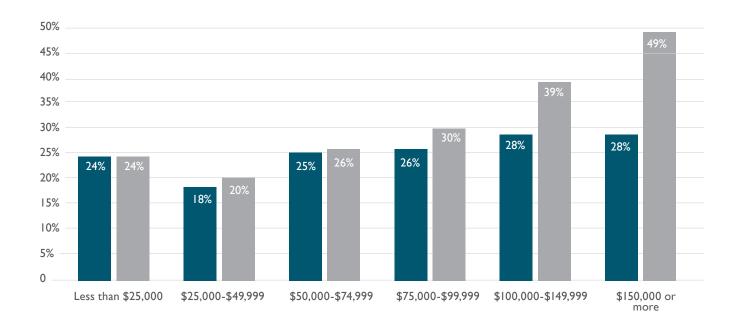
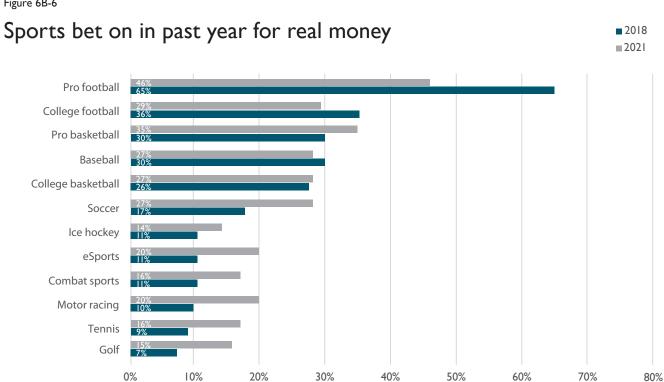
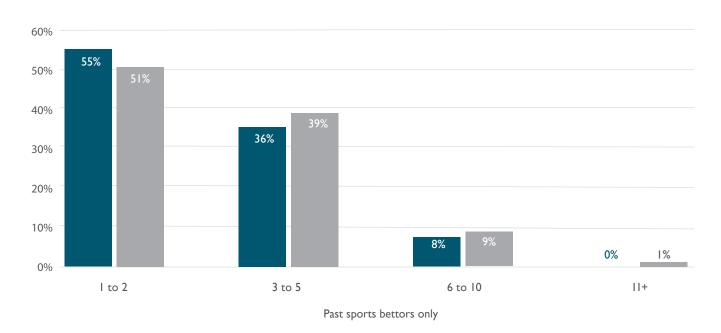


Figure 6B-6

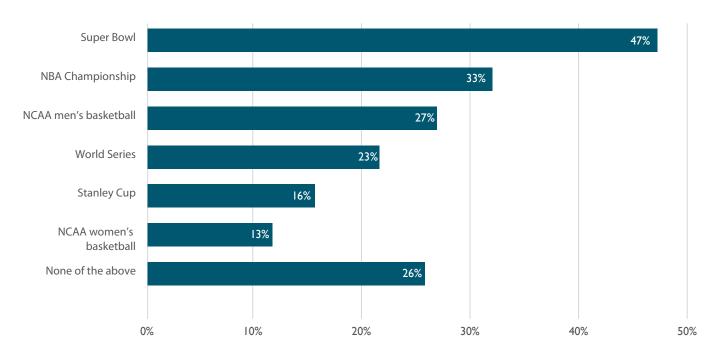


Number of sports bet on

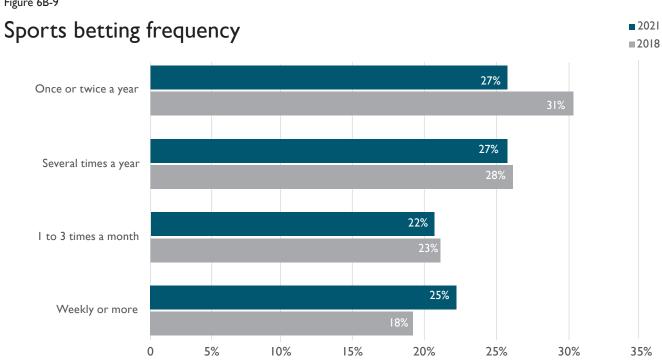
■ 2018 ■ 2021



Past year betting on "big events"







Percent of last year sports gamblers



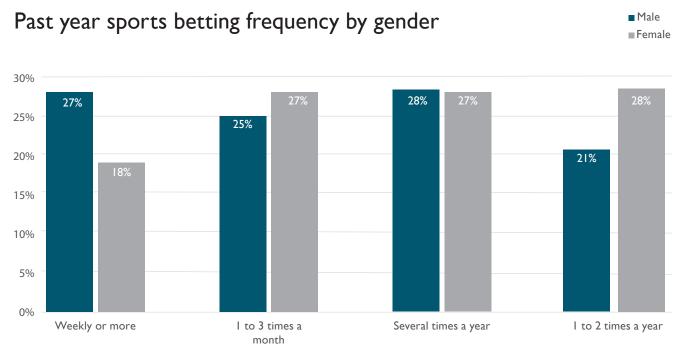
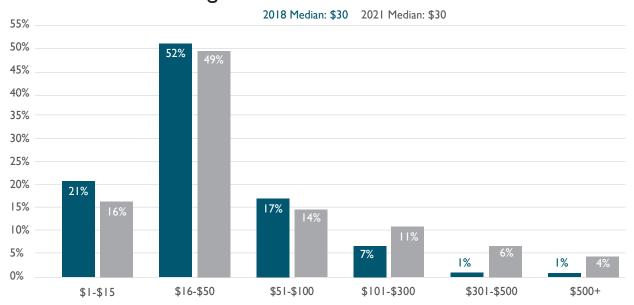


Figure 6B-11

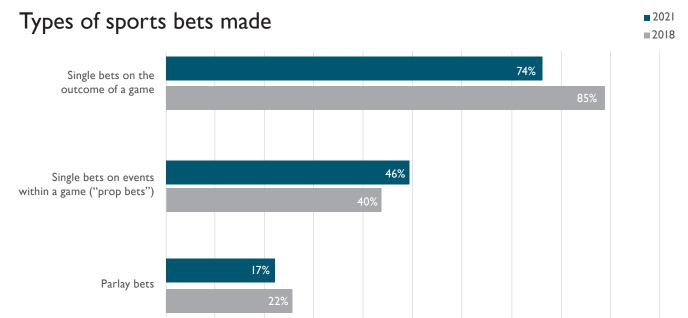
# What is the average size of a wager you would make on the outcome of a game?

■ 2018 ■ 2021

100%







0%

10%

20%

30%

40%

50%

60%

70%

80%

90%

Figure 6B-13

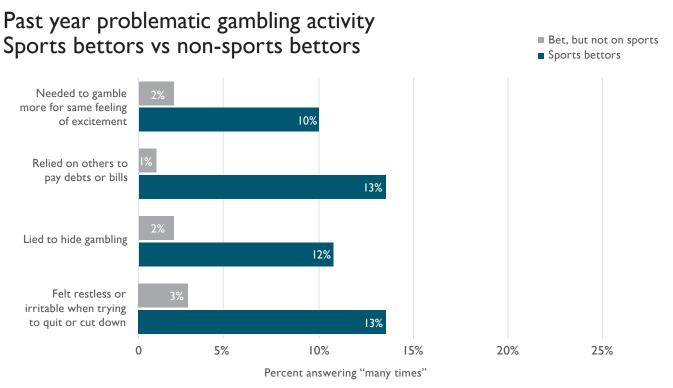


Figure 6B-14

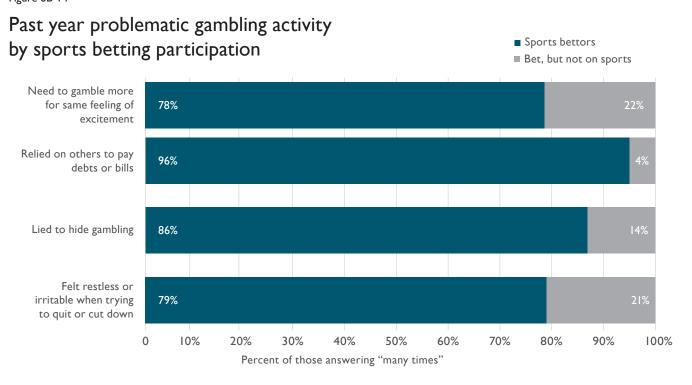
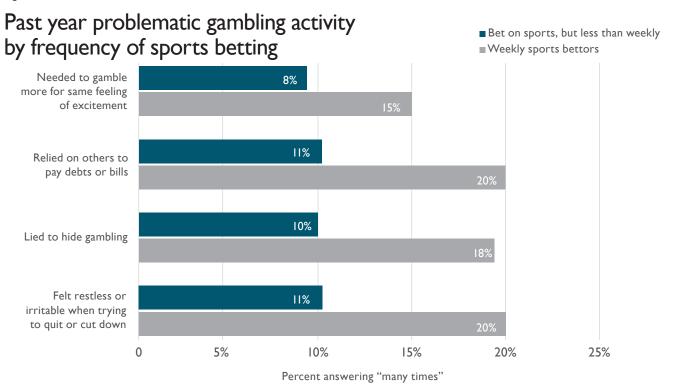


Figure 6B-15



Past year problematic gambling activity among sports bettors by gender

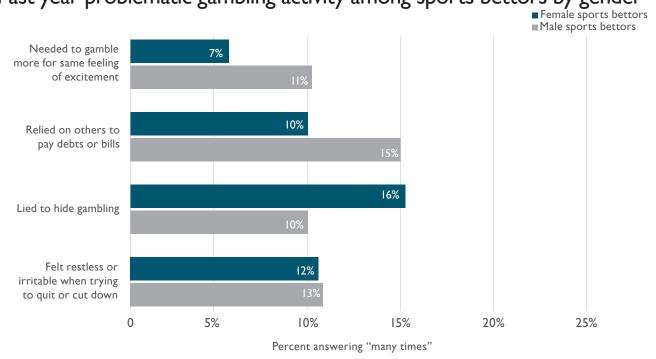
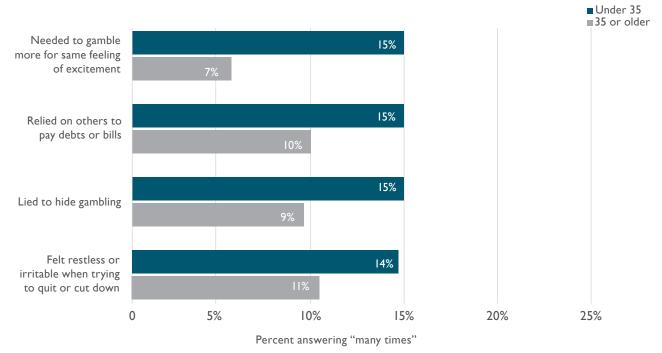


Figure 6B-17

#### Past year problematic gambling activity among sports bettors by age



Sports betting participation by number of gambling activities

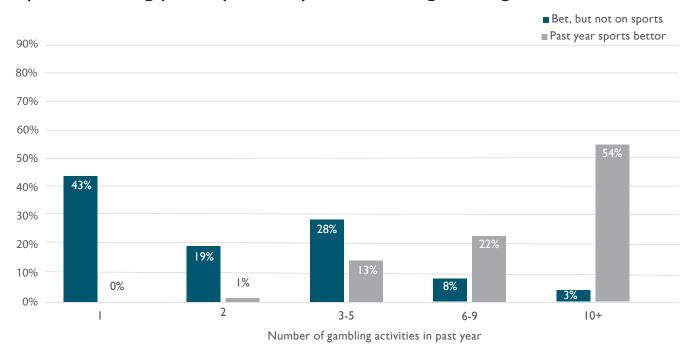


Figure 6B-19

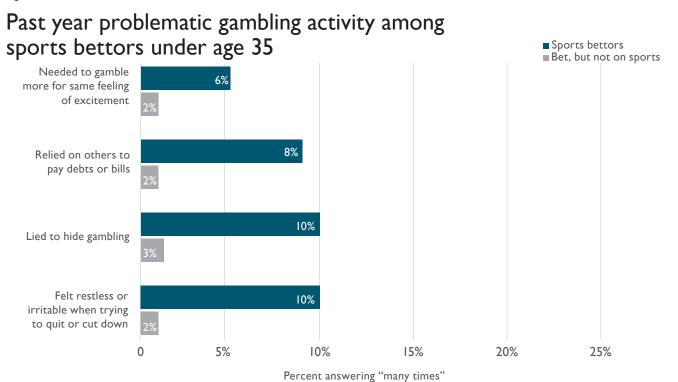


Figure 6B-20 Gambling literacy by sports betting behavior ■ Bet, but not on sports Less than weekly sports betting ■Weekly sports betting 65% My chances of winning get better after I've lost 66% If I gamble more often it will help me 34% win more than I lose 68% Gambling is not a good way to make money 0 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Percent disagreeing

Figure 6B-21

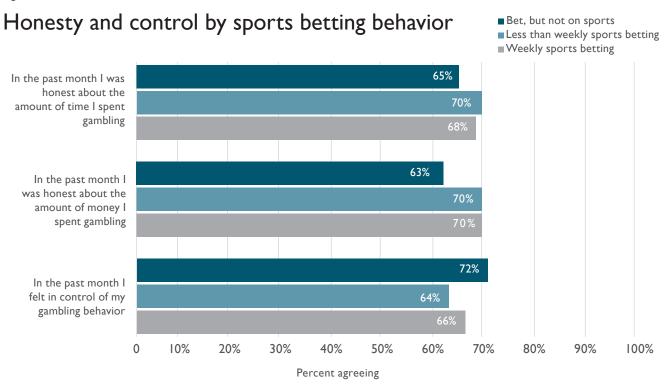


Figure 6B-22

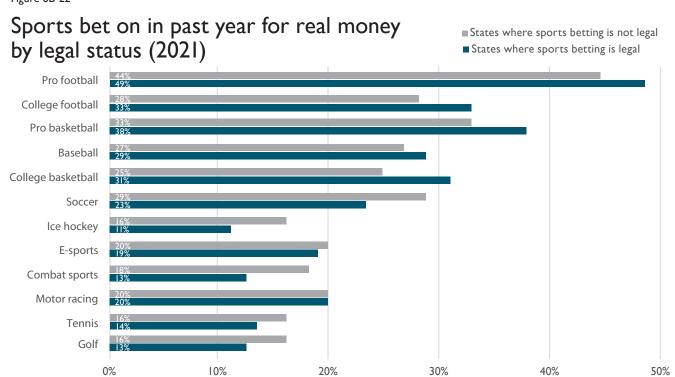


Figure 6B-23

#### Past year sports betting by age and legal status (2021)

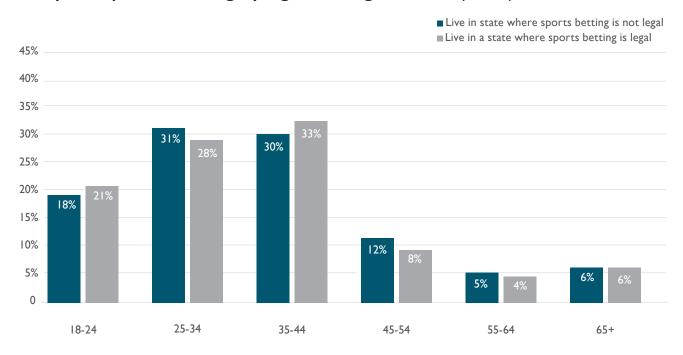


Figure 6B-24

Single bets on the outcome of a game

Single bets on events within a game ("prop bets")

Parlay bets

0

### Types of sports bets made by legal status (2021)

16%

10%

20%

30%

40%

50%

60%

70%

80%

90%





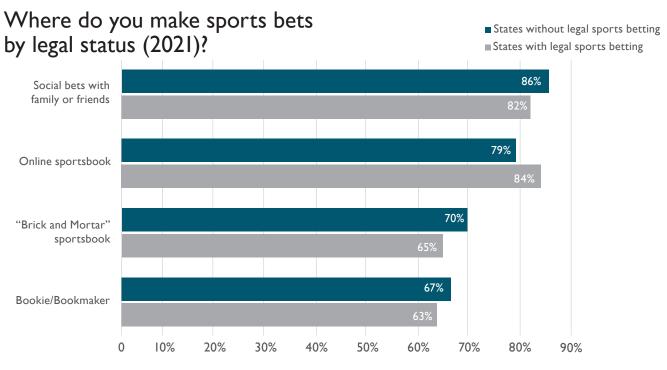


Figure 6B-26

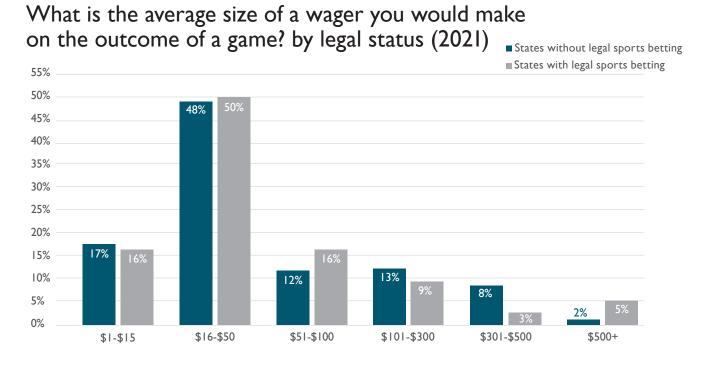
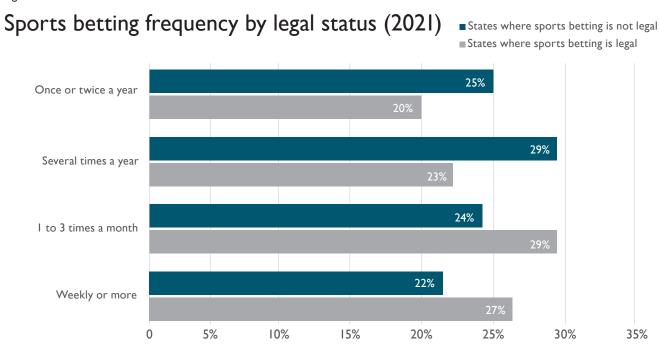


Figure 6B-27



Percent of past year sports gamblers

Figure 6B-28

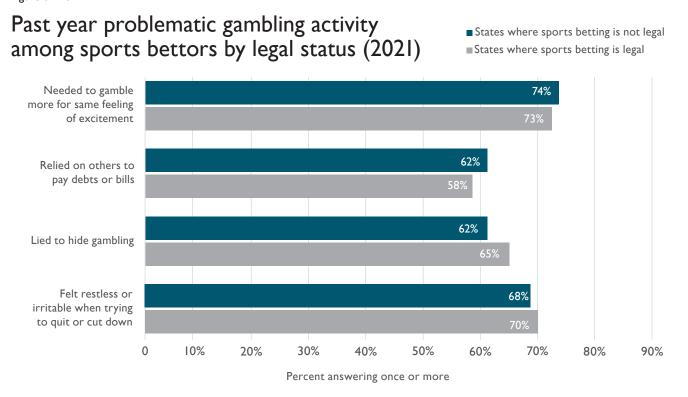


Figure 6B-29

## Past year problematic gambling activity among sports bettors by legal status (2021)

States where sports betting is not legalStates where sports betting is legal

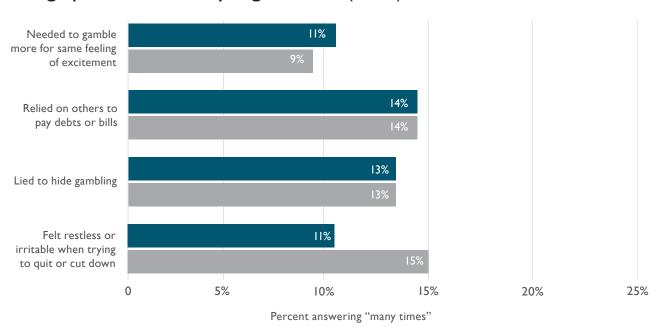


Figure 6B-30

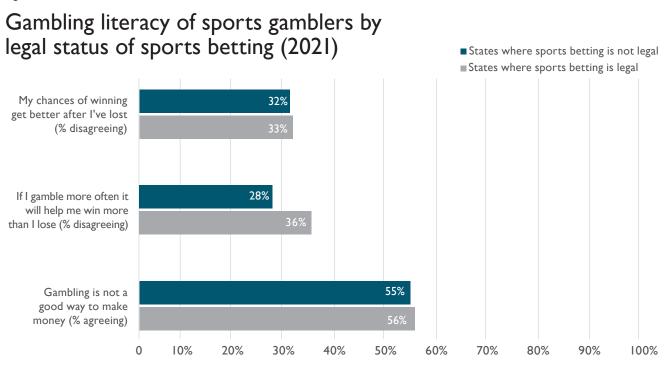


Figure 6B-31

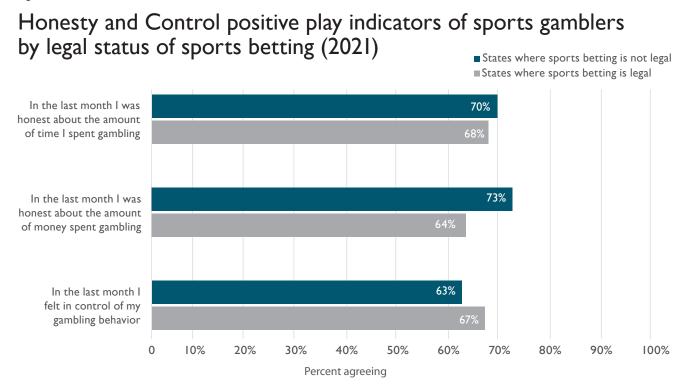
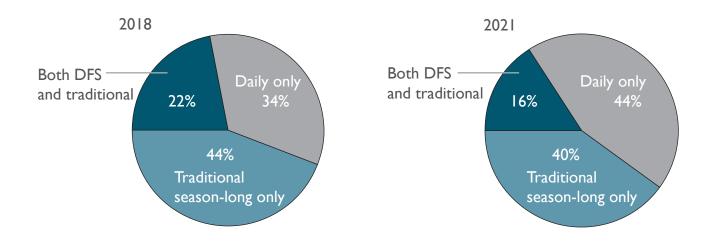


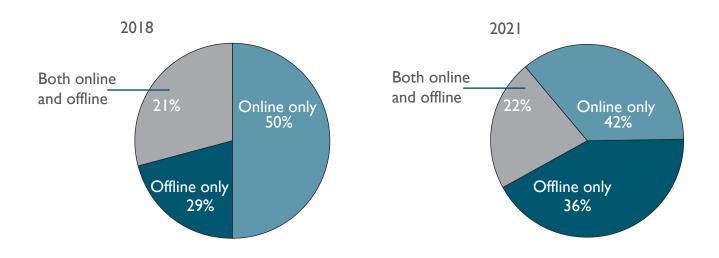
Figure 6C-1

Fantasy sports participation by type



DFS = daily fantasty sports

Method of playing traditional fantasy sports leagues



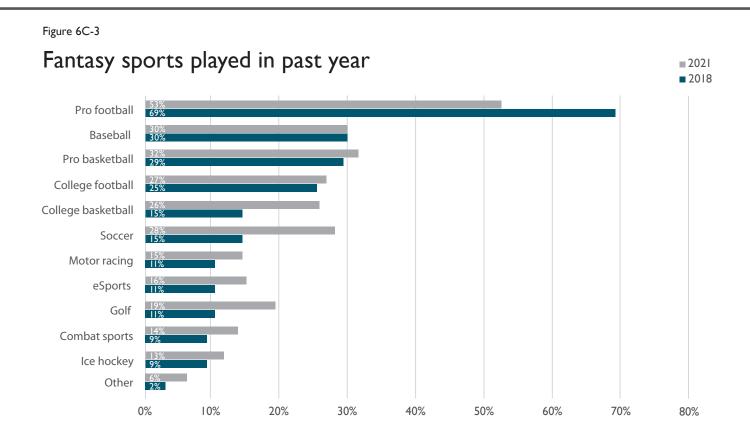
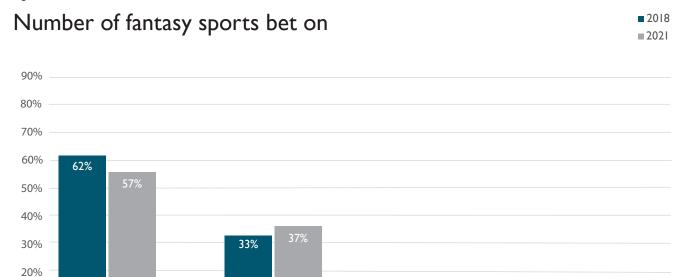


Figure 6C-4



Past year fantasy sports bettors

3 to 5

1%

||+

0%

Figure 6C-5

10%

0%

I to 2

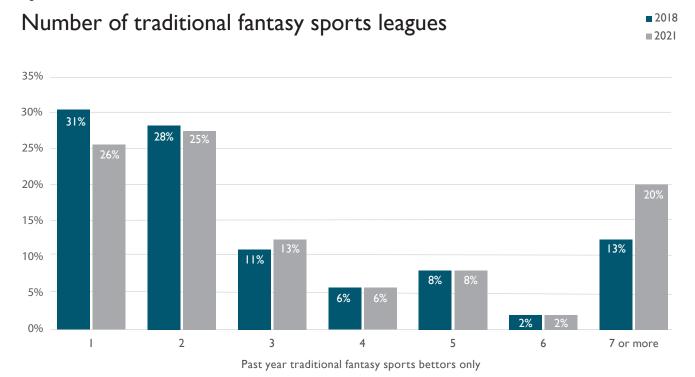
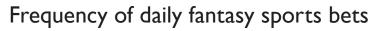
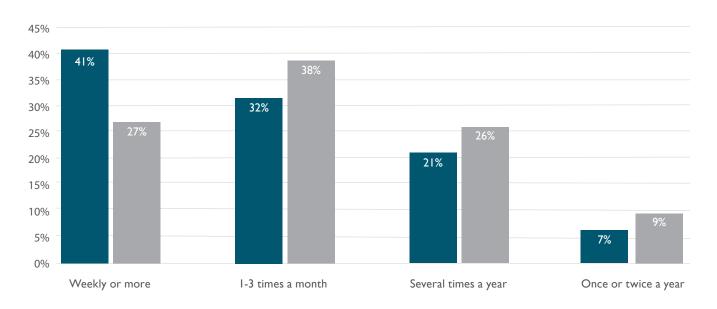


Figure 6C-6



■ 2018 ■ 2021



Past year fantasy sports betting by age

**2018** 

**■**2021

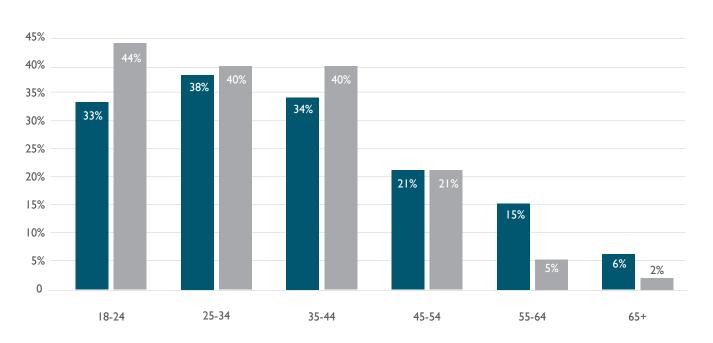
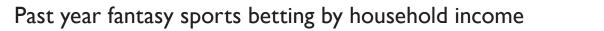


Figure 6C-8



■ 2018 ■ 2021

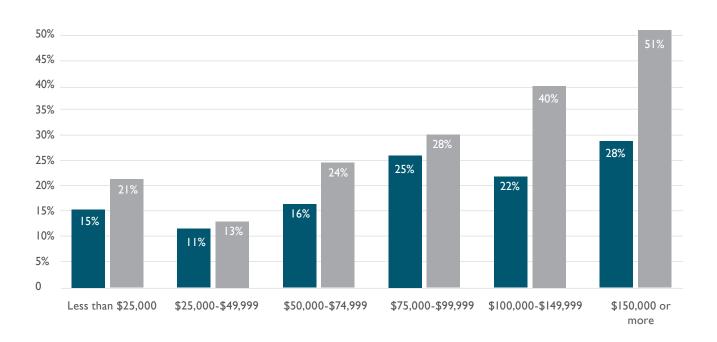


Figure 6C-9

### Past year fantasy sports betting by educational attainment

■ 2018 ■ 2021

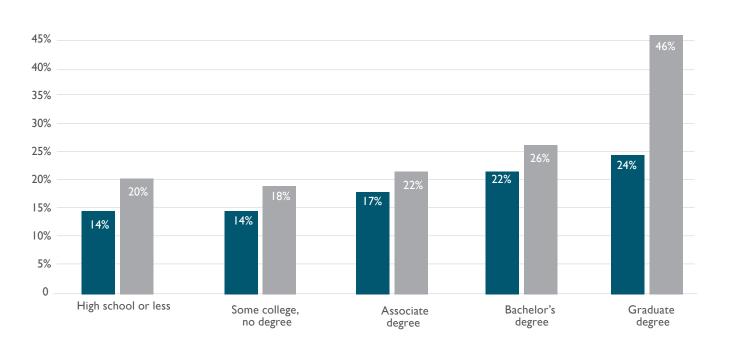
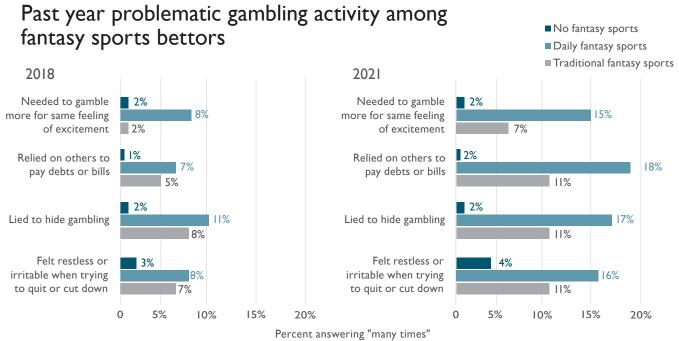
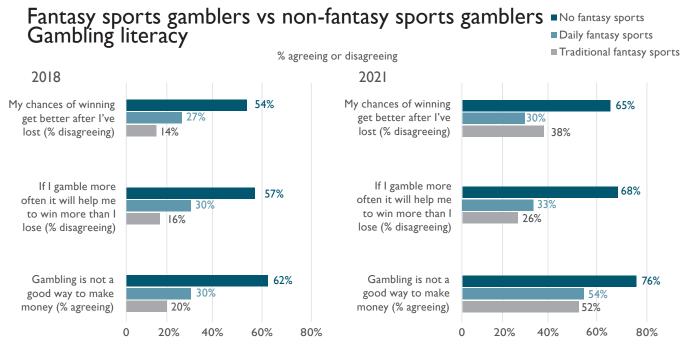


Figure 6C-10



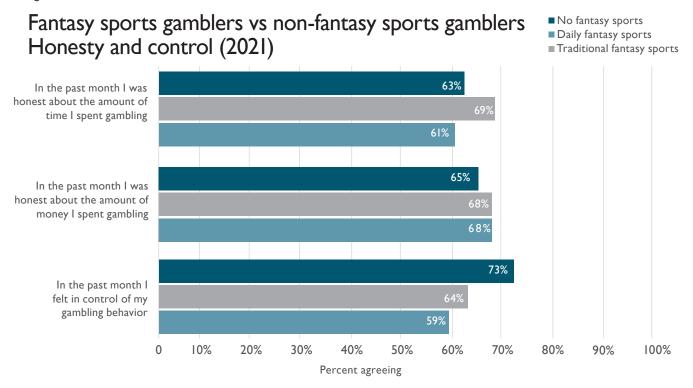
Those playing both daily and traditional fantasy sports are included in both categories

Figure 6C-II



Those playing both daily and traditional fantasy sports are included in both categories

Figure 6C-12



Types of lottery play

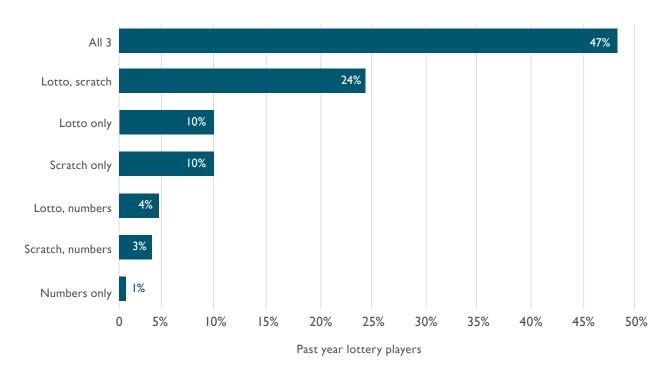
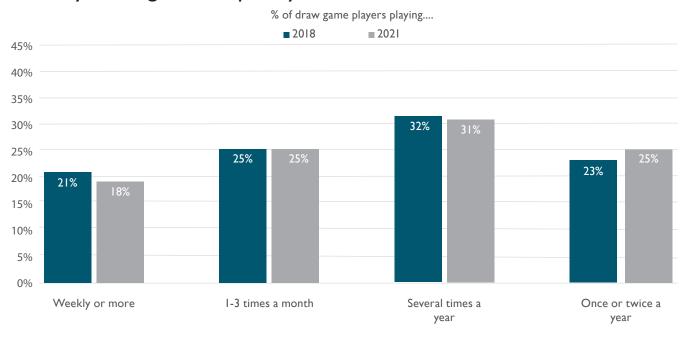


Figure 6D-2

### Lottery draw game frequency



Lottery instant/scratch game frequency

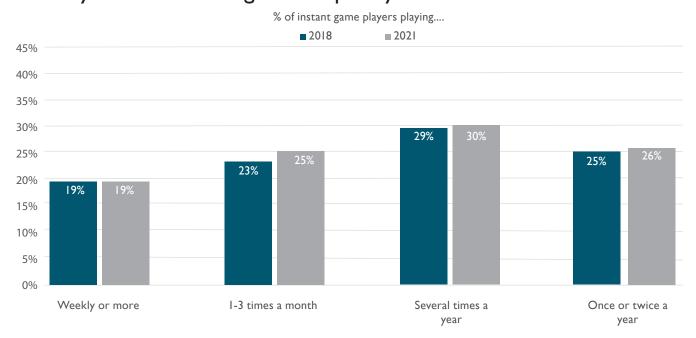
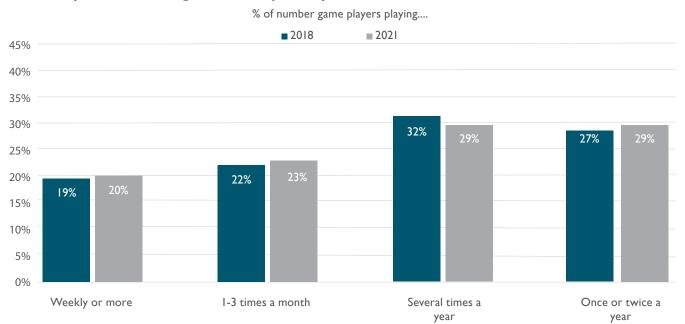


Figure 6D-4

### Lottery numbers game frequency



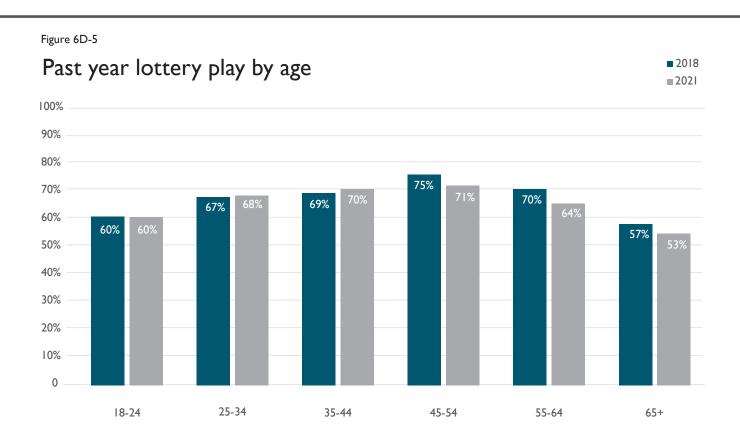
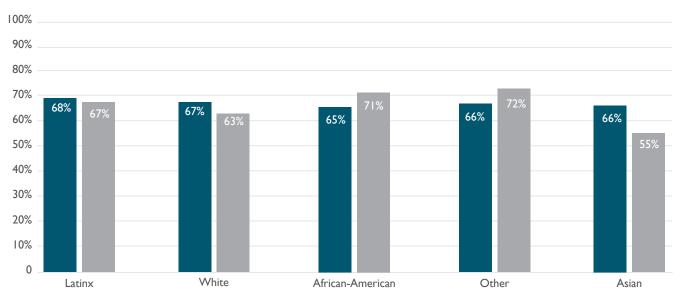


Figure 6D-6

### Past year lottery play by racial/ethnic origin

**2018** 





Note: Respondents could list multiple racial/ethnic origins Native Americans included in "other" due to small sample size

Figure 6D-7

### Past year lottery play by educational attainment

■2018

**■**2021

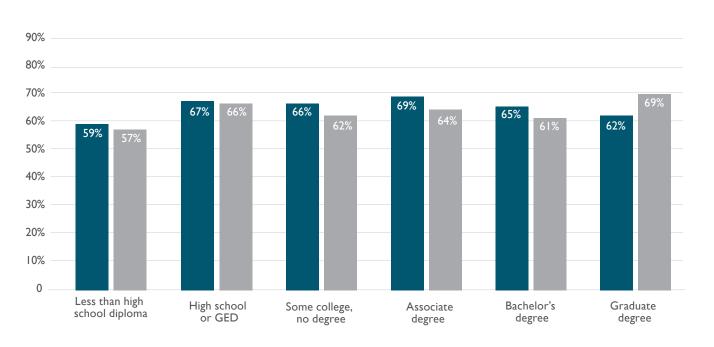
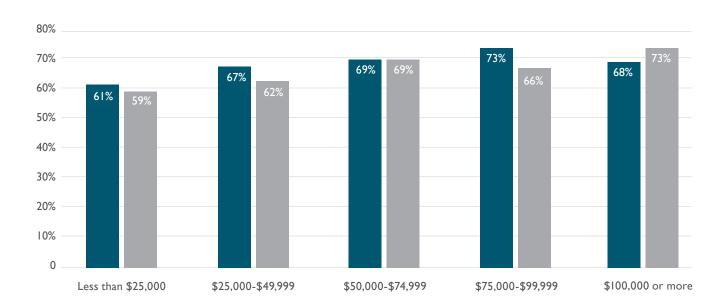


Figure 6D-8

### Past year lottery play by household income

■ 2018 ■ 2021



Casino spending frequency

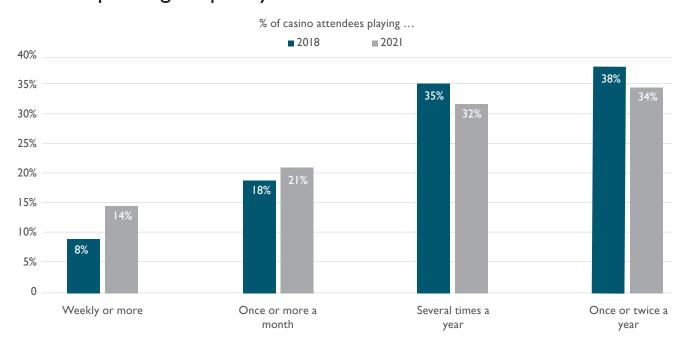
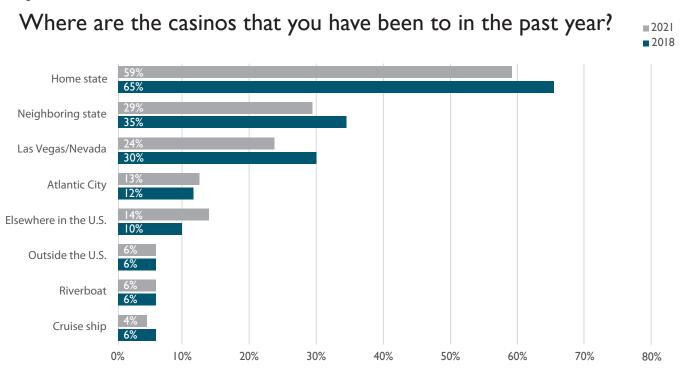


Figure 6E-2



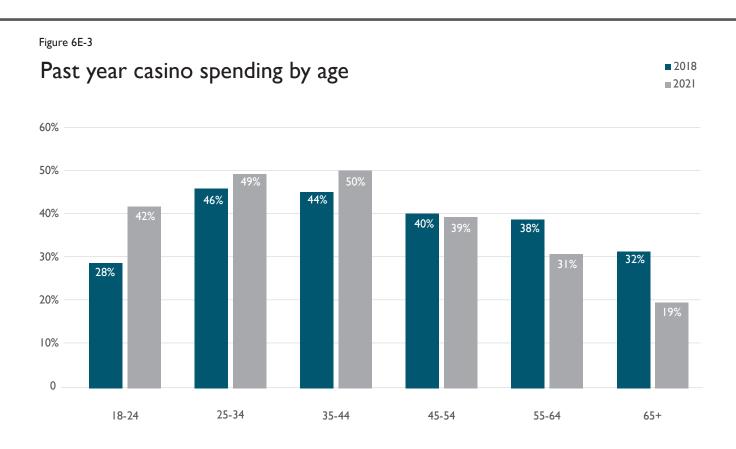


Figure 6E-4

#### Past year casino spending by household income

■ 2018 ■ 2021

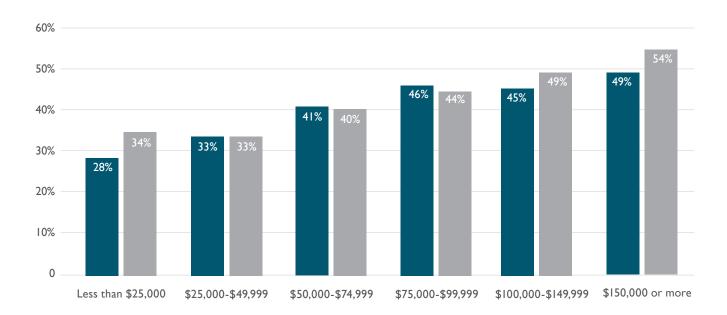
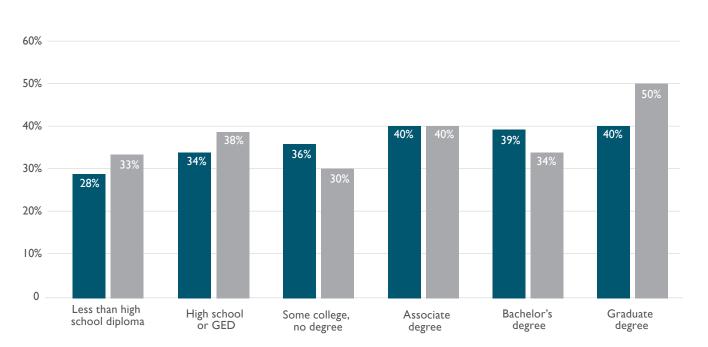


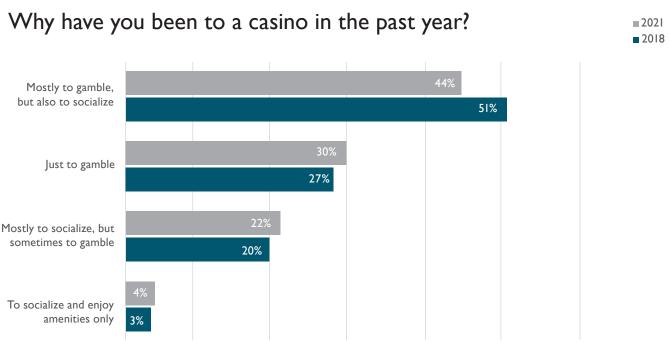
Figure 6E-5

#### Past year casino spending by educational attainment

■2018 ■2021







30%

40%

50%

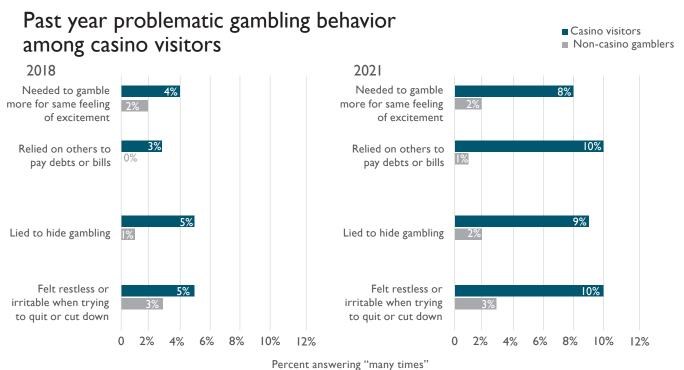
60%



0

10%

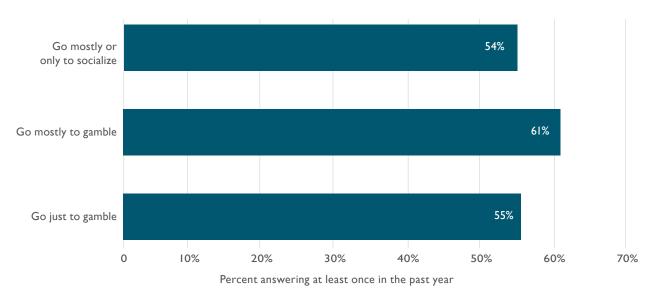
20%



er cerre uno vi ci nig

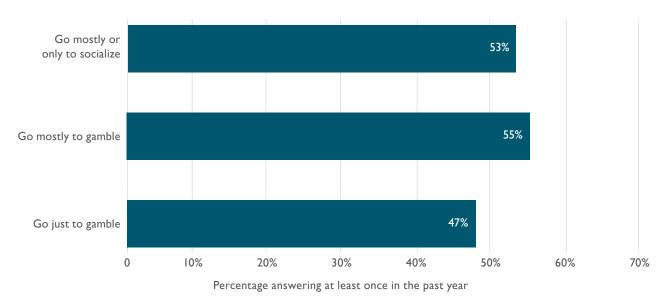
Figure 6E-8

### "How often did you need to gamble with larger amounts of money?" by reason for visiting a casino



"Go mostly to socialize" and "Go only to socialize" responses combined due to small sample

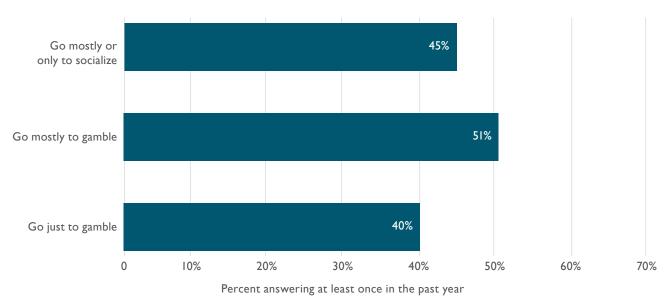
"How often did you feel restless or irritable when you tried to cut down or stop gambling?" by reason for visiting a casino



"Go mostly to socialize" and "Go only to socialize" responses combined due to small sample

Figure 6E-10

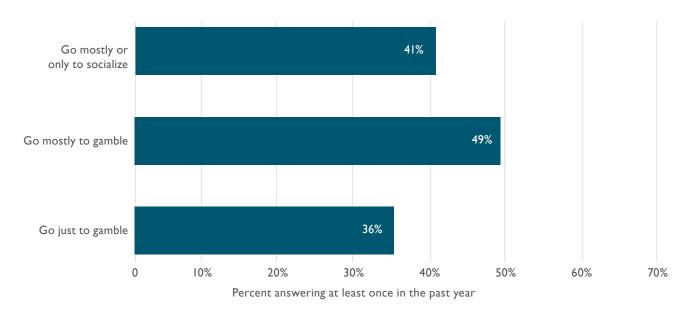
# "How often have you lied to hide your gambling?" by reason for visiting a casino



"Go mostly to socialize" and "Go only to socialize" responses combined due to small sample

Figure 6E-II

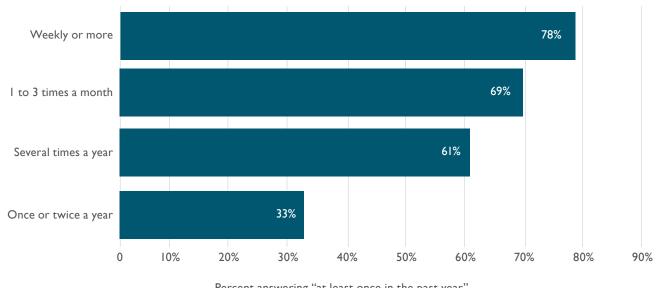
# "How often have you relied on others to pay debts or bills" by reason for visiting a casino



"Go mostly to socialize" and "Go only to socialize" responses combined due to small sample

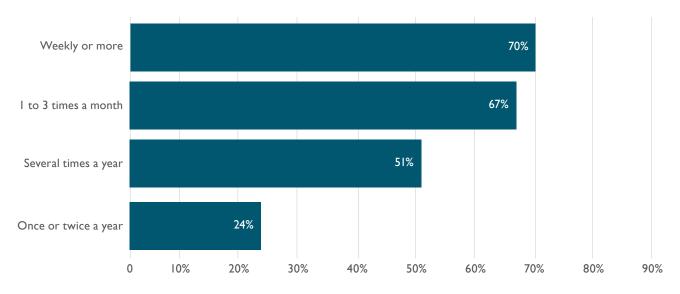
Figure 6E-12

#### "How often did you need to gamble with larger amounts of money?" by frequency of casino visits



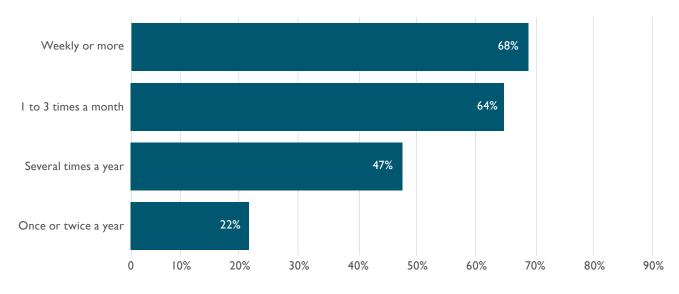
Percent answering "at least once in the past year"

Figure 6E-13 "How often have you felt restless or irritable when you tried to stop or cut down your gambling?" by frequency of casino visits



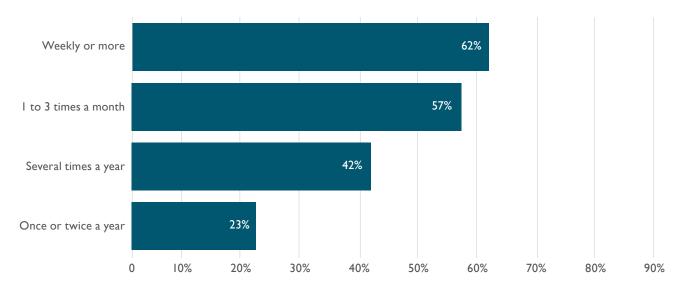
Percent answering "at least once in the past year"

"How often have you lied to hide your gambling?" by frequency of casino visits



Percent answering "at least once in the past year"

"How often have you relied on others to pay debts or bills?" by frequency of casino visits



Percent answering "at least once in the past year"

Figure 6E-16

# Casino gamblers vs non-casino gamblers Past year positive play indicators — gambling literacy (2021) Casino visitors Non-casino gamblers

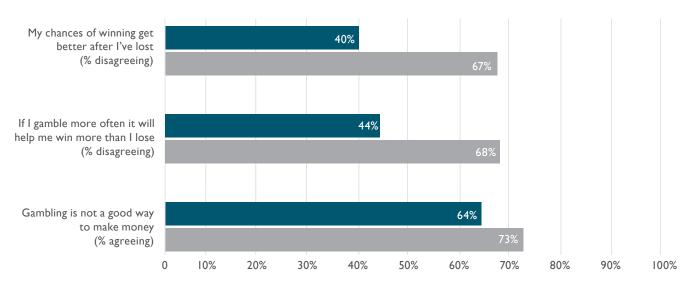
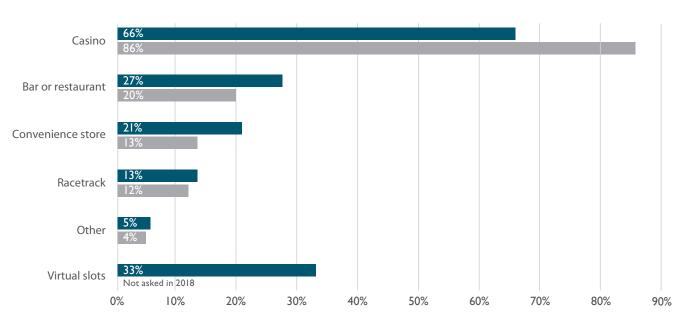


Figure 6F-I



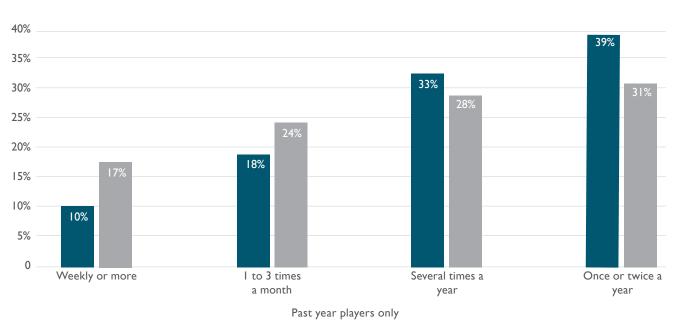








■ 2018 ■ 2021







**2018** 

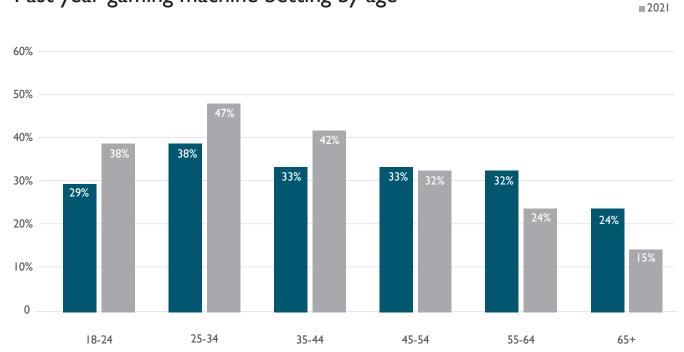


Figure 6F-4

#### Past year gaming machine play by household income

■ 2018 ■ 2021

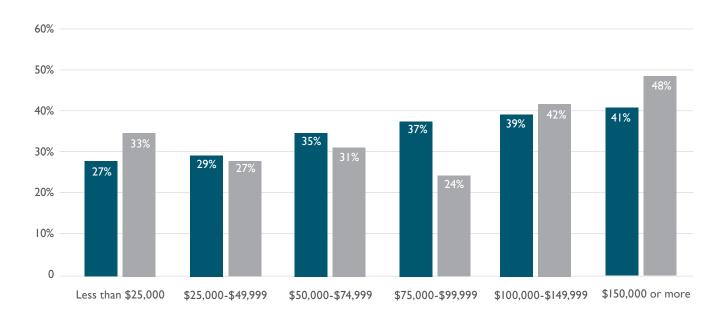
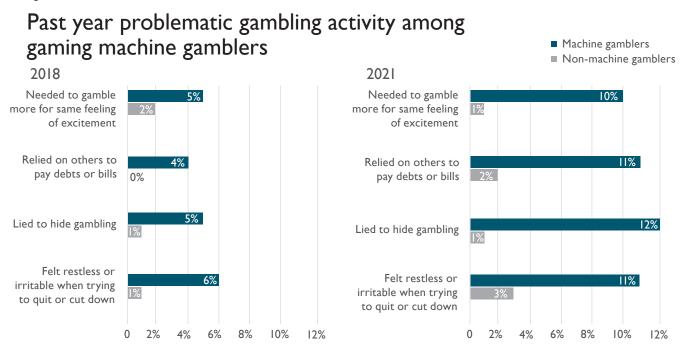
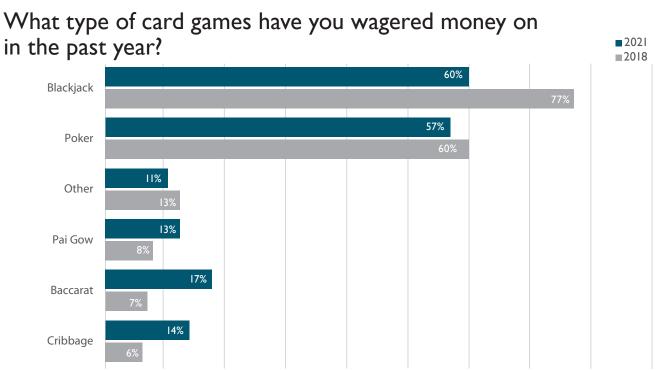


Figure 6F-5



Percent answering "many times"

Figure 6G-I



40%

50%

60%

70%

80%

Figure 6G-2 Frequency of card play

0%

10%

20%

30%



90%

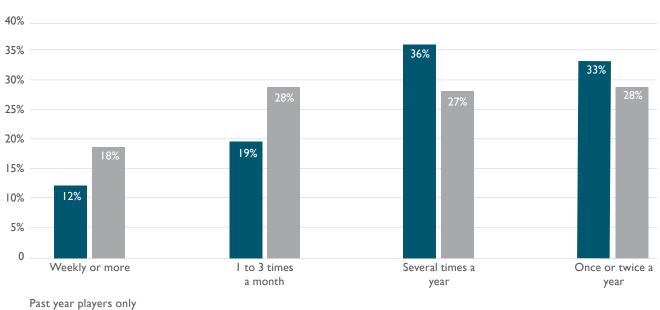
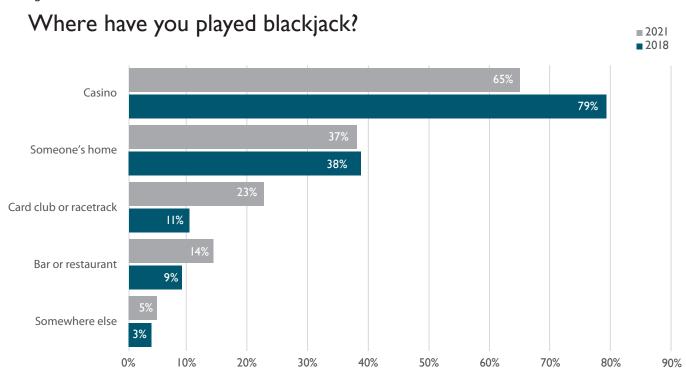


Figure 6G-3



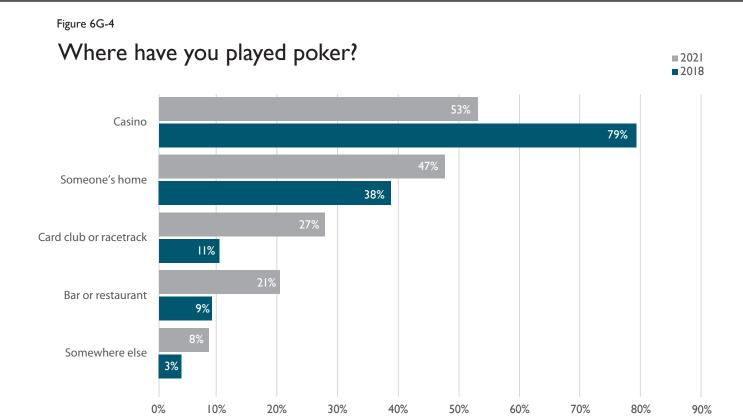
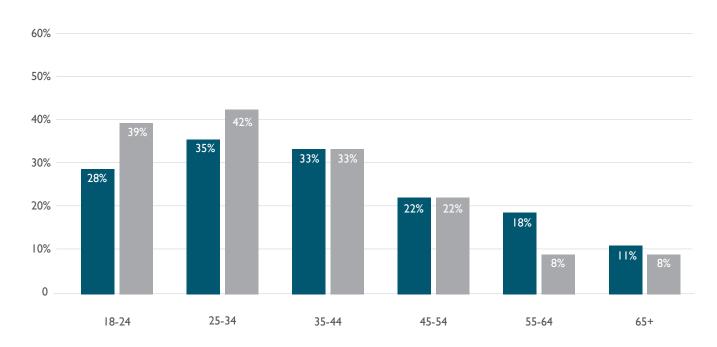


Figure 6G-5

#### Past year card play by age

■ 2018 ■ 2021







■2018

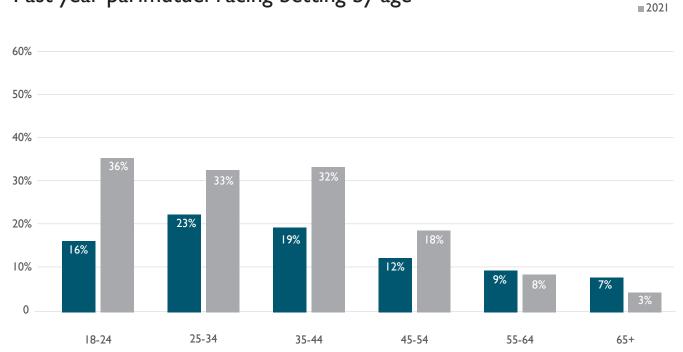


Figure 6I-I

### Past year bingo play by age

■ 2018 ■ 2021

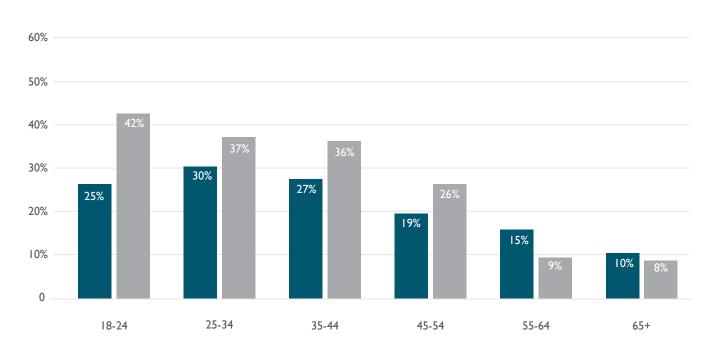
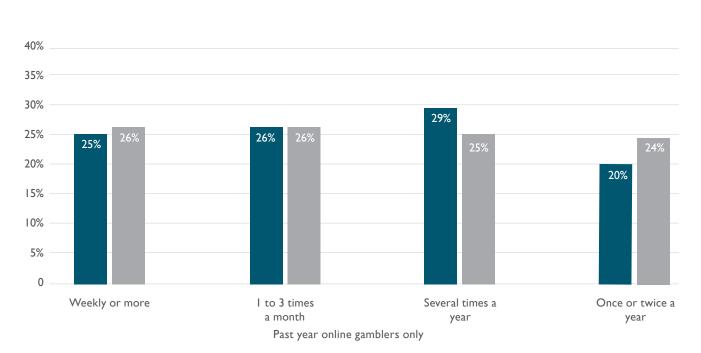


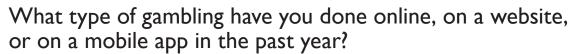
Figure 6J-I

### Frequency of online gambling

■ 2018 ■ 2021







■ 2021 ■ 2018

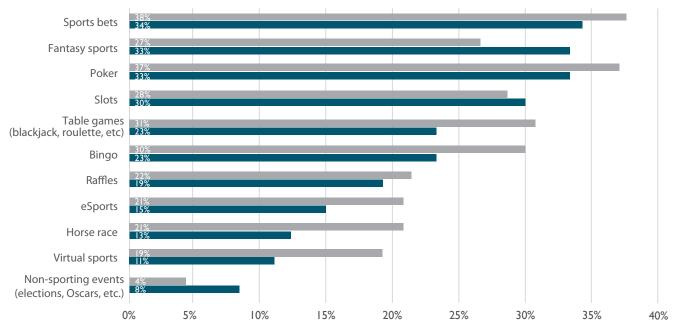


Figure 6J-3

#### Past year online gambling by age

**2018** 

■ 2021

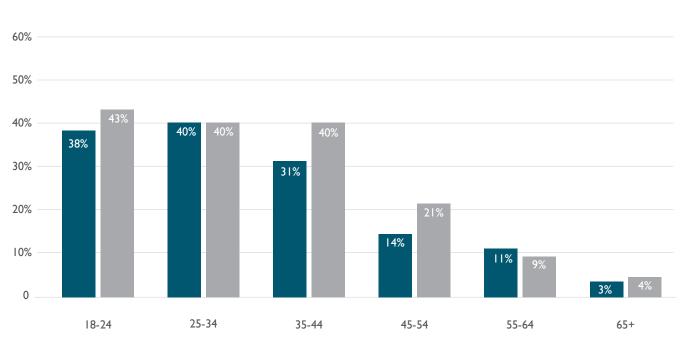


Figure 6J-4

### Past year online gambling by gender

■ 2018 ■ 2021

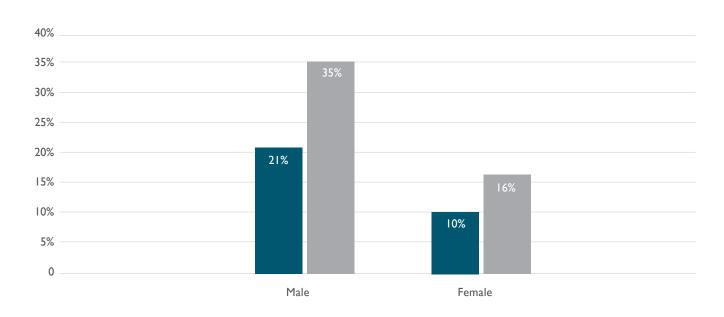
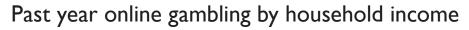
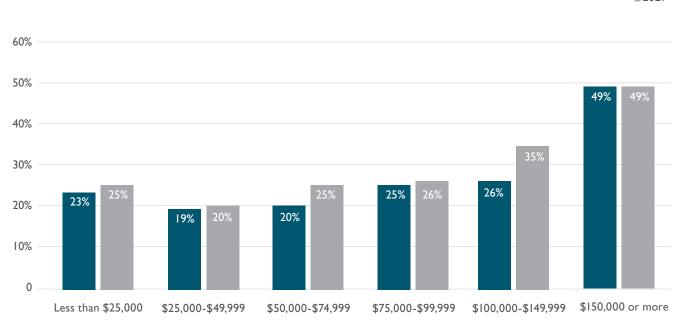


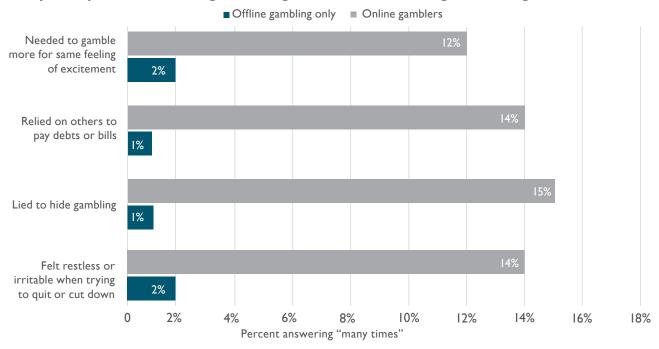
Figure 6J-5



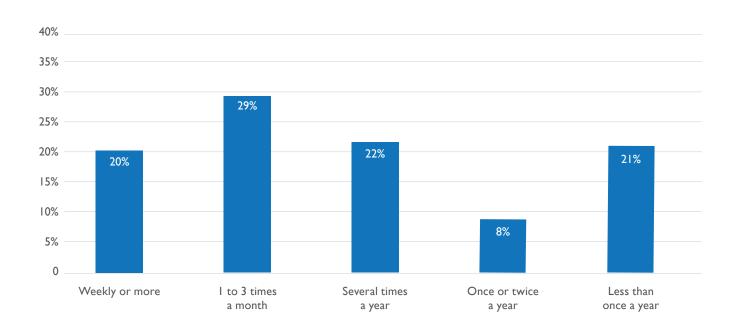
■ 2018 ■ 2021



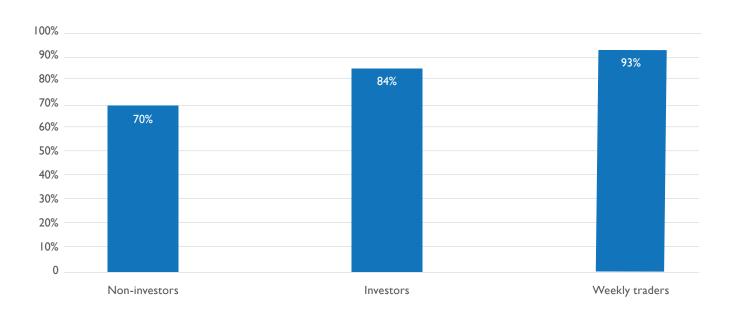
Past year problematic gambling behavior among online gamblers



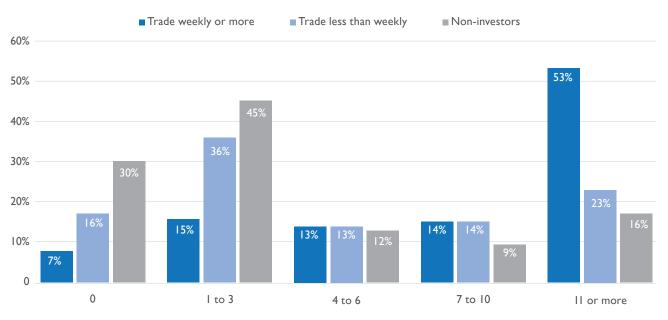
How regularly do you trade investments?



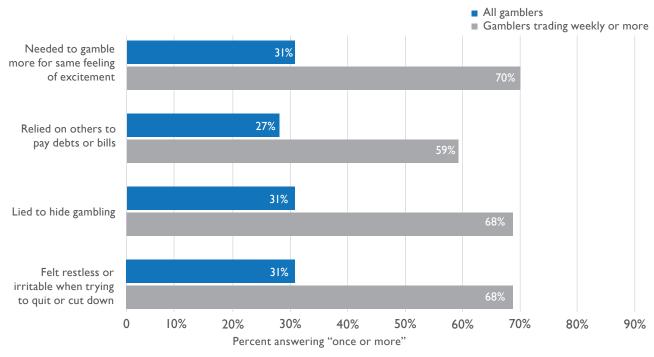
Past year gambling by investment activity



Number of past year gambling activities by level of investment activity



Past year problematic gambling activity by frequent trading



Number of problematic behaviors occurring "many times" by frequent trading activity

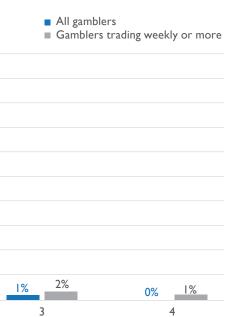
90%

80% 70% 60% 50% 40% 30% 20%

0

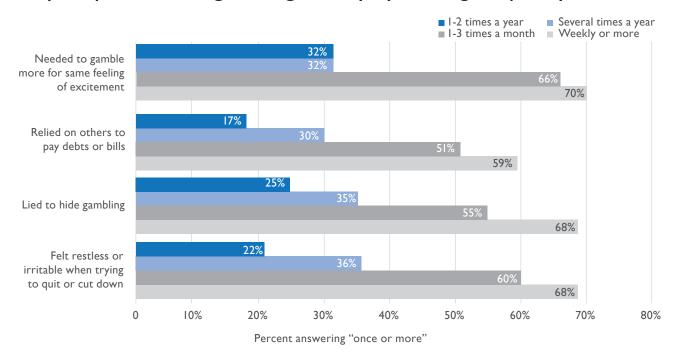
89%

None

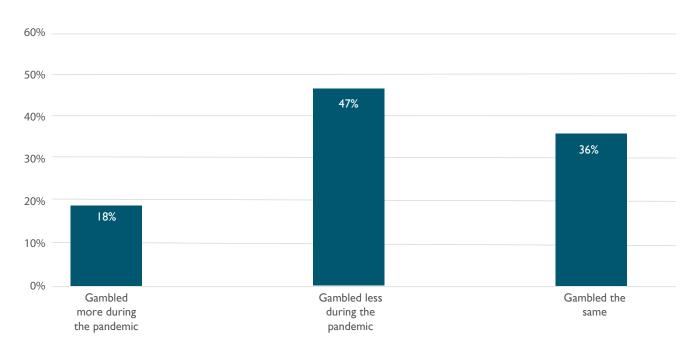


3%

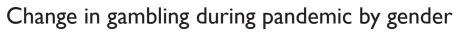
Past year problematic gambling activity by trading frequency



Change in gambling during pandemic









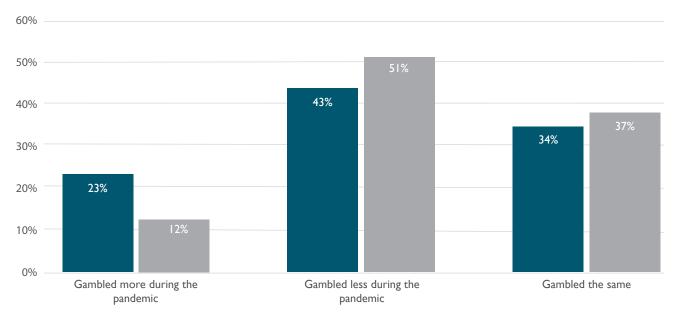
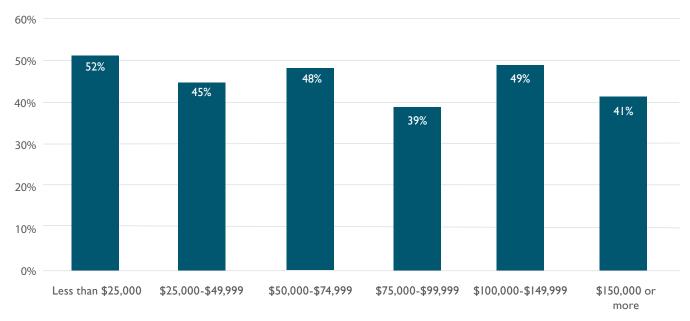


Figure 8-3

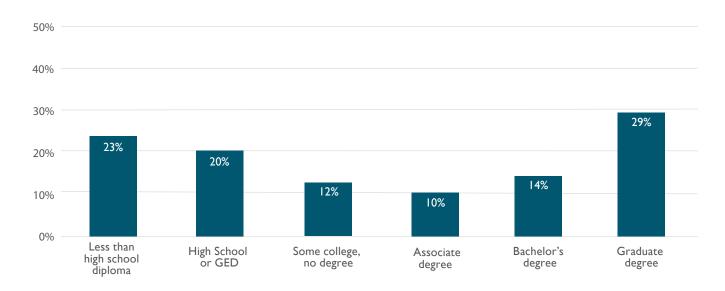
# Percentage of gamblers increasing play during pandemic by household income



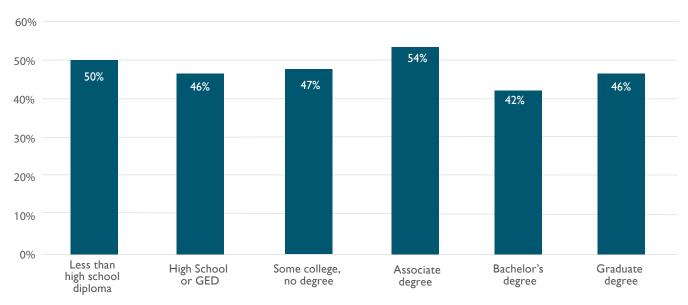
Percentage of gamblers decreasing play during pandemic by household income



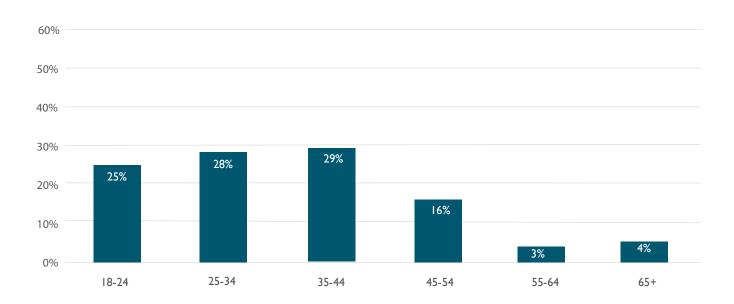
Percentage of gamblers increasing play during pandemic by educational attainment



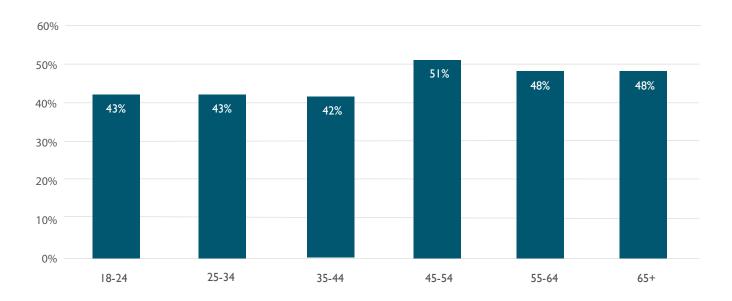
Percentage of gamblers decreasing play during pandemic by educational attainment



Percentage of gamblers increasing play during pandemic by age



Percentage of gamblers decreasing play during pandemic by age



Percentage of gamblers not changing play during pandemic by age

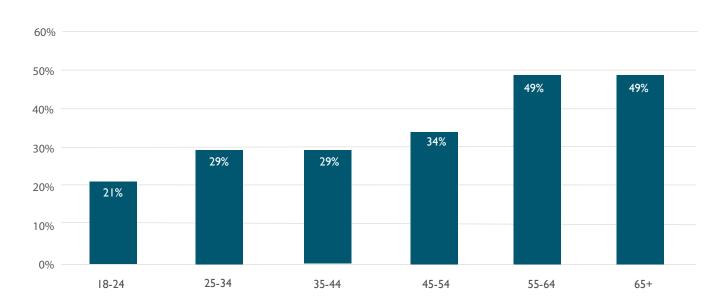
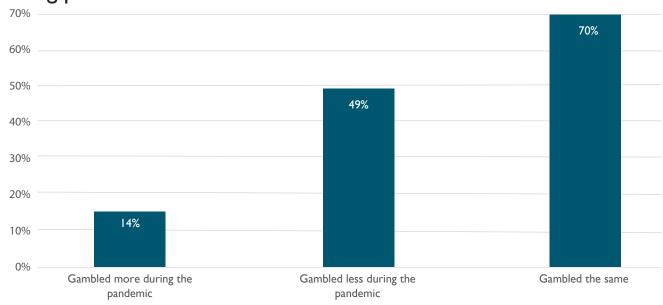


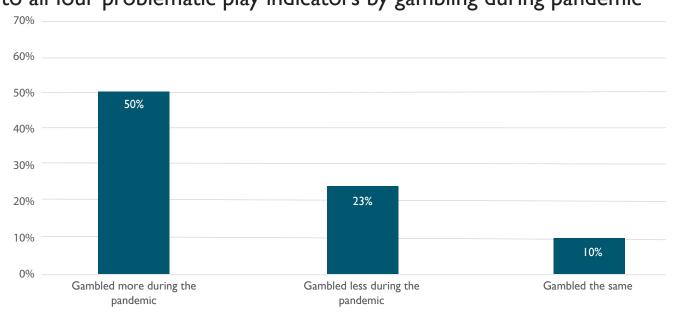
Figure 8-10

# Percentage of gamblers showing no problematic play by gambling during pandemic



Percent responding "not in the past year" to all four indicators

Percentage of gamblers answering "once" or more to all four problematic play indicators by gambling during pandemic



Percent responding "once" or more to all four indicators

Figure 8-12

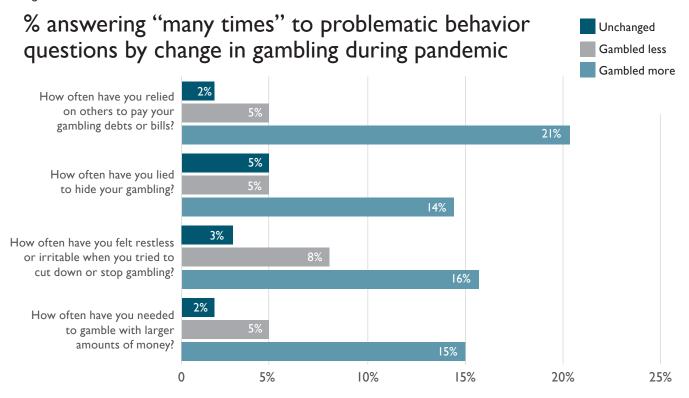


Figure 8-13

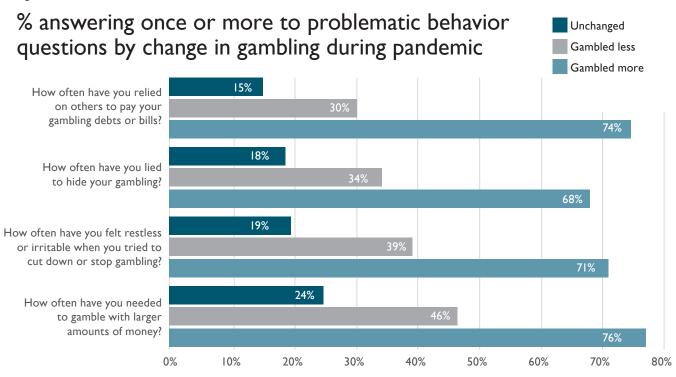


Figure 8-14

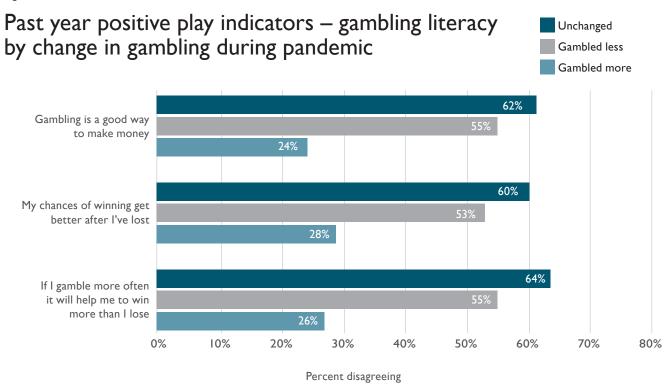


Figure 8-15

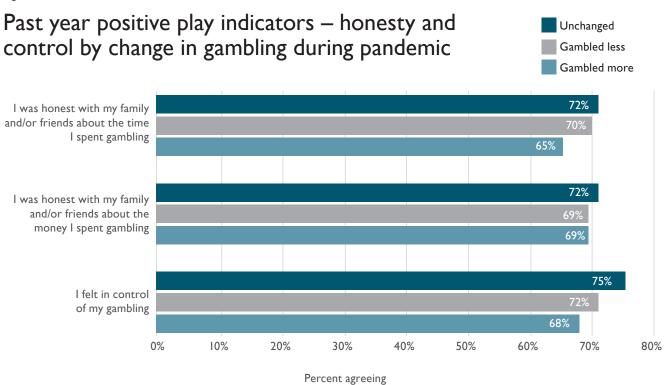
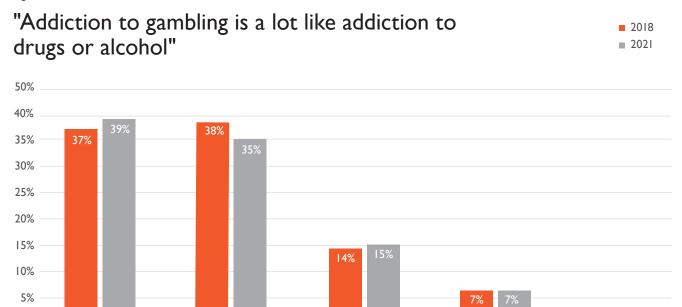


Figure 10A-1



Neutral

Disagree somewhat

5%

Strongly disagree

Figure 10A-2

0

Strongly agree

Agree somewhat

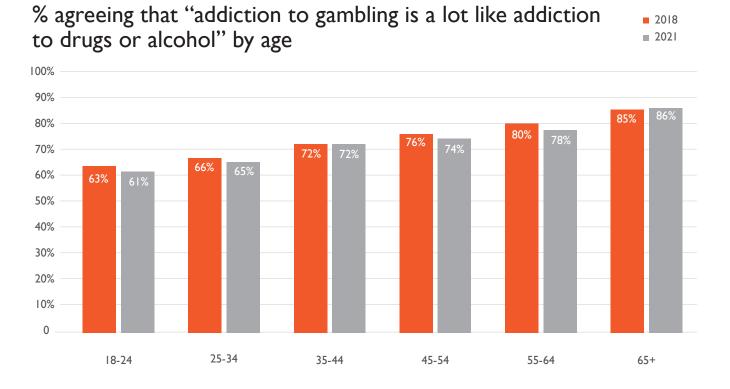
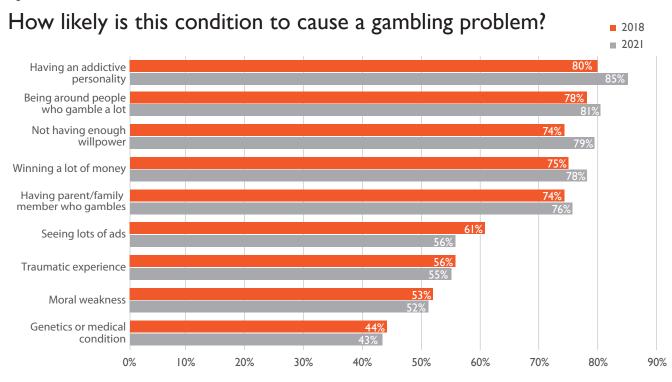


Figure 10A-3





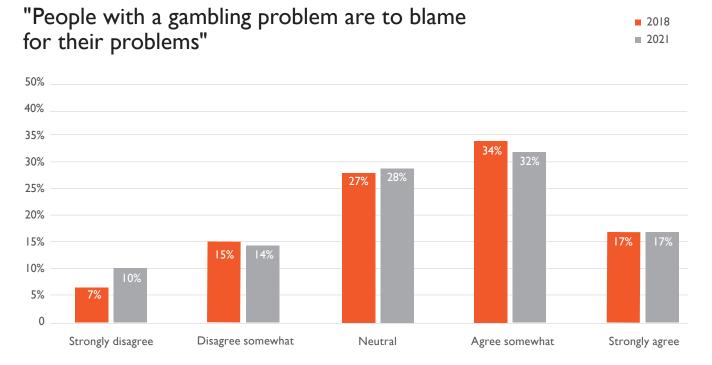
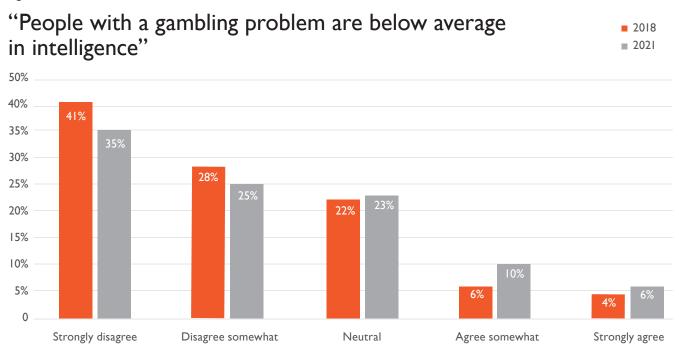


Figure 10A-5



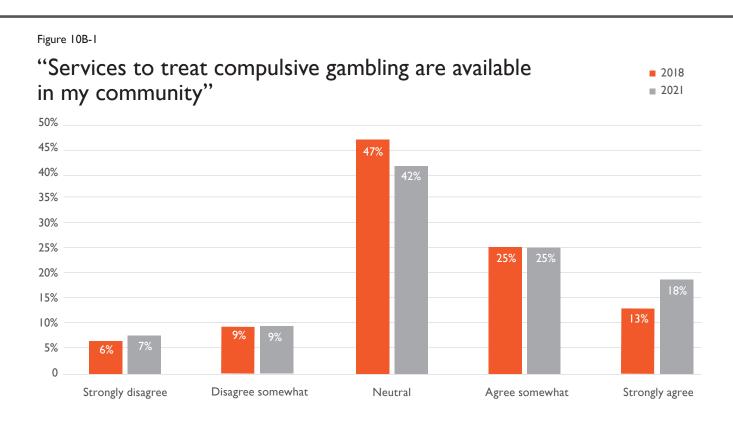
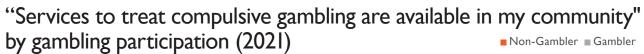


Figure 10B-2



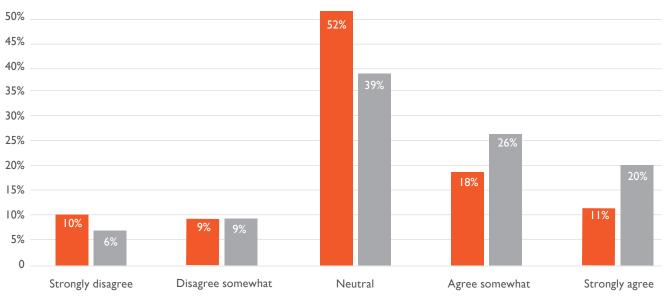


Figure 10B-3

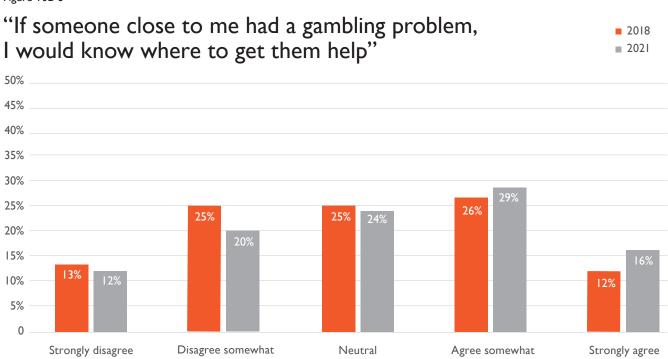
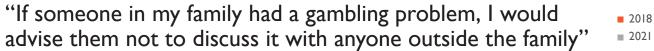


Figure 10B-4



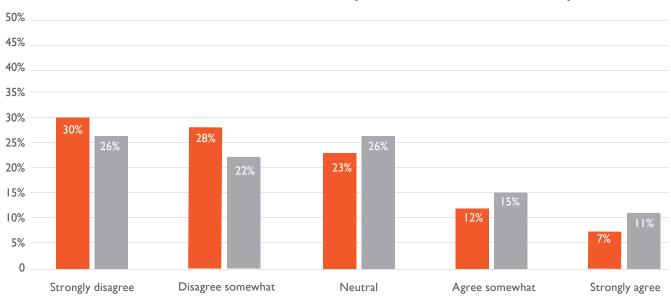


Figure 10B-5

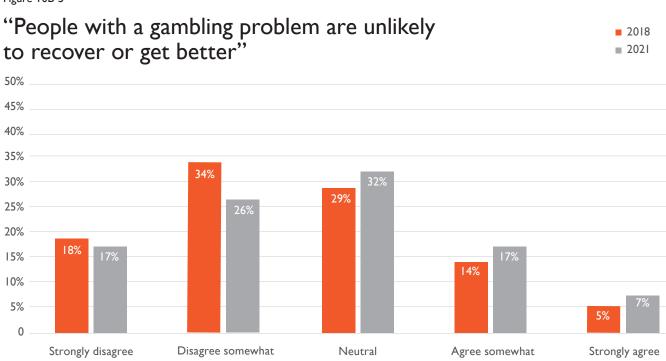


Figure 10B-6

### "People with a gambling problem are unlikely to recover or get better" by age (2021)

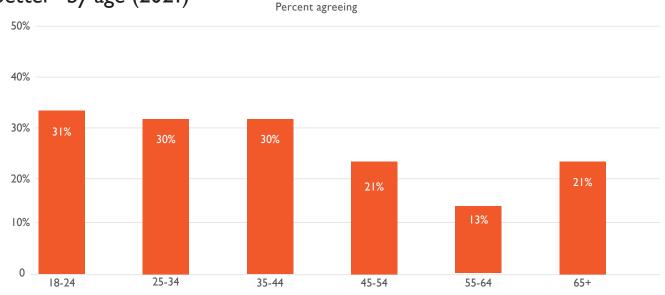
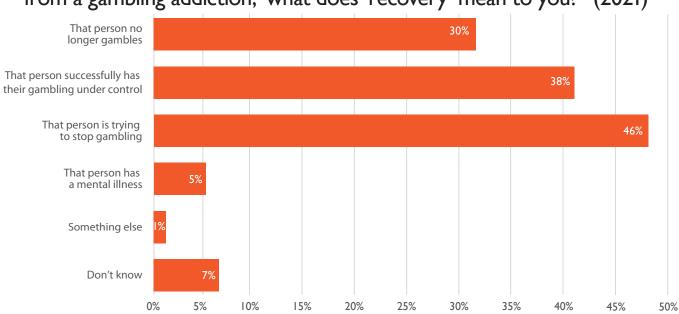


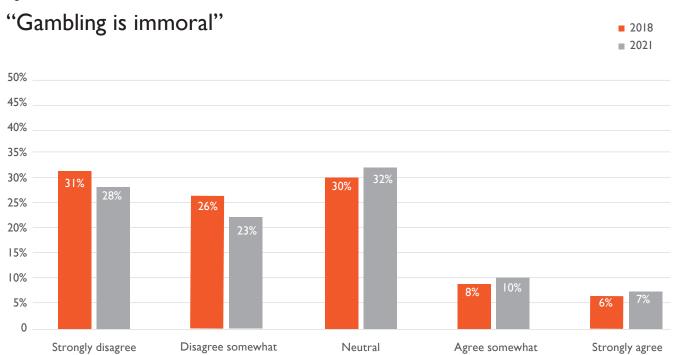
Figure 10B-7

### "When you hear the word 'recovery,' as in 'this person is in recovery from a gambling addiction,' what does 'recovery' mean to you?" (2021)

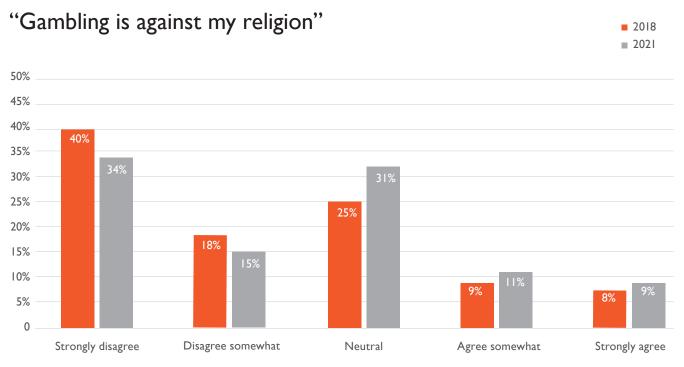


#### NGAGE 2.0 Report Charts

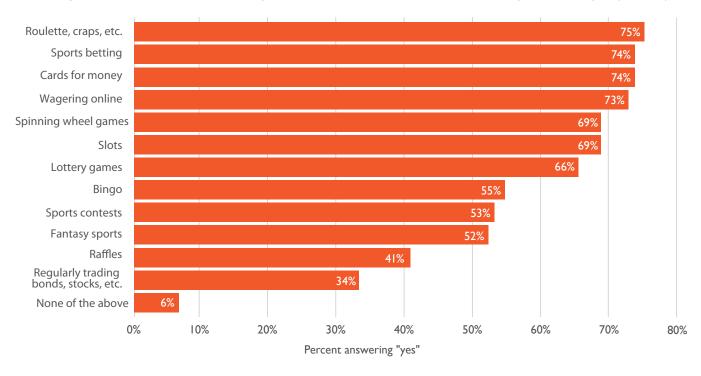
Figure 10C-1







Do you consider betting on these activities to be gambling? (2021)



Do you consider betting on sports outcomes to be gambling? (2021)

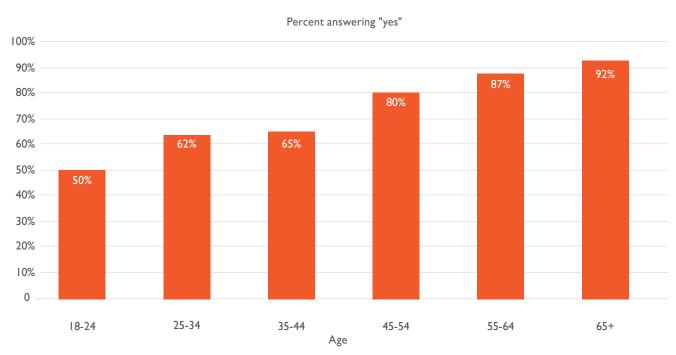
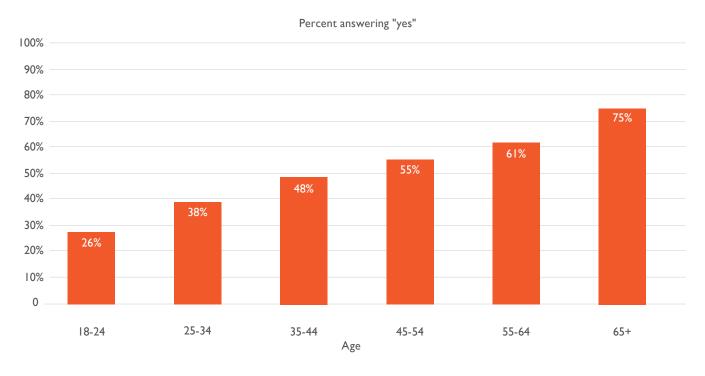
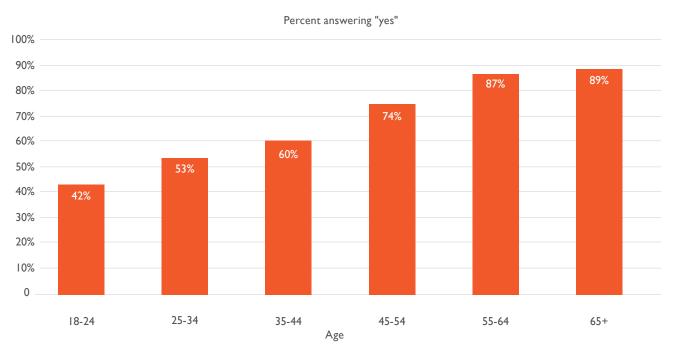


Figure 10D-3

#### Do you consider playing fantasy sports to be gambling? (2021)



Do you consider playing slots/gaming machines to be gambling? (2021)



Do you consider playing lottery games to be gambling? (2021)

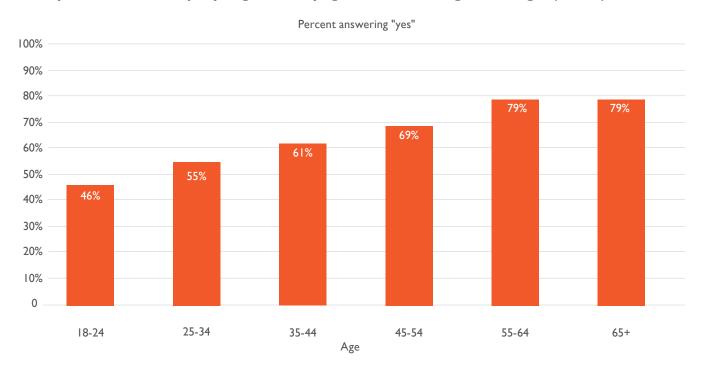


Figure 10D-6

Do you consider regularly trading bonds, stocks, GICs, etc. to be gambling? (2021)

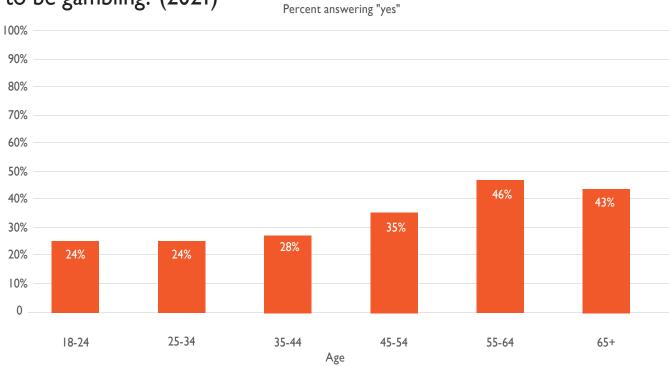


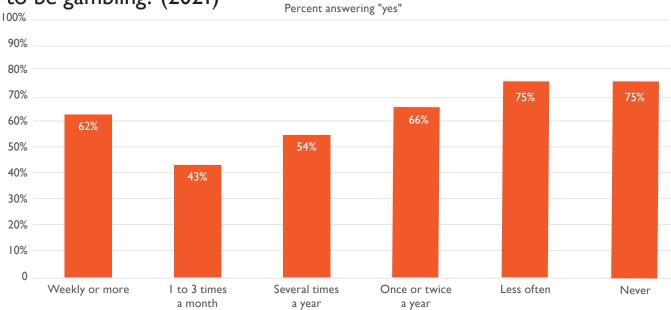
Figure 10D-7

### Do you consider these to be gambling? (2021)

	MALE	FEMALE
Roulette, craps, dice games	72%	77%
Sports betting	72%	76%
Cards for money	72%	75%
Wagering online	72%	74%
Spinning wheel games	67%	71%
Slots/Gaming machines	67%	71%
Lottery	66%	66%
Bingo	56%	55%
Sports contests	52%	55%
Fantasy sports	52%	53%
Raffles	43%	39%
Stocks, bonds, etc.	32%	35%
None of the above	5%	7%

Figure 10D-8

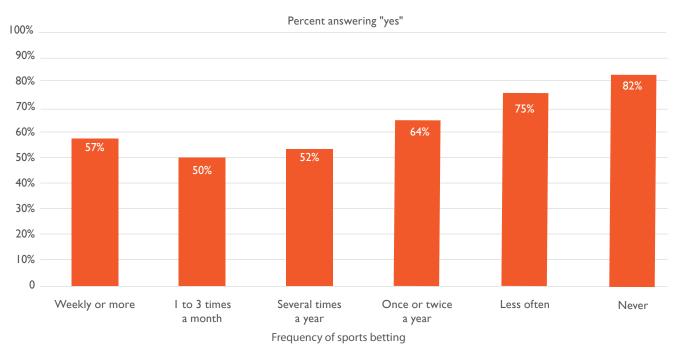
Do you consider betting on slots/gaming machines to be gambling? (2021)



Frequency of slot/gaming machine play

Pigure 10D-9

Do you consider betting on sports outcomes to be gambling? (2021)



Do you consider regularly trading stocks, bonds, GICs, etc. to be gambling? (2021)

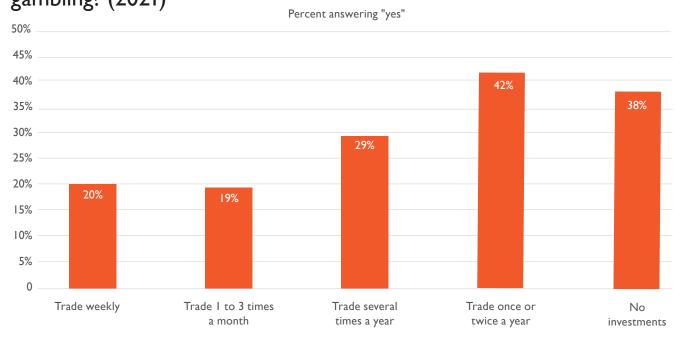


Figure 10E-1

"The gambling industry should do more to help people with a gambling addiction"

20182021

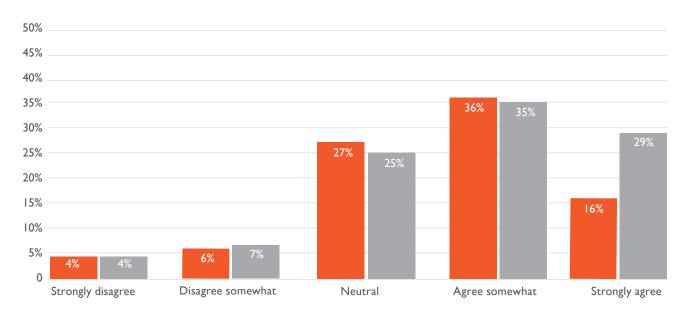
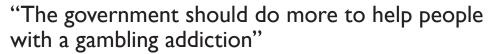


Figure 10E-2



■ 2018 ■ 2021

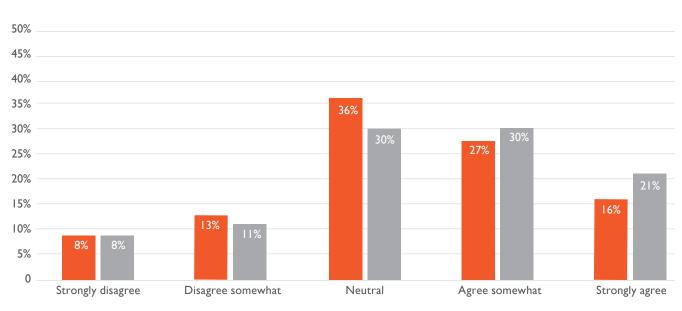


Figure 10E-3

"The gambling industry should do more to help people with a gambling addiction" by legal status (2021)

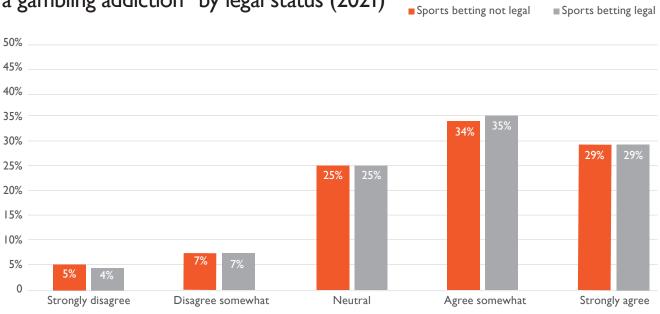


Figure 10E-4

"The government should do more to help people with a gambling addiction" by legal status (2021)

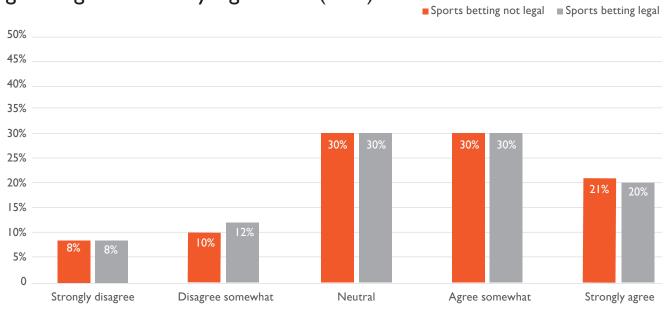


Figure 10E-5

"If your state was to legalize/has legalized sports betting, how important is it to require operators to implement responsible gambling measures?"

■ 2018 ■ 2021

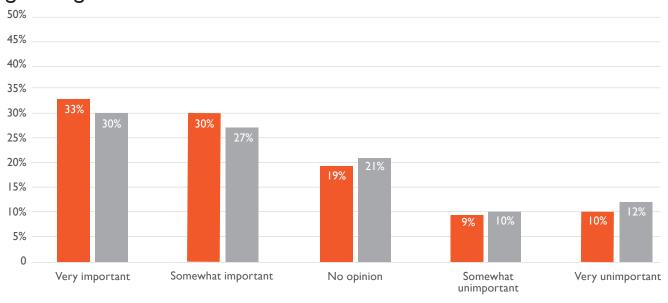


Figure 10E-6

"If your state was to legalize/has legalized sports betting, how important is it to require operators to implement responsible gambling measures?"

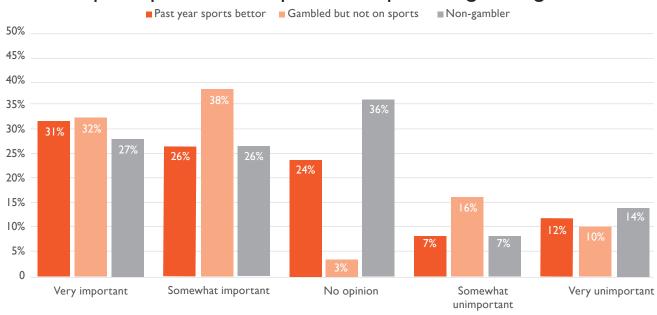
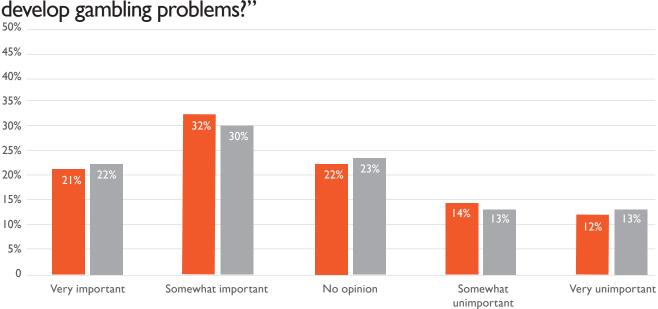


Figure 10E-7

"If your state was to legalize/has legalized sports betting, how important is it to set aside revenues to treat people who develop gambling problems?"



"If your state was to legalize/has legalized sports betting, how important is it to set aside revenues to treat people who develop gambling problems?" (2021)

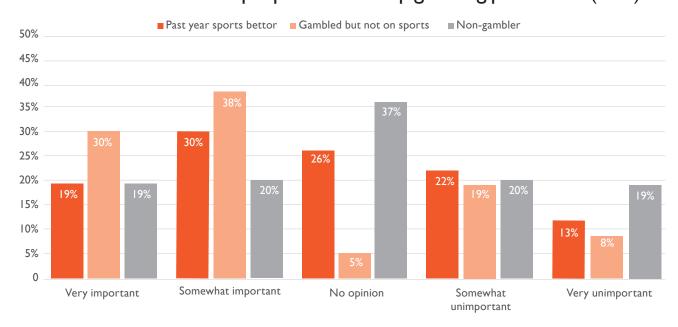


Figure 10E-9

"If your state was to legalize/has legalized sports betting, how important is it to set aside revenues for public awareness campaigns?" = 2021

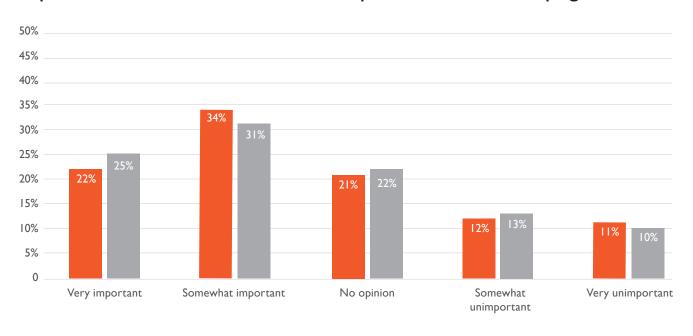


Figure 10E-10

"If your state was to legalize/has legalized sports betting, how important is it to set aside revenues for public awareness campaigns?" (2021)

