

Young people and gambling: an empirical research

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Abstract

Gambling appears today as a heterogeneous, multidimensional phenomenon (Caretti et al., 2010; Whelan et al., 2007) that involves also young people. In our country, there is a progressive increase in pathological gambling in the youth population and in the disadvantaged social strata also supported by strong media pressure to spread the use of gambling, thus fuelling the mentality of relying on fate rather than the skills or commitment to succeed in life. The purpose of this research is to investigate the knowledge, perceptions and behaviours associated with gambling in a sample of 523 Italian teenagers attending high school and detect the presence of subjects with pathological or risky behaviour related to gambling. *Clin Ter* 2021; 172 (1):e23-29. doi: 10.7417/CT.2021.2276

Key words: gambling, belief, cognitive distortions, pathological gambling

Introduction

Gambling can be defined as betting on any type of game or event with an uncertain outcome where chance, in varying degrees, determines the outcome (Bolen, Boyd, 1968); it is an activity in which the player has no possibility of influencing the outcome of the game and in which they are invested by money or other goods. Today it has been considered a form of socially acceptable entertainment and is practised with friends, for a limited time and with insignificant losses. In recent years, interest in gambling and related issues has significantly increased progressively for several reasons. The introduction of national lotteries, the proliferation of gaming machines, the expansion of casinos and the advent of new media that allow gambling (Internet, smartphones, interactive TV etc.), have increased accessibility and global gambling popularity. Gambling also satisfies the desire for challenge and social redemption and represents for many an antidote to compensate for individual and social malaise. The expansion of the phenomenon has taken on important proportions of economic, social and health nature, involving and touching a large part of the Italian population (it is estimated that up to 50% of the population has experienced gambling at least once) and assuming for some people a pathological, compulsive and destructive connotation, similar to that of alcoholism and hard drugs. For this reason, the political world has taken interest in the problem, producing in 2016 a governmental Report on Pathological Gambling to the Parliament; moreover, pathological gambling has been included into the 2017 revision of the Essential Levels of Health Care Regulations, whose validity is nationwide, provided that, usually, the Regions legislate autonomously on health assistance aspects (Tavazzani, Fara, Marceca, 2020).

Gambling appears today as a heterogeneous, multidimensional phenomenon and various researches (Caretti et al., 2010; Whelan et al., 2007) have demonstrated the complex interaction between biological, psychological and social factors in the development and persistence of gambling. In our country, there is also a progressive increase in pathological gambling in the youth population and in the disadvantaged social strata also supported by strong media pressure to spread the use of gambling, thus fuelling the mentality of relying on fate rather than the skills or commitment to succeed in life.

In 1980 the W.H.O. had already defined *gambling* as a social problem, however in Italy the gambling disorder and the problems related to it have long been ignored from the clinical-scientific point of view, relegating this conduct disorder in the exclusive sphere of “vice”. Gambling disorder is defined, in the latest edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), as persistent or recurring problematic behaviour related to gambling that leads to discomfort or clinically significant impairment. The DSM-V places the pathological gambling disorder among addictions in the category “disorder not related to the use of substances” and the overall picture that is outlined is that of a loss of control in gambling behaviour that leads to a chain of losses and a progressive predominance of it in the subject’s life. Ultimately, pathological players know that their behaviour compromises, destroys or damages their

personal, marital, family and work relationships; however they are chronically and progressively unable to resist the urge to play, and this is what creates addiction. The results of the study conducted among the very young, between 15 and 19 years of age, by IFC-CNR (Istituto di Fisiologia Clinica-Consiglio Nazionale delle Ricerche), based on the data collected in Italy using the methodological references of the European School Survey Project on Alcohol and other Drugs (ESPAD®Italia, 2015), show how present, the risky and problematic gambling behaviour really is, respectively, in 11% and in about 8% of the young people interviewed. The relationship between early age of initiation to gambling and pathological gambling in adolescents has also been demonstrated but, despite being illegal among minors, many adolescents today are active players. The risk of developing a gambling addiction is higher in people with low self-esteem, high levels of risk taking, and sensation seeking (Breen, Zuckerman, 1999).

There is also an association between gambling disorder and emotional specific factors: a recent study (Crusco, Massoni, et al. 2016) reveals that 51% of the respondents diagnosed with gambling disorder makes use of alcohol and / or drugs; that 73% of the patients started playing in order to relieve feelings of dysphoria and suffering consequences on work as well as family life (51%). Furthermore, 41% of the respondents in the sample showed that gambling disorder could be transformed into an alarming risk of suicide. Pathological processes are also systematically associated with erroneous beliefs and cognitive bias. Joukhador, Blaszczyński and Maccallum (2004) have shown how gamblers with gambling problems present a higher number of erroneous beliefs than non problematic gamblers, and how such distorted belief systems are related to the intensity of play.

The more a subject plays, the more he will manifest high levels of belief. The erroneous beliefs are characterized by the tendency of the player to associate the winnings to his abilities and the losses to the negative influence of others or to bad luck; the propensity to reformulate the game outcomes (such as experiences from which to 'learn') in order to continue playing despite the losses and the so-called "hindsight bias" or to evaluate one's decision to play as right or wrong based on the game outcomes (Raylu and Oei, 2004). Furthermore in a sample of Korean teenagers the future gambling intention, irrational gambling beliefs and the internet addiction were found have positive correlation with each other (Hwang-Gun Ryu, et. al. 2012). Given the complex nature of the phenomenon and the fact that one of the main factors in the onset and development of pathological gambling is its onset in adolescence (Jacobs, 2000), it is considered important to pay attention to gambling behaviour in this particular group of age, with the aim of better understanding the factors involved in the development of a pathological addiction to gambling and of developing appropriate prevention and intervention programs.

Research methodology

This research is part of "Punta in Alto" (Aim high), a project aimed at analysing and preventing the phenomenon of ludopathy in young people of the Italian High schools. The

project, funded by the Ministry of Labor and Social Policies and coordinated by the Association "Together towards new Horizons" and IRASE (Istituto per la Ricerca Accademica Sociale ed Educativa), foresees the implementation of prevention and training activities within schools, as well as the organization of dissemination events of project practices. It insists on a vast territorial area including the following Italian regions: Abruzzo, Campania, Lazio, Lombardy, Molise, Sardinia, Sicily, Tuscany, Trentino, Veneto. Appropriately trained project operators contacted the individual schools to present the intervention plan and collect the adhesions. The institutions involved are essentially professional institutes where the "new dependencies" seem to have a greater appeal. The study was conducted in compliance with the ethical standards for research established by the Italian Association of Psychology (AIP). In the 19 schools that joined, the operators administered the questionnaires anonymously to the students. Before proceeding with data collection, all participants were informed of the general objectives of the investigation; students had an hour to fill in the questionnaires and each participant was free to stop filling in the questionnaires at any time. The quantitative data thus obtained were processed through the SPSS statistical software. In addition to the descriptive analyses, on the basis of the type of variables examined, the data were subjected to the Student's T test.

Objectives

The purpose of this research is to investigate the knowledge, perceptions and behaviours associated with gambling in a sample of Italian teenagers attending high school. In particular, the study aims to:

- investigate the knowledge and beliefs relating to gambling;
- to investigate the perceptions of young people on the diffusion of the phenomenon and its characteristics;
- detect the presence of subjects with pathological or risky behaviour related to gambling;
- determine the level of bias, cognitive distortions and erroneous beliefs relating to gambling.

Tools

The participants were given, in balanced order: a personal data sheet in which they had to indicate the age group, gender and school / region to which they belong; a Questionnaire on gambling knowledge and beliefs created ad hoc; the Italian version of *The South Oaks Gambling Screen-Revised for Adolescents* (SOGS-RA) by Winters, Stinchfield and Fulkerson, (1993); *The Gambling Attitudes and Belief Survey* (GABS) by Breen R.B and Zucherman (1999). The Knowledge and Beliefs Questionnaire consists of 21 questions and was specifically created to investigate the perception of adolescents on certain aspects related to gambling, in particular: the spread of the phenomenon by both young people and people with which they come into contact; expenses incurred per capita; knowledge of the various types of game and the possibilities of playing them for a minor; awareness of the random aspect of the

various games; the influence of advertising. The *South Oaks Gambling Screen-Revised for Adolescents* (SOGS-RA; Winters, Stinchfield, Fulkerson, 1993) is a self-report tool for detecting problem gambling-related behaviours in adolescence. It is based on DSM III diagnostic criteria with indication of a cut-off for probable pathological play (≥ 4). The scale consists of 12 items that investigate the loss of control over the game (need to play increasing amounts of money, failures in any attempts to eliminate / reduce the game), the run-up of losses (attempt to recover the lost money by returning to play, lies to family members, debt, illegal actions), interference with school and relationships, and feelings of guilt related to gambling. SOGS-RA scores define three categories of players (Winters, Stinchfield, Kim, 1995): non-problematic (0-1), at risk (2-3) and problematic (greater than or equal to 4). The SOGS-RA has high levels of reliability and internal consistency, with a Cronbach α of .80 (Winters et al., 1993). The *Gambling Attitudes and Belief Survey* (GABS) developed by Breen R.B and Zucherman (1999) is a self-report questionnaire that investigates cognitive distortions and irrational beliefs present in the gambler. It consists of 35 questions with possible answers on a four-point Likert scale from "strongly agree" to "strongly disagree". The total score ranges from 35 to 140. The test does not include a cut-off to discriminate the various types of player (social, excessive, pathological). In addition, the questionnaire assumes that those who use the data already have a good knowledge of pathological gambling in order to fully understand the meaning of the answers given by the subject to the individual items. GABS measures a variety of cognitive biases, irrational beliefs and the propensity towards gambling. High test scores indicate that gambling is felt as a positive and exciting experience where luck and strategy play an important role. The internal consistency of the test is high with a Cronbach's $\alpha = 0.93$.

Sample

The sample consists of 523 Italian students (388 boys and 135 girls) attending technical higher education institutions. 98.3% of the sample is aged between 15 and 18, while 1.7% is between the ages of 19 and 27. Pupils come from the following ten Italian regions: Abruzzo (3.8%), Campania (8.8%), Lazio (14.7%), Lombardy (9.9%), Molise (4.8%), Sardinia (8.6%), Sicily (15.1%), Tuscany (12.2%), Trentino (14%), Veneto (8%).

Results

Questionnaire on knowledge and beliefs relating to gambling

The first questionnaire administered is aimed at detecting the knowledge and beliefs relating to gambling in the sample of students examined. A statistical descriptive analysis of the frequencies was conducted. Below is the percentage of the various types of answers for each question.

To the first question: "*In Italy the annual per capita expenditure in gambling (lottery, slots, scratch cards, etc.) in your opinion is...*": 54.5% of the subjects answered "above € 1500", the 18.2% "between € 1000 and € 1500", 14.9%

"between € 500 and € 1000", 8.2% did not answer the question and according to 4.2% of the subjects the expenditure is "Less than 500 euros".

Currently, the turnover in Italy exceeds 100 billion euros in games included under the usual gambling term. On average, an Italian spends 400 euros per month, therefore around 4800 euros per year. The perception of the gravity of the phenomenon in terms of total and individual expenditure is therefore close to reality since more than half of the subjects (54.5%) responded "above € 1,500".

To the second question: "*The electronic gaming devices installed in Italy are...*": 34% replied "1 for every 80 inhabitants", 28.3% replied "1 for every 140 inhabitants", 18.5% "1 for every 200 inhabitants", 9.6% "1 for every 450 inhabitants", 9.6% did not respond.

The appliances currently installed in Italy are about 1 for every 140 inhabitants. Therefore, there is a tendency to underestimate the spread of electronic gambling equipment, since only 28.3% of the interviewees provided an answer that is close to reality.

To the third question: "*Do you think that in the lotto game an experienced player is more likely to win than a beginner?*" 83.7% of the subjects answered "no", 12.2% answered "yes" and 4% did not provide any answer. Most of the subjects interviewed (83.7%) are aware of the random component that characterizes the lotto game. Now let's analyse in detail how much skill is considered a determining factor in other games of chance.

To the fourth question: "*Is skill as a determining element in prediction contests required?*" 44.2% of the subjects replied "none", 30.2% "a lot" and 25.6% replied "little".

To the fifth question: "*Is skill as a determining element in online games required?*" 37.7% of the subjects answered "none", 34% answered "a lot" and 28.3% answered "little".

To the sixth question: "*Is skill as a determining element in scratch cards required?*" 90.1% of the subjects replied that the game of scratch cards does not require any skills, 6.5% replied "little" and 3.4% replied "a lot". To the seventh question: "*Is skill as a determining factor in sports betting required?*" 43.8% replied "a lot", 34.2% replied "a little" and 22% replied "none".

To the eighth question: "*Is skill as a determining factor in slot machines required?*" 72.1% of the subjects replied "none", 19.5% "little" while 8.4% replied "a lot".

The data shows that the boys interviewed are aware of the random component that characterizes most of the games. Sports betting, online games and prediction contests are the categories of games in which the percentage of "a lot" responses is higher and in which therefore the skill component is most perceived as relevant. This attitude is in a certain sense justifiable because in such games, in fact, even if the role of chance remains predominant, the player may have a certain influence on the outcome of the game.

To the ninth question: "*In which of the following places do you think it is possible to gamble for a minor?*" 49.1% of the subjects think that minors can gamble online, 31.9% think that they can play in bars, 8.8% in tobacconists and 10.1% in arcades.

The awareness of the possibility of playing online even for a minor due to the lack of appropriate controls is evident, but the “bar” responses also reach a significant percentage probably because it is common practice for managers not to check the age of the players.

To the tenth question: “*Do you know someone who plays regularly?*” 43.8% of the subjects replied “friends”, 43.4% “acquaintances”, 6.7% “close relatives”, 6.1% other relatives.

To the eleventh question: “*How widespread do you think playing money or betting among your peers?*” 50.7% of the subjects replied “enough”, 25.8% replied “little”, 14.7% replied “widespread” and the remaining 8.8% “not at all”.

The data reported for the last two questions are rather worrying because they reveal that the game is perceived as a rather widespread activity in the youth world and that therefore, in a more or less relevant way, young people, especially if they are male, are in contact with people, even peers, who play. The following questions are aimed at investigating which types of games are most practised by our sample of students. To the twelfth question: “*Have you ever played prediction contests?*” 72.3% of the interviewees answered “not at all”, 22.2% answered “little” and 5.5% answered “a lot”.

To the thirteenth question: “*Have you ever played online gambling?*” 69.8% of the subjects answered “not at all”, 20.1% answered “little” and 10.1% answered “a lot”.

To the fourteenth question: “*Have you ever played scratch cards?*” 51.6% of the subjects answered “little”, 44% “not at all” and 4.4% “a lot”.

To the fifteenth question: “*Have you ever played sports bets?*” 58.7% answer “not at all”, 27.7% answer “little” and 13.6% answer “a lot”.

To the sixteenth question: “*Have you ever played slot machines?*” 83% of the subjects answered “not at all”, 13.6% answered “little” and 3.4% answered “a lot”.

From the answers it emerges that in general the boys interviewed do not usually play. The game categories that have obtained the highest percentage of answers “a lot” and which are therefore most practised among the youths are: sports betting (13.6%) and online games (10, 1%).

To the seventeenth question: “*What game do you imagine when you think of gambling?*” 30.6% of the subjects answered “slot machines”, 29.4% “casinos”, 15.5% “sports betting”, 14.1% “card games”, 8.6% “scratch cards” and 1.7% the lotto “.

In the collective imagination of the teenagers, slot machines seem to occupy a significant place, followed by casinos and sports betting. This figure is not surprising if one thinks of the widespread localization of game rooms at the back of ordinary bars and cafes even near schools.

To the eighteenth question: “*Did you happen to see or hear gambling advertisements?*”, 61% of the subjects answered “often”, 29.6% “sometimes”, 4.8% “never” and the 4.6% replied “once or twice”.

To the nineteenth question: “*Do you think that the influence exercised by advertising is ...?*” 48.8% of the subjects answered “subjective”, 26.6% “a lot”, 15.5% “a little” and 9,4% “none”.

The data show that a considerable proportion of subjects (61%) are still often exposed to messages that advertise gam-

bling despite the possible serious consequences of the game. On the whole, however, the influence that advertising has on individual choices seems to be reduced also in consideration of the subjective variables involved in the response.

To the twentieth question: “*Do you think that the motivation that drives people to gamble is...*” 54.7% of the subjects answered “to get rich”, 24.1% “the taste of the challenge”, 15.5% “Boredom” and 5.7% “the desire for emulation”.

Certainly the aspect that attracts the most, at least initially, is the possibility of getting rich, as is rightly pointed out by 54.7% of the interviewees. Not to be underestimated, however, is the component relating to the possibility of challenging fate and experiencing strong sensations that protect against painful feelings of boredom, very common in young people.

To the twenty-first question: “*Do you think gambling is ...?*” 55.8% of the subjects answered “a pathological risk”, 22.6% “a way of earning”, 10.1% “Fun”, 6.9% did not provide any answer, and 4.6% “a challenge of skill”.

Most of the young people interviewed are therefore aware of the dangers of gambling, but the percentage of subjects who see it as an opportunity for easy money and a source of fun is not negligible.

South Oaks Gambling Screen-Revised for Adolescents (SOGS-RA)

Based on the SOGS-RA scores, the subjects were divided into three groups representing the different levels of problematic behaviour related to gambling: “non-problematic players” (score <2), “players at risk” (score 2-3) and “problematic players” (score >3). As it can be seen from the table and the graph below, 79.9% of the teenagers who took part in this study do not seem to have any problem related to the game, 9.9% fall into the category of players at risk and 10.1% show problematic behaviour. In the female subgroup the percentage of problematic players is 4.4%; 7.4% of girls are at risk while 88.1% are non problematic. In the male subgroup 77.1% of the subjects are non problematic, 10.8% are at risk and 12.1% have a problematic game mode.

The table below shows how there is a difference in the prevalence of risky and problematic play between the two subgroups. In the male subgroup the prevalence of at risk and problematic subjects is, in fact, higher than that of the female subgroup (problematic F = 4.4%, M = 12.1%; at risk F = 7.4% M = 10, 8%).

Type of player	Frequency	%	Gender	Frequency	%
Non problematic	418	79,9	Female	119	88,1
			Males	299	77,1
At risk	52	9,9	Females	10	7,4
			Males	42	10,8
Problematic	53	10,1	Females	6	4,4
			Males	47	12,1
TOT.	523	100,0		523	100,0

The table below illustrates, by dividing the subjects on the basis of the region they belong to, the percentage of teenagers in our study who present problematic ways of

playing. The regions with the significantly higher number of problematic players are Tuscany (26.6%), Abruzzo (25%) and Sardinia (20%).

Problematic player and regions	Sample	Frequency	%
Abruzzo	20	5	25,0
Campania	46	4	8,7
Lazio	77	4	5,2
Lombardia	52	2	3,8
Molise	25	0	0,0
Sardegna	45	9	20,0
Sicilia	79	6	7,6
Toscana	64	17	26,6
Trentino	73	5	6,8
Veneto	42	1	2,4
TOT.	523	53	10,1

Gambling Attitude and Belief Survey (GABS)

The test investigates the cognitive distortions and irrational beliefs present in the gambler. The total score ranges from 35 to 140 but, as specified, there is no cut off to discriminate the various levels. High scores in the GABS however indicate that gambling is felt as a positive and exciting experience in which luck and strategy play an important role. The higher the score obtained by the subjects, the higher the degree to which the player relies on beliefs, attitudes, values, and prejudices inherent in gambling. In the sample considered, the average of the scores obtained in the questionnaire was 72.64 (SD = 14.82). The teenagers interviewed therefore seem moderately prone to cognitive distortions and irrational beliefs about what concerns gambling. The female subgroup scores an average of 69.87 (SD = 13.46), while the male subgroup of 73.6 (SD = 15.16). Student's T test was used to compare the means of the two subgroups. By setting the significance level $\alpha = 0.05$, the initial hypothesis of equal averages ($p < 0.05$) of the sub-distributions is not accepted.

	N	Mean	Deviance	Std. Error	gdl	p
Females	135	69,87	13,46	1,16	133	0,01
Males	388	73,6	15,16	0,77	386	
Total	523	72,64	14,82			

The T test reveals a statistically significant difference between the averages of the two groups in the variable considered, with an average test score lower in the female subgroup which, therefore, are less influenced by false beliefs and cognitive biases.

The results obtained in the GABS by the three types of players detected with the SOGS-RA test were then compared. As shown in the tables below, players at risk and problematic players get higher average scores at GABS than players with non-problematic game modes. This would indicate a greater tendency for risky and pathological players

to rely on gambling beliefs, attitudes, values, and prejudices. This tendency also appears more marked in the subgroup of males at risk and problematic than that of females belonging to the same classification.

Type of player and GABS	N	Main GABS	Deviance
Non problematic	418	70,4	14,8
At risk	52	80,6	13,8
Problematic	53	82,1	14,3
TOT.	523	72,6	14,8

Type of player and GABS	Gender	N	Main GABS	Deviance
Non problematic	F	119	69,0	13,2
	M	299	71,0	14,6
At risk	F	10	74,9	13,8
	M	42	81,9	13,6
Problematic	F	6	79,0	14,3
	M	47	82,5	14,4

Discussion and conclusions

In recent years the phenomenon of gambling has taken on worrying dimensions and the young people involved in the project seem to have a fair perception of its size, at least in terms of economic investments made by the Italian population. On the other hand, the estimate of the spread of electronic devices distributed throughout the territory is less precise. In fact, Italy holds the European record of slot machines rate per inhabitants: they are about one for every 140 inhabitants, but only 28% of the subjects provided an answer consistent with this figure. Overall, the boys are aware of the random component that characterizes most gambling games, recognizing a greater importance of the skill factor only in sports betting, online games and in prediction contests; games in which, indeed, an experienced player can influence the result to some extent. In Italy, current legislation prohibits the practice of gambling among minors, however recent epidemiological investigations conducted by the ISS (Istituto Superiore di Sanità) show that the number of students involved in this activity is very high. This is an evident sign of the "normalization" effect the gaming industry has worked on in the last fifteen years, determining the assimilation of this phenomenon as "normal" and "accepted" in our culture. According to the Institute (ISS Report 18) minors mainly play from tobacconists (46.7%), in betting houses (41.1%) and in bars (28.8%). 49.1% of the young people who took part in our study believe that a minor can play online, probably because of the ease to bypass any control (a minor user can pretend to be an adult and there is no regulation on the matter); we must also consider that young people are very comfortable with computers, and the internet allows anonymity. Another significant percentage of

subjects (31.9%) instead answered “bar”, places that often act as tobacconists and where it is also possible to play with slot machines given the leniency in the controls by the managers. The data relating to the perception of the diffusion of the phenomenon among peers, friends, acquaintances and close relatives are rather worrying, and that highlights how much gambling is a rather widespread activity in the world of youths: overall, in fact, 87.2% of subjects knows friends and acquaintances who gamble habitually; 50% of the subjects then believes that gambling is a fairly widespread phenomenon among peers and 14.7% that it is widespread. Considering the response rates relating to how much the various games of chance are practised, it is possible to conclude that, despite the widespread diffusion, gambling represents an occasional pastime for most teenagers in the sample. The types of gambling preferred by youths are sports betting (13.6% of subjects practice them “a lot”) and online games (10.1% of subjects practice them “a lot”), although one significant percentage (56%) rarely plays with scratch cards and in prediction contests (27.7%). In the imagination of students, slot machines and casinos still seem to hold a prominent position, perhaps becoming the very emblem of gambling, also in consideration of the considerable diffusion of the machines in places that young people usually have easy access to. A significant share of subjects (61%) also declares to have been exposed to advertising messages concerning gambling; only recently, in fact, the decree concerning the ban on advertising of any type of gambling has been applied in Italy. 48.6% of the subjects believe that the influence exercised by advertising essentially depends on subjective response variables, while 26.6% of the subjects recognize the great persuasive power of advertising. More than half of the youths interviewed (54.7%) identify the main motive of gambling in the desire to get rich, but it is also interesting the fact that a not negligible percentage of subjects sees in the pleasure of being able to challenge fate (24, 1%) and in a boredom life experience (15.5%) the possible motivation to play. In fact, the literature on the subject identifies among the causes of gambling the need to cope with internal states of unease, to experience strong and exciting sensations and the desire / illusion to change one’s socio-economic status in an easy and fast way, bypassing the commitment and hard work necessary to achieve any important goal. The comforting data that emerged from the research concerns the widespread awareness in young people of the risk of pathological addiction associated with gambling, perhaps deriving from the current proliferation of awareness-raising and prevention campaigns. Although for the majority of the youths (79.9%) who took part in the research, gambling is an opportunity to have fun and has a limited impact on daily life, it’s worrying the presence of a percentage equal to 9, 9% of gamers at risk of gambling and 10.1% of openly pathological players. This figure appears even alarming when compared with results of other researches (Baiocco, Couyoumdjian, Langellotti and Del Miglio, 2005), in a similar sample by age, who report significantly lower percentages of boys classified both in the “at risk” (8.4%) and “problematic” category (2.3 %). The results of this study also show a significant gender difference as regards not only to the degree of involvement in gambling (in the male subgroup 10.8% are at risk and

12.1% are problematic, while in the subgroup of females, the percentages drop respectively to 7.4% and 4.4%), higher in males according to the reference literature, but also, as emerged from previous studies (Cosenza and Nigro, 2011), as in regards to the presence of cognitive distortions related to gambling. Specifically, males tend, more than their female peers, to feel unable to stop playing and to think that losses are surely followed by winnings by virtue of an incorrect calculation of probability deriving from the lack of knowledge of statistical theories and cognitive biases. Overall, however, the teenagers interviewed seem only moderately prone to cognitive distortions and irrational beliefs about what concerns gambling. The data also reveal a greater tendency for gamblers at risk and for problem gamblers to rely on gambling beliefs, attitudes, values and prejudices and, once again, this provision is more present in males than females. To conclude, ludopathy is a complex and multidimensional phenomenon that, unquestionably, also involves teenagers at various levels. It calls into question psychological, biological and cultural factors of an individual and collective nature which risk compromising delicate adolescent development paths and which must therefore be carefully understood and monitored in order to implement valid intervention and prevention programs.

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