



COMPARATIVE ELEMENTS OF THE EFFECTS OF THE COVID-19 PANDEMIC ON GAMBLING ADDICTS

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Abstract

The research is focused on highlighting the effects of the COVID-19 pandemic on addicted gamblers, compared with non-gamblers, and was conducted based on the premise that during this period, addicted gamblers were significantly influenced by the restrictions imposed on pandemic. It should be noted that these circumstances are unique, they have not been encountered before, which offers a special opportunity to study behaviors for different categories of people, as well as how they manage to adapt to this new situation. The research on the comparative elements of the effects of the COVID-19 pandemic was carried out on a sample of 96 participants, one year after the outbreak of the pandemic with its imposed restrictions to prevent the spread of the virus. The aim of the research was to check the fear of COVID-19, the manifestations of anxiety, depression, and stress in this period checked on addicted gamblers and compared to non-gamblers, assuming that these elements would be different for gambling addicts; the research highlights also the elements related to self-esteem and life satisfaction, estimated to be lower in the case of addicted gamblers compared to people who are not involved in gambling.

Keywords: *addicted gamblers, COVID-19 pandemic, depression, anxiety, stress*

1. INTRODUCTION

Gambling is initially seen by players as a pleasant form of leisure, with a willingness to allocate a certain amount for the game and a certain amount of time to play the game (Rizeanu, 2012, 2018). Often the initial involvement in gambling is catalyzed by several factors that can trigger the emergence of pathological gambling, which can later be enhanced and maintained by the existence of certain favorable aspects.

The initial involvement in gambling is sustained by a series of motivational elements and enhanced by three categories of factors that can trigger the appearance and development of pathological gambling: the desire to reduce or compensate some

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emotional states, the intention to impress and prove their value, the desire to be approved and validated by the social circle (Back, Lee, & Stinchfield, 2011).

The pathological form of gambling (gambling addiction), is included in the section "Disorders unrelated to substance use" according to DSM-V and is "problematic behavior of pathological, persistent and recurrent, which causes discomfort or clinically significant damage, manifested by four or more of the characteristic elements, over a period of 12 months."

The accumulation of all aspects of pathological gambling induces over time a decrease in cognitive abilities, physical and mental deterioration, and increased symptoms of depression, culminating in potential suicidal thoughts, given that financial losses will severely affect players, in a way which they lose control of their lives in favor of gambling (Blaszczynski, Phillips, Ogeil, & Chow, 2013).

Other aspects that appear following to the addiction developed by gamblers: they suffer from impairment of studies, work and other activities carried out in society; they have frustrations related to financial losses that will generate negative emotional states, most often associated with anxiety, increased stress levels and the appearance of stress-related illnesses; they face family and social problems; they tend to isolate themselves and have criminal and legal problems; they fall prey to collateral vices, such as excessive alcohol and substance use; they frequently have behaviors of mythomania and manipulation (Rizeanu, 2012, 2013b).

The profile of the pathological gambler in Romania can be described by the following elements: in 94.1% of cases the gambler is male, aged between 17-61 years, most often from rural areas, from families with several children and most often from families with various problems. A percentage of 75.46% of pathological players have depressive disorders, and in 64.71% of cases there is an average level of anxiety (Rizeanu, 2013a, 2014).

The influence of the COVID-19 pandemic may be significant on gambling-related behaviors, following the fact that gambling is considered one of the potential effects of mental health. The rise of gambling had been associated with a greater degree of gambling problems, increased alcohol consumption and psychological distress. Increased participation in gambling during COVID-19 pandemic can be explained because of the changes imposed by the pandemic every day in the lives of people with problematic gambling patterns (Håkansson & Widinghoff, 2021). Players who were already involved in gambling diversified their gambling activities, bet more per session, and spent more money on gambling. Compared to the same period last year, data from online gambling companies indicate that products with a faster gaming cycle, such as slots, have seen an increase in the number of active players. The number of bets on virtual sports and online poker increased in 2020 compared to 2019, as did the number of hourly gambling sessions (Auer & Griffiths, 2021). In conclusion, in terms of gambler behavior and the risk situations to which

it is exposed, it has been shown that the COVID-19 pandemic increases gambling problems due to migration to the online area during quarantine.

2. OBJECTIVE AND HYPOTHESES

2.1. OBJECTIVE

The objectives of the research are:

1. To highlight the possible correlations between the following variables: depression, anxiety, stress, self-esteem, life satisfaction, fear of COVID-19 and gambling addiction.
2. To demonstrate that fear of COVID-19 is similar for both gambling addicts and non-players.
3. To highlight that self-esteem, life satisfaction, depression, anxiety, and stress presents differences between addicted gamblers and non-players during pandemic.

2.2. HYPOTHESES

The research hypothesis are as follows:

1. There are statistically significant correlations between gambling addiction, depression, anxiety, stress, self-esteem, life satisfaction and fear of COVID-19 among gambling addicts.
2. The intensity of fear of COVID-19 is not different between gambling addicts and non-gamblers.
3. The level of self-esteem and life satisfaction are lower for addicted gamblers compared to non-gamblers.
4. The levels of depression, anxiety and stress are higher for addicted gamblers compared to non-gamblers.

3. METHOD

3.1 The participants

The participants were a group of 96 males, with various ages, different background, and marital status, out of which 49 males were problem gamblers and addicted gamblers (SOGS more than 0) and 47 non-players (SOGS 0). They responded by filling out both Google forms and physical document forms in March and April 2021.

4.2 The instruments

1. SOGS – South Oaks Gambling Screen” (Lesieur and Blume, 1987) is a questionnaire consisting of 33 detailed items, consisting of certain items that present an answer associated with the risk of pathological gambling (a total of 20 items).

2. Fear of COVID-19-FCV-19S scale (Ahorsu, Lin, Imani et al, 2020) has an internal consistency ($\alpha = 0.82$) and test-retest reliability (ICC = 0.72). The scale consists of 7 items. All items are answered using a 5-step Likert scale format, from strong disagreement to strong agreement. The total score results from the calculation of the score resulting from the sum of the items (between 7 and 35). The higher the score is, the fear of COVID-19 is higher.

3. The Rosenberg Self-Esteem Scale (Rosenberg, 1965) contains 10 items that measure the overall self-worth, measuring both positive and negative feelings about the self. The results obtained after scoring can be between 10 and 40.

4. The "Life Satisfaction" scale (Diener, Emmons, Larsen, and Griffin, 1985) consists of 5 items and was designed to measure the global cognitions of one's life satisfaction. Participants must indicate how much they agree or disagree with each of the 5 items using a 7-step Likert scale. Being a summative scale, based on the answers rated on the Likert scale in 7 steps, the scores obtained for the items are summed.

5. The DASS questionnaire - Depression, Anxiety and Stress Scales (Lovibond & Lovibond, 1995) has 21 items, divided equally on 3 scales, respectively Depression, Anxiety and Stress. Each scale has 7 items, these being interspersed randomly, the completion of each item being made by the respondent by self-assessment.

3.2 Procedure

The instruments were applied both on-line by Google forms, as well as in physical forms. The Ethical code and GDPR legislation were respected. All participants were noticed about the research and they consented, being aware of their anonymous identity.

3.4 The design

Below variables were considered:

1. Independent variables: addiction to gambling (gambling addicts and non-gamblers)
2. Dependent variables: fear of COVID-19, depression, anxiety, stress, self-esteem, life satisfaction, gambling addiction.

4. RESULTS

Mean and Std. Deviation are indicated in Table 1, for both groups: gambling addicts and non-players, for following variables: fear of COVID-19, depression, anxiety, stress, self-esteem, life satisfaction and gambling addiction.

Table 1. Descriptive statistics

Variable	Gambling addicts		Non-gamblers	
	Mean	Std. Deviation	Mean	Std. Deviation
Fear of COVID-19	14.02	5.01	13.32	6.23
Depression	21.06	7.92	19.87	8.18
Anxiety	15.11	7.66	19.49	6.36
Stress	30.12	8.36	24.98	9.26
Self-esteem	28.88	4.51	34.72	5.4
Life satisfaction	13.51	8.26	26.3	5.83
Gambling addiction	6	3.03	0	0
N	96			

The bivariate correlations are indicated in Table 2, only for gambling addicts' group, for variables: fear of COVID-19, depression, anxiety, stress, self-esteem, life satisfaction and gambling addiction.

Table 2. Correlations

		GA	FC	SE	LS	D	A	S
Gambling addiction (GA)	Pearson Correlation	1.000	-0.152	-0.250	-0.431*	-0.031	0.057	0.102
	Sig. (2-tailed)		0.296	0.084	0.002	0.831	0.695	0.486
	N	49	49	49	49	49	49	49
Fear of COVID-19 (FC)	Pearson Correlation	-0.152	1.000	-0.045	0.049	-0.039	-0.171	0.253
	Sig. (2-tailed)	0.296		0.758	0.737	0.788	0.239	0.080
	N	49	49	49	49	49	49	49
Self esteem (SE)	Pearson Correlation	-0.250	-0.045	1.000	0.882*	-0.497*	0.008	-0.515*
	Sig. (2-tailed)	0.084	0.758		0.000	0.000	0.957	0.000
	N	49	49	49	49	49	49	49

Life satisfaction (LS)	Pearson Correlation	0.431*	0.049	0.882*	1.000	-0.494*	-0.018	-0.469*
	Sig. (2-tailed)	0.002	0.737	0.000		0.000	0.901	0.001
	N	49	49	49	49	49	49	49
Depression (D)	Pearson Correlation	-0.031	-0.039	-0.497*	-0.494*	1.000	0.548*	0.666*
	Sig. (2-tailed)	0.831	0.788	0.000	0.000		0.000	0.000
	N	49	49	49	49	49	49	49
Anxiety (A)	Pearson Correlation	0.057	-0.171	0.008	-0.018	0.548*	1.000	0.504*
	Sig. (2-tailed)	0.695	0.239	0.957	0.901	0.000		0.000
	N	49	49	49	49	49	49	49
Stress (S)	Pearson Correlation	0.102	0.253	-0.515*	-0.469*	0.666*	0.504*	1.000
	Sig. (2-tailed)	0.486	0.080	0.000	0.001	0.000	0.000	
	N	49	49	49	49	49	49	49

In table 2 is indicated that there are several statistically significant correlations between variable as follows:

- There is a statistically significant negative correlation between the gambling addiction and self-esteem ($r=-.431$; $p<.05$)
- There is a positive statistically significant correlation between self-esteem and life satisfaction ($r=.882$; $p<.05$)
- There is a statistically significant negative correlation between the self-esteem and depression ($r=-.497$; $p<.05$)
- There is a statistically significant negative correlation between the self-esteem and stress ($r=-.515$; $p<.05$)
- There is a statistically significant negative correlation between the life satisfaction and depression ($r=-.494$; $p<.05$)
- There is a statistically significant negative correlation between the life satisfaction and stress ($r=-.469$; $p<.05$)
- There is a positive statistically significant correlation between depression and anxiety ($r=.548$; $p<.05$)
- There is a positive statistically significant correlation between depression and stress ($r=.666$; $p<.05$)
- There is a positive statistically significant correlation between anxiety and stress ($r=.504$; $p<.05$). The other correlations are not confirmed.

Table 3 presents the results of independent sample test of fear of COVID-19 between gambling addicts and non-gamblers.

Table 3. Independent Samples Test results-Fear of COVID-19

	Group	N	Mean	Std. Deviation	S.E. Mean
Fear of COVID-19	Non-players	47	13.32	6.23	0.91
	Gambling addicts	49	14.02	5.01	0.72

		Levene's Test for Equality of Variances		T-Test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Fear of COVID-19	Eq. var assumed	1.6	0.213	-0.61	94	0.544	-0.7	1.15	-2.99	1.58
	Eq. var. not assumed			-0.61	88.22	0.546	-0.7	1.16	-3	1.6

The statistical significance is not relevant ($p > .05$) and there are no significant differences for fear of COVID-19 between the groups.

Table 4 presents the results of independent sample test regarding self-esteem and life satisfaction for gambling addicts compared to non-players.

Table 4. Independent Samples Test results – Self-esteem & Life satisfaction

	Group	N	Mean	Std. Deviation	S.E. Mean
Life satisfaction	Non-players	47	26.3	5.83	0.85
	Gambling addicts	49	13.51	8.26	1.18
Self-esteem	Non-players	47	34.72	5.4	0.79
	Gambling addicts	49	28.88	4.51	0.64

		Levene's Test for Equality of Variances		T-Test for Equality of Means						
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		F	Sig.	t	df	Sig. (2-tailed)	Mean Dif.	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Life satisfaction	Eq.Var. As.	10	0.002	8.73	94	0.000	12.79	1.46	9.88	15.7
	Eq.Var.Not As.			8.79	86.49	0.000	12.79	1.45	9.9	15.68
Self-esteem	Eq.Var. As.	1	0.327	5.77	94	0.000	5.85	1.01	3.83	7.86
	Eq.Var.Not As.			5.74	89.69	0.000	5.85	1.02	3.82	7.87

The statistically significance is relevant ($p < .05$) for both variables, life satisfaction and self-esteem and there are significant differences between the gambling addicts and non-players regarding life satisfaction and self-esteem during pandemic. For both variables, the gambling addicts present lower levels compared to non-players.

Table 5 presents the results of independent sample test regarding depression, anxiety and stress for gambling addicts compared to non-players.

Table 5. Independent Samples Test results – Depression, Anxiety & Stress

	Group	N	Mean	Std. Deviation	S.E. Mean
Depression	Non-players	47	19.87	8.18	1.19
	Gambling addicts	49	21.06	7.92	1.13
Anxiety	Non-players	47	19.49	6.36	0.93
	Gambling addicts	49	15.18	7.66	1.09
Stress	Non-players	47	24.98	9.26	1.35
	Gambling addicts	49	30.12	8.36	1.19

		Levene's Test for Equality of Variances		T-Test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Diff	95% Confidence Interval of the Difference	

								erence	Lower	Upper
Depression	Eq. var. assumed	0.1	0.804	-0.72	94	0.471	-1.19	1.64	-4.45	2.07
	Not assumed			-0.72	93.48	0.471	-1.19	1.64	-4.45	2.07
Anxiety	Eq. var. assumed	1.2	0.276	2.99	94	0.004	4.31	1.44	1.45	7.16
	Not assumed			3	92.13	0.003	4.31	1.43	1.46	7.15
Stress	Eq. var. assumed	0.2	0.661	-2.86	94	0.005	-5.14	1.8	-8.72	-1.57
	Not assumed			-2.85	92.1	0.005	-5.14	1.8	-8.72	-1.56

The statistically significance is relevant ($p < .05$) for anxiety and stress. For anxiety, the gambling addicts present lower levels compared to non-players, while for the stress, gambling addicts present higher levels compared to non-players, during pandemic. The statistically significance is not relevant ($p > .05$) for depression, there are no significant differences between the groups.

5. CONCLUSIONS

The conclusion of the bivariate correlations indicates that, for the gambling addicts, during pandemic, there is a statistically significant negative correlation between the gambling addiction and self-esteem; there is also a negative correlation between self-esteem and depression and stress. The analysis concluded that there is a positive statistically significant correlation between self-esteem and life satisfaction, while there is a statistically significant negative correlation between the life satisfaction and depression and stress. At the same time, there are positive statistically significant correlation between depression, anxiety and stress.

Regarding the fear of COVID-19, both gambling addicts and non-gamblers have similar levels. The research was conducted exactly one year after the outbreak of the pandemic, a substantial period in which the population has increasingly adapted to the existing situation.

With reference to life satisfaction and self-esteem, there are significant differences between the gambling addicts and non-players, for both variables, the gambling addicts present lower levels compared to non-players. There are also significant differences between the gambling addicts and non-players regarding the levels of anxiety and stress: for anxiety, the gambling addicts present lower levels compared to non-players, while for the stress, gambling addicts present higher levels compared to non-players, during pandemic.

The research will be able to be continued later, after the end of the restrictions imposed by the pandemic, once the return to normal life and activity, to see if the

aspects related to the analyzed elements were temporarily amplified during the pandemic or if they created a permanent change, which will be found later in the structure of manifestations and in the behavior of gambling addicts.

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