# DEPRESSION AND ADDICTION IN GAMBLING

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**Abstract:** The main objective of this work is the theoretical knowledge and practical exploitation of pathological consequences on life game player chance, depression and addiction are two of the most important factors that are reflected in the gambler personality.

This study can be a help for those who want to learn more about this topic so widespread and, at the same time controversial. Pathological form of the gambling is not an isolated phenomenon, but a highly complex issue that profoundly affects in the same way the pathological chance players and their families and society as a whole.

The overall target of this work is a gambling foray into pathological. Based on two personality disorders, addiction and depression, I have demonstrated the close connection between them and gambling through research conducted during years 2014-2016 on a sample of 40 respondents. I chose this topic from the idea that depression influences the emergence and development of the pathological gambling, but I concluded that this relationship is bivalent because both depression and addiction influencing the onset pathological gambling and pathological gambling induces addiction and depression. I have selected respondents from different backgrounds because those players are part of all walks of life, not just individuals with a very good financial situation, but any individuals who come from the lower class of society. The link between all social backgrounds from which they belongs to ans gambling is possible because human rationality can be lost during the game regardless of the status and intellectual level of the gambler.

**Keywords:** gambling, addiction, depression, obsessive behavior, personality.

#### 1. Introduction

Gambling is a form of social entertainment or a pleasant way to spend free time accompanied by the desire to win money in a relatively short time, pleasure that can turn into addiction when it occurs excessively (Rizeanu, 2013).

Games of chance and gambling have existed since ancient times and were manifested in various forms, desire to win, to gain wealth and prestige by adding risk has always been a force which is represented by instinct that is present the human gene. Instinct is part of the broad scope of the survival mechanisms of the individual (Rizeanu, 2012).

Cambridge International Dictionary (1996) gives us a very good definition of what constitutes gambling or games of chance as "those games aimed gains money or other rewards." This definition covers all of gains arising from practicing any type of gambling. Gamblers Anonymous Association defines the game of chance as any form of betting, significant or not, the gain is safe or not and depends largely on the skills of gambler.

Games of chance were practiced in ancient times. In archaeological researches has been found throughout China and attested since 2300 BC, which shows that people were playing dice thousands of years ago. If you leaf through a little world history is revealed that around 100 AD leaders of today Norway and Sweden have resolved an issue of territory using dice, the winner being the one who gives more six to six double, so they found a solution without bloodshed specify those wars. In the Middle Ages, King Richard <the Lionheart> forbade his soldiers to play dice for fear of losing control over them, and Roman emperors Claudius and Nero were gaming enthusiasts.

Playing cards has the origin in China, it practices during the 12th century, while in Europe and Spain appeared only in the 13th century.

Lotteries exist from Roman Empire and were brought to England in 1569 by Queen Elizabeth I with the aim of raising funds for its projects. American War of Independence was financed with the help of the lottery, George Washington was the first who bought lottery tickets to encouraged this event.

In 1834, Charles Caldwell was the first who labeled gambling as a vice addictive. Fyodor Dostoyevsky, in his novel "Player", published in 1866, described in detail the distortions of payers thinking, loss of control, self-esteem and hopelessness, his personal experience gave him the opportunity to know all these details; he managed to heal itself from this dependence without resorting to any type of specialized treatment,

promise that there will never play made to his wife gave him the necessary motivation.

# 2. Theoretical Background

Addiction to gambling is a major psychiatric disorder that is part of impulse control disorders, psychiatrist community framing a gambling as the pathological disorder. Human rationality can be lost during the game regardless of the status and intellectual level of the player.

In the last five years this public health problem began to receive attention from the representatives of various fields of science (psychology, medicine). Manual of Diagnostic and Statistical Mental Disorders DSM IV-TR (American Psychiatric Association, 2000) gives us the main definition of the pathological form of the gambling "gaming behavior chance persistent and recurrent maladaptive (criterion A) interrupts the pursuit of personal goals, family or professional. Diagnosis does not arise if the gambling behavior is explained better of a manic episode (criterion B) ".

Some experts believe that the pathological form of the gambling can be classified as obsessive-compulsive disorder, which describes the addict as a person who realizes that his thoughts obsessive push him toward these actions illogical and inadequate, but feeling anxious, helpless when trying to quit.

Depression has been a subject of study from 1800 through poetry, drama and non-didactic prose. The concept of depression was used incidentally in the 19th century, the term established itself permanently as a result of systematic use of it by Kraepelin to describe periods of sadness and discouragement alternating phases of excitation and euphoria of psychosis manic-depressive (Toma, 2008).

Therefore, the word depression is beyond pathological, being present in all episodes of sadness, lowering tone mental and behavioral change, capacity and delaying the subject experiences occur.

It makes a huge confusion between sadness and depression. The feeling of sadness is not depression, but depression involves a sadness that has a high impact on the lives, daily activity, self-esteem, judgment and basic functions, such as sleep and appetite, being highly affected (Filimon, 2002).

The frequency, severity and universality are the three essential features of depression. Depression is not always obvious; cheerfulness can be hidden under an olympian calm. The frequency of depression is apparent from the statistics, but not all cases are recorded precisely because it can be hidden. The most common factor leading to depression is the tendency towards suicide (Filimon, 2002).

Addiction is usually a condition of slavery, namely a very strong inclination to serve this custom. Dependence is the ground state of an individual to exist. Obsession is a feeling, often irrational, over which the individual has a very low control. There are factors that most often are confused or are used without documentation in advance by individuals who break the psychological threshold cabinets. All inclinations needs to be discussed thoroughly and symptoms cannot be a wedge issue without knowing all the feelings and emotions of the subject. Personality represents all physical structures, intellectual and emotional aspects of an individual, all are exposed through consistent patterns of behavior (International Encyclopedia of Psychology, Volume II) ..

# 3. Assumptions and objectives

### **Global Assumptions:**

- There is a correlation between depression and five personality traits (paranoia, psychopathy, mental level, resistance to frustration and motivation) measured between depression and SP13-intraversie extraversion (E / I) measured EPQ.
- It is assumed that there are significant differences in the dimensions of DAS, EPQc (behavioral problems), EPQl (sincerity scale) based on group membership (group from Romania and Romanian group from England) of the participants.

# **Hypotheses:**

It is assumed that the player addict develops a strong trend towards installing depression;

- It is assumed that the number of unsuccessful attempts to quit gambling increases a higher emotional instability;
- It is assumed that after the game ended with a loss, a gambler develop sense of guilt, the need to lie to cover his loss;
- It is assumed that the player develops pathological paranoia elements involving guidelines for superiority, exaggerated behavior, susceptibility exaggerated, rigidity, psycho tendencies, logical interpretation but with false premises;

# Work objectives

- Examine the relationship between depressive disorder behavioral factors and gambling;
- The possibility of examining the relationship between elements of paranoia and games of chance;
- Examine the relationship between frustration and resistance to gambling;
  - Examine the relationship between lies and games of chance;

- Identifying the relationship between irrational beliefs and gambling.
- Identification of a link between genetic vulnerability and risk pleasure;
- Evidence of some elements of paranoia in choosing appliances, betting numbers and favorable days;
- Demonstrate a relationship between high mental level and a general culture rich and predisposition to addiction;

### 4. Research Tools

Personality Scale 13 (SP 13) - contains 130 questions on 13 pathological manifestation of personality tendencies. The 13 scales are: Validity (lie) (V), history (A). Psych asthenia (PA), Depression (D), Immaturity-Labiality (IL), Schizoid (SCH), Elements of Paranoia (Pa), Hysteria (Hy), Psychopathy (Pt), Mental Level (NM), Frustration resistance (RE), Mood (EE), Motivation (M). This personality questionnaire answers are "Yes" at all scales less than 1, 11 and 13 which will be count the "no" answers. If the first scale (validity) have more than five negative answers, the questionnaire will be canceled because the information that follows is given rational answers are thoughtful, information does not reflect the true subject.

**Eysenck Personality Questionnaire (EPQ)** -is based on the theory of Jung and contains the following five scales: Extraversion-Introversion (EI), Neuroticism (N), Psychotism (P), Abnormal Behavior (C), Sincerity Scale (IT). For each item scale we count affirmative answers. Particular attention pay to scale "Sincerity". If a score of between 17 and 19 have to do with a slight distortion, and if the score is greater than 19, the questionnaire will not be considered because the respondent is lying.

Attitude Dysfunctional Scheme (DAS) - contains 40 statements to which the respondent must decide to what extent agrees with that statement, as follows: 1 = fully agree; 2 = largely agree; 3 = somewhat agree; 4 - neutral; 5 = somewhat disagree; 6 = largely in disagreement; 7 = totally disagree. At listing, indirect factors are their opposites on the scale and direct factors retain their value. A score lower than 79 indicating low value of dysfunctional attitudes, while a score above 170 indicates a very high level of dysfunctional attitudes.

Rating Scale of Irrational Beliefs Related Games Luck (ECI) is a questionnaire with 23 items developed by Raylu and Oei (2004), with which participants can self-assess irrational beliefs related to games of chance on a Likert scale in seven steps where 1 = strongly disagree and 7 = strongly agree. Scale is used to identify irrational beliefs related to a game of chance among players as a first step in the cognitive

restructuring therapy. The score is obtained by summing the results of answers to all items; high scores indicate high levels of irrational thoughts of the players.

The 23 items used to assess participants' irrational beliefs on the game of chance are divided into five subscales:

- biasuri interpretative (bi) on the ability to control the game (sample item: Losses during the game will be followed by a series of earnings);
  - illusion of control (ic) (sample item: My prayers helps me gain);
- prediction control (PC) (sample item: I have some power to make predictions about the gain that follows);
- unrealistic expectations (an) related to games of chance (eg item: Gambling make me happy);
- inability to stop the game (is) (sample item: I'm not strong enough to stop me from playing).

Scores items can be calculated for each subscale and total score is calculated by summing responses to all items; in both cases, higher scores indicate strong presence of irrational beliefs on the gambler.

Freedom from Gambling Problem Questionnaire - the Freedom from Problem Gambling program, by Fontaine and Rosenthal (2008), developed self-assessment questionnaire of the pathological gambling. It contains 17 items so the answer affirmative (YES) or negative (NO). If the number of positive responses is greater than five, then we can speak about significant problems, even serious addiction. To calculate the final score is awarded one point for each answer and interpretation of results slightly in context is as follows:

0 = no addiction problems;

1-4 = mild addiction problems, to moderate;

>= 5 or more significant problems of addiction.

# 5. Sample

The present study was conducted in the following casinos and gaming halls: Metropolis Casino & Slots Roulette Arad and Ladbrokes Barnsley, UK. Subjects were selected based on their openness to respond concretely and honestly to questions. I explained to the subjects what involving this research, I have made very detailed briefing and that I will not disclose the identity gave a note of confidence.

The bulk sample of the research is composed of 40 respondents of which 10% are female and 90% are male. Participants aged between 18 and 55 years old and belong to two groups: the first group consists of people who live in Arad and playing at the casino in Arad mentioned, and

the second group consists of people of Romanian origin, which currently living in England, Barnsley town and attending the games room.

Romanian respondents in England, throughout the interview, tended to compare investment earnings and wages in Romania are much smaller than the gain currently registered in one week.

Arad sample consists of 20 players of which four are women accounting for 20% and 80% are male. Romanians in Britain sample consists of 20 subjects represented 100% of males. I must disclose that I didn't meet in England females from Romania who attends gambling halls.

# 6. Data analysis

1. There is a correlation between depression and five personality traits (paranoia, psychopathy, mental level, frustration resistance and motivation) measured between depression and SP13 – extraversion-introversion (E / I) measured EPQ.

After applying personality testing SP13 and EPQ I obtained the following significant correlations proportional between depression scales test SP13 (paranoia, psychopathy, mental level, frustration resistance and motivation), and between depression and unrealistic expectations related to gambling play the ECI (evaluation of irrational beliefs related to a game of chance):

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SP13 D and SP13 Pa -> 601 **
SP13 D and SP13 Pt -> 400 *
SP13 D and SP13 NM -> 543 **
SP13 D and SP13 RE -> 385 *
SP13 D and SP13 M -> 386 *
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SP13 D and ECI an -> 340 \*

Between SP13 D (depression) and EPQ E (extraversion-introversion) I got an inverse correlation worth 544\*\*, which suggests that depression increases as the participant is more introverted. Introvert is quiet, introspective, has a rich inner life; is the thinker type, possess abstract thinking, he is unrealistic; slightly tensioned, lacks the ease externalization, rich inner experiences; in social relationships is reserved, it is incredulous and planned; leaning towards a lifestyle ordered dominate their aggressiveness.

This psychological profile is valid only when the light is not on them, in game machines room they become interest and sociable. He gets in the game room extroverted, he is sociable, loves fun, has many friends; easily assume the risk, he loves adventure and is exposed to hazards; seeking agitation, he likes to make jokes, he is oscillating; He wants to look optimistic.

From the above mentioned values, we obtained significant correlations in terms of depression and inner feelings of the player's choice. Depression is the emotional state that is characterized by malaise, sadness, motor inhibition, decreased libido, suicidal ideation. Depression, as defined by the widest generality, is a decrease of the provision of basic, focusing on unpleasant sad feelings. Depressive syndrome has as defining components depressed mood, slowing of thought processes, psychomotor slowness that installs with a number of ancillary symptoms of somatic expression. Depressed mood is perceived as "vital sadness", loss of feelings, inner restlessness and emptying the contents bleak.

In my research, all these symptoms about significant correlations are being directly proportional to the feeling of paranoia, with psychopathy suffered by the respondent, with the mental resistance to frustration and motivation.

A significant amount, 601\*\*, I have obtained from the correlation between depression and paranoia elements, beyond what means that depression increases as paranoia elements are present; This shows guidelines for supra evaluation, exaggerated superiority in personal behavior and in assessing availability and susceptibility exaggerated, rigidity and a tendency very high to psycho logical interpretation. but departure is based on false premises that have no relation to reality.

Psychopathy is the second element influencing the onset and development of depression. Thus, by a factor of 400\*, denotes the presence of psychopathy mental fragility and extreme type behavior (between passivity and exaggerated type to unpredictable reactivity). All induce the presence of psychopathy and impulsiveness with crosscurrents in relation to ethical moral rules, depriving censorship (self-control) and sometimes state of awareness.

From the group of questions related to mental level found in SP13, I noted the question "Are there strangers staring at you with hatred and wantonly you talk ugly?" While the answer was 80% positive, which means that the environment and suspicions are the main factors influencing the installation of depression.

Resistance to frustration obtained a quota of 385, which means that depression increases as higher resistance to frustration. This correlation indicates the subject adapt and resist the imposition scheme and the deprivations, especially in your social context in which it operates.

The correlation between depression and motivation indicate awareness of behavior and attitudes towards socio requirements in family or socio-professional. Added value (386) shows that problems and disputes are present both in the social, family, emotional and socio-professional phenomena that we study with other research tools.

The value of the correlation between depression and unrealistic expectations related to the game of chance, 340, indicates that the player believes that gambling make their life easier and waits as his life to simplify, to feel they can breathe, to feel peaceful, gambling giving these moments (examples: "Gambling make me happier." "When you play, things seems better." "When you play, the future seems to rising (pink)." Bets reduce tension and stress."

The hypothesis is validated in part because only certain scales of personality questionnaire SP13 correlated with extraversion-introversion and paranoia scales measured by EPQ. So:

- 1. SP13 Pt and EPQ e -> -461 \*\*
- 2. NM SP13 and EPQ  $e \rightarrow -640 **$
- 3. RE SP13 and EPQ e -> -507 \*\*
- 4. SP13 EE and EPQ p -> -404 \*\*

All four are inversely proportional correlations, such as the subject is more introverted, the psychopathy increases, so the respondents have mental fragility, highly-like behavior, impulsivity and lack of control in family, relationships and professional. Introversion is responsible for resistance to frustration. As more as introversion decreases, the participant adapt more easily to new situations at work. There is an inverse correlation, between emotional balance (SP13) and psychotism (EPQ). Thus the greater emotional balance, there will be less psychotism. This correlation suggests that when the frequency decreases, the expression of antisocial behavior, desire to show cruelty and hostility towards others and things preference for strange, unusual diminishes intensities of emotional reactions occur; psycho-emotional precarious balance is characterized by excessive shyness aside and harder to control excessive excitability on the other side. These are usually the source of decompensation and disordered behaviors in context with the rules and rigors and sometimes social environment.

2. It is assumed that there are significant differences in the dimensions of DAS (dysfunctional attitudes scale) EPQc (behavioral problems), EPQl (sincerity scale) based on group membership (group from Romania and Romanian group in England) of participants (Table. 1).

To test this hypothesis, I used **t test**, with independent variable group. T test for independent samples used to test the difference between the averages of the same independent variables measured in two groups, made up of different subjects.

T test can be used to test samples as small if the sampling distribution for the two groups is normal and if the variance values in the two groups did not differ significantly. SPSS data table contains the

independent variable (group) with two values, depending on membership in one group or another. The independent variable is numeric conventional coding 1 and 2.

Table 1

	GRUP	N	Mean	Std. Deviation	Std. Error Mean
DAS	1 – group from Romania	20	134.65	35.807	8.007
	2 – Romanian group in England	20	163.25	42.159	9.427
EPQc	1 – group from Romania	20	14.35	2.254	.504
	2 – Romanian group in England	20	12.30	2.618	.585
EPQl	1 – group from Romania	20	8.05	.759	.170
	2 – Romanian group in England	20	7.30	1.031	.231

The coefficients obtained from the processing of data in SPSS (Table. 1) shows that there is a significant difference depending on size of group affiliation: DAS, EPQc (behavioral disorders) and EPQl (sincerity scale).

Regarding DAS, I got t = -2.312 coefficient significant at a threshold of p <0.05, demonstrating that there is a significant difference between the group from Romania and Romanian group from England in terms of dysfunctional attitudes, group Romanian in England is significantly more prone to introduce these attitudes toward including depression (m eng= 163.25 and m rom=134.65).

Depression is a mental state of sadness and bitterness which runs long periods. Symptoms that persist for more than two weeks and are of a severity that begins to hinder normal daily activities announces installation of clinical depression. Only a small proportion of those suffering from depression are able to recognize this condition and undergo the necessary treatment. The reasons are fear of social compassion, personal pride and ignorance. Even severe cases of depression can be cured even if the company does not believe in a cure for this disorder. It is estimated that by 2020 depression will become the second cause of disorder worldwide after cardiovascular diseases. Currently, the disease affects about 121 million people worldwide. In Romania, there was a significant increase in major depressive episode with age, from 2.1% - 2.6% (18-49 years) 4.4% - 5.2% (over 50 years) and with a growth rate of 1.2 percentage points for every other age

groups: 50-64 years and above 65 years. Symptoms: Feeling anxious or worried without an obvious reason; low frustration tolerance; loss of interest in activities that were produced before pleasure; self-accusation; feelings of helplessness; low self-esteem; thoughts of death and / or suicide.

Regarding EPQc (behavioral disorders), I got a coefficient t = 2.654, significant at a threshold of p <0.05, demonstrating that there is a significant difference between the group from Romanian and Romanian group from England on behavioral disorders, Romanian group from England is significantly more aggressive and emotionally unstable (m\_rom = 14.35 and m\_eng = 12.30).

In the field of behavioral disorders, an important place is for antisocial behavior. In this sense, those who have studied the antisocial behavior of gamblers arrived at highlighting a "profile" their psychological:

- a) trends towards aggression, either latent or manifest, based on a background of hostility, denial of socially accepted values;
- b) emotional instability generated by educational shortcomings, and the last phase of the fragility of the ego;
- c) social maladjustment due to insecurity, the individual seeks to replace, for example by changing his home dense loitering or by avoiding organized forms of life and activity;
- d) conduct duplicity manifested on two different planes: one, the behavior secret intimate the offense and the other is prepared, the behavioral relationship with society, whereby they often betray offense;
- e) existential imbalance, as evidenced by passions, addictions, perversions, absurd waste of money.

Regarding EPQl (sincerity scale), I got a coefficient t=2.620, significant at a threshold of p <0.05, demonstrating that there is a significant difference between the group from Romanian and Romanian group from England on the scale of honesty (m\_rom = 8.05 and m\_eng=7.30). This coefficient shows the validity of the research.

On the other hand, social desirability (Tanasanu, 2009) is a thoroughly studied concept in a lot of fields such as psychology, industrial-organizational psychology, personality psychology, social psychology and health psychology. Author who have dealt for the first time this concept has been Marlon Crowne in 1960, social desirability is considered that participants need to obtain the approval of others by providing answers in a manner acceptable and appropriate from a cultural standpoint. Thus, social desirability may be interpreted as a problem of subjects responding, rather, according to rules and social needs, rather than according to their personal values

In other words, social desirability is the tendency of an individual to present themselves in a favorable light to others just to hide some flaws or exaggerate some qualities.

Impression management refers to the control of information transmitted in order to improve the views of others for their own benefit or to achieve certain social goals. People want to control the impressions of others, but the most important and most common form of impression management is related to personal image of each of us (Tanasanu, 2009).

### 7. Conclusions

Reaching the end of the research, I must say that this study has some limitations. It has made clear that all data presented is limited to two groups investigated: 20 respondents from Romania and 20 Romanian respondents who lives and work in England who present addictive gambling. It is possible that a larger sample research findings to be different from what I have presented in this study. The fact that all 40 respondents were taken only two casinos could be a limit too.

The 20 respondents in Romania showed a slight opening to me because we know each other before applying questionnaires. Romanian respondents in England agreed to provide me with information only after I guaranteed that their identity will not be disclosed, which suggests skepticism and lack of trust in new people.

After applying personality questionnaires I have noticed an increased trend towards more dependence and depression Romanian players in England. In this case, the factor that predisposes the occurrence of depression is the missing family. Even though they were followers of gambling that went abroad to work does not empowering, threw him into a situation where they cannot go out alone.

By applying DAS scores were very high, which means that both groups show a very high level of dysfunctional attitudes that may constitute a predisposition to depression installation.

SP 13 brings high levels also so that we can make a general characterization, an individual appears so anxious, he presents obsessive phobic, is indecisive, lacks confidence in its own forces; depressed by the lack of interest manifested in emotional relationships, has ridden and quirks of behavior. He present exaggerated superiority and exaggerated susceptibility. He presents theatrical mood and exaggerated desire to be noticed regardless processes. Mental fragility and extreme type behavior, lacking confidence and impulsivity shown by illustrating picture is true to the player's chance of disease.

The EPQ shoes that all these behavioral disturbances very nice contoured, showing tendencies towards aggression, based on a

background of hostility and denial of social values. He is always in conflict with someone or something. Not be required to accept a very hard working and responding to the demands of others. Feels like enclosed, tight, suffocating the society in which he has no place. Thus recourse to the theater and to lie with the hope that he will be accepted for a period of time even if that aggression and impulsivity appear when lacking of self-control.

Pathological chance players put their trust in prayers, rituals and objects that can attract good fortune, something which is very clear from the application assessment Scale of unrealistic expectations related to the game of chance. In their view, a gain arises from theis skills acquired over time and due to the gaming experience, while loss is attributed to fate, to predict a possible win. Irrational beliefs of the participants on the game of chance, pathological tendency reflects player trust in signs and predictions, unrealistic expectations related to gambling are those that can be observed (example: gambling make me happy).

Depression is closely related elements of paranoia, psychopathy, resistance to frustration, motivation and unrealistic expectations related to the game of chance. Thus I have an introverted individual who use to extraversion is liked to have friends; trends show very elevated logical interpretation of phenomena, but departure is based on false premises that have no relation to reality; It is fragile psycho and presents a highly-like behavior, is always exaggerated reactivity between passivity and exaggerated type unpredictable; It is impulsive and lacks self-censorship; adapts very hard working regime imposed; he is not without problems and disputes in the socio-familial and socio-professional caused by gambling which can not give up because of unrealistic expectations which, according to him, make him happier and games reduce tension and stress.

#### References

DSM IV The Diagnostic and Statistical Manual of Mental Disorders

Filimon, L., (2002), *Experienta depresiva. Practici socio-culturale*, Editura Dacia Cluj-Napoca

Magill, F. (1996), International Encyclopaedia of Psychology, volume One, University of Illinois, London-Chicago

Magill, F. (1996), International Encyclopaedia of Psychology, volume Two, University of Illinois, London-Chicago

Rizeanu, S. (2012), Dependenta de jocuri de noroc. Ghid de ajutor pentru jucatorii patologici de noroc si familiile acestora, Editura Universitara, Bucuresti

- Rizeanu, S. (2012), Responsible gaming project (Romanian Conference of Gambling), Polo, Floreasca, Bucuresti
- Rizeanu, S. (2013), *Psihoterapia jocului de sansa patologic*, Editura Universitara, Bucuresti
- Rizeanu, S. (2013), Specificul jucatorului roman dependent de jocuri de noroc, (Romanian Conference of Gambling), Polo, Floreasca, Bucuresti
- Tansanu A., Macarie A., Condur A., Boghiţoiu I.S., Tudose L.E (2009)

  Dezirabilitatea socială modelarea empirică a unui chestionar

  standardizat. Lucrare prezentată la Conferința APIO, Iasi