FROM LOOT BOXES TO LOTTERY TICKETS:

GAMING & GAMBLING AMONG BC YOUTH AGED 12–18

McCreary Centre Society

We gratefully acknowledge that the McCreary Centre Society is located on the ancestral, traditional, and unceded territory of the Coast Salish Peoples, including the territories of the xwməθkwəy̓ əm (Musqueam), Skwxwú7mesh (Squamish), and səlilwətaɬ (Tsleil-Waututh) Nations. We also acknowledge the continuing connection to this land of the Métis Nation.

FROM LOOT BOXES TO LOTTERY TICKETS:

GAMING & GAMBLING AMONG BC YOUTH AGED 12–18

ISBN: 978-1-998481-23-1

McCreary Centre Society
3552 East Hastings Street
Vancouver, BC, V5K 2A7

Copies of this report are available at: *mcs.bc.ca*.
For enquiries about this report, please email: *mccreary@mcs.bc.ca*.

McCreary Centre Society

PROJECT TEAM

Dr. Annie Smith
Executive Director

Dr. Elizabeth Saewyc
Research Director

Dr. Colleen Poon
Senior Research Associate

Dr. Maya Peled
Director of Evaluation

Evelyn McGowan
Director of Community Engagement

Katie Horton
Director of Youth Engagement

Ren Forsyth
BC AHS Coordinator

Erin Casey
Research Analyst

Lucie Anderson
Evaluation & Research Analyst

Danielle Mahdal
Graphic Designer & Research Assistant

ADVISORY COMMITTEE

Johann Andrew Robertson, Former Principal Consultant, Esports Foundry; Master's Student in Counselling Psychology, Yorkville University

Farida Butt, Strategic Engagement & Public Awareness Manager, Gaming Policy & Enforcement Branch, BC Ministry of Public Safety & Solicitor General

Gerald Thomas, Director, Legal Substances & Problem Gambling Policy & Prevention, BC Ministry of Health

Jason Michaud, Director, Prevention Services, Gambling Support Division, Gaming Policy & Enforcement Branch, BC Ministry of Public Safety & Solicitor General

Krystal Dash, Director, Mental Health & Substance Use, BC Ministry of Education and Child Care

Luke Clark, Director, Centre for Gambling Research, University of British Columbia

Ryan McCarthy, Director, Player Health, Safer Play & Enterprise Integrity Division, BCLC

ACKNOWLEDGEMENTS

We are grateful to all those who made this report possible, including students in Grades 7—12 across the province who completed the BC Adolescent Health Survey, their school teachers and administrators, as well as the Public Health Nurses, Public Health Resource Nurses, nursing students, and allied health professionals who administered the survey.

We also thank Paul Gordon, Program Manager, PLEA Community Services; and Armin Shahriari, Prevention & Community Engagement Provider, Contractor—Gambling Support BC, for their support of this report.

Funding for this report was provided by the BC Ministry of Health.

Funding for the 2023 BC Adolescent Health Survey was provided by the BC Ministry of Children and Family Development and the BC Ministry of Health.

Citation: Smith, A., Peled, M., Poon, C., Casey, E., Anderson, L., & McCreary Centre Society. (2025). *From loot boxes to lottery tickets: Gaming & gambling among BC youth aged 12–18*. McCreary Centre Society.

TABLE OF CONTENTS

KEY FINDINGS

The 2023 BC Adolescent Health Survey (BC AHS) was completed by 38,277 youth aged 12–18 in 59 of BC's 60 school districts, and included questions about gambling and gaming. Survey results showed:

- In the past year, 34% of 12–18-year-olds had engaged in at least one of eight gambling or gaming activities for money. These included three types of gaming-related activities (buying in-game items, playing in a gaming tournament, and streaming video games), and five types of gambling games (buying lottery tickets/scratch cards, playing cards/dice in person or online, and sports betting in person or online).

- Males were the most likely to have engaged in at least one of these eight activities for money in the past year (47% vs. 29% of non-binary youth vs. 20% of females). The most popular activity was using real money to buy in-game items while playing video games, which 20% of youth had done.

- Compared to 5 years earlier, youth were more likely to have played cards or dice in person (11% vs. 8% in 2018) and online (5% vs. 2%), and to have bet on sports online (4% vs. 2%) in the past year. They were less likely to have bought lottery tickets or scratch cards (7% vs. 8% in 2018) and bet on sports in person (6% vs. 7%).

- Online sports betting was the least common of the five gambling activities youth engaged in for money in the past year. However, it was the activity youth engaged in most regularly. For example, 13% of those who engaged in online sports betting did so daily, which was more than three times the rate of those who bought in-game items, bought lottery tickets/scratch cards, and played cards/dice in person on a daily basis.

- There was a link between regular sports participation and betting on sports. For example, youth who played organized sports (such as soccer or hockey with a coach) at least weekly in the past year were twice as likely as those who played less regularly or not at all to have engaged in sports betting for money during this time (10% vs. 5%).

- Potential health risks associated with regular gaming and gambling for money included poorer sleep, disrupted eating, and reduced school attendance.

- The more regularly youth were gaming and gambling for money, the more likely they were to report their playing had become problematic. In the past year, 12% reported needing help for their gaming, 1% for their gambling, and 1% needed help for both of these.

- Youth more likely to have reached a point where they needed help for their gaming or gambling included those who had no close in-person friends, those who had friends online whom they had never met in person, as well as those experiencing hunger and deprivation.

- Problematic gaming and gambling were also more common among youth who were gaming after the time they were expected to be asleep, bet with virtual credits they bought with real money, felt they spent too much time alone, and did not get along with those around them. Additionally, problematic gaming was more common among those who often or always felt lonely, and had been bullied in the past year.

- The three strongest predictors that youth would be engaging in gaming activities for money on a daily basis were not feeling safe in their neighbourhood, having online friends they had never met in person, and participating in extreme sports on a weekly basis. The presence of protective factors reduced the likelihood that youth would be gaming daily. The factors that had the strongest effect were going offline at bedtime, planning to pursue post-secondary education, and having an adult to help with specific tasks (e.g., learning life skills).

- Other protective factors that were associated with a reduced likelihood that youth would be gaming and gambling for money regularly included feeling connected and engaged with family, school, and community; having parents or guardians who knew what youth were doing in their free time and online; and having close in-person friends.

INTRODUCTION

In 2021, McCreary Centre Society released a report about gambling among 12–18-year-olds in British Columbia (*Understanding the odds: Gambling among BC youth aged 12–18*). Since the report was released there has been an expansion of sports betting opportunities in Canada, as well as an increase in awareness of online gambling and video games with gambling elements, including those which encourage the purchase of in-game items.

This report considers changes in gambling behaviours over time, looks at the prevalence of gaming and gambling among youth, considers where these activities intersect, and looks at associations with health and well-being. It also considers protective factors that can reduce the risk of youth regularly engaging in gaming and gambling for money.

The report uses data from the BC Adolescent Health Survey (BC AHS). The survey is conducted approximately every 5 years in public schools across BC, with the most recent survey completed in 2023. Around 38,500 students participated in the 2023 BC AHS and the findings are considered representative of 98% of students in Grades 7–12 in mainstream public schools across BC.

As gambling is legal for 19-year-olds in BC, this report focuses on the 38,277 students aged 12–18 who participated in the 2023 BC AHS.

When reading the report, please note:

- All reported comparisons and associations are statistically significant at least at $p < .05$. This means there is less than a 5% likelihood that reported results occurred by chance.
- Percentages may not always total 100% due to rounding.
- Where it is not obvious, a note is added to a table or chart if there is no statistically significant difference between percentages.
- Any percentage that is marked with an asterisk (*) should be interpreted with caution, as the standard error was higher than others but still within the releasable range.
- For readability, 'in the past year' and 'in the past 12 months' are used interchangeably, as are 'in the past month' and 'in the past 30 days'.

Quotes from 2023 BC AHS participants are included throughout the report.

A fact sheet detailing the methodology for the BC AHS is available at: *mcs.bc.ca/pdf/2023_bcahs_factsheet_methodology.pdf*.

LIMITATIONS

The BC AHS does not capture the gambling and gaming behaviours of youth who were not attending public school or who were not in school on the day the survey was administered. Youth with certain disabilities and learning challenges may also have been unable to participate.

The BC AHS questions about gambling have changed over the years, and the gaming items were new in 2023. As a result, some comparisons over time could not be carried out.

The report provides associations, and does not imply causation. For example, regular gambling and gaming were associated with mental health and substance use challenges, but the BC AHS data does not tell us the direction of that relationship. Analyses were conducted to ensure additional factors such as age or poverty were not driving the reported results, but it is unclear if other unidentified factors may have influenced the results.

GLOSSARY

- **Esports** is short for electronic sports, and is a form of competition using video games. Esports are often organized, multiplayer video game competitions.
- **Gambling activities** refers to five ways youth may have gambled in the past 12 months: buying lottery tickets/scratch cards, betting on sports in person, betting on sports online, playing cards/dice in person, and playing cards/dice online.
- **Gambling for money** refers to engaging in one or more of the five gambling activities for money in the past 12 months.
- **Gaming activities** refers to three ways youth may have been involved in gaming-related activities in the past 12 months: buying in-game items, playing in gaming tournaments, and streaming video games.
- **Gaming for money** refers to engaging in one or more of the three gaming activities for money in the past 12 months.
- **Loot boxes** are randomized, virtual containers in video games that provide players with in-game items, often purchased with real or in-game currency and linked to gambling-like mechanics (Zendle & Cairns, 2019).
- **Material deprivation** was measured using the 11-item Youth Deprivation Index created with BC youth (see Smith et al., 2023 for more details).
- **Problematic gambling** reflects youth who felt or were told they needed help for their gambling in the past 12 months.
- **Problematic gaming** reflects youth who felt or were told they needed help for their gaming in the past 12 months.
- **Protective factors** are relationships and conditions in youth's lives that are associated with improved health and well-being. Protective factors can also help to reduce harmful impacts of adverse experiences.
- **Regular gambling** refers to engaging in at least one of the five gambling activities (playing cards/dice in person and online, sports betting in person and online, and buying lottery tickets/scratch cards) for money at least weekly in the past 12 months.
- **Regular gaming** refers to engaging in at least one of the three gaming-related activities (playing in a gaming tournament, streaming video games, and buying in-game items) for money at least weekly in the past 12 months.
- **Risk factors** are challenges in youth's lives that may increase their likelihood of experiencing poorer health and well-being.
- **Skins and cosmetics** are virtual items that change the appearance of characters in a video game without providing any gameplay advantage. They can be bought or earned within games using real money or through gambling-type activities (e.g., through the purchase of loot boxes).

GAMBLING ACTIVITIES FOR MONEY

The BC AHS asked youth about five ways they could have gambled for money in the past year. These included playing cards or dice in person and online, sports betting in person and online, and buying lottery tickets or scratch cards. This section first considers the prevalence of youth engaging in these five types of gambling activities and then profiles who is taking part.

"[I am really good at] gambling."

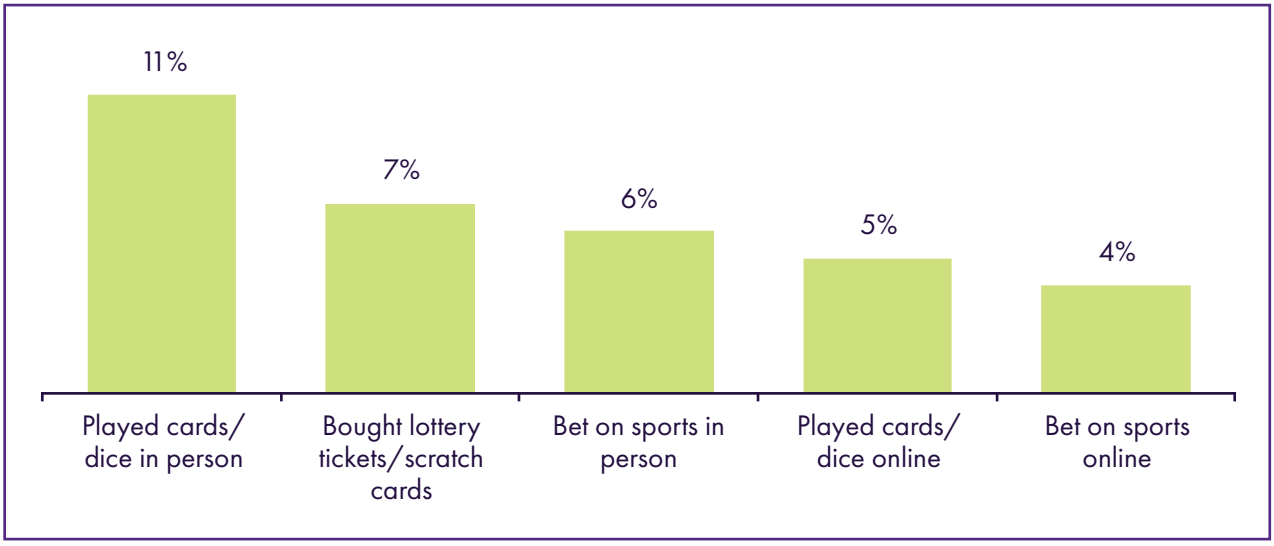
—16-year-old youth

"I bet money/income items with friends for fun (I'm broke)."

—14-year-old youth

Playing cards or dice in person was the most common way youth gambled for money.

GAMBLING ACTIVITIES YOUTH ENGAGED IN FOR MONEY IN THE PAST 12 MONTHS



CARDS & DICE

Card games, including internet poker, have been identified as popular gambling activities among youth (particularly male and racialized youth) and have been associated with problem gambling (Elton-Marshall et al., 2016; Farhat et al., 2022).

In the past year, 12% of BC youth aged 12–18 played cards or dice for money (online or in person). This was an increase from 8% in 2018, and included 4% who played both in person and online (vs. 2% in 2018).

PLAYED IN PERSON

In the past year, 11% of youth played cards or dice in person for money (vs. 8% in 2018). This included 2% who played on 2 or 3 days a month (vs. 1% in 2018), and 2% who played at least weekly (vs. 1% in 2018).

PLAYED ONLINE

Reflecting the pattern in 2018, youth were less likely to have played cards or dice online than they were to have played in person (5% vs. 11%). However, the percentage who played online in the past 12 months increased from 2% in 2018 to 5%, and the percentage who played online at least weekly also increased from under 1% to over 1%.

The percentage of youth who played cards or dice for money increased from 2018.

SPORTS BETTING

Online sports betting has increased following the 2021 legalization of single-event sports betting, and associated rise in media coverage (Wheaton et al., 2025). Regular involvement in sports betting has been associated with an increased risk of problematic gambling, especially among older youth (Emond & Griffiths, 2020; Marchica et al., 2017; Pérez-Albéniz et al., 2021; Pisarska & Ostaszewski, 2020).

"I am pretty good when it comes to betting on sports, especially hockey."

—17-year-old youth

"I bet 20 dollars for Liverpool to win and another 20 dollars to Napoli. Liverpool is tie and Napoli losing. I have the worst luck ever."

—14-year-old youth

Similar to the rate in 2018, 8% of BC youth bet on sports for money in the past year (online or in person). This included 2% who engaged in both in-person and online sports betting (vs. 1% in 2018).

BET IN PERSON

In the past year, 6% of youth bet on sports in person, including 1% who did so on 2 or 3 days a month and 1% who bet at least weekly. Despite an overall decrease in youth who bet on sports in person in the past year (from 7% in 2018 to 6%), there was a slight increase in those who bet at least weekly (from under 1% in 2018 to over 1%).

BET ONLINE

Reflecting the pattern from 5 years earlier, online sports betting was less common than in person sports betting, with 4% of youth betting on sports online in the past year. However, the percentage who bet online doubled (from 2% in 2018), and there was also an increase in those who did so at least weekly (from under 1% to over 1%).

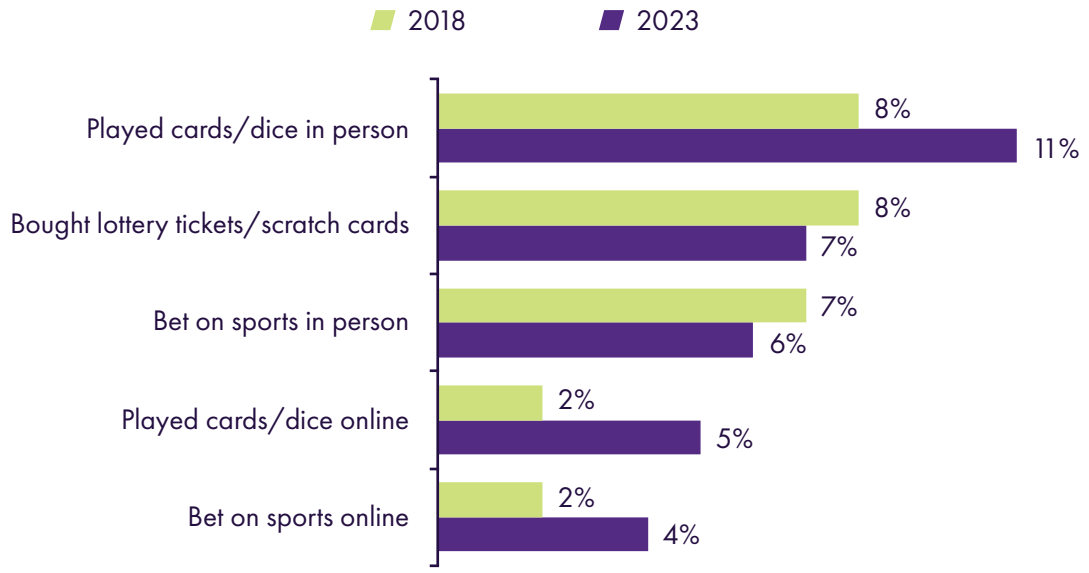
LOTTERY TICKETS OR SCRATCH CARDS

Buying lottery tickets and scratch cards have traditionally been popular forms of gambling among youth, and have also been associated with problem gambling in this age range (González-Roz et al., 2017; Pisarska & Ostaszewski, 2020; Zhai et al., 2021).

Previous decreases in youth buying lottery tickets/scratch cards continued.

In the past 12 months, 7% of youth bought lottery tickets or scratch cards (vs. 8% in 2018 vs. 15% in 2008). This included 1% who did so 2 or 3 days a month, and 1% who bought them at least weekly (a slight increase from 2018).

CHANGES OVER TIME IN THE GAMBLING ACTIVITIES YOUTH ENGAGED IN FOR MONEY IN THE PAST 12 MONTHS



YOUTH WHO WERE MORE LIKELY TO GAMBLE FOR MONEY

This section considers which youth were more likely to have gambled for money in the past year.

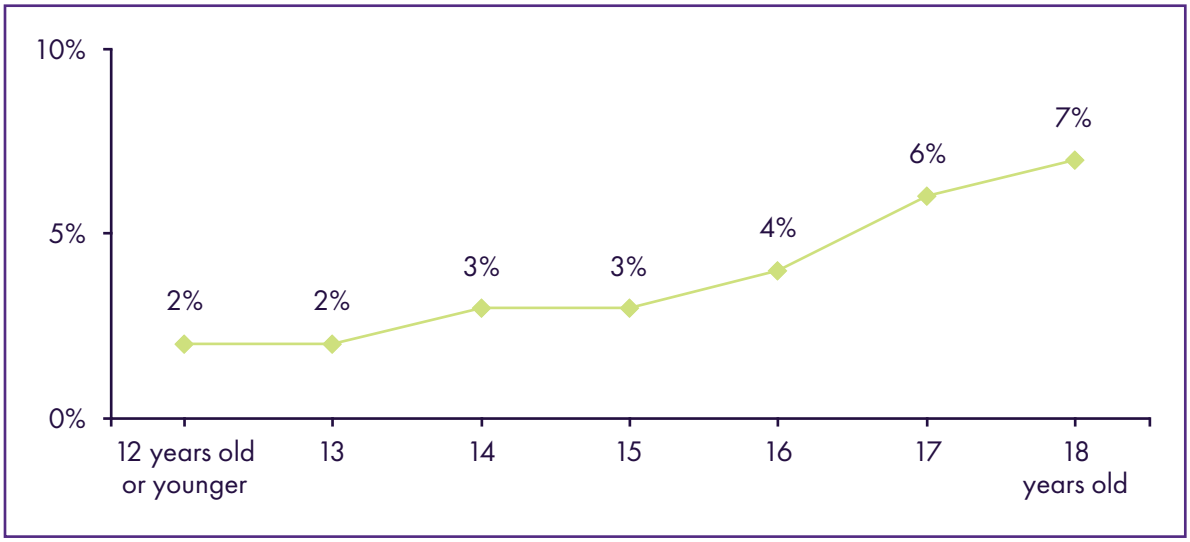
Overall, 20% of youth had engaged in at least one of the five gambling activities for money in the past year (i.e., bought lottery tickets or scratch cards, bet on sports in person, bet on sports online, played cards or dice in person, and played cards or dice online). This was an increase from 18% in 2018.

AGE

With the exception of buying lottery tickets or scratch cards where there were no age differences, older youth were more likely than younger ones to have gambled for money in the past year. For example, 14% of 18-year-olds played cards or dice in person, compared to 11% of 14-year-olds and 9% of those aged 12 or younger.

There were fewer age differences for those who gambled weekly. However, older youth were more likely to bet on sports online at least weekly (e.g., 2% of 17-year-olds vs. 1% of 13- to 15-year-olds).

BET ON SPORTS ONLINE FOR MONEY IN THE PAST 12 MONTHS



Note: Not all age differences were statistically significant.

1 IN 5

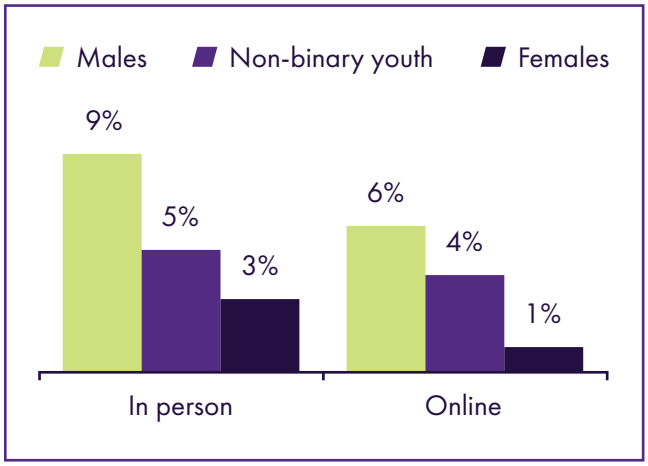
youth gambled for money in the past year.

GENDER IDENTITY

There were no gender differences in buying lottery tickets or scratch cards in the past year, unlike in 2018 when non-binary youth were the most likely to have done so. However, non-binary youth were still the most likely to have bought lottery tickets or scratch cards on a weekly basis (2% vs. 1% of males vs. <1% of females).

For the other gambling activities, females were generally the least likely to have gambled for money, as well as to have done so regularly. For example, they were around half as likely as males to have played cards or dice in person (8% vs. 15%) and online (3% vs. 6%) in the past year, as well as to have played weekly (1% vs. 2%, for each of these activities).

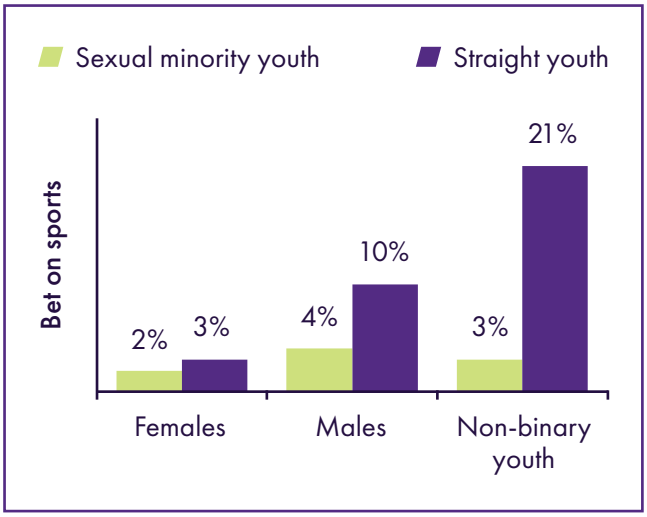
BET ON SPORTS FOR MONEY IN THE PAST 12 MONTHS



SEXUAL ORIENTATION

Youth who identified their sexual orientation as straight were more likely than sexual minority youth to have engaged in all gambling activities except buying lottery tickets or scratch cards. For example, 7% of those who identified as straight bet on sports in person in the past year, compared to 3% of those who identified as lesbian or gay.

SEXUAL MINORITY YOUTH WERE LESS LIKELY TO ENGAGE IN SPORTS BETTING FOR MONEY IN THE PAST YEAR



Overall, females were the least likely to have gambled for money.

LOCATION

There were no urban-rural differences in who gambled for money in the past year, except rural-based youth were more likely to have bought lottery tickets or scratch cards (8% vs. 7% of urban-based youth). This was the reverse of 2018 when urban-based youth were more likely to have done so.

There were some regional differences, with youth in the Fraser and Vancouver Coastal regions generally the least likely to have gambled for money in the past year. For example, 8% of youth in the Interior and North bought lottery tickets or scratch cards in the past 12 months, compared to 6% in Fraser and Vancouver Coastal.

Rates of gambling for money also varied at the more localized Health Service Delivery Area level. For example, in-person sports betting ranged from 5% in Richmond to 10% in the Northwest, and online sports betting ranged from 3% in North Vancouver Island and Vancouver to 6% in the Okanagan.

Youth in the Lower Mainland were among the least likely to have gambled for money.

BACKGROUND

Youth were asked about their racial identity and family background. Youth who identified as Asian were less likely to have gambled for money than youth who reported other racial identities. For example, 16% of Asian youth had engaged in any of the five gambling activities for money in the past year, compared to 22% of White youth.

FAMILY BACKGROUND OF YOUTH WHO GAMBLED FOR MONEY IN THE PAST 12 MONTHS

African	27%
Australian, Pacific Islander	23%
Caribbean	24%
East Asian	14%
European	22%
Indigenous	21%
Latin/South/Central American	22%
Middle Eastern	19%
South Asian	20%
Southeast Asian	16%
Other	24%
Do not know	20%

Note: Youth could mark all that applied.
Note: Not all differences between groups were statistically significant.

IMMIGRATION STATUS

Youth born in Canada were more likely than those born abroad to have played cards or dice in person in the past year (12% vs. 10%), whereas those born abroad were more likely to have played these games online (5% vs. 4% of those born in Canada). Playing cards or dice online was particularly popular among those who had arrived in Canada as refugees (10%) and these youth were three times as likely as Canadian-born youth to play at least weekly (3% vs. 1%).

Youth who arrived in Canada as refugees were also more likely to have bet on sports in person (11% of refugee youth vs. 6% of Canadian-born youth) and online (e.g., 9% vs. 5% of those who arrived as international students) in the past year, including on a weekly basis (4% vs. 1% of Canadian-born youth for both in-person and online sports betting).

YOUTH WHO GAMBLED AT LEAST WEEKLY

Adolescence is a time of experimentation and risk-taking, and youth might view playing occasional games of chance for money as a harmless activity. However, gambling at least weekly during the past year was associated with a greater likelihood of youth reporting that their gambling had reached a point where they needed help (see *page 31* for more details about problematic gambling).

In the past year, 4% of youth engaged in one or more of the five monetized gambling activities at least weekly. Youth who were more likely to have gambled this frequently included those who:

- **Had a challenging home life**, including youth who did not live with their parents (7% vs. 3% of those who did not have this experience), lived alone (16% vs. 4%), and had government care experience (6% vs. 3%).

- **Lived in poverty.** For example, youth who went to bed hungry at least sometimes because there was not enough money for food were twice as likely to have gambled for money at least weekly (6% vs. 3% of those who never went to bed hungry), as were those who could not afford to participate in extracurricular physical activities in the past year (6% vs. 3% of those who did not face this financial barrier).

4% **of youth gambled for money at least weekly.**

- **Experienced material deprivation**, including those who felt deprived of access to the Internet (12% gambled weekly vs. 3% of those who had this); a quiet place to sleep (7% vs. 3%); money for school supplies, school trips, and extracurricular activities (7% vs. 3%); and access to transportation (6% vs. 3%).

- **Experienced in-person and/or online victimization**. For example, 6% of those who had been cyberbullied in the past year gambled at least weekly (vs. 3% who had not been cyberbullied during that time).

- **Felt unsafe in their school or community**. For example, 10% of those who rarely or never felt safe in their neighbourhood in the daytime regularly gambled for money, compared to 3% of those who often or always felt safe there.

- **Had other adverse experiences**. For example, gambling for money at least weekly was more common among youth who had experienced bereavement, including the loss of someone close to them due to suicide (6% vs. 3%) and violence (10% vs. 3%).

- **Had attention deficit hyperactivity disorder** (ADHD; 4% vs. 3% of those without ADHD).

- **Used substances recently and regularly**, including alcohol, cannabis, and tobacco. For example, 8% of youth who used cannabis on 20 or more days in the past month gambled at least weekly vs. 5% of those who used on fewer or no days that month (among youth who had tried cannabis).

- **Reported problematic use in other areas**, including youth who reported they needed help for their substance use (7% vs. 3% of those who had not needed help) and video gaming (5% vs. 3%) in the past year.

- **Engaged in health risk behaviours**, including unprotected sex and driving while impaired. For example, youth who drove after using substances in the past month were five times more likely to have gambled at least weekly (15% vs. 3% of those who did not drive while impaired).

- **Had certain interpersonal experiences**, including those who did not get along with people around them (5% of these youth gambled at least weekly vs. 3% of youth who got along with others), and had online friends they had never met in person (4% gambled regularly vs. 3% who did not have such friends).

- **Engaged in thrill seeking** such as extreme sports like backcountry skiing, skateboarding, and BMXing on a weekly basis (7% vs. 3% of those who participated less frequently).

- **Were employed during the school year** (5% vs. 3% of youth who did not work during this time), and particularly those who worked in excess of 20 hours a week (11% vs. 4% of those who worked fewer hours; among those who worked). However, there were some differences based on the reasons that youth were working. For example, those who worked because they wanted spending money were more likely to have gambled for money weekly than those who were working to save for school (4% vs. 3%; among youth who were employed).

Youth who experienced challenges in their life were more likely to gamble regularly.

SPORTS BETTING & PHYSICAL ACTIVITY ENGAGEMENT

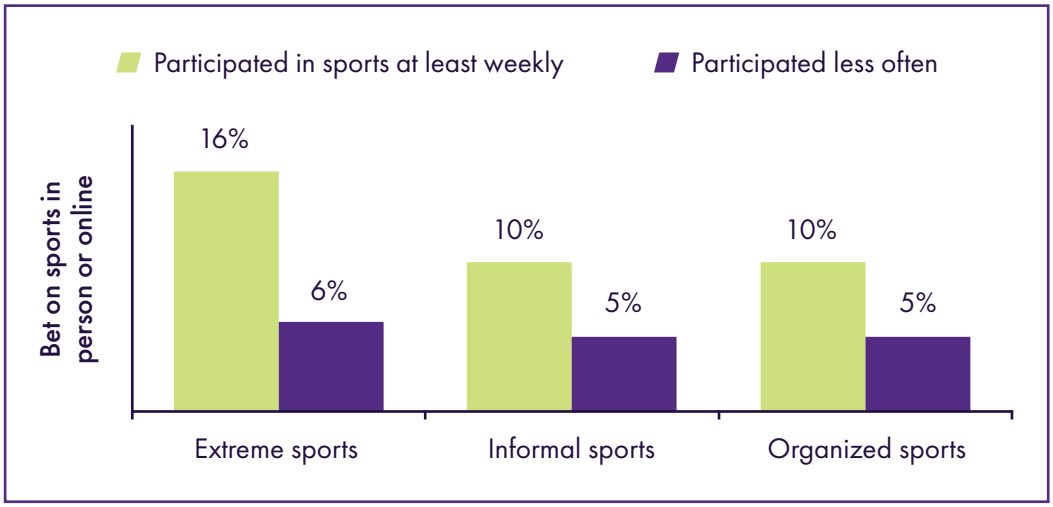
> *"I am good at basketball, competitive video games (video games in general), computer, athletic/active activities."*
>
> **—16-year-old youth**

> *"[I am good at] competitive stuff like gaming, sports, etc."*
>
> **—13-year-old youth**

As noted previously, extreme sports participation was associated with youth being more likely to gamble on a weekly basis. It was also specifically associated with sports betting at least weekly for youth of all genders. Participation in informal sports such as road hockey, and organized (coached) sports such as playing on a soccer team were also linked to sports betting.

Additional analyses showed that although youth who engaged in one type of sport often participated in other types, all three types of sports participation (extreme, organized, and informal) independently predicted sports betting. The independent association between weekly engagement in each type of sport and sports betting remained even when participation in other gambling activities was considered (i.e., statistically controlled).

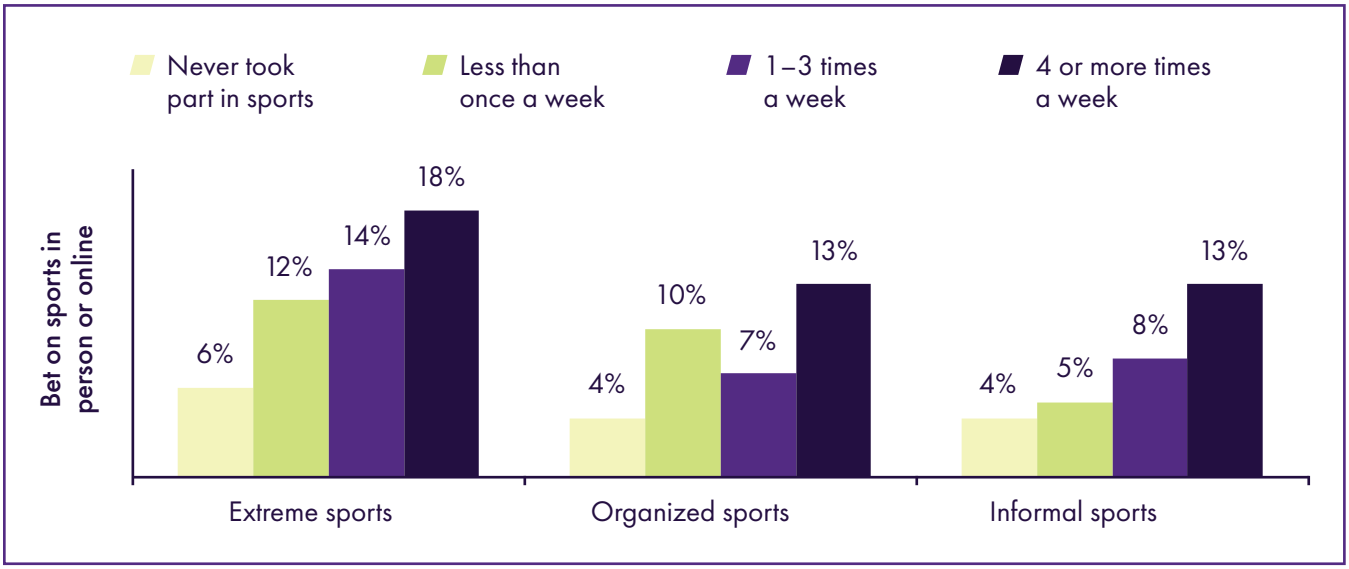
YOUTH WHO TOOK PART IN SPORTS AT LEAST WEEKLY WERE MORE LIKELY TO BET ON SPORTS FOR MONEY IN THE PAST 12 MONTHS



Overall, the more regularly youth played sports in the past year, the more likely they were to have bet on sports during this time. However, for organized sports, youth who took part 1 to 3 times a week were less likely to bet on sports than both those who took part less often and those who participated more regularly. In each type of sport, youth who played four or more times a week were the most likely to have bet on sports.

There was also a link between other types of exercise engagement and sports betting, including exercising at a gym or recreational centre, and exercising to an online video or class.

YOUTH WHO TOOK PART IN SPORTS FOUR OR MORE TIMES A WEEK WERE THE MOST LIKELY TO HAVE BET ON SPORTS FOR MONEY IN THE PAST 12 MONTHS



Note: For extreme sports, the difference between 'less than once a week' and '1– 3 times a week' was not statistically significant.

Regular engagement in sports was associated with sports betting.

GAMING ACTIVITIES FOR MONEY

Having considered youth who gambled for money, this section considers past year engagement in gaming-related activities for money.

In the past year, 24% of youth had engaged in at least one of three gaming-related activities for money that they were asked about on the survey. These included buying in-game items, streaming video games, and playing in a gaming tournament.

BOUGHT IN-GAME ITEMS

Some video games allow players to use real money to buy characters or goods (e.g., loot boxes which contain randomized items). These games are particularly popular among males and younger youth, and have been linked to problem gambling in adolescence (e.g., DeCamp & Daly, 2023; Drummond et al., 2020; Li et al., 2019; Zendle & Cairns, 2019; Zendle et al., 2019).

> *"[I bought] something actually useful and for like $1."*
>
> **—15-year-old youth**

> *"Does unlocking stuff with in-game currency count?"*
>
> **—15-year-old youth**

Buying in-game items was the most popular of the eight gambling and gaming-related activities youth engaged in for money. One in five youth (20%) had used real money to buy in-game items such as loot boxes and cosmetics in the past year. This included 4% who bought these items 2 or 3 days a month, and 2% who did so at least weekly.

1 IN 5

youth had used real money to buy in-game items such as loot boxes and cosmetics in the past year.

PLAYED IN A GAMING TOURNAMENT

Gaming tournaments (also known as 'esports' tournaments) have become increasingly popular with youth as they can win money and prizes. Several studies have found an association between engaging in this type of gaming activity and betting on esports (Scholz, 2019; Torres-Toukoumidis, 2022).

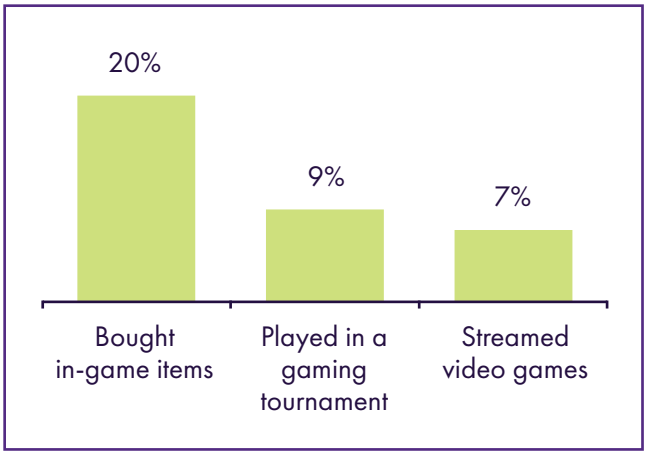
In the past year, 9% of youth had played in a gaming tournament for money, including 6% who played monthly or less frequently, 1% who played 2 or 3 days a month, and 2% who played at least weekly.

STREAMED VIDEO GAMES

Streaming live video games has gained popularity in recent years, through platforms such as Twitch which allow anyone to broadcast themselves playing. Concerns have been raised that watching these live streams exposes youth to gambling (e.g., watching loot box openings and gambling videos; Grosemans et al., 2024).

In the past year, 7% of youth had streamed video games for money, including 2% who did so at least weekly.

GAMING ACTIVITIES YOUTH ENGAGED IN FOR MONEY IN THE PAST 12 MONTHS



YOUTH WHO WERE MORE LIKELY TO ENGAGE IN GAMING ACTIVITIES FOR MONEY

> *"I need to spend money on Dead by Daylight and Overwatch because virtual cosmetics are the best things to ever exist."*
>
> **—14-year-old youth**

AGE

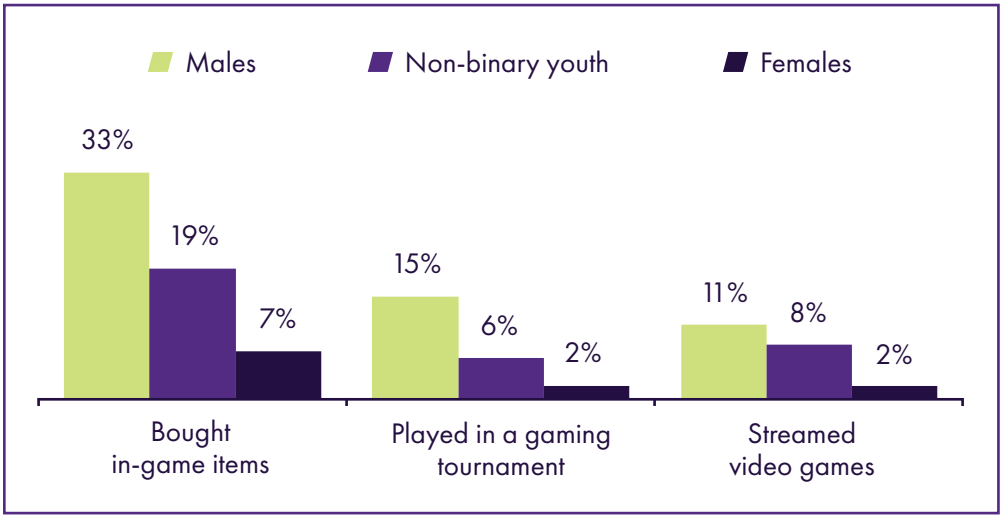
Youth aged 15 or younger were more likely than those aged 16 or older to have played in a gaming tournament for money in the past year (10% vs. 8%), and to have done so at least weekly (2% vs. 1%). This was the only one of the eight gambling and gaming activities that youth did for money where younger youth were more likely than older ones to have participated.

Playing in gaming tournaments was more popular among younger youth.

GENDER

Females were the least likely to participate in gaming-related activities for money. For example, 3% of males played in a gaming tournament at least weekly, compared to less than 1% of females.

GAMING-RELATED ACTIVITIES THAT YOUTH ENGAGED IN FOR MONEY IN THE PAST 12 MONTHS



SEXUAL ORIENTATION

Overall, gaming for money was more popular among straight youth than those who identified as a sexual minority. This included buying in-game items (21% vs. 17% of sexual minority youth), playing in a gaming tournament (10% vs. 5%), and streaming video games (7% vs. 5%) in the past year. However, sexual minority females were more likely than straight females to stream video games (3% vs. 2%) and buy in-game items (11% vs. 5%).

Female youth were the least likely to be gaming for money.

LOCATION

There were few regional differences or urban-rural differences in gaming for money, except youth in rural areas were more likely to have bought in-game items on a weekly basis (3% vs. 2% of urban-based youth).

BACKGROUND

Reflecting the pattern with gambling, youth who identified racially as Asian were less likely than youth of other racial identities to have streamed video games, played in a gaming tournament, and bought in-game items. For example, 5% had streamed video games, compared to 7% of White youth.

Youth were also asked about their family background. At least 1 in 5 youth of every family background had engaged in gaming-related activities for money in the past year.

FAMILY BACKGROUND OF YOUTH WHO ENGAGED IN GAMING-RELATED ACTIVITIES FOR MONEY IN THE PAST 12 MONTHS

African	26%
Australian, Pacific Islander	27%
Caribbean	26%
East Asian	23%
European	24%
Indigenous	27%
Latin/South/Central American	26%
Middle Eastern	26%
South Asian	21%
Southeast Asian	27%
Other	28%
Do not know	24%

Note: Youth could mark all that applied.
Note: Not all differences between groups were statistically significant.

IMMIGRATION STATUS

Canadian-born youth were more likely to have bought in-game items (21% vs. 18% of those born abroad); and youth who arrived in Canada as refugees were more likely to have played in a gaming tournament (15% vs. 9% of Canadian-born youth) and streamed video games (11% vs. 7%) for money in the past year. Refugee youth were also more likely to have played in gaming tournaments at least weekly (6% vs. 2% of Canadian-born youth).

YOUTH WHO ENGAGED IN GAMING ACTIVITIES AT LEAST WEEKLY

Overall, 4% of youth had engaged in any of the three gaming activities for money at least weekly. These youth shared many similar experiences and characteristics with those who gambled for money regularly. For example, they were more likely to live alone (15% vs. 4% of those who did not have this experience), away from their parents (7% vs. 4%), and have government care experience (7% vs. 4%). They were also more likely to have experienced poverty and deprivation. For example, 8% of those who felt deprived of access to transportation engaged in gaming activities at least weekly in the past year, compared to 4% of youth who were not deprived in this way.

As with regular gambling, regular gaming was more common among youth with a history of adverse experiences including bereavement due to suicide (6% vs. 4% of those without this experience) and violence (8% vs. 4%). There also seemed to be a link to risk taking, such as driving after using substances (10% of youth who did so in the past month were gaming regularly vs. 4% of those who did not drive while impaired), having unprotected sex (16% vs. 6%; among youth who had ever had intercourse), and participation in extreme sports (7% of those who took part at least weekly vs. 4% who did not do this weekly).

Similar to the results for gambling, youth were more likely to be engaging in weekly gaming activities for money if they worked during the school year, and particularly if they worked in excess of 20 hours a week (9% vs. 5% of those who worked fewer hours; among those who worked). They were also more likely to participate in these gaming activities regularly if they did not get along with people around them (7% vs. 4%) and had online friends whom they had never met in person (7% vs. 2% of those who did not have such friends).

Youth who were not at all hopeful for their future were more likely to engage in monetized gaming activities weekly (8% vs. 4% of those who felt quite or very hopeful), as were those who wished they had a different life (5% vs. 4% who did not feel that way).

Youth with ADHD were more likely than those without the condition to engage in gaming activities (6% vs. 4%) on a regular basis, which reflected the pattern for gambling. Unlike gambling, regular gaming was also more common among youth with obsessive compulsive disorder (OCD; 6% vs. 4% of those without the condition) and depression (5% vs. 4%).

As was seen with regular gambling, there was a link between reporting problematic substance use and regular gaming (6% engaged in gaming activities weekly vs. 4% of those who did not need help for their substance use). Additionally, youth who reported needing help for their social media use were more likely to engage in regular gaming (5% vs. 4%).

Youth who were regularly gaming experienced similar challenges to well-being as those who were regularly gambling.

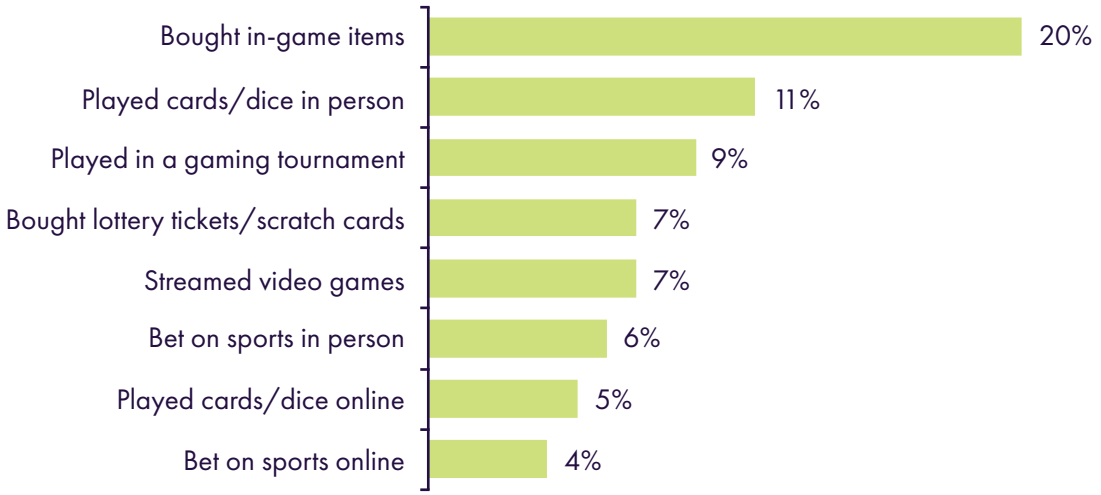
CONNECTIONS BETWEEN GAMING & GAMBLING

Supporting findings from other studies (e.g., Wieczorek et al., 2024), the previous section showed that there are many similarities between youth who engage in gaming for money and those who gamble for money. This section further explores the overlap between the different gaming and gambling activities, including the frequency at which youth are engaging in these activities.

In the past year, 34% of youth had participated in at least one of the eight gambling and gaming activities they were asked about for money. One in five (20%) females did so, compared to 29% of non-binary youth and 47% of males.

Buying in-game items was the most common activity youth did for money.

DIFFERENT TYPES OF ACTIVITIES YOUTH ENGAGED IN FOR MONEY IN THE PAST 12 MONTHS



"I always play for money."

—18-year-old youth

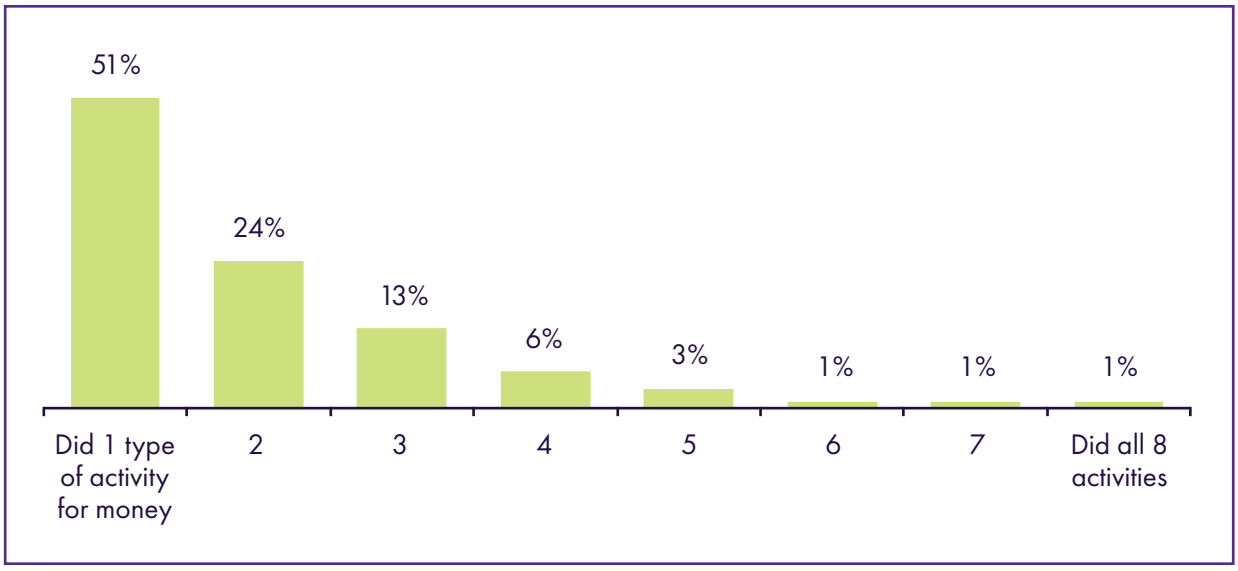
"[I am really good at] making Avatars for a game called VRChat for money."

—14-year-old youth

Among youth who engaged in gaming or gambling activities for money in the past year, around half engaged in a single type of activity, around a quarter engaged in two types, and the remainder participated in three or more different types.

Among youth who engaged in each different activity, the most common activity they did exclusively was buying in-game items (42% of youth who bought these items did not engage in any of the other seven activities for money), followed by buying lottery tickets/scratch cards (37%), and playing cards or dice in person (26%). Youth who gambled online (sports betting and playing cards/dice online) were the most likely to also participate in all the other activities.

NUMBER OF ACTIVITIES YOUTH ENGAGED IN FOR MONEY IN THE PAST 12 MONTHS (AMONG THOSE WHO PLAYED FOR MONEY)



Note: The activities included five gambling activities (buying lottery tickets/scratch cards, betting on sports in person, betting on sports online, playing cards/dice in person, and playing cards/dice online) and three gaming activities (buying in-game items, playing in gaming tournaments, and streaming video games).

GAMBLING & GAMING ACTIVITIES YOUTH PARTICIPATED IN FOR MONEY IN THE PAST 12 MONTHS (AMONG YOUTH WHO TOOK PART IN EACH ACTIVITY)

	Number of other activities							
	0	1	2	3	4	5	6	7
Played cards/dice in person	26%	27%	18%	12%	8%	3%	2%	4%
Played cards/dice online	4%	20%	21%	19%	14%	8%	4%	11%
Bet on sports in person	18%	23%	17%	15%	10%	6%	3%	8%
Bet on sports online	10%	15%	17%	18%	13%	9%	5%	13%
Bought lottery tickets/scratch cards	37%	21%	13%	9%	6%	4%	2%	7%
Played in a gaming tournament	14%	25%	26%	15%	8%	4%	2%	6%
Streamed video games	10%	25%	29%	13%	9%	4%	3%	8%
Bought in-game items	42%	24%	17%	8%	4%	2%	1%	2%

Note: "0" refers to youth who engaged exclusively in the activity and did not take part in any of the other seven activities in the past 12 months.
Note: Not all differences were statistically significant.

Some combinations of activities appeared to be popular. For example, 83% of youth who played cards or dice online in the past year also played in person; and 61% who bet on sports online also bet on them in person. Similarly, among youth who streamed video games in the past year, 76% also bought in-game items and 59% played in a gaming tournament during this time.

There was also crossover between gambling and gaming. For example, among youth who had bet on sports in person in the past year, 49% also bought in-game items during this time, as did 39% of those who bought lottery tickets or scratch cards.

3 IN 5

who bet money on sports online also did so in-person.

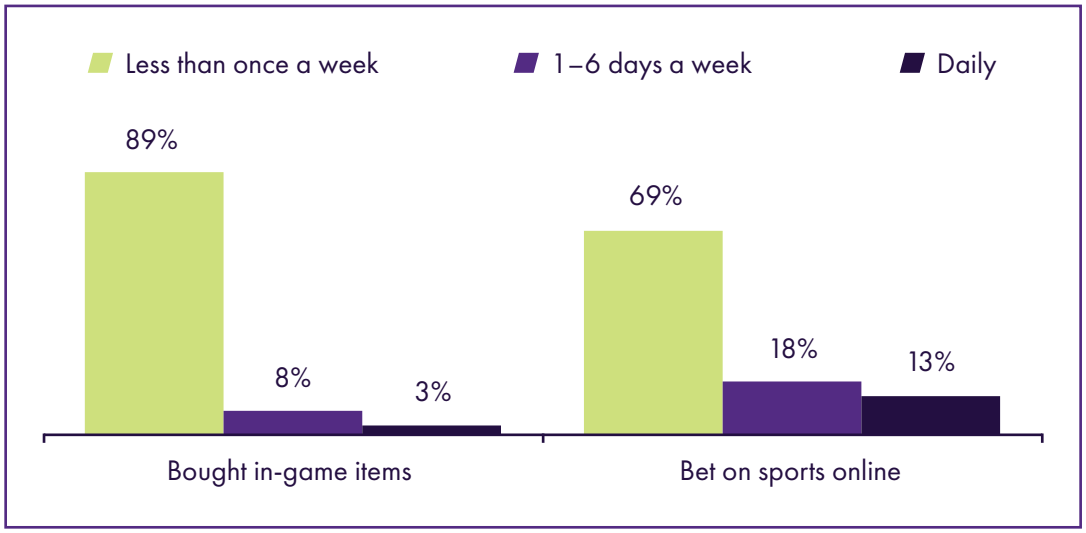
Online sports betting was the least common activity youth engaged in for money. However, it was the activity that participants were the most likely to do daily. For example, 13% of those who engaged in online sports betting did so daily, which was more than three times the rate of those who bought in-game items or lottery tickets/scratch cards, or played cards/dice in person.

FREQUENCY OF PARTICIPATING IN ACTIVITIES FOR MONEY IN THE PAST 12 MONTHS (AMONG THOSE WHO ENGAGED IN THE ACTIVITY)

	Less than once a week	1–6 days a week	Daily
Bought lottery tickets/scratch cards	89%	6%	4%
Bought in-game items	89%	8%	3%
Played cards/dice in person	83%	13%	4%
Played in a gaming tournament	81%	13%	5%
Bet on sports in person	79%	14%	7%
Played cards/dice online	73%	19%	8%
Streamed video games	73%	20%	8%
Bet on sports online	69%	18%	13%

Note: Not all differences between activities were statistically significant.

FREQUENCY OF PARTICIPATING IN ACTIVITIES FOR MONEY IN THE PAST 12 MONTHS (AMONG THOSE WHO ENGAGED IN THE ACTIVITY)



NON-MONETARY GAMBLING & GAMING

> *"[I played] with fake money."*
>
> **—15-year-old youth**
>
> *"We sometimes play for who does the dishes or gets dinner!"*
>
> **—16-year-old youth**

In addition to youth who had engaged in gambling and gaming for money, 36% of 12–18-year-olds participated in at least one of the eight activities without involving money in the past year (i.e., played for something else of value and/or 'just for fun'), including 15% who exclusively played without money.

PLAYED FOR SOMETHING OF VALUE OTHER THAN MONEY

In the past year, 13% of youth had participated in at least one of the eight gaming or gambling activities for something of value other than money, including 9% who did so once a month or less, 2% who did so on 2 or 3 days a month, and 2% who did so at least weekly. Males were the most likely to have gambled in this way (19% vs. 15% of non-binary youth vs. 6% of female youth), and to have done so regularly (e.g., 4% did so weekly vs. 1% of females).

At the Health Service Delivery Area level, rates of playing for something other than money ranged from 11% in South Vancouver Island to 16% in Vancouver. At the larger Health Authority level, youth in the Northern and Interior regions were more likely than those in the rest of the province to play in this way on a weekly basis (3% vs. 2%). There were few other regional differences in who did these activities for something of value other than money.

15% **of youth exclusively played without money in the past year.**

Three quarters of youth (75%) who engaged in at least one of the eight gambling or gaming activities for something of value other than money also played for money. Buying in-game items was the most common way they did so.

ACTIVITIES YOUTH ENGAGED IN FOR MONEY IN THE PAST 12 MONTHS (AMONG THOSE WHO ALSO PLAYED FOR OTHER THINGS OF VALUE)

Bought in-game items	59%
Played in a gaming tournament	32%
Played cards/dice in person	25%
Streamed video games	25%
Bet on sports in person	17%
Bought lottery tickets/scratch cards	16%
Played cards/dice online	13%
Bet on sports online	12%

3 IN 4

youth who engaged in gambling or gaming activities without money also played with money.

PLAYED FOR FUN

There is concern that gambling for fun (e.g., while playing card games) can eventually lead to youth gambling for money, especially if they have regularly been successful at winning while playing for fun (Carran & Griffiths, 2015).

In the past year, 34% of youth had participated in at least one of the eight gambling or gaming activities without involving money or anything else of value (i.e., played for fun), including 8% who did so at least weekly and 3% who did so daily.

"I do sports betting for fun like UFC."

—14-year-old youth

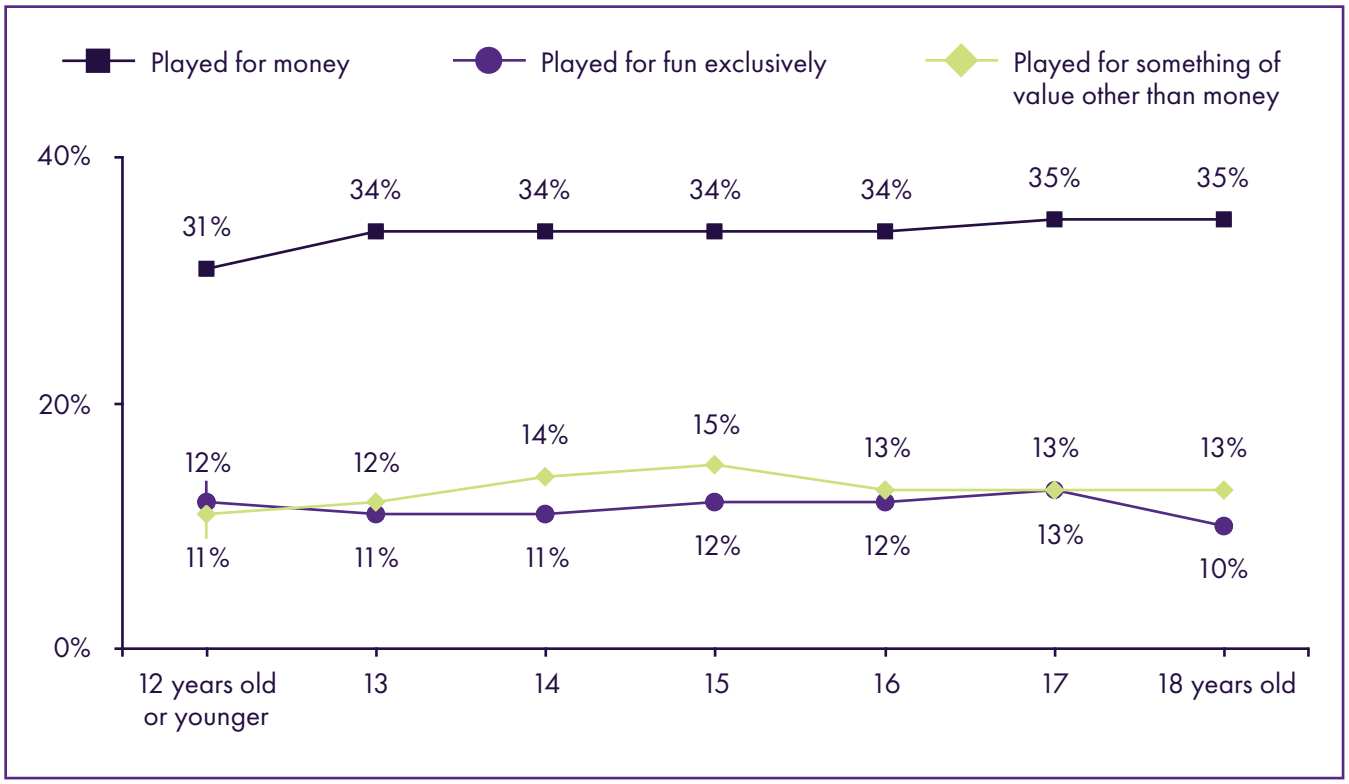
"For the sports betting, it's fantasy drafts that I do with no direct money involved with the app."

—17-year-old youth

Around a third (35%) of youth who played for fun did so exclusively (i.e., did not engage in any of the activities for money or other items of value). Youth who played exclusively for fun were more likely to:

- Identify as a gender minority (e.g., 18% of non-binary youth vs. 12% of females).
- Identify as a sexual minority (e.g., 17% of those who identified as gay or lesbian vs. 11% of those who identified as straight).
- Live in the Vancouver Coastal region (e.g., 14% vs. 10% in the Interior), and particularly in Vancouver (e.g., 16% vs. 9% in Northwest and Northeast).

GAMBLING & GAMING IN THE PAST 12 MONTHS



Note: Not all differences were statistically significant.

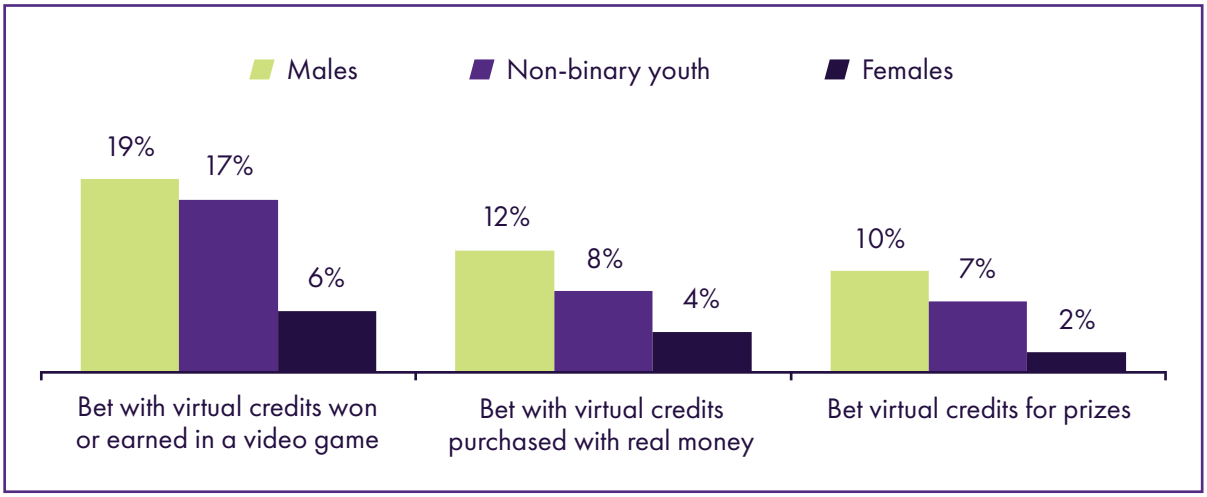
BETTING WITH VIRTUAL CREDITS

Betting with virtual credits in esports and video games (including casino games such as roulette) is rarely age controlled and has been associated with problem gambling among youth (Hing et al., 2022).

In the past month, 19% of BC youth had bet with virtual credits (such as points, gems, coins, or skins) in a video game, including 8% who bet with credits they purchased using real money, and 4% who exclusively bet with real money.

Betting with virtual credits bought with real money was more popular among males, younger youth (e.g., 21% of 12- to 14-year-olds vs. 16% of 18-year-olds), and rural-based youth (9% vs. 8% of urban-based youth). Betting this way was also more common among youth born abroad (9% vs. 7% of those born in Canada), and particularly those who arrived in Canada as refugees (12%).

BET WITH VIRTUAL CREDITS IN THE PAST MONTH



Note: For 'bet with virtual credits won or earned in a video game', the difference between males and non-binary youth was not statistically significant.

1 IN 5

youth aged 14 and younger bet with virtual credits they bought with real money.

BETTING WITH VIRTUAL CREDITS IN RELATION TO GAMING & GAMBLING FOR MONEY

Among youth who bet with virtual credits in the past month, 13% had also engaged in one of the five gambling activities for money on at least a couple of days that month. Also, 19% had bought in-game items, 9% had played in a gaming tournament, and 9% had streamed video games this frequently for money.

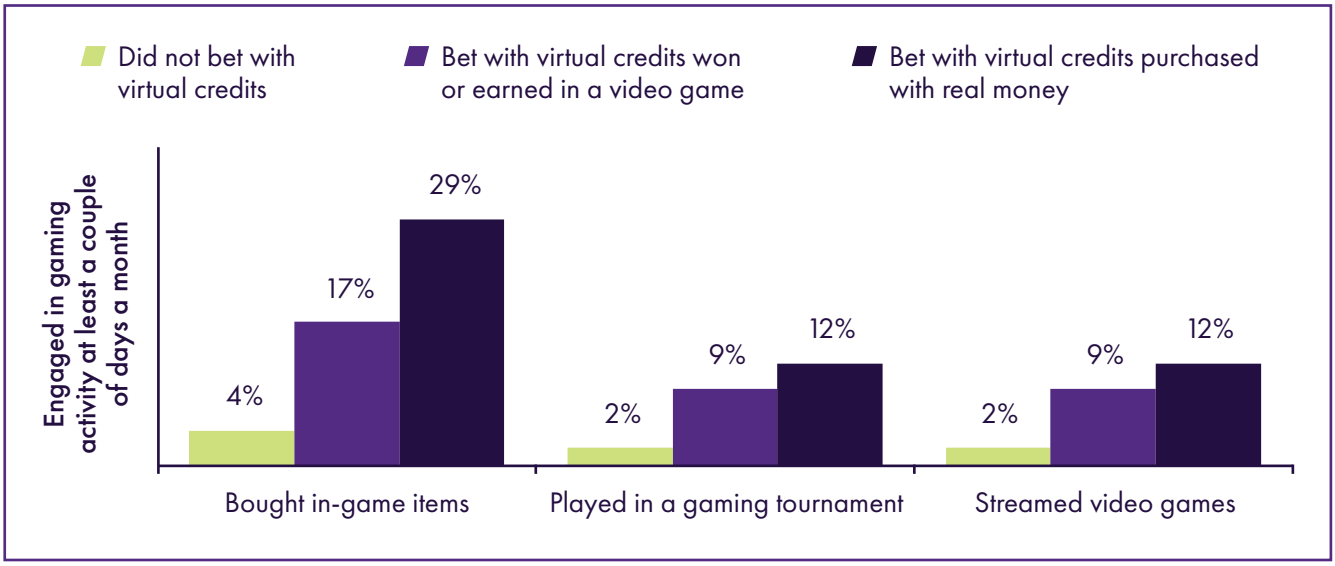
13% **who bet with virtual credits in the past month also gambled for money at least a couple of days that month.**

Youth who bet with virtual credits they bought with real money were more likely to have also used real money in the past year to engage in any of the eight gaming or gambling activities they were asked about. For example, 7% engaged in online sports betting at least a couple of days a month (vs. 1% of those who did not bet with virtual credits).

They were also more likely to have:

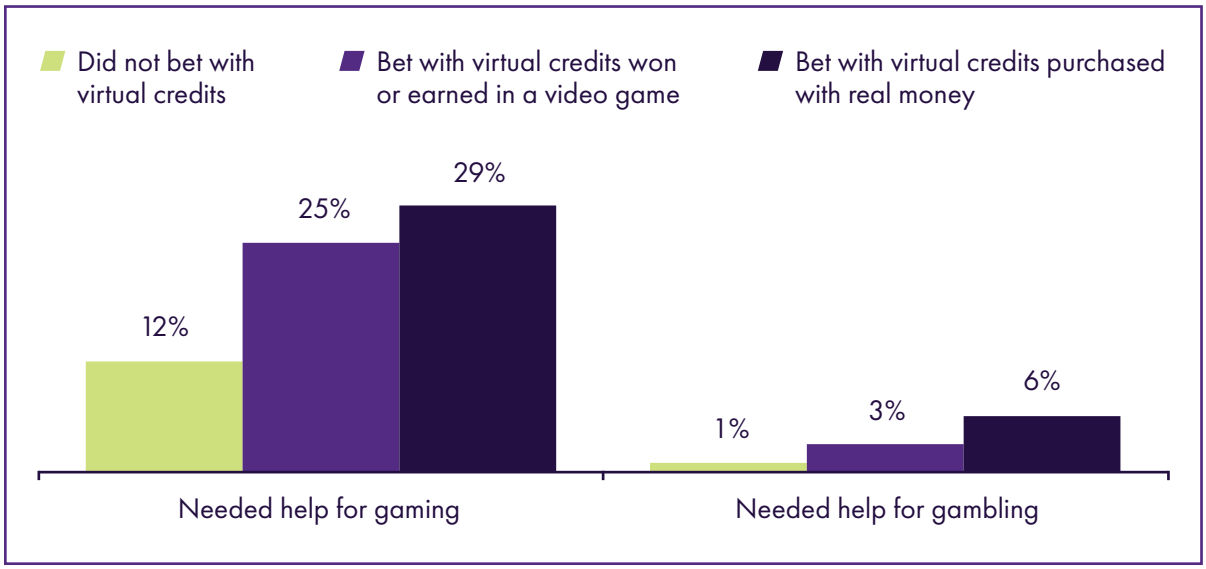
- Used a phone on their last school day to gamble (8% vs. 1% of those who had not bet with virtual credits).
- Played or watched esports on a phone the previous day (37% vs. 19% of those who did not bet with virtual credits in the past month), including after they were expected to be asleep (43% vs. 20%).

YOUTH WHO BET WITH VIRTUAL CREDITS THEY BOUGHT WITH REAL MONEY IN THE PAST MONTH WERE THE MOST LIKELY TO HAVE ENGAGED IN EACH OF THE GAMING ACTIVITIES FOR MONEY DURING THAT TIME



Youth who used real money to purchase virtual credits were more likely than those who acquired these credits in other ways or did not bet with virtual credits to report that they had needed help for their gaming in the past year. These youth were also more likely to have needed help for their gambling during this time.

YOUTH WHO BET WITH VIRTUAL CREDITS THEY BOUGHT WITH REAL MONEY IN THE PAST MONTH WERE THE MOST LIKELY TO NEED HELP FOR THEIR GAMING & GAMBLING IN THE PAST 12 MONTHS



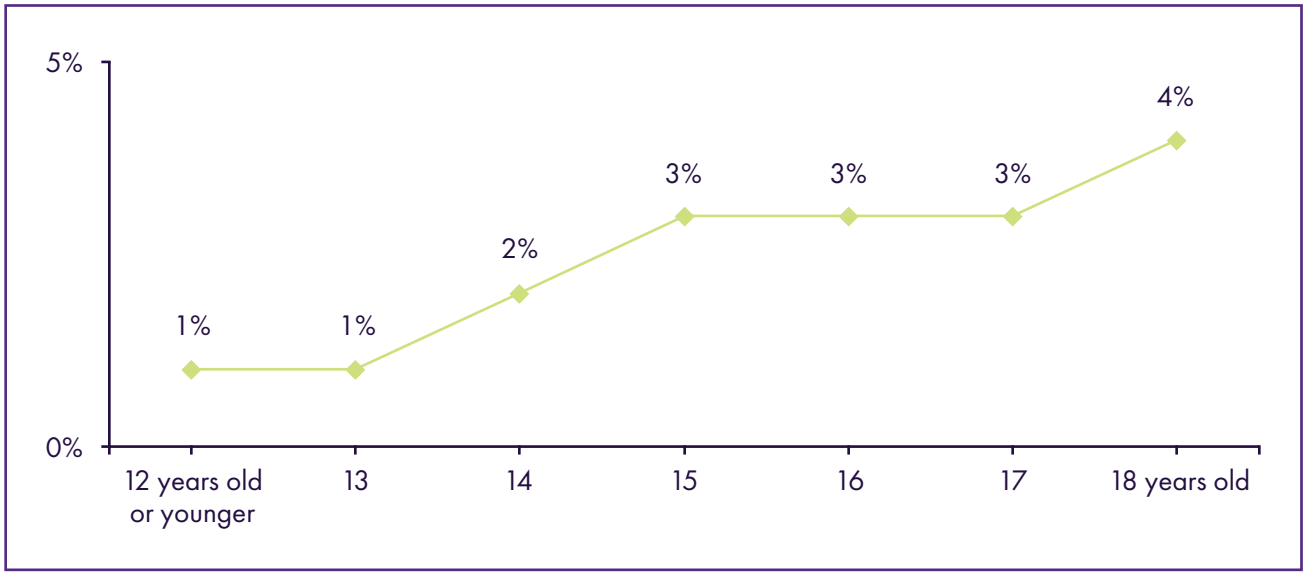
Betting with virtual credits purchased with real money was associated with youth reporting problematic gaming and gambling.

MOBILE GAMBLING & GAMING

Youth most commonly used a phone on the previous school day for scrolling on social media and connecting with family and friends. Some also used a phone to watch or play esports (18%), watch or play other games (26%), and gamble (2%). Males and non-binary youth were more likely than females to have used a phone to gamble that day (e.g., 4% of males vs. 1% of females), as were older youth in comparison to younger ones.

Older youth were more likely to have used a phone on the previous school day to gamble.

USED A PHONE OR TABLET FOR GAMBLING ON LAST SCHOOL DAY



Note: Not all age differences were statistically significant.

Among youth who used a phone to gamble on the previous school day, 17% reported engaging in at least one activity for money on a daily basis in the past year. The most popular activity was online sports betting.

ACTIVITIES YOUTH ENGAGED IN FOR MONEY DAILY IN THE PAST 12 MONTHS (AMONG THOSE WHO USED A PHONE TO GAMBLE ON THEIR LAST SCHOOL DAY)

Bet on sports online	12%
Played cards/dice online	8%
Bought lottery tickets/scratch cards	8%
Bought in-game items	8%
Played cards/dice in person	8%
Bet on sports in person	8%
Played in a gaming tournament	6%
Streamed video games	6%

Youth who used a phone to watch or play games were more likely to have also used it to gamble. For example, 6% of those who used a phone to watch or play esports had also used it to gamble that day (vs. 2% of those who had not watched or played esports on a phone).

Females were the least likely to have used a phone to gamble.

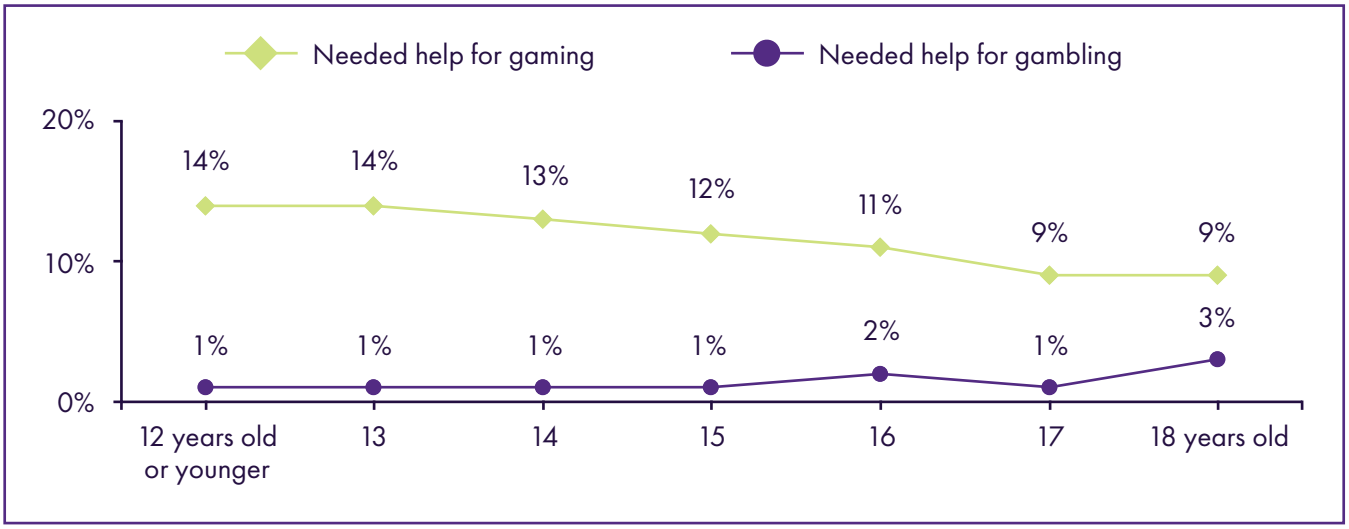
PROBLEMATIC GAMBLING & GAMING

> *"I have a gambling addiction but it's chill cuz I be making big money lowkey."*
>
> **—15-year-old youth**

Youth were asked whether their gaming and gambling had become problematic enough that they needed help in the past year. Overall, 12% reported needing help for their gaming, 1% for their gambling, and 1% needed help for both. Non-binary youth were the most likely to report needing help for both gambling and gaming (2% vs. 1% of males vs. <1% of females).

The majority of youth (60%) who reported they had needed help for their gambling also needed help for their gaming in the past year. However, this was not the case in reverse, as 7% of those who needed help for their gaming also needed help for their gambling.

NEEDED HELP FOR GAMBLING & GAMING IN THE PAST 12 MONTHS



Note: Not all age differences were statistically significant.

1% **of youth needed help for both their gaming and gambling in the past year.**

NEEDED HELP FOR GAMBLING

Around 2-3% of North American youth experience problematic gambling, with males and older youth more likely to report such problems. Other risk factors for problem gambling include substance use, antisocial behaviours, depressive symptoms, and poor academic performance (Calado et al., 2017; Dowling et al., 2017; Emond & Griffiths, 2020).

Increased accessibility to gambling venues has been related to increased problematic gambling among young people (Kang et al., 2019), as has participation in more than one form of gambling (González-Roz et al., 2017) and gambling online (Emond et al., 2022).

The percentage of youth who reported needing help for their gambling in the past year rose slightly from just under 1% in 2018 to over 1%. The rate was higher among those who gambled for money during that time (e.g., 3% vs. <1% of those who played exclusively for fun).

The percentage who reported that their gambling had reached a point where they needed help was lower than for those who needed help for their social media use (18%), video gaming (12%), and various types of substance use (e.g., 5% needed help for their vaping).

Among youth who gambled for money in the past year, older youth were more likely to report needing help for their gambling (6% of those aged 16 or older vs. 4% of those aged 15 or younger), as were non-binary youth (13% vs. 6% of males vs. 1% of females) and trans youth (15% vs. 4% of cisgender youth).

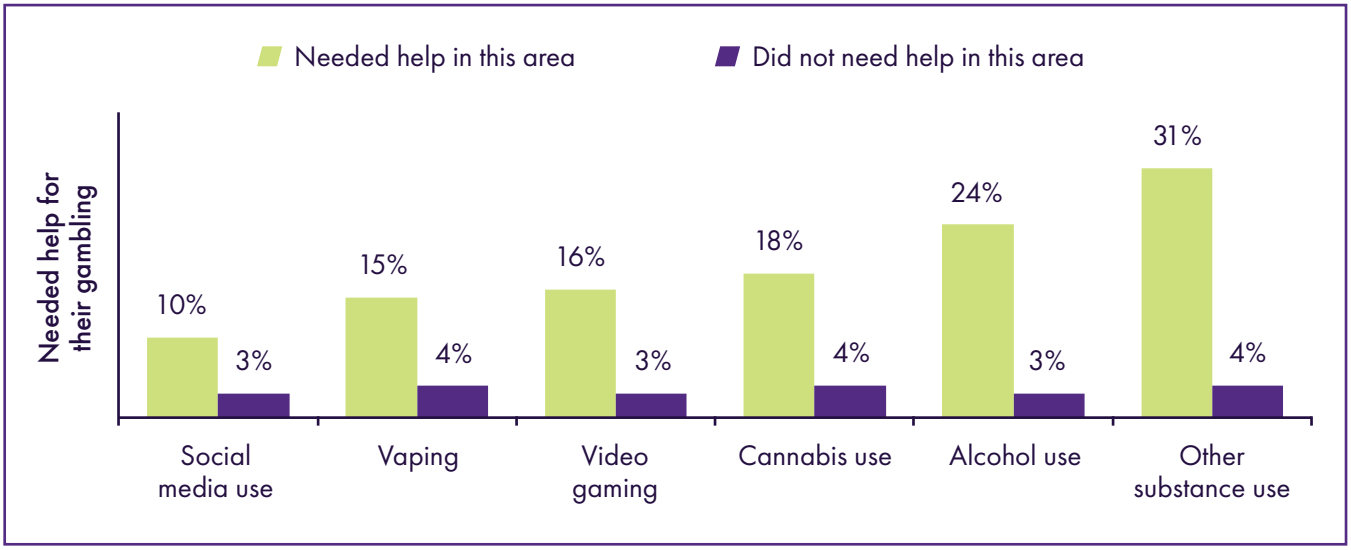
The profile of other youth more likely to have needed help for their gambling was similar to the profile of youth who were more likely to gamble for money on a regular basis. This included youth who:

- Felt they spent too much time alone (7% vs. 4% of those who spent the right amount on their own).
- Had no close friends in their school or neighbourhood (10% vs. 4% of those who had at least one in-person friend).
- Had online friends whom they had never met in person (6% vs. 4% of those who had no such friends).
- Were the only child in their household (6% vs. 4% of those who lived with other children or youth).
- Did not get along with those around them (8% vs. 4% of those who got along with others).
- Lived alone (24%* vs. 5% of those who lived with others).
- Went to bed hungry because there was not enough money for food at home (9% vs. 4% of those who never went to bed hungry for this reason).
- Experienced material deprivation (e.g., 9% who were deprived of two or more items on the Youth Deprivation Index vs. 4% of those who were not deprived of any items).
- Reported having specific conditions, including autism spectrum disorder (15% vs. 4% of those without this condition) and ADHD (8% vs. 4%).

- Worked at a paid job in excess of 20 hours a week during the school year (13% vs. 5% of those who worked fewer hours).
- Watched or played esports or other games on a phone on their last school day (6% vs. 4% of those who did not engage in this activity).
- Were gaming after the time they were expected to be asleep (e.g., 7% who played or watched esports vs. 3% who did not).
- Needed help in the past year with their social media use, video gaming, or substance use.

Youth who were isolated were more likely to experience problematic gambling.

YOUTH WHO NEEDED HELP IN OTHER AREAS IN THE PAST 12 MONTHS WERE MORE LIKELY TO ALSO NEED HELP WITH THEIR GAMBLING DURING THIS TIME



Note: Among youth who gambled for money in the past 12 months.

ACTIVITY ENGAGEMENT

The more of the five gambling activities youth engaged in for money in the past year, the more likely they were to report that their gambling was at a point where they needed help. For example, 2% of youth who engaged in one gambling activity reported needing help, compared to 4% of those who engaged in two, 14% who engaged in three or four, and 28% who engaged in all five gambling activities. The only exception was playing cards or dice online where youth were equally likely to need help if they played exclusively or played in combination with other gambling activities.

The more regularly youth gambled for money in the past year, the more likely they were to report needing help for their gambling. For example, 15% of those who gambled at least weekly needed help, compared to 5% who gambled 2 or 3 days a month and 2% who gambled less regularly.

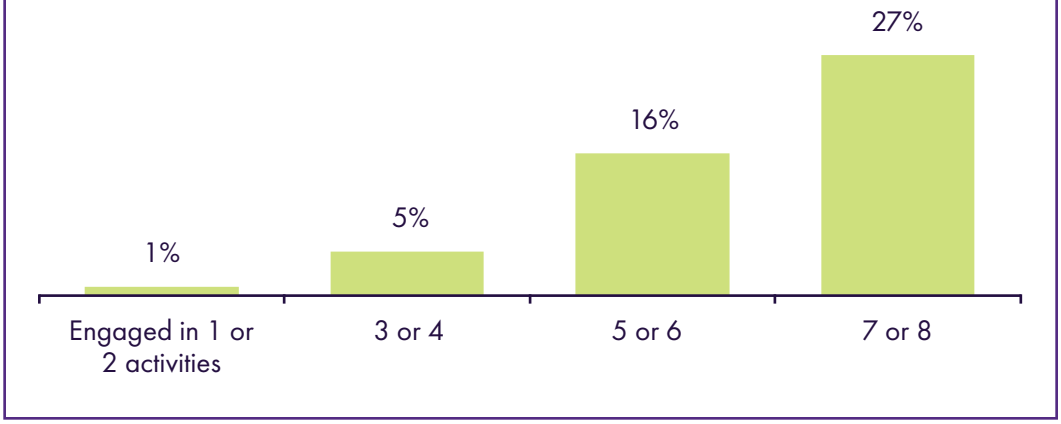
Youth who engaged exclusively in online gambling were more likely than those who gambled exclusively in person to report that their gambling was at a point where they needed help. For example, 8% of youth who exclusively played cards/dice or bet on sports online needed help, compared to 2% of those who exclusively did these in person.

Youth who engaged in both gambling and gaming activities for money were more likely to need help for their gambling than those who did either of these exclusively (7% needed help vs. 3% of those who exclusively engaged in gambling activities vs. 1% of those who exclusively engaged in gaming activities for money).

The more ways in which youth gambled, the more likely they were to report problematic gambling.

Youth who were gaming and gambling were more likely to report needing help for their gambling than those who did either exclusively.

THE MORE ACTIVITIES YOUTH ENGAGED IN FOR MONEY IN THE PAST 12 MONTHS, THE MORE LIKELY THEY WERE TO REPORT NEEDING HELP FOR THEIR GAMBLING DURING THIS TIME



Note: Among youth who played for money in the past 12 months.
Note: The activities included five gambling activities (buying lottery tickets/scratch cards, betting on sports in person, betting on sports online, playing cards/dice in person, and playing cards/dice online) and three gaming activities (buying in-game items, playing in gaming tournaments, and streaming video games).

Additionally, the more regularly youth engaged in any of the eight gaming and gambling activities, the more likely they were to report needing help for their gambling.

THE MORE OFTEN YOUTH TOOK PART IN EACH ACTIVITY FOR MONEY IN THE PAST 12 MONTHS, THE MORE LIKELY THEY WERE TO NEED HELP FOR THEIR GAMBLING DURING THIS TIME

	Engaged at least once in the past year	Engaged at least weekly	At least a couple of days a week	Daily
Bet on sports online	15%	28%	35%	43%
Played cards/dice online	12%	23%	28%	37%
Bet on sports in person	8%	20%	24%	30%
Bought lottery tickets/scratch cards	7%	31%	42%	46%*
Streamed video games	6%	10%	12%	18%
Played in a gaming tournament	6%	12%	16%	22%
Played cards/dice in person	6%	14%	18%	31%
Bought in-game items	3%	13%	19%	27%

Note: Among youth who played for money in the past 12 months.
*Percentage should be interpreted with caution as the standard error was higher than others, but still within the releasable range.

The more regularly youth took part in any of the gaming and gambling activities, the more likely they were to need help for their gambling.

NEEDED HELP FOR GAMING

Youth who spend money on games with simulated gambling elements have been found to be at greater risk of their gaming becoming problematic (Hing et al., 2023). Playing these types of games may also increase the likelihood that young people go on to experience problems with their gambling (Brooks & Clark, 2023; Primi et al, 2022).

In the past year, 12% of youth reported that they needed help for their gaming. Youth who were more likely to report needing help included gender and sexual minority youth (e.g., 19% of non-binary youth vs. 16% of males vs. 6% of females); youth born abroad (13% vs. 11% of those born in Canada); and younger youth (e.g., 14% of 13-year-olds vs. 9% of 17-year-olds).

There were also some regional differences with youth in the Vancouver Coastal region the most likely to report needing help with their gaming (e.g., 14% vs. 10% of Vancouver Island and Interior youth), and specifically those in Richmond (e.g., 16% vs. 9% in Thompson Cariboo Shuswap).

Around

1 IN 8

youth needed help for their gaming in the past year.

Youth in poverty were more likely to experience problematic gaming.

Some of the same life experiences and challenges that were linked to reporting problematic gambling were also associated with youth being more likely to report needing help for their gaming, including:

- Having government care experience (20% vs. 11% of youth who had not been in care).
- Material deprivation (e.g., 19% of those deprived of two or more items on the Youth Deprivation Index vs. 10% of those not deprived of any items).
- Having no close friends in their school or neighbourhood (15% vs. 11% of those who had these friends).
- Having online friends whom they had never met in person (18% vs. 8% of those without this experience).
- Going to bed hungry at least sometimes because there was not enough money for food (19% vs. 11% of those who never went to bed hungry).
- Experiencing problematic social media use (40% vs. 6% of those who did not need help for this in the past year), and substance use (19% vs. 11%).
- Watching or playing esports or other games on a phone on their last school day (21% vs. 7% of those who did not engage in these activities).
- Reporting they were playing or watching esports (22% vs. 9% of those who did not engage in this activity) and gaming other than esports (22% vs. 7%) after the time they were expected to be asleep.
- Spending too much time on their own (20% vs. 10% of those who felt they spent the right amount of time alone).
- Not getting along with those around them (21% vs. 10% of those who got along with others).
- Having autism spectrum disorder (18% vs. 11% of those without this condition) and ADHD (17% vs. 11%).

However, some factors were unique to reporting problematic gaming, including:

- Often or always feeling lonely (16% vs. 10% of those who hardly ever or never felt this).
- Reporting having a mental health condition (e.g., 15% of those with depression vs. 11% without).
- Experiencing barriers to participating in extracurricular sports and other physical activities (13% vs. 9% of those who did not experience barriers).
- Being bullied at school or while getting to or from school in the past year (14% vs. 10% who did not have this experience).
- Not working (13% vs. 10% who worked during the school year).

Additionally, 60% of youth who reported that they had needed help for their gambling in the past year had also needed help for their gaming during this time (vs. 11% of those who had not needed help for gambling).

ACTIVITY ENGAGEMENT

At least 1 in 4 youth who engaged in gaming activities for money in the past year reported they needed help with their gaming during that time, including 29% who streamed video games, 28% who played in a gaming tournament, and 25% who bought in-game items.

Generally, the more regularly youth had engaged in gaming activities, the more likely they were to report needing help. For example, 45% of youth who played in a gaming tournament daily needed help for their gaming, compared to 29% who played once a week and 11% who played less than weekly. Similarly, 47% of youth who bought in-game items daily needed help for their gaming, compared to 33% who did so once a week, and 11% who did so less than weekly.

The more gaming activities youth had engaged in for money in the past year, the more likely they were to report needing help for their gaming in that time. For example, 21% of youth who engaged in one gaming activity for money reported needing help for their gaming, compared to 33% who engaged in all three.

Additionally, 39% of those who were engaging in one gaming activity for money daily reported needing help for their gaming, and this rate almost doubled (74%) among those who engaged in two activities daily.

Among youth who reported needing help for their gaming in the past year, 56% engaged in at least one of the eight gaming or gambling activities for money, including 26% who participated in at least one of the five gambling activities.

Youth who had not played with real money also reported their gaming had become problematic in the past year, including 10% who played exclusively 'for fun.'

Gaming and gambling without money was also linked to problematic gaming.

POTENTIAL HEALTH RISKS ASSOCIATED WITH REGULAR GAMBLING & GAMING

Regular gambling refers to engaging in at least one of the five gambling activities for money at least weekly in the past 12 months. Regular gaming refers to engaging in at least one of the three gaming-related activities for money at least weekly during this time.

"Do video games and mental illness have a connection?"

—17-year-old youth

"I would like to learn how gaming and how relationships can affect my mental health."

—17-year-old youth

Although the direction of the relationship cannot be determined, there appeared to be an association between regular gambling and gaming and youth experiencing challenges to their well-being. These included:

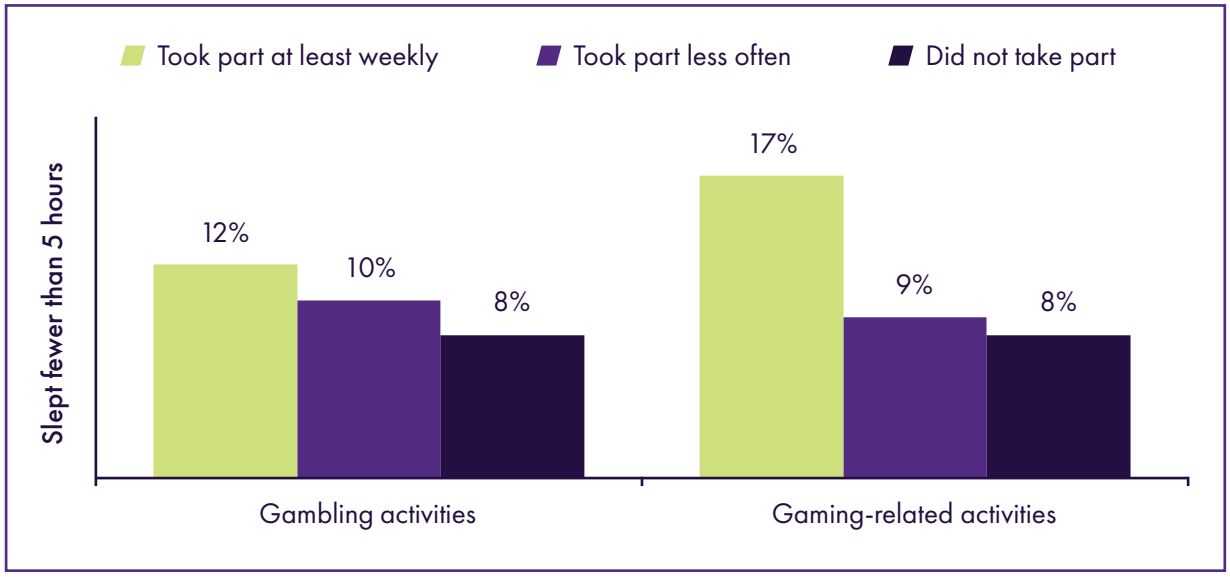
- **Problems at home.** For example, 10% of youth who gambled at least weekly in the past year ran away from home during this time (vs. 7% of those who gambled less regularly vs. 5% of those who did not gamble for money).
- **Mental health challenges.** For example, youth who were gaming on at least a weekly basis were more likely to have experienced extreme despair in the past month (11% vs. 8% of those who were gaming less regularly or not at all); and to have seriously considered suicide (22% vs. 18%) and attempted suicide (10% vs. 5%) in the past year. Similarly, youth who gambled regularly were more likely to have attempted suicide in the past year (8% vs. 5% of those who did not gamble weekly).

- **Fewer hours of sleep.** For example, sleeping four hours or less the previous night was more common among youth who regularly played in a gaming tournament (20% vs. 10% who played in a gaming tournament less than weekly vs. 8% who did not play) and among those who streamed video games regularly (20% vs. 13% vs. 8%). Similarly, youth who bought in-game items at least weekly were more likely to have experienced fewer hours of sleep (19% slept four hours or less vs. 9% vs. 8%), and those who bought in-game items every day were the most likely to have experienced reduced sleep (28% had slept four hours or less the previous night).

  Also, youth who gambled at least weekly were more likely to be playing or watching esports after they were expected to be asleep (39% vs. 28% of those who gambled less often vs. 17% who never gambled for money).

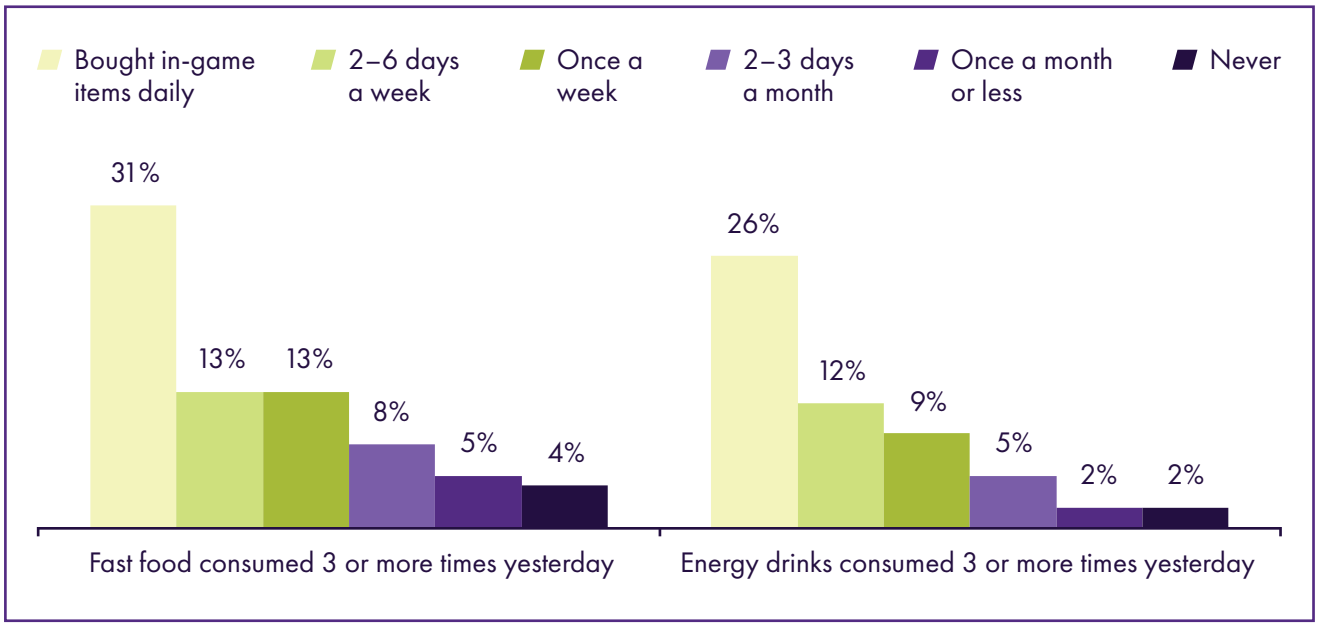
- **Disrupted meals.** For example, youth who gambled at least weekly were more likely than those who gambled less often to skip meals, including breakfast (20% did not eat breakfast on any day in the past week vs. 15%), lunch (7% vs. 5%), and dinner (2% vs. 1%).

THE MORE OFTEN YOUTH PARTICIPATED IN GAMBLING & GAMING ACTIVITIES FOR MONEY IN THE PAST 12 MONTHS, THE MORE LIKELY THEY WERE TO SLEEP FEWER THAN 5 HOURS THE PREVIOUS NIGHT



Less healthy eating. Regular gaming and gambling were linked to fast food and energy drink consumption. For example, 58% of those who were gaming at least weekly had eaten fast food the day before completing the survey (vs. 49% of those who were gaming less regularly vs. 43% who did not engage in gaming for money), and 30% drank energy drinks the previous day (vs. 16% vs. 13%).

YOUTH WHO BOUGHT IN-GAME ITEMS FOR MONEY EVERY DAY IN THE PAST 12 MONTHS WERE THE MOST LIKELY TO HAVE HAD FAST FOOD & ENERGY DRINKS THREE OR MORE TIMES YESTERDAY

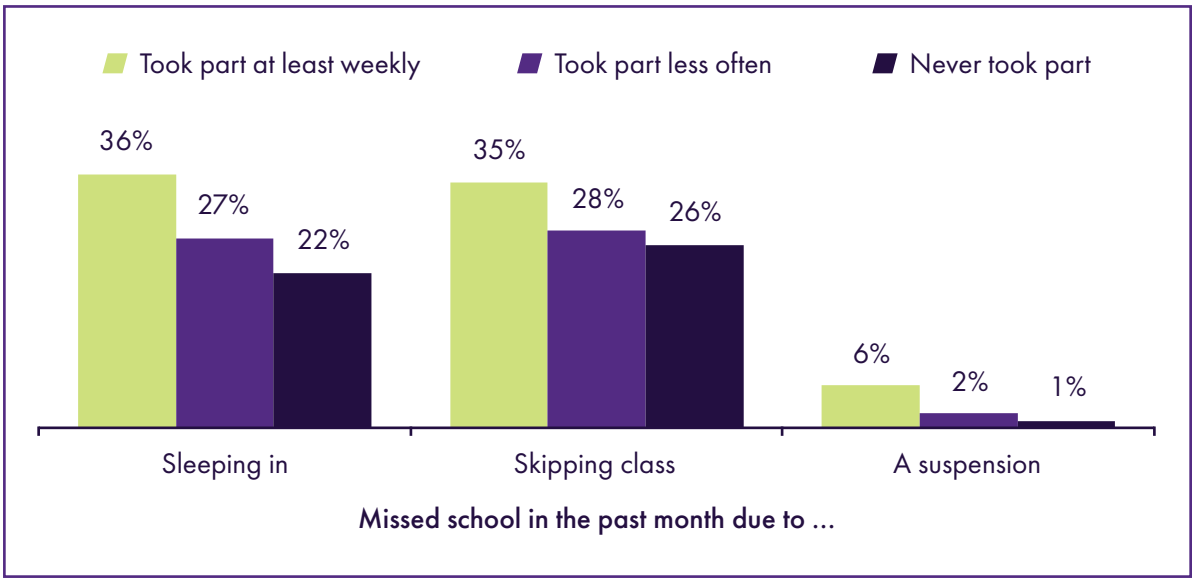


Note: Not all differences were statistically significant.

Regular gaming was associated with energy drink consumption and reduced sleep.

- **Reduced school attendance.** For example, youth who gambled for money at least weekly were more likely to have missed school because they slept in (37% vs. 30% of those who gambled less often vs. 22% who had not gambled for money in the past year) and because they got suspended (6% vs. 3% vs. 1%). A similar pattern was seen for gaming.

THE MORE OFTEN YOUTH PARTICIPATED IN GAMING ACTIVITIES FOR MONEY IN THE PAST 12 MONTHS, THE MORE LIKELY THEY WERE TO MISS SCHOOL



Note: For 'skipping class', the difference between 'took part less than weekly' and 'never took part' was not statistically significant.

37% **who gambled for money regularly missed school in the past month because they slept in.**

VIOLENCE & VICTIMIZATION

Online gambling and gaming can increase the risk that youth will experience verbal sexual harassment, discrimination, and cyberbullying. Also, the more regularly they engage in online gambling and gaming, the more likely they are to experience these forms of violence. Increased experiences of verbal sexual harassment and in-person victimization have also been reported for youth who regularly bought lottery tickets/scratch cards (McInroy & Mishna, 2017; Nguyen et al., 2022).

"[I want to talk about] how bad online gaming gets. I've been told to kill myself more times this year than I've been hugged because I was not good or too good for the game."

—17-year-old youth

"Online grooming is a real thing. (Take it from me, being groomed and convinced to send explicit images and texts and 3 years later I'm raging depressed and anxious lesbian with no life, no future, no real friends, no GF, spending all my time and money on a first-person shooter video game called Valorant)."

—16-year-old youth

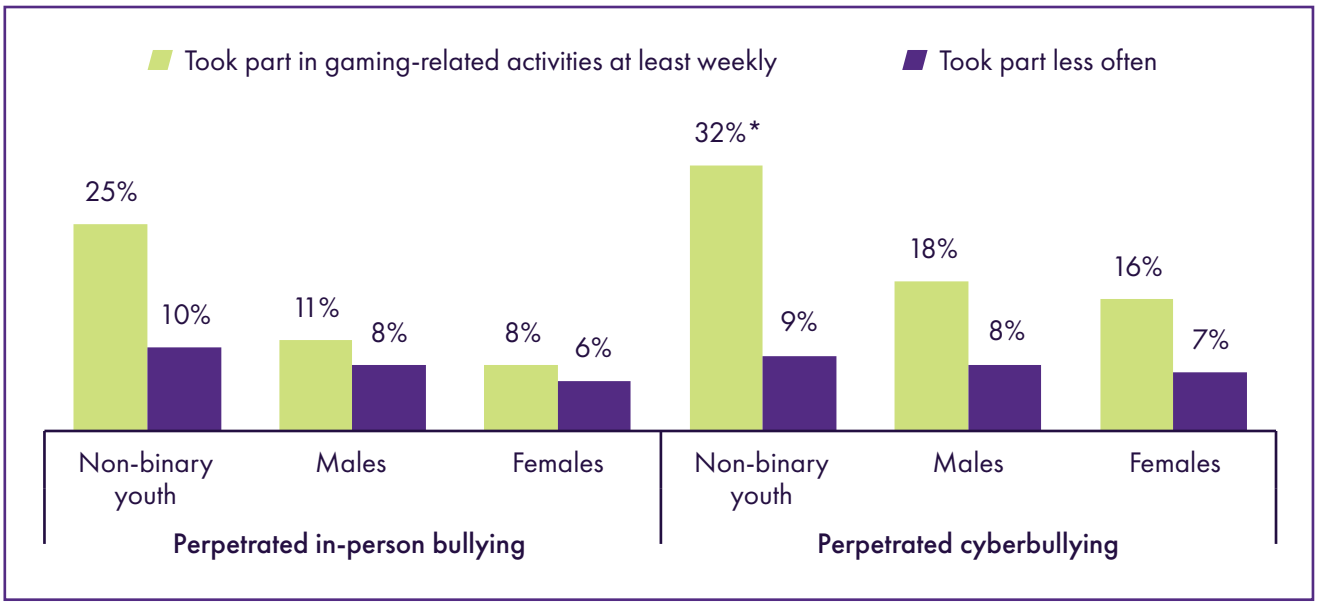
Consistent with past studies, results from the 2023 BC AHS showed that regular gaming and gambling were linked to violence and victimization, including:

- **Sexual harassment.** For example, 49% of youth who were gaming at least weekly were sexually harassed in the past year, compared to 44% of those who played less regularly or not at all. The increased risk was seen for youth of all genders (e.g., 38% of males who were gaming regularly had experienced verbal sexual harassment vs. 33% of those who gamed less regularly vs. 24% of those who did not game for money in the past year).
- **Other types of victimization.** For example, 26% of youth who engaged in regular gaming had been cyberbullied in the past year, compared to 20% of those who were gaming less regularly, and 13% of those who did not engage in gaming in the past year. Also, 18% of those who gambled regularly had been physically attacked in the past year, compared to 13% who gambled less often, and 7% who did not gamble at all in the past year.

Regular gaming and gambling were associated with violence victimization and perpetration.

- **In-person and online violence perpetration.** For example, youth who regularly gambled were more likely to have perpetrated bullying in person (15% vs. 7% of those who did not gamble weekly) and online (18% vs. 8%). However, regular engagement in gambling or gaming was not associated with increased perpetration of in-person bullying for females.

YOUTH WHO REGULARLY ENGAGED IN GAMING ACTIVITIES FOR MONEY WERE MORE LIKELY TO PERPETRATE IN-PERSON BULLYING & CYBERBULLYING IN THE PAST 12 MONTHS



Note: The difference between females who 'took part at least weekly' and those who 'took part less often' was not statistically significant for 'perpetrated in-person bullying'.

*Percentage estimate should be interpreted with caution as the standard error was higher than others, but still within the releasable range.

REDUCING THE LIKELIHOOD OF GAMBLING & GAMING

This section highlights protective factors that were associated with a reduced likelihood of youth engaging in gaming and gambling activities for money in the past year. It also considers whether these protective factors reduced the likelihood that youth who had engaged in these activities for money would go on to do so on a regular basis.

Regular gambling refers to engaging in at least one of the five gambling activities for money at least weekly in the past 12 months. Regular gaming refers to engaging in at least one of the three gaming-related activities for money at least weekly during this time.

FAMILY RELATIONSHIPS

"My dad does not let me play games on Mondays–Fridays."

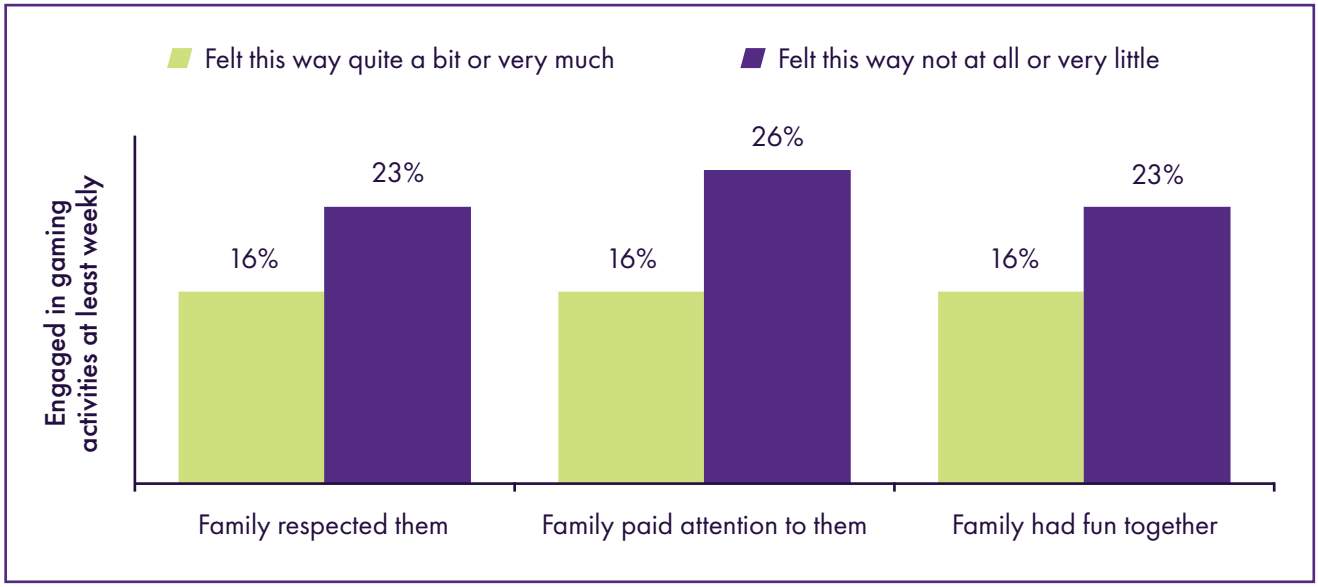
—12-year-old youth

Youth who felt connected to their family were less likely to have taken part in gambling and gaming activities for money, and to have done so regularly. For example, 19% of youth who felt their family paid attention to them quite a bit or a lot had gambled in the past year, compared to 24% of those who felt their family paid attention to them only a little or not at all.

Family connectedness and parental monitoring are key protective factors.

Also, youth who gambled in the past year were half as likely to have bought lottery tickets/scratch cards on a regular basis if they felt their family paid attention to them (3% bought them at least weekly vs. 6% who felt their family did not pay as much attention to them).

YOUTH WHO FELT CONNECTED TO THEIR FAMILY WERE LESS LIKELY TO ENGAGE IN GAMING ACTIVITIES FOR MONEY AT LEAST WEEKLY (AMONG THOSE WHO ENGAGED IN GAMING ACTIVITIES IN THE PAST 12 MONTHS)



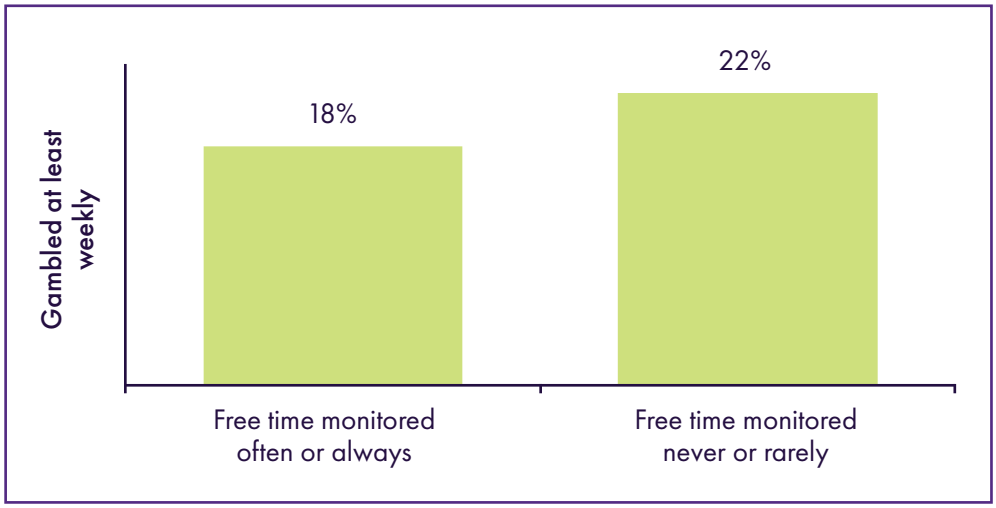
Having fun with their family can be protective for youth against regularly engaging in gaming and gambling for money.

Youth who reported that their parent(s) or guardian(s) knew how they spent their time were less likely to have participated in gambling and gaming activities. For example, those who felt their caregivers often or always monitored their time online were less likely to have played cards or dice online (4% vs. 5% of youth whose caregivers rarely or never monitored their time online) and to have engaged in online sports betting (3% vs. 4%) in the past year.

If youth did engage in gambling and gaming activities, they were less likely to have done so regularly if they had caregivers who knew how they spent their free time. For example, 16% of youth whose caregivers often or always monitored their free time engaged in gaming activities at least weekly, compared to 24% of those whose caregivers rarely or never monitored their free time.

Youth who went offline after their parents expected them to be asleep were less likely to have engaged in gaming or gambling activities for money. For example, 18% of these youth engaged in gaming activities, compared to 26% who did activities like watching or playing esports after bedtime. Also, if they did participate in gaming activities, they were less likely to have done so regularly (13% did so at least weekly vs. 18% of those who engaged in activities after bedtime).

YOUTH WITH CAREGIVERS WHO MONITORED THEIR FREE TIME WERE LESS LIKELY TO REGULARLY GAMBLE FOR MONEY (AMONG THOSE WHO GAMBLED IN THE PAST 12 MONTHS)



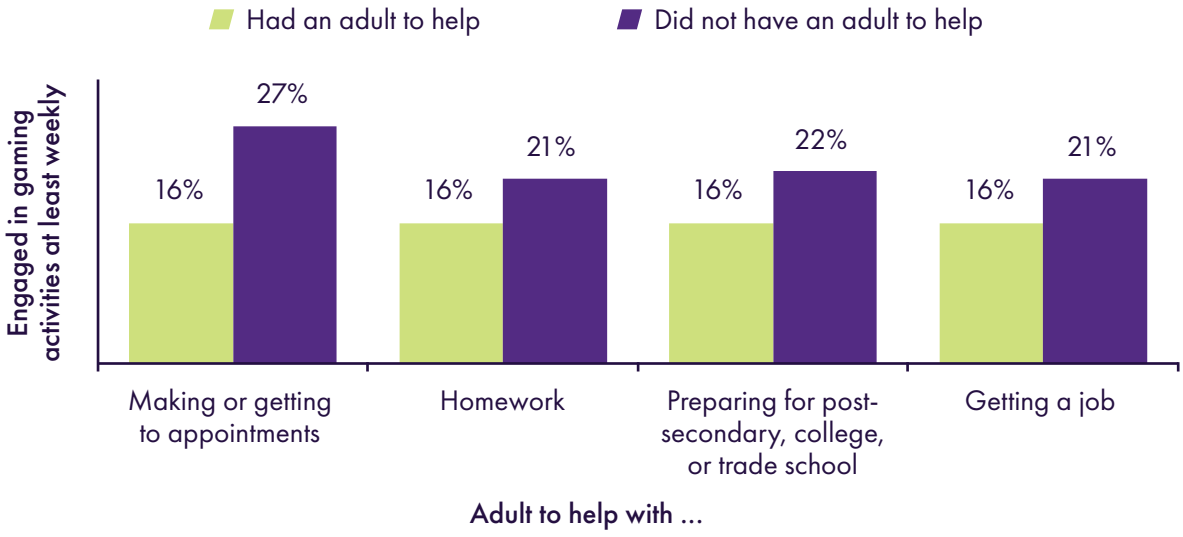
SUPPORTIVE & HELPFUL ADULTS

The presence of adults inside or outside their family whom youth could talk to if they had a serious problem decreased the likelihood that they would engage in gambling and gaming. For example, 19% of youth who had an adult they could talk to had gambled for money in the past year, compared to 22% who did not have such an adult. Also, youth who had gambled were less likely to have done so regularly when they had an adult they could talk to about their problems (e.g., 4% gambled daily vs. 6% of youth without such an adult).

Having an adult who helped with specific tasks was also protective. For example, youth who had an adult to help with learning life skills were less likely to have played cards or dice online in the past year (4% vs. 6% of youth who did not have this adult support).

Similarly, among youth who had gambled for money, those who had an adult to help with tasks, such as making or getting to appointments, were less likely to have gambled regularly (e.g., 17% gambled at least weekly vs. 26% of youth who did not have an adult to help with appointments).

YOUTH WHO HAD AN ADULT TO HELP WITH TASKS WERE LESS LIKELY TO REGULARLY ENGAGE IN GAMING ACTIVITIES FOR MONEY (AMONG THOSE WHO ENGAGED IN THESE ACTIVITIES IN THE PAST 12 MONTHS)



Having access to supportive adults is protective for youth.

SCHOOL

> *"I don't play video games on school days except for Friday nights and weekend mornings."*
>
> **—12-year-old youth**

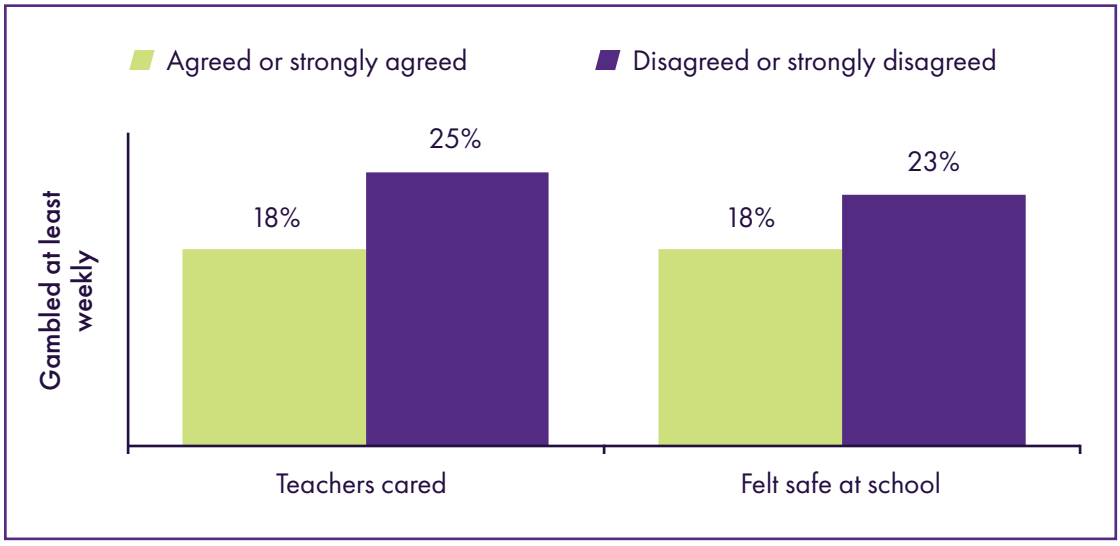
Having positive school experiences has been linked to improved student well-being, and was also associated with reduced engagement in gambling and gaming for money. For example, youth were less likely to gamble for money in the past year if they felt their teachers cared about them (18% vs. 29% of youth who did not feel this way) and if they felt like a part of their school (19% vs. 22%).

Feeling positively about school also reduced the likelihood that youth who engaged in gaming or gambling would do so regularly. For example, if youth had engaged in gaming activities for money in the past year, they were less likely to do so regularly if they felt like a part of their school. Specifically, they were less likely to take part once a week or more in a gaming tournament (7% vs. 11% who did not feel like part of their school), streaming video games (7% vs. 12%), and buying in-game items (8% vs. 14%).

Having post-secondary aspirations also reduced the likelihood that youth regularly engaged in gambling and gaming for money. For example, among youth who participated in gaming activities in the past year, 15% of those who planned to pursue post-secondary education participated on a regular basis, which was half the rate of youth who did not plan to pursue post-secondary education (30%).

Being connected to school and having educational aspirations can be protective against engaging in gaming and gambling for money.

YOUTH WHO HAD POSITIVE SCHOOL EXPERIENCES WERE LESS LIKELY TO REGULARLY GAMBLE FOR MONEY (AMONG THOSE WHO GAMBLED IN THE PAST 12 MONTHS)



FRIENDS

Having meaningful friendships was associated with reduced engagement in gambling and gaming for money. For example, youth who had friends they could share their ups and downs with were less likely than youth without such friends to bet on sports online (4% vs. 5%) and to stream video games (6% vs. 8%) for money in the past year.

Youth who participated in gaming activities for money in the past year were less likely to do so regularly if they had friends they could share their ups and downs with (16% engaged in gaming activities at least weekly vs. 22% of those without such friends). Youth were also half as likely to be engaging in gaming activities on a daily basis if they had such friends (4% vs. 8% of those who did not have such friends; among youth who did these activities for money in the past year).

Having close in-person friends also reduced the likelihood that youth would engage in regular gaming activities for money (16% engaged at least weekly vs. 23% with no in-person friends), including participating on a daily basis (4% vs. 9%).

CONNECTIONS & SENSE OF SAFETY OUTSIDE OF THE HOME

There was also value to youth having connections beyond their home and school. For example, youth who felt quite a bit or very much a part of their community were less likely to stream video games (7% vs. 8% of those who felt only a little or not at all connected) and to buy in-game items (19% vs. 22%) in the past year.

Also, feeling safe in their neighbourhood was protective. For example, if youth had gambled for money in the past year, they were half as likely to have done so regularly if they felt safe in their neighbourhood during the day (17% who often or always felt safe had gambled at least weekly vs. 34% who rarely or never felt safe).

Similarly, among youth who had taken part in gaming activities for money in the past year, those who often or always felt safe in their neighbourhood during the day were less likely to have taken part at least weekly (16% vs. 36% of those who rarely or never felt safe), including every day (3% vs. 18%).

Youth were half as likely to be gaming daily if they had supportive friends.

Feeling safe and connected in their community can reduce the chances youth will be gambling and gaming.

MEANINGFUL PARTICIPATION

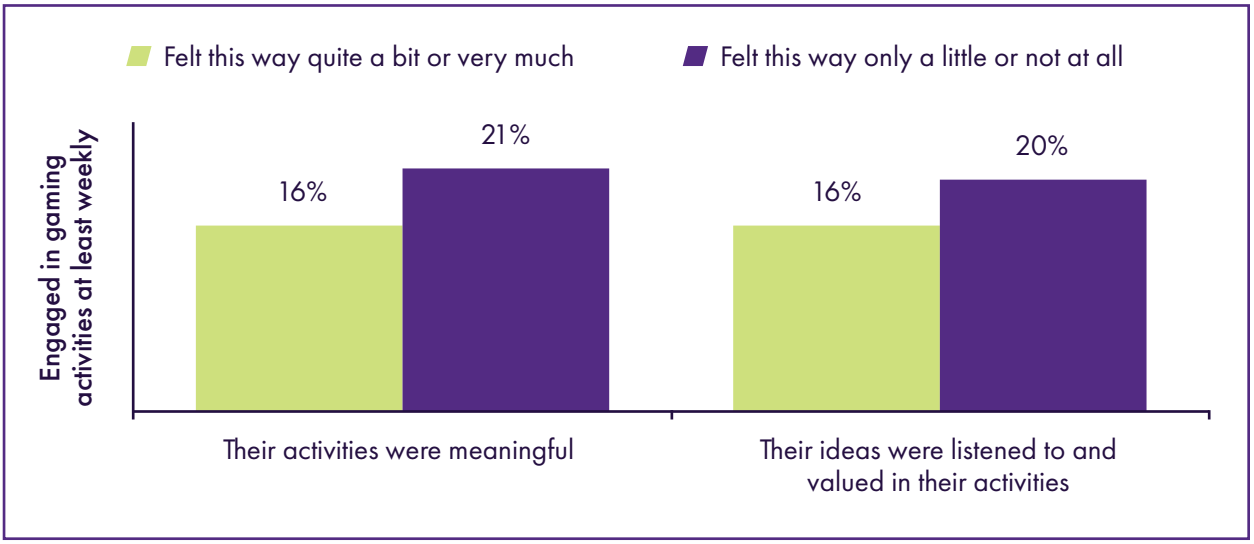
"I video game too much and I need more stuff like volunteer opportunities to do."

—13-year-old youth

Participating in meaningful activities reduced the likelihood that youth would engage in gaming and gambling for money. For example, those who felt their activities were quite or very meaningful were less likely than those who did not feel their activities were as meaningful to have participated in sports betting online (4% vs. 5%), playing cards or dice online (4% vs. 6%), buying in-game items (19% vs. 21%), and streaming video games (6% vs. 8%) in the past year.

Similarly, youth who felt meaningfully engaged and valued in their activities were less likely to have engaged in gambling and gaming for money on a regular basis. For example, among those who gambled for money in the past year, 17% of those who felt their activities were quite or very meaningful gambled at least weekly, compared to 22% of those who felt their activities were a little or not meaningful.

YOUTH WHO FELT MEANINGFULLY ENGAGED & VALUED IN THEIR ACTIVITIES WERE LESS LIKELY TO REGULARLY ENGAGE IN GAMING ACTIVITIES FOR MONEY (AMONG THOSE WHO ENGAGED IN THESE ACTIVITIES IN THE PAST 12 MONTHS)



Gaming and gambling was less frequent among youth who had meaningful activities in their life.

LIFE SATISFACTION

Youth who were satisfied with their life were less likely to have gambled or engaged in gaming-related activities for money. For example, those who felt they had a good life were less likely to have bought lottery tickets or scratch cards (6% vs. 9% of youth who did not feel this way), engaged in online sports betting (4% vs. 5%), and streamed video games (6% vs. 10%) for money in the past year.

Feeling satisfied with their life was also protective among youth who had participated in gambling or gaming in the past 12 months. For example, if youth had engaged in gaming activities for money in the past year, they were less likely to have done so regularly if they felt they had a good life (16% gamed weekly vs. 28% of those who did not feel they had a good life). Similarly, among youth who had gambled for money in the past year, those who felt they had a good life were less likely to have gambled on at least a weekly basis (18% vs. 27%).

Positive life satisfaction ratings were linked to reduced gaming and gambling.

SUPPORTING MORE VULNERABLE YOUTH

As reported earlier, youth who experienced challenges were at greater risk of engaging in regular gaming or gambling for money. These youth often have fewer protective factors in their life. However, when these protective factors were present, the likelihood that they would regularly engage in gambling or gaming was reduced. For example, youth who lived alone but who felt safe at school were nine times less likely to have gambled on a weekly basis than those who lived alone and did not feel safe at school.

Similarly, among youth experiencing material deprivation, those who planned to attend post-secondary were less likely than those without such school plans to have engaged in gaming activities on a weekly basis (4% vs. 11%). Also, among youth with government care experience, those who had an adult to help with tasks were less likely to gamble regularly (5% vs. 18%* of those who did not have such an adult).

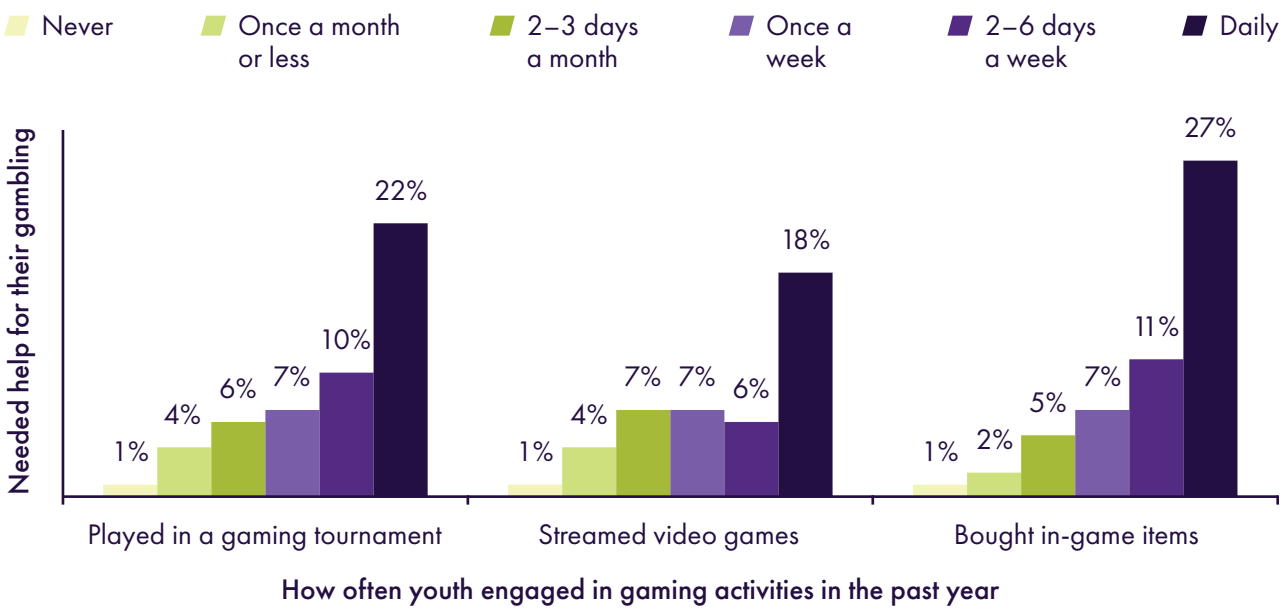
Protective factors were effective even for youth facing barriers.

REDUCING DAILY GAMING

Results presented earlier in this report have shown that gaming for money was more common among BC youth than gambling, and that the more regularly youth were gaming, the more likely they were to also be gambling for money. One in four youth (25%) who needed help with their gambling were engaging in gaming activities at least weekly, and youth who were gaming for money every day were the most likely to report that their gambling had become problematic. For example, over a quarter of youth who bought in-game items on a daily basis reported needing help for their gambling in the past year.

This report has also shown the important role that risk and protective factors can play in increasing or decreasing the likelihood that youth will be gaming regularly. Understanding which of these risk and protective factors were most strongly linked to daily gaming for money can help us to focus supports, which can not only reduce youth's risk for problematic gaming, but also their risk of problematic gambling.

YOUTH WHO ENGAGED IN GAMING ACTIVITIES FOR MONEY ON A DAILY BASIS WERE THE MOST LIKELY TO REPORT NEEDING HELP FOR THEIR GAMBLING IN THE PAST YEAR



Note: Not all differences were statistically significant.

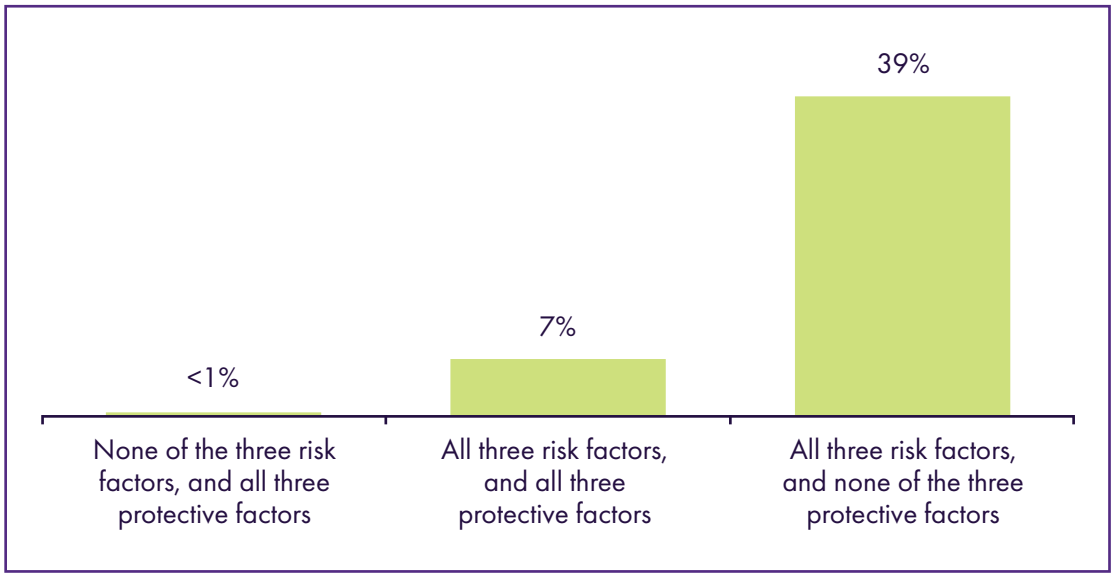
Daily gaming was a risk factor for regular and problematic gambling.

Considering the risk and protective factors discussed earlier in the report, the three strongest risk factors for engaging in gaming for money on a daily basis were youth rarely or never feeling safe in their neighbourhood during the daytime, having online friends whom they had never met in person, and participating in weekly extreme sports. However, even when youth experienced these risk factors, if they went offline before bedtime, planned to pursue post-secondary education, and/or had an adult to help with specific tasks (e.g., learning life skills), their likelihood of gaming daily was reduced.

Going offline at night, having post-secondary plans, and having an adult to help with life tasks were the three strongest protective factors against daily gaming.

In addition, even when youth felt unsafe in their neighbourhood, had online friends they had never met in person, and engaged in weekly extreme sports, the chances they would be gaming daily were reduced if one of the three identified protective factors was present in their lives. For example, if youth had all of the three risk factors and none of the three protective factors, the likelihood of them gaming daily was 39%, but dropped to 19% if they had the three risk factors but also had an adult to help with tasks. Also, the more of the three protective factors they had, the less likely they were to be gaming daily.

LIKELIHOOD YOUTH ENGAGED IN DAILY GAMING ACTIVITIES FOR MONEY IN THE PAST 12 MONTHS IN RELATION TO THE PRESENCE OF RISK & PROTECTIVE FACTORS



Note: Risk factors were rarely or never feeling safe in the neighbourhood during the day, having online friends whom they had never met in person, and participating in extreme sports at least weekly. Protective factors were going offline at bedtime, planning to pursue post-secondary education, and having an adult to help with specific tasks.

There were some gender differences in which risk factors were most strongly associated with daily gaming, as well as which protective factors were the most robust at reducing the likelihood of daily gaming, even when the risk factors were present.

For males, the strongest risk factors for gaming daily were feeling unsafe in their neighbourhood during the daytime, having online friends they had never met in person, and participating in extreme sports at least weekly. However, even when these risk factors were present in males' lives, if they went offline at bedtime, had an adult to talk to about a serious problem, and felt safe at school, their likelihood of gaming daily decreased. For example, among those who had all three risk factors, the likelihood they would engage in daily gaming dropped from 31% if they had none of the three protective factors, to 19% if they went offline at bedtime, and 8% if they had all three of the protective factors.

For females, having online friends they had never met in person was the strongest risk for daily gaming, but the risk was reduced when they had friends to share their ups and downs with and felt safe at school.

Never or rarely feeling safe in their neighbourhood during the daytime, having ADHD, and engaging in weekly extreme sports were the strongest risk factors for non-binary youth engaging in daily gaming, and the strongest protective factors were having an adult to help with tasks and planning to pursue post-secondary education. The likelihood non-binary youth were gaming daily was 7 in 10 (70%) if they had all three risk factors and neither protective factor. This was more than three times the likelihood of non-binary youth who had all three risk factors but had an adult to support them with tasks (19%), and the risk dropped to 2% for those who had both of the protective factors.

GENDER DIFFERENCES IN THE RISK AND PROTECTIVE FACTORS ASSOCIATED WITH GAMING FOR MONEY DAILY

Strongest predictors of daily gaming (risk factors)			
Males	Feeling unsafe in their neighbourhood during the daytime	Having online friends they had not met in person	Participating in extreme sports at least weekly
Females	Having online friends they had not met in person		
Non-binary youth	Feeling unsafe in their neighbourhood during the daytime	Having ADHD	Participating in extreme sports at least weekly

Strongest protective factors which reduced the likelihood of daily gaming even in the presence of risk factors			
Males	Going offline at bedtime	Having an adult to talk to about a serious problem	Feeling safe at school
Females	Friends to share their ups and downs with	Feeling safe at school	
Non-binary youth	Having an adult to help with specific tasks	Planning to pursue post-secondary education	

FINAL THOUGHTS

Youth can find gaming and gambling fun and exciting, and might see engaging in these activities as a way to make friends and connect with others. However, this report has shown that regularly engaging in these activities may increase the likelihood that these behaviours become problematic and negatively impact young people's health and well-being. It also shows the value of youth having in-person friends and opportunities to build positive connections offline in their school and community, particularly for those at risk of being isolated and marginalized.

The report also highlights who might be at increased risk to engage in gaming and gambling in a way that might become problematic, as well as the protective factors and supports that may mitigate that risk. For example, knowing that youth involved in sports are more likely to bet on sports suggests there may be a role for coaches and others involved in youth sports to talk to young people about gambling, recognize the signs that someone may be struggling, and know how to connect youth with resources that could help.

Coaches and other supportive adults play a key role in young people's healthy development. However, such adults may be unaware or feel ill-equipped for the important part they can play in supporting youth in the areas of gaming and gambling. Spending time with youth, encouraging them to disconnect from technology, modelling spending time offline, and providing barrier-free opportunities to participate in in-person activities and events may all be helpful in bolstering protective factors that can reduce the likelihood of regular gaming and gambling.

Providing non-judgemental opportunities for youth to discuss their gaming and gambling (including educating adults on current trends and games) can be helpful. It can also be helpful to talk with them about signs that their behaviour is becoming unhealthy and where they might be able to get support if they are interested.

The report findings showing a decrease in youth purchasing lottery tickets and scratch cards and an increase in gambling in ways that are not as regulated suggest that legislation, policies, and practices may influence youth's decisions to spend money gaming and gambling. When the next BC AHS is completed in 2028, it will be interesting to note whether policy changes such as the recently introduced school cellphone ban have impacted online gaming and gambling rates.

Below are some suggestions for anyone wanting to reduce their gaming and gambling. There are also resources available for youth who may be struggling in these areas. These include services and supports through *Gambling Support BC* which can be accessed at *gamblingsupportbc.ca* or by calling *1-888-795-6111* (available 24/7).

Recommendations for reducing the likelihood of gaming becoming problematic include:

- Set a time limit for playing (e.g., 2 hours a day).
- Take breaks when playing.
- Recognize what times in the day may lead to excessive gaming and avoid playing during these times.
- Avoid online settings and games that may bring out charged emotions or potentially unhealthy behaviours.
- Make sure to balance screen time with physical activity and other activities that are healthy.
- Spend time connecting with people in-person away from the screen.
- Avoid games that have the option to play with real money.
- Enable and use parental controls and/or block the ability to play with real money in games, where possible.
- If playing games with the option to use real money, talk to a trusted adult before doing so.
- Disengage from all devices and wind down before bed.
- Help your family or have them help you play video games in a healthy way.

Similar recommendations apply to gambling. Additional suggestions include:

- Do not bet more than you can afford to lose.
- Be aware of what might 'trigger' you to spend money on gambling and have a strategy to address this.
- Do not gamble when you are upset or stressed.
- Limit your alcohol and other substance intake while gambling.
- Know how a game works before spending money to play.
- Do not try to win back what you have lost.

Be aware that gaming and gambling sites that encourage using real currency are designed to make money.

MCCREARY RESOURCES

To request a presentation or workshop of the findings in this report and for further details about all the resources listed below, email *mccreary@mcs.bc.ca*. Please also consider joining our community mailing list (email *mccreary@mcs.bc.ca* to join).

We are currently creating additional materials based on the findings in this report. These are intended to encourage young people to understand the role that gaming and gambling might play in their life; to help them recognize when their participation may be having a negative impact on their health and well-being; and to help ensure they know where to go to access support if they want to reduce or stop their gaming and gambling.

2023 BC AHS

To view provincial, regional, and topic specific reports, fact sheets, infographics, and other resources produced from the 2023 BC AHS, please visit *mcs.bc.ca/bcahs*.

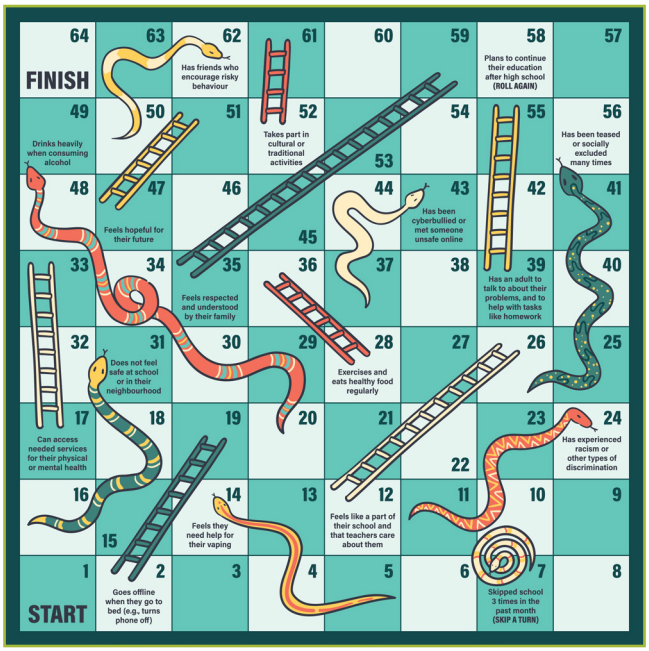
A video created by a group of young hip hop artists in Vancouver shares some of the comments provided by participants in the 2023 BC AHS, and is available at *youtube.com/watch?v=swC1K4MKTPg*.

Still from the *Generations* music video.

NEXT STEPS WORKSHOPS

The Next Steps is an award-winning workshop series that supports youth to engage with the BC AHS data. A toolkit is available that provides facilitators (e.g., teachers, Public Health Nurses, youth workers, and other adult supports) with a workshop template that can be used to share results of the survey with youth aged 12 to 19. It includes an introduction to the results, interactive activities to learn about risk and protective factors, and discussion questions to explore local youth health issues at *mcs.bc.ca/pdf/2023_next_steps_toolkit.pdf*.

A 'snakes and ladders' style board game to promote discussion about risk and protective factors is also available. Email *mccreary@mcs.bc.ca* for more details or to order a copy.



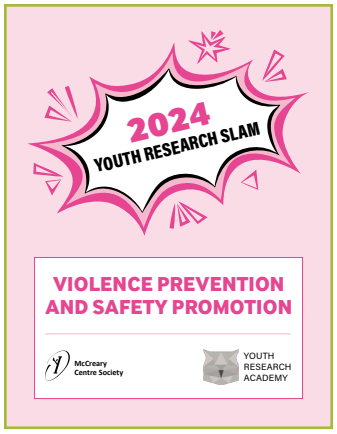
BC AHS risk and protective factors game.

YOUTH RESEARCH SLAM

The Research Slam program is a fast-paced weekend or week-long program which teaches youth basic community-based research skills, including ways to answer their research questions using BC AHS data.

The youth researchers who participated in the 2024 Youth Research Slam created a report and infographics for youth, school staff, and caregivers. The infographics are available in both English and French.

To download these materials, please visit: *mcs.bc.ca/youth_research_academy*.



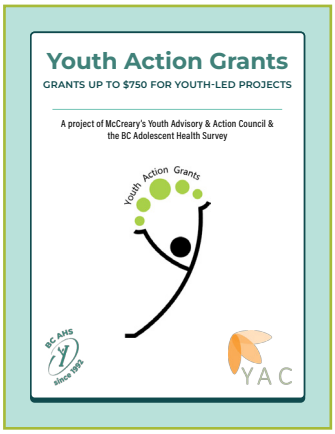
2024 Youth Research Slam report cover.

YOUTH HEALTH AMBASSADORS (YHA)

The YHA are a team of school-aged youth across BC who facilitate conversations with their peers about youth health topics, and support the sharing of BC AHS data. For more information or to apply to become a YHA, please email *mccreary@mcs.bc.ca*.

YOUTH ACTION GRANTS (YAGS)

YAGs offer up to $750 for youth-led projects that address findings from the BC AHS and that seek to support or improve youth health. For more information on how youth can apply, please visit *mcs.bc.ca/youth_action_grants*.



YAG application, available in English and French.

TREVOR COBURN MEMORIAL GRANTS

The Trevor Coburn Memorial Grants are available to BC youth (up to age 29) wanting to carry out projects to support BC youth facing barriers, including youth with experiences of homelessness, substance use challenges, and government care. For more information or to apply, please visit *mcs.bc.ca/trevor_coburn_memorial_grants*.

ACCESSING THE BC AHS DATA

Researchers from academic institutions and other partner agencies are encouraged to contact *mccreary@mcs.bc.ca* if they would like to apply to access the data, or to commission McCreary to conduct additional research projects with the data.

REFERENCES

Brooks, G. A., & Clark, L. (2023). The gamblers of the future? Migration from loot boxes to gambling in a longitudinal study of young adults. *Computers in Human Behavior, 141*, 107605. https://doi.org/10.1016/j.chb.2022.107605

Carran, M., & Griffiths, M. (2015). Gambling and social gambling: An exploratory study of young people's perceptions and behaviour. *Aloma: Revista de Psicologia, Ciències de l'Educació i de l'Esport, 33*(1), 101–113. https://doi.org/10.51698/aloma.2015.33.1.101-113

Calado, F., Alexandre, J., & Griffiths, M. D. (2017). Prevalence of Adolescent Problem Gambling: A Systematic Review of Recent Research. *Journal of Gambling Studies, 33*(2), 397–424. https://doi.org/10.1007/s10899-016-9627-5

DeCamp, W., & Daly, K. (2023). Loot box consumption by adolescents pre- and post- pandemic lockdown. *PeerJ* (San Francisco, CA), 11, e15287–e15287. https://doi.org/10.7717/peerj.15287

Dowling, N. A., Merkouris, S. S., Greenwood, C. J., Oldenhof, E., Toumbourou, J. W., & Youssef, G. J. (2017). Early risk and protective factors for problem gambling: A systematic review and meta-analysis of longitudinal studies. *Clinical Psychology Review, 51*, 109–124. https://doi.org/10.1016/j.cpr.2016.10.008

Drummond, A., Sauer, J. D., Ferguson, C. J., & Hall, L. C. (2020). The relationship between problem gambling, excessive gaming, psychological distress and spending on loot boxes in Aotearoa New Zealand, Australia, and the United States—A cross-national survey. *PloS One, 15*(3), e0230378–e0230378. https://doi.org/10.1371/journal.pone.0230378

Elton-Marshall, T., Leatherdale, S. T., & Turner, N. E. (2016). An examination of internet and land-based gambling among adolescents in three Canadian provinces: results from the youth gambling survey (YGS). *BMC Public Health, 16*(1), 277–277. https://doi.org/10.1186/s12889-016-2933-0

Emond, A. M., & Griffiths, M. D. (2020). Gambling in children and adolescents. *British Medical Bulletin, 136*(1), 21–29. https://doi.org/10.1093/bmb/ldaa027

Emond, A., Griffiths, M. D., & Hollén, L. (2022). Problem Gambling in Early Adulthood: a Population-Based Study. *International Journal of Mental Health and Addiction, 20*(2), 754–770. https://doi.org/10.1007/s11469-020-00401-1

Farhat, L. C., Foster, D. W., Wampler, J., Krishnan-Sarin, S., Hoff, R. A., & Potenza, M. N. (2022). Casino Gambling in Adolescents: Gambling-Related Attitudes and Behaviors and Health and Functioning Relationships. *Journal of Gambling Studies, 38*(3), 719–735. https://doi.org/10.1007/s10899-021-10083-6

González-Roz, A., Fernández-Hermida, J. R., Weidberg, S., Martínez-Loredo, V., & Secades-Villa, R. (2017). Prevalence of Problem Gambling Among Adolescents: A Comparison Across Modes of Access, Gambling Activities, and Levels of Severity. *Journal of Gambling Studies, 33*(2), 371–382. https://doi.org/10.1007/s10899-016-9652-4

Grosemans, E., De Cock, R., Bradt, L., Zaman, B. (2024). More than loot boxes: the role of video game streams and gambling-like elements in the gaming-gambling connection among adolescents. *Journal of Gambling Issues*. https://doi.org/10.4309/gbvy4097

Hing, N., Lole, L., Russell, A. M. T., Rockloff, M., King, D. L., Browne, M., Newall, P., & Greer, N. (2022). Adolescent betting on esports using cash and skins: Links with gaming, monetary gambling, and problematic gambling. *PloS One, 17*(5), e0266571. https://doi.org/10.1371/journal.pone.0266571

Hing, N., Russell, A. M. T., King, D. L., Rockloff, M., Browne, M., Newall, P., & Greer, N. (2023). Not all games are created equal: Adolescents who play and spend money on simulated gambling games show greater risk for gaming disorder. *Addictive Behaviors, 137*, 107525–107525. https://doi.org/10.1016/j.addbeh.2022.107525

Kang, K., Ok, J. S., Kim, H., & Lee, K.-S. (2019). The Gambling Factors Related with the Level of Adolescent Problem Gambler. *International Journal of Environmental Research and Public Health, 16*(12), 2110. https://doi.org/10.3390/ijerph16122110

Li, W., Mills, D., & Nower, L. (2019). The relationship of loot box purchases to problem video gaming and problem gambling. *Addictive Behaviors, 97*, 27–34. https://doi.org/10.1016/j.addbeh.2019.05.016

Marchica, L., Zhao, Y., Derevensky, J., & Ivoska, W. (2017). Understanding the Relationship Between Sports-Relevant Gambling and Being At-Risk for a Gambling Problem Among American Adolescents. *Journal of Gambling Studies, 33*(2), 437–448. https://doi.org/10.1007/s10899-016-9653-3

McInroy, L. B., & Mishna, F. (2017). Cyberbullying on Online Gaming Platforms for Children and Youth. *Child & Adolescent Social Work Journal, 34*(6), 597–607. https://doi.org/10.1007/s10560-017-0498-0

Nguyen, S. H., Sun, Q., & Williams, D. (2022). How do we make the virtual world a better place? Social discrimination in online gaming, sense of community, and well-being. *Telematics and Informatics, 66*, 101747. https://doi.org/10.1016/j.tele.2021.101747

Pérez-Albéniz, A., Gil, M., Díez-Gómez, A., Martín-Seoane, G., & Lucas-Molina, B. (2021). Gambling in Spanish Adolescents: Prevalence and Association with Mental Health Indicators. International Journal of Environmental *Research and Public Health, 19*(1), 129. https://doi.org/10.3390/ijerph19010129

Pisarska, A., & Ostaszewski, K. (2020). Factors associated with youth gambling: longitudinal study among high school students. *Public Health (London), 184*, 33–40. https://doi.org/10.1016/j.puhe.2020.03.017

Primi, C., Sanson, F., Vecchiato, M., Serra, E., & Donati, M. A. (2022). Loot boxes use, video gaming, and gambling in adolescents: Results from a path analysis before and during COVID-19-pandemic-related lockdown in Italy. *Frontiers in Psychology, 13*, 1009129–1009129. https://doi.org/10.3389/fpsyg.2022.1009129

Scholz, T. M. (2019). *eSports is Business: Management in the World of Competitive Gaming* (1st ed.). Springer International Publishing. https://doi.org/10.1007/978-3-030-11199-1

Smith, A., Martin, S., Peled, M., & Poon, C. (2023). Developing an index of adolescent deprivation for use in British Columbia, Canada. *Child Indicators Research, 16*(1), 273–291. https://doi.org/10.1007/s12187-022-09968-8

Torres-Toukoumidis, A. (2022). *Esports and the Media: Challenges and Expectations in a Multi-Screen Society* (1st ed.). Routledge. https://doi.org/10.4324/9781003273691

Wheaton, J., Rossi, R., Moxey, M., Tozzi, E., & Moradipour, S. (2025). Gambling advertisements in Ontario: exploring the prevalence and regulatory compliance of televised and social media marketing during sports matches. *International Gambling Studies, 25*(1), 1–21. https://doi.org/10.1080/14459795.2024.2400356

Wieczorek, Ł., Bujalski, M., & Dąbrowska, K. (2024). 'I Can Tell You It's a Bit of a Gamble': A Qualitative Analysis of How People Who Engage in Gaming and Gambling Understand a Link Between These Two Behaviours. *Journal of Gambling Studies, 40*(2), 859–871. https://doi.org/10.1007/s10899-023-10275-2

Zendle, D., & Cairns, P. (2019). Loot boxes are again linked to problem gambling: Results of a replication study. *PloS One, 14*(3), e0213194–e0213194. https://doi.org/10.1371/journal.pone.0213194

Zendle, D., Meyer, R., & Over, H. (2019). Adolescents and loot boxes: links with problem gambling and motivations for purchase. *Royal Society Open Science, 6*(6). https://doi.org/10.1098/rsos.190049

Zhai, Z. W., Hoff, R. A., Howell, J. C., Wampler, J., Krishnan-Sarin, S., & Potenza, M. N. (2021). Lottery-Purchasing Adolescents: Gambling Perceptions, Problems, and Characteristics. *Journal of Gambling Studies, 37*(4), 1177–1195. https://doi.org/10.1007/s10899-021-10004-7

McCreary
Centre Society