

# REPORT ON BEHAVIORAL ADDICTIONS AND OTHER ADDICTIVE DISORDERS 2024

# **Executive summary**

The main objective of this monographic report is to contribute to understanding the current situation regarding behavioral addictions and, specifically, gambling<sup>1</sup>, problematic Internet use, possible gaming disorder and pornography use in Spain. In this way, it is hoped to ultimately help in the prevention of misuse and possible problems associated with these activities.

For this purpose, a descriptive study of gambling, gaming, Internet use and pornography use has been carried out based on the answers to the specific questions included in the latest editions of the ESTUDES and EDADES surveys, the results of which are representative at the national level. In addition, data on admissions to treatment for behavioral addictions in Spain are included.

The main results of this report are presented below:

## **GAMBLING (ONLINE AND/OR FACE-TO-FACE)**

Population 15-64 years old (EDADES)

- In 2024, 53.8% of the population aged 15 to 64 has played online and/or face-to-face gambling in the last 12 months (56.1% in men and 51.5% in women).
- As in previous years, there continues to be a large difference between the prevalence of **online gambling**, which in 2024 was 5.5%, and **face-to-face gambling**, with a prevalence of 52.9%.
- Over time, in the case of face-to-face gambling, there was a decrease with respect to the figures obtained in 2020 and 2022 (63,6% in 2020, a 17% decrease), while in the case of online gambling the figures remained stable.
- By **sex**, men have the highest prevalence of both types of gambling (online: 8.2% vs. 2.7%; face-to-face: 54.8% vs. 51.1%).
- Analyzing prevalence by age group, it can be seen that young people between 15 and 34 years of age are the ones who play online gambling the most (7.4% of young people between 15 and 24 years of age and 8.8% of those between 25 and 34 years of age). In the case of face-to-face gambling, it is a practice that increases as the age of the respondents increases.
- Regarding the type of games used, among those who play in person, the conventional lottery
  and instant lotteries are by far the most used games, something that has been observed in
  different years. In the online channel, sports betting, although declining in importance compared
  to other games, is still the most played game along with traditional lottery.
- The largest amount of money spent in a single day by those who have played games of chance (gambling), hardly shows any difference between those who have done it online and those who have done it in person, with the most common amount spent being between 6 and 30 euros. The data suggest that most persons who gambled spent modest amounts, but a few incurred in significant spending. In terms of evolution, there is a slight increase in the amount of money spent with respect to 2022 in both gambling modalities.

<sup>&</sup>lt;sup>1</sup> For the purpose of this work, it has been considered that there is a game of chance (gambling) when all the following conditions are met:

<sup>-</sup> When participating in the game, the player bets with money (Participation with money).

<sup>-</sup> There is an uncertain outcome to the facts on which the bet is placed (Chance).

<sup>-</sup> There are financially assessable prizes (Awards).



• The different **types of games** (online and/or face-to-face) were divides into **three categories<sup>2</sup> according to** the interval of play, continuity, availability, as well as other structural characteristics of the games: category III may favor more intensive gambling. It is observed that the great majority of players in the last 12 months have played category I games (90.4%). However, the highest amounts of money spent in a single day are concentrated among those who have played type III games.

#### Population 14-18 years of age (ESTUDES)

- In 2023, 21.5% of students between 14 and 18 years of age will have played online and/or face-to-face gambling in the last 12 months (compared to 20.1% in 2021). With respect to gender, there are significant differences, with this percentage rising to 29.4% in the case of men and falling to 13.3% in the case of women.
- In 2023, the prevalence of **face-to-face gambling** was 17.7%, higher than the prevalence **of online gambling** (10.7%).
- Over time, both prevalences are similar to those in 2021 (online: 9.4% in 2021; face-to-face: 17.2% in 2021) and are below 2019 levels.
- By **sex**, men have the highest prevalence of both types of gambling (online: 17.1% vs. 4.3%; face-to-face: 23.4% vs. 11.8%).
- According to **age**, in both types of gambling the prevalence in the last 12 months experiences a progressive increase as the age of the students increases.
- In relation to the **type of game**, with respect to online gambling, in first place are video games (51.5%) and in second place sports betting (35.2%), both for men and women. However, in the third position there are differences according to sex, with cryptocurrencies in the case of men and bingo in the case of women. Regarding the type of betting with physical money, it is observed that lotteries, primitiva or bonoloto are placed in first place with 40.6%, followed by bingo with 35.9% and instant lotteries with 33.6%. There are significant differences according to gender. For men, the games most used in person are lotteries, primitiva, bonoloto; sports betting and soccer pools and/or quinigol, while for women, bingo is the most representative game modality, followed by lotteries, primitiva, bonoloto and instant lotteries.
- The largest amount of money spent in a single day by those who have played online or face-to-face gambling games is, in most cases, below 6 euros. A greater amount of money spent in a single day is observed in those people who have played online gambling games. In both types of gambling, the distribution by sex shows that the amount spent by women is lower than that of men.
- The age of onset is similar for online and face-to-face gambling, being 14.7 years and 14.8 years, respectively.

#### PROBLEMATIC GAMBLING AND GAMBLING DISORDER

According to the latest version of the Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5) gambling disorder is "persistent maladaptive gambling behavior that results in clinically significant distress". Given the current evidence, in the DSM-5 pathological gambling is classified under the chapter "Substance-related and addictive disorders."

<sup>&</sup>lt;sup>2</sup>For the analysis by game category, the following groups have been established according to the game interval, continuity, availability, as well as other structural characteristics of the games:

TYPE I: primitiva lotteries, bonoloto, eleven coupons, eurojackpot active game, 7/39, soccer pools and/or quinigol, contests on television, radio, press... with economic betting.

TYPE II: instant lotteries, scratch cards, bingo.

TYPE III: sports betting, horse betting, gambling machines (slots, slot machines), card games (poker, mus, blackjack, point and bank...).



According to this manual, obtaining a score of 1 to 3 on the DSM-5 scale would be considered problematic gambling, representing excessive gambling behavior, experiencing some problem derived from this activity. A score equal to or higher than 4 would be considered a gambling disorder, which can be differentiated into three levels according to the score: mild, moderate or severe.

#### Population 15-64 years old (EDADES)

- In the 2018 edition of the EDADES survey, a scale based on DSM-5 diagnostic criteria was introduced for the first time to explore the existence of possible problematic gambling and/or gambling disorder.
- It is estimated that, in 2024, 1.4% of the population would show a possible problematic gambling (1% of people would have a possible problematic gambling and 0.4% would present a possible gambling disorder).
- Over time, this figure has decreased with respect to previous years, In 2018, the prevalence of a possible problematic gambling was 2.6% (a 46% decrease). This value is higher among men than among women (2.2% vs. 0.7% respectively).
- Possible problematic gambling (DSM-5 ≥1) among the population that has played online or face-to-face gambling in the last 12 months is higher among online gamblers (18.4%) than among face-to-face gamblers (4.3%). In terms of evolution, there is a greater presence of gamblers with a possible problematic gambling than in 2022 in both online and face-to-face gambling.
- The probability of developing problematic gambling in those who have played category III
  gambling games online and/or face-to-face is more than three times higher than those who
  have played type II games and more than five times higher than those who have played type I
  games.
- In the online modality, the highest prevalence of problematic gambling was observed among those who played slot machines (31.1%), followed by horse betting (25.4%) and bingo (24.6%). In the face-to-face mode, among those who have played card games (22.6%) and, again, among those who have played slot machines (22.3%).
- The prevalence of possible problematic gambling is higher the greater the maximum amount of money spent in a single day.
- Regarding the profile of people who engage in possible problematic gambling, it is observed that:
  - o play money at a higher frequency than the general population aged 15-64 years
  - have a higher prevalence of reporting other risky behaviors with addictive substances, such as "borracheras", binge drinking, risky alcohol consumption and daily tobacco use.

# Population aged 14-18 years (ESTUDES)

- In the ESTUDES 2019 survey, to explore possible problematic gambling, the Lie/Bet questionnaire was introduced for the first time. This is a screening instrument of only two questions inquiring whether the subject has felt the need to gamble more and more or has lied to significant others about how much money he/she spends on gambling. The prevalence rate of possible problematic gambling according to this instrument is Lie/Bet≥1.
- In 2023, it is estimated that 4% of students aged 14 to 18 years could present a possible problematic gambling. This figure, quite higher among boys than girls, is close to that of 2021 and below that of 2019.
- By age, it is observed that the prevalence of possible problematic gambling increases as the age analyzed increases, with 18-year-old students having the highest prevalence (8.3%).
- In 2023, 23.5% of the students who played online gambling would have a possible problematic gambling, while among those who played gambling in person this value was 20.5%. Compared to 2021, these prevalences have increased, mostly for face-to-face gambling (from 18.2% to 20.5%).



- Regarding the profile of students aged 14 to 18 years who present possible problematic gambling, it is observed that:
  - o gamble money more frequently than other 14-18 year old students
  - play a wider variety of games (video games, sports betting and slots, slot machines)
  - spend larger amounts of money
  - o have a higher prevalence of risk behaviors and psychoactive substance use, such as "borracheras", binge drinking and cannabis use.

#### **PROBLEMATIC INTERNET USE**

Problematic Internet use is a growing phenomenon of our time that is defined as a generalized and problematic use of the Internet, associated with a loss of control and negative consequences for the individual.

From the ESTUDES 2014 and EDADES 2015 surveys, a scale was introduced to measure problematic internet use: *The Compulsive internet Use Scale*, CIUS. This is a validated scale for the early detection of possible cases of risk and consists of a total of 56 items, in which a score greater than or equal to 28 indicates possible problematic internet use.

## Population 15-64 years old (EDADES)

- In 2024, 3.7% of the population aged 15 to 64 years had a possible problematic use of the Internet in Spain, a figure similar to that recorded since 2020, the year in which a significant increase in this prevalence was observed.
- Prevalence is similar among men (3.6%) and women (3.7%) in all editions of the survey. With respect to age, problematic Internet use peaks among the youngest, 11.7% among those aged 15 to 24 years, decreasing with increasing age to be somewhat residual among those aged 45 to 54 years (1.8%) and among those aged 55 to 64 years (0.9%).
- Both in 2024 and in previous editions, differences are observed in relation to other risk behaviors such as heavy alcohol consumption ("borracheras" and binge drinking in the last 30 days) and cannabis use in the last 30 days, between the population aged 15 to 64 years with a possible problematic internet use and the general population aged 15 to 64 years, being in all cases higher prevalences in the population with a possible problematic internet use.

## Population aged 14-18 years (ESTUDES)

- In 2023, the prevalence of problematic internet use among students aged 14 to 18 years was 20.5%, having decreased by 3 percentage points compared to the 2021 result.
- An analysis of this indicator by sex shows that, as in previous years, the possible problematic use of the Internet is higher in women than in men (25.9% in women and 15.3% in men).
- The prevalence of internet users with possible problematic use increases with age. Compared to 2021, prevalence decreases for all ages except 18 years old, which remains stable (23.3% vs. 23.6%).
- In relation to other risk behaviors, it is observed, as in the general population (15-64 years old)
  that intensive alcohol consumption, cannabis consumption and daily tobacco use in the last 30
  days are higher among students with a possible problematic use of the Internet than in the rest
  of the students.

#### **GAMING**

Gaming use disorder is defined, according to ICD-11, as a pattern of gaming behavior ("digital gaming" or "video gaming") characterized by impaired control over gaming, increasing priority given to gaming over other activities to the extent that gaming takes precedence over other interests and daily activities, along with continuation of gaming despite the occurrence of negative consequences. For a diagnosis



of video game use disorder to be made, the pattern of behavior must be severe enough to cause significant impairment in personal, family, social, social, educational, occupational, or other important areas of functioning and would normally have been evident for at least 12 months.

In 2019, a module on video games was included in the framework of the Survey of Secondary School Students on Drugs and Addictions (ESTUDES). The first part of the module included general questions on prevalence and frequency of use and, in a second part, questions based on DSM-5 criteria were included to be able to detect a possible video game disorder. Questions on the use of electronic sports ("eSports") as a player or spectator were also included. The main results of their analysis are detailed below.

## Population aged 14-18 years (ESTUDES)

- Regarding the prevalence of video game use in 2023, 83.1% of students report having played video games (96.2% of males and 69.7% of females). As was the case in 2019 and 2021, the prevalence of use is higher among boys than among girls.
- In terms of age, there is a decrease as the age of the users increases.
- Analyzing the frequency of video game use in 2023, the most common is the weekly use of video games (29.8%). However, there are different trends between boys and girls: 43% of boys have played video games weekly in the last 12 months, while in the case of girls, only 16.0% have done so with this frequency.
- According to the DSM-5 criteria-based scale, in 2023, 5.1% of all students aged 14 to 18 years would have a possible video game use disorder. This percentage is the lowest of those recorded since 2019.
- By gender, men are the most likely to suffer from video game use disorders, although this percentage has dropped considerably compared to the figure recorded in 2021 (11.3% vs. 7.7%).
- When analyzing the prevalences by age, there is a generalized decrease with respect to 2021, except in the case of 18 years old, which thus has become the age with the highest risk of video game use disorder.
- In relation to the frequency of video game use, it is higher among students with a possible video game disorder than among all students who have played video games in the last 12 months (both in days and number of hours). They also play larger amounts of money to improve their position in video games, having increased spending of more than €100 compared to 2021 (from 15.8% to 19.1%).
- Behaviors such as the prevalence of online, face-to-face or problematic gambling are higher among students with possible video game disorder than among all students aged 14 to 18 years.

## CRYPTOCURRENCY AND STOCK MARKET GAMBLING

In response to the growing interest on the part of public policy makers and researchers in knowing the impact that financial technologies, which are in continuous evolution, may have on the consumption habits and mental health of the population, this block is included as a novelty in the EDADES 2024 survey.

# Population 15-64 years old (EDADES)

In 2024, 0.4% of the population of Spain aged 15 to 64 years acknowledges having gambled with **cryptocurrencies** in the last 12 months. Despite being a very rare habit, it is somewhat more common among men (0.5%) than among women (0.2%), and among those under 35 years of age (0.5%) than among those over 35 (0.3%).

With respect to the **stock market**, only 0.3% of the population aged 15 to 64 years reported having participated in the last year. According to sex, the prevalence is somewhat higher among men (0.5%) than among women (0.2%), being an unusual activity for both groups. In evolutionary terms, the prevalences recorded in 2022 are maintained. It seems that sex has a greater impact on this habit than



age, in this sense, in 2024, the prevalence of trading is the same (0.3%) in the 15-34 years age group and in the 35-64 years age group. When analyzing sex and age together, it is observed that the proportion of men who have invested trading on the stock market in the last year is higher than that of women in both age groups.

#### **USE OF PORNOGRAPHY**

The term pornography refers to any literary, artistic, or cinematographic material that explicitly exhibits genitalia and sexual actions, and whose primary purpose is to arouse the viewer in a sexual manner.

Currently, access to pornography has changed drastically due to easy access through the Internet and the emergence of new technologies. Adolescents are initiated in this practice at very early ages and its use is increasing due to: easy access to content through the Internet (accessibility), low or no cost of this material (affordability) and anonymity of the Internet (anonymity).

In order to explore the prevalence of pornography use in young people, a module on pornography use was introduced in the 2023 ESTUDES survey. Likewise, in 2024 a series of questions were added to the EDADES questionnaire with the aim of finding out the level of pornography consumption in the Spanish population aged 15 to 64 years. The main results are shown below.

# Population 15-64 years old (EDADES)

- 63.8% of the Spanish population between 15 and 64 years of age acknowledges having consumed pornography at some time in their lives, 29.0% in the last 12 months and 18.2% in the 30 days prior to the survey. The level of consumption is higher among men regardless of the time period analyzed.
- Recent consumption (last 12 months and last 30 days) decreases with increasing age, with the highest prevalence in the youngest age group (15-24).
- The most prevalent practice is solitary consumption (as opposed to consumption with a partner or friends). This pattern is also observed if we analyze by sex, although the percentage of women who do not use pornography is much higher (52.7% in women compared to 19.7% in men).

## Population 14-18 years of age (ESTUDES)

- 66.8% of students admit to having used pornography at least once in their lifetime, 58.6% in the last 12 months and 44.5% in the last 30 days.
- When differentiated by sex, there are large differences, with much greater use of pornography among men than among women for the three time periods analyzed. The greatest differences are found in consumption in the last month (68.4% of male students vs. 19.3% of female students).
- By age, there is a direct relationship with pornography use, since the higher the age, the higher the prevalence of pornography use in the three time periods considered. It is noteworthy that 37.1% of 14-year-olds have seen pornography in the last month.
- Regarding the company with which pornography consumption takes place, 85% of students between 14 and 18 years of age use it alone, reaching 91% in the case of men. However, females have a higher rate of viewing with both partners and friends, with a difference of 12.3 percentage points between the two sexes (37.0% of females and 24.7% of males).
- In relation to the device used to view pornography, it is observed that the greatest use of pornography is from the cell phone (92.4%), followed by use from the computer or tablet (36.6%). When differentiating by sex, the greatest discrepancy is in the use of computer or tablet, where 41.1% of men visualize by this means while it drops to 27.9% in the case of women.



#### INDICATOR ADMISSIONS TO TREATMENT FOR BEHAVIORAL/NON-SUBSTANCE ADDICTIONS

- The indicator Admissions to Treatment for behavioral or non-substance addictions is a registry that collects individualized data on admissions to outpatient treatment for behavioral/non-substance addictions in an autonomous community /city in a given year. It starts its collection in all autonomous communities/cities in 2021.
- Its objective is to complement the information obtained in the surveys with information on the treatment of people diagnosed with behavioral or non-substance addictions.
- A detailed protocol is available describing the variables included in the protocol, the behavioral/non-substance addictions collected and the inclusion and exclusion criteria. This information is available on the website of the National Plan on Drugs (PNSD).
- In 2022, among the 4,670 admissions to treatment for behavioral addictions were reported, 4,031 were men (86.3%) and 639 women (13.7%). The weight of women is lower than in admissions to treatment for psychoactive substances, both legal and illegal. These data represent an increase over the previous year, which is attributed to an improved completeness in the reporting of this new indicator.
- 82.0% of treatment admissions in 2022, were for gambling addiction. Among the rest, 9.3% were
  for problematic internet use, mobile or electronic device, social networking or video game use
  disorders, 3.4% for a shopping addiction and 2.9% for sex-related addictions. These figures are
  similar to the previous year.
- The average age of those admitted to treatment is 37.1 years, with many differences depending on the behavioral addiction that generates the admission (gambling: 38.5 years; video games: 20.5 years; shopping: 46.8 years; sex: 40.0 years; eating: 34.1 years).
- 21.8% may present dual pathology criteria (a mental health diagnosis different from the disorder for which they are admitted to treatment). This percentage is higher among women (33.3%) than among men (20.1%).
- Different consequences associated with behavioral addiction are reported, being mainly family conflicts (26.6%), economic problems (25.1%) and health problems (16.9%). These consequences vary according to the behavioral addiction that generates the admission, but do not vary according to sex.
- Despite the fact that the behavioral addiction that generates most admissions in both sexes is gambling, among women this disorder accounts for 58.8%. Thus they have more shopping disorders (16.4%), those related to the use of internet, cell phones, electronic devices or social networks, as a whole (15.6%) and eating disorders.
- In 2022, 26.7% of all those admitted to treatment used some psychoactive substance in the 30 days prior to admission, associated with the primary behavioral addiction (poly drug use). This pattern is more frequently associated with men (28.4%) than women (15.9%).
- The behavioral addictions most associated with poly-drug use were gambling and sex addiction, especially in their face-to-face modalities.
- The secondary substances that most frequently appear with a pattern of poly-drug use are alcohol (39.9%), cocaine (16.2%) and cannabis (12.0%). In general, the online modality is associated with a higher consumption of cannabis while the face-to-face modality is associated with a higher consumption of alcohol and cocaine.