J Gambl Stud (2013) 29:29–36
DOI 10.1007/s10899-012-9296-y

ORIGINAL PAPER

Updates of the Prevalence of Problem Gambling in Romanian Teenagers

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Published online: 18 February 2012

Abstract The aim of this study was to find out what is the prevalence of pathological in Romanian teenagers. We questioned one thousand thirty-two teenagers in Cluj-Napoca and Harghita counties. Participants completed a questionnaire with 40 items including gamblers anonymous twenty questions. The sample included teenagers aged 11–19 years; 65.57% were male and 34.43% were female. The subjects were divided into three groups: non-gambling/recreational gambling or occasional gambling (0–1 positive answers — Level 1)—753 subjects (72.96%) [316 females and 437 males]; problem gambling (2–6 points—Level 2)—243 subjects (23.54%) [43 females and 200 males]; pathological gambling (above 7 points—Level 3)—36 subjects (3.48%) [3 females and 33 males]. The mean age of pathological gamblers was 16.48 years. Gender differences were as expected, males engaging in pathological gambling (91.66% from pathological gamblers) more than females did (8.33% from pathological gamblers). Data revealed that the most encountered games practiced weekly were sport bets and slot machines in the case of 36.11% of the pathological gamblers; lotto, internet casino and pool bets each with 25%, followed by roulette and black-jack with 22.22%.From those who reported practicing gambling at a pathological level 66.66% engaged in alcohol consumption, 13.88% illicit drug use and 19.44% licit drugs. Just 16.66% smoke cigarettes. Data revealed higher rates of prevalence in Romanian teenagers than in other Central and Eastern European countries. A prevalence study at a national level should be designed.

Keywords Prevalence · Problem gambling · Pathological gambling · Romanian · Children · Adolescents · Teenagers

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Introduction

Worldwide researches on gambling consistently showed that problem gambling can negatively affect significant areas of a person's life, including their health, poor academic performances, and interpersonal relationships, delinquent and criminal behaviour (Derevensky and Gupta 2004). Youth pathological gamblers have been reported to have high rates of suicide ideation and suicide attempts (Nower et al. 2004). These negative consequences and costs implied in order to treat people affected by this disorder determined specialists to adopt measures in order to prevent the phenomenon. For adopting prevention programs and constructing a system for intervention in pathological and problem gambling it is important to conduct prevalence studies.

In different European countries specialists conducted national or regional studies (Griffiths 2009). Results from studies in different European countries suggest that problem gambling among adolescents is considerably higher than among adults (Derevensky and Gupta 1996; Griffiths 2009; Johansson and Götestam 2003; Lesieur and Klein 1987; Moodie and Finnigan 2006; Olason and Gretarsson 2009; Rossow and Hansen 2003; Shaffer and Hall 1996; Stinchfield et al. 1997; Wood and Griffiths 1998; Wynne et al. 1996). Although problem gambling among adolescent samples tended to be higher than in adult samples, many of the participants in these studies were either local survey and/or used opportunistic or non-representative samples. Directions for further studies should follow the standardized procedure and use a representative sample for prevalence surveys.

However, in countries where there have been large samples with good representation (e.g., Great Britain, Germany), the problem gambling prevalence rate among adolescents is at least four to five times higher than in the adult population (Griffiths 2009).

Gambling in Romania

In each country there are specific regulations that establish limits and control access to games. In Romania there is a legal limit of age and any teenager under 18 years old should not be given access to games. New regulations regarding gambling in Romania were established according to no. 10 Article from the Romanian Government Emergency Ordinance 77/2009. This article defined more clearly what can be considered and what cannot be considered gambling. In 2011 there was a modification of the law (Romanian Government Decision 823/2011 published in Romanian Official Gazette 616/2011) and online gambling was considered even if difference between different types of online gambling were not approached.

Lupu 2009 recently reviewed the empirical evidence on gambling and problem gambling in Romania. As far as these data concern, there have not been carried out national gambling prevalence surveys although some regionalized researches have been done.

Although there has been little research in adult gambling in Romania, there has been some research on adolescents. Lupu et al. 2002 examined the prevalence of problem gambling using the GA-20 scale in three Romanian counties on 500 high-school students between the ages of 14–19 years (57% female and 43% male). They reported that 34 students (6.8%) were identified as problem gamblers (scoring 7 or more out of 20 on the gambling scale). Among these 34 individuals most were male (n=28). The games most frequently played by Romanian teenagers were: poker (35%), football pools (56%), bingo (32%), basketball betting (6%), blackjack (3%), and roulette (3%).

Two-thirds of the sample gambled very frequently (64%) with 18% gambling rarely or very rarely. Most of the gamblers played in groups (82%). The mean age the participants

began gambling was of 14 years. Findings also showed that 18% of the problem gamblers had alcoholic fathers and 12% had fathers who were problem gamblers. No significant differences were found between problem and non-problem gamblers in what regards family income and social status. Among pathological gamblers there were students with high financial and social status, but also with low incomes and problems in family. This is a characteristic for those with dependencies.

Caritas, a pyramidal game, having its centre in Cluj-Napoca, became hugely popular in Romania between 1991 and 1993. People gave an amount of money being promised they would get eight times more money. The significance given to the money was changed and people expected to earn a lot of money in a short time and with no effort. In this context adults and children considered gambling a way to gain a lot of money and have the life they had dreamed of. One of the factors that contributed to higher rates of gambling prevalence in Romania was this *Caritas* phenomenon, but after the revolution in 1989 law had changed a lot and instability created confusion along with less obedience to the law.

Higher prevalence rates among adolescents were given by individual factors (age, gender, ethnicity, genetics, biology, personality traits, different mental disorders—anxiety, depression, ADHD, cognitions, engaging in other problem behaviors) family factors or social and community factors (Hayer et al. 2005).

In another study, Lupu et al. 2001 analyzed the risk factors for problem gambling in 231 Romanian adolescents between the ages of 14 and 18 years. Using the GA-20 scale, Lupu et al. 2001 categorized the participants into three groups: non-gambling/recreational gambling, occasional gambling (0–1 positive answers—Level 1); problem gambling (2–7 positive answers—Level 2); pathological gambling (7–20 positive answers—Level 3). Results revealed that 34% were non-gamblers or gambled very occasionally (Level 1); 54% were problematic players (Level 2); and 12% were defined as pathological gamblers (Level 3) (Lupu 2009). Risk factors for pathological gamblers included: parental divorce, serious physical illness in a family members, death of a family member, family break-up, psychological illness in a family member, sexual abuse, and being in a severe accident. Results also showed that 14% of problem gamblers used illegal drugs. Lupu et al. 2001 identified two distinct types of pathological gambler:

- Adolescents from an unfavorable family and social environment, who had to deal with stress and trauma (e.g.: neglect, physical, and/or sexual abuse). In this case gambling was a coping mechanism to deal with chronic stress.
- Adolescents from a favorable family and social environment with a medium to high income, where parents neglected the child because of hard working. In this case gambling was a way to spend time and/or to attract a parent's attention.

Lupu (2009) noted that the significant prevalence of pathological gambling among Romanian adolescents in the study by Lupu et al. 2002 has been confirmed by similar cases in Romanian child psychiatry clinics (Lupu 2008, (2009)).

Materials and Methods

Participants

Participants in the study (N=1,032, 65.57% were male and 34.43% were female) were selected on the criteria of convenience. Subjects were aged 11–19 years old. We made a list of the schools in Cluj and Harghita counties where we had access and randomly selected classes

which participated in our study. In what regards demographic characteristics Cluj County had a total population of 702,775 people—13.9% were aged 10–19 years and Harghita County of 326,222—15.3% were aged 10–19 years old (www.insse.ro). Subjects were not remunerated but schools involved in the study got a report where the percentages of pathological, problem and social gambling were given. School principals were proposed to enroll in a gambling prevention program with the classes participating in this study.

Procedure

Teenagers completed a structured questionnaire "The 20 questions of the Gamblers Anonymous American Association" (Gamblers Anonymous 1984) and 20 more questions.

Instruments

We developed an instrument which consisted of 40 questions. The first 20 items were the *20-GA*—an instrument with high reliability as measured by Cronbach's alpha. Concurrent, convergent and predictive validity of the 20-GA supported the use of this instrument as an acceptable screening instrument (Toneatto 2008). This instrument was translated and adapted in Romanian for teenagers. One of the limits in what regards the instrument is that it was not validated for Romanian population. The other 20 questions were related to age, sex, family description, income, school, class, academic results, school absenteeism, reason for gambling, toxic drug use, favorite gambling games and frequency of gambling, the maximum amount gambled (Lupu & Todiriţă 2010).

Results

Of the total teenager sample, 753 (72.96%) gambled at a recreational level, and 36 (3.48%) at a pathological level. Gender differences were as expected, males engaging in pathological gambling (91.66% from pathological gamblers) more than females did (8.33% from pathological gamblers).

The study divided the subjects into three groups according to their results after completing the questionnaire (according to their answers at 20-GA):

Level 1—0–1—non-gambling/recreational gambling or occasional gambling.

Level 2—2–6—problem gambling.

Level 3—≥7—pathological gambling.

In Table 1 you can observe there are 23.54% problem gamblers who have problems with gambling—either they spend a lot of time gambling, or they already steal in order to gamble, etc. The onset of gambling is the age of almost 15 years. The mean age of pathological gamblers is 16.52 (SD=1.82) years and the youngest gamblers are only 11 years old (in two cases in this sample).

Table 1 Categories of gamblers

	Male	Female	Total (%)
Level 1	437	316	753 (72.96)
Level 2	200	43	243 (23.54)
Level 3	33	3	36 (3.48)
Total	670	362	1032 (99.98)

Note Level 1 = Recreational gambling, Level 2 = Problem gambling, Level 3 = Pathological gambling

The questionnaire reveals the most frequent games played by Romanian teenagers. In Table 2 you can see how often pathological gamblers in our sample play each kind of game. There is a difference between the games played weekly and those played sometimes. The most frequent games played are sport betting and slot machines, lotto and internet casino and pool bets, roulette and Black-jack, playing cards for money.

We were interested in the association between gambling and psychoactive substances abuse. The most frequent association between pathological gambling and substance abuse is with alcohol in 24 cases out of 36 (Table 3), and then with the so called legal drugs, cigarettes, and illegal drugs. Those who reported consuming legal drugs consumed illegal drugs, too.

Discussion

Figure 1 presents the percentage of each category: social gamblers, problem gamblers and pathological gamblers.

23.54% of the sample (N=1,032) are problem gamblers. This high rate can be also given by the instrument used—20-GA. Both pathological and problem gambling exceed percentages found in other countries. As we mentioned in the Introduction, gambling prevalence in adolescents is higher, but in this rates are rather excessive. It is important to conduct a national survey with an appropriate sample.

The association of psychoactive substance abuse with gambling is a well known fact. We expected that the highest association to be with smoking as cigarettes are easy to provide among children and adolescents though selling them to children and adolescents is legally forbidden.

In Table 4 there is a summary of the data in this present study.

Table 2 The most frequent games played by pathological gamblers

Weekly	Number of players (%)	Sometimes	Number of players (%)
1. Sport betting/slot machines	13 (36.11)	1. Playing cards for money	15 (41.66)
2. Lotto/internet casino/Pool bets	9 (25)	2. Sport betting/scratch tickets/Lotto	13 (36.11)
3. Roulette/Black-jack	8 (22.22)	3. Pool bets	11 (30.55)
4. Playing cards for money	6 (16.66)	4. Internet casino	10 (27.77)
5. Stocks	5 (13.88)	5. Slot machines	9 (25)
6. Horse betting/playing dice on money	4 (11.11)	6. Roulette/Black-jack	6 (16.66)
		7. Playing dice on money	5 (13.88)
		8. Horse betting	2 (5.550
		9.Poker	2 (5.55)

Table 3 Association between pathological gambling and psychoactive substances abuse

Alcohol	Illegal drugs	Legal drugs	Smoking
24 (66.66%)	5 (13.88%)	7 (19.44%)	6 (16.66%)

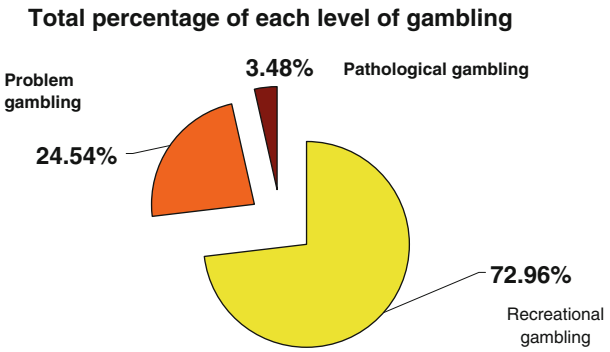

Fig. 1 Percentage of levels of gambling

Table 4 Summary of the outcomes of the study

Dimension	
Sample	1,032 teenagers
	11–19 years old
	Cluj, Harghita counties
	65.57% male
	34.43% female
Pathological gamblers	36
	3.48%
	91.66% male and 8.33% female
	Sex ratio F:M 1:11
Preferred games for gambling	1. Sport betting/slot machines-36.11%
	2. Lotto/internet casino/pool bets-25%
	3. Roulette/Black-jack-22.22%
	4. Playing cards for money-16.66%
	5. Horse betting/playing dice for money-11.11%
Maximum amount gambled (%)	0.5–5 Euro-38.88
	5–10 Euro-13.88
	10–100 Euro-44.44
	100–1,000 Euro-2.77
Group gambling (%)	Individual—22.22%
	Group—72.22
	Individual as well as in group—5.55
Academic results (%)	Acceptable—69.44
	Modest—30.55
School attendance (%)	Regular attendance—61.11
	Irregular attendance—38.88
Family incomes	Moderate incomes—52.77
	Moderate and high incomes—47.22
Control perception in gambling (%)	The belief that they can control the game—50
	The chance has no importance in gaining—50
Mean age in starting gambling	14.94±2.30 years

Preferred games tend to include new types of games like slot machines and internet gaming during the last years. The trend is to move gambling from casinos and land based games to the internet. It is specific for this age to have a highly socialized life and make most of the activities in groups, gambling being one of them, as teenagers answered. Gambling leads to lowering academic results and increasing the number of absences which can be an alarming sign for teachers. Family incomes do not affect whether teenagers gamble or not. Being rich or poor is not a condition for being more predisposed to gambling. Both are affected by gambling. Each pathological and problem gambler has cognitive distortions and they think they can control the outcome of a game. Irrational beliefs, magical thinking or superstitions are common among gamblers and this is the case with adolescent gamblers too.

Conclusions

The prevalence of problem gambling in the case of Romanian teenagers is 23.54% (17.69% female and 82.30% male), and of pathological gambling is 3.48% (8.33% female and 91.66% male). Mean age of pathological gamblers is 16.52 ± 1.82 years the youngest gamblers being only 11 years old. The mean age in starting gambling is 14.94 ± 2.30 years. The majority prefers to gamble in groups (72.22%) the following: sport betting/slot machines; lotto/internet casino/polls bets; roulette/black jack; playing cards on money; horse betting/playing dice on money. The highest amount of money gambled was 10–100 euro for 44.44% from pathological gamblers. 50% from the pathological gamblers consider they can control the game, and 50% considers that the chance has no importance in gaining. 1/3 from the gamblers has problems in adapting to school: absenteeism and underachievement. Pathological gambling is associated with substance abuse: alcohol—66.66%, illegal drugs—13.88% and legal—19.44%, and 16.66% are smoking. There is a normal distribution in the incomes of the gambles' families: low incomes on one hand and moderate and high incomes on the other hand.

In what regards the limits of these study there are some important issues. In the first place the instrument for screening pathological gambling was not validated for Romanian speaking population and moreover, the 20-GA was translated and adapted for teenagers transforming work and employment with school and academic activities.

Another limit of the study is that the sample was not randomized one and this convenience sample does not give us the possibility to generalize the data. Data obtained can be correlated with other data in studies already mentioned, like the one in 2002, Lupu et al. and give more than descriptive outcomes.

As further directions we look for conducting a national study with a relevant sample respecting all scientific rules for generalization of the data. We conduct a study for validation of 20-GA, SOGS-RA, MAGS and DSM-IV-J for Romanian adolescents. Moreover we work at testing different gambling prevention programs in order to diminish the number of problem gamblers and possible pathological gamblers.

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