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Exploring problem gambling's lay understandings: the social representations of problem gambling in relation to gambling involvement, sex and life satisfaction

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Abstract
The main aim of this study was to examine how people think about problem gambling, i.e., persistent gambling despite its negative effects, through the social representations (SRs) that they share about this issue. SRs are organized collections of beliefs, opinions, and knowledge that members of a social group have in common, and past research highlighted them as significant predictors of people's behavior, and therefore valuable for public health interventions. We investigated the content of the social representation (SR) of problem gambling in a sample of Romanians and we also aimed to examine the variations in this representation according to individuals' involvement in gambling, and the relations between these variations and life satisfaction. Sex differences were also assessed. We approached the SR content using the free association technique with the inductive stimulus "individual with problem gambling" on a convenience sample of Romanians (N = 313). Results of the comparative statistical analyses indicate significant differences in the core of this SR between groups with different positions on the variables considered. They suggest several elements of social stigmatization of people struggling with problem gambling within the SRs shared by certain groups, specifically by individuals with no gambling involvement (mostly female) and by those with low life satisfaction. Our findings indicate that the SR of individuals with gambling involvement (mostly male) is as focused on the psychological dynamics that attract and keep one's involvement in gambling, but also on its risks, including that of social exclusion. Finally, our findings indicate that individuals with high life satisfaction share a more empathic perspective on the struggles confronted by people with problem gambling.

Keywords Gambling · Problem gambling · Social representations · Life satisfaction · Addiction

1 Introduction

Gambling represents an activity that essentially involves components such as: (i) the outcome of the event is uncertain, and the final result is largely based on chance or luck; (ii) bets are not exclusively limited to sums of money; in certain contexts, personal goods can also be wagered; (iii) participation in gambling activities is voluntary; and (iv) involvement in gambling activities involves the payment of a sum of money or, depending on the context, a fee [1].

It is important to note that the literature acknowledges that gambling may have both positive and negative outcomes [2]. Regarding the positive effects of gambling, it has been revealed that recreational gambling can enhance

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aspects such as escape from boredom and a way to pass the time especially for many older individuals [3, 4], community connection [5, 6], family interaction [5], or enjoyment [7]. Another positive experience created by gambling is that of "escape"; individuals may engage in gambling to escape daily worries and to boost self-esteem, allowing those involved a window of time in which they can enter an ideal environment [3]. It must be noted that this escape from negative emotions may provide only temporary relief and is highly associated with problem gambling and maladaptive coping mechanisms [4]. Other positive aspects of gambling include a sense of freedom, enhanced self-competence, confidence in one's abilities, or increased cognitive efficiency [8–11].

The negative effects of gambling are much more varied and have a profound impact on mental health, including financial difficulties [12], health problems [13], emotional distress [14], depression [15, 16], anxiety [15, 17], or even suicide [18]. Furthermore, some individuals are unable or unwilling to refrain from gambling even when they come to experience such harmful effects and negative outcomes. This type of persistent gambling was labeled "problem gambling", and past research highlighted that it can have important negative consequences [19]. Most importantly, problem gambling has been found to be linked to a higher chance of developing addiction disorders [20], various mental health diseases [21], and a variety of psychological and socioeconomic problems [22]. Therefore, problem gambling has been repeatedly highlighted as a significant public health issue [23, 24].

These findings highlight the importance of understanding how people perceive and think about problem gambling in order to develop tailored interventions to prevent this phenomenon and to support individuals who are already affected by it. The aim of this research is to examine lay thinking about problem gambling through the lenses of the theory of social representations (SRT), and to investigate how these lay perceptions differ according to three factors that have been previously highlighted as associated to problem gambling, i.e., actual gambling involvement, gender and life satisfaction.

1.1 Social representations and gambling

Social representations (SRs) are organized collections of beliefs, opinions, and knowledge that members of a social group have in common regarding particular issues or social objects [25–28]. SRT [25–28] has been frequently put to use in order to understand how knowledge about important social issues is constructed and shared, as SRs function as a conceptual system through which people interpret reality and that shapes their relationships with the physical and social environment, influencing both behaviors and practices [29]. Also, SRs play a decisive role in organizing action [30] and molding behaviors [31, 32]. The content of the SR of any object is closely related to the social practices towards the respective object [27, 28, 33, 34]. Therefore, people's SRs about a particular topic are predictors of their behaviors that are relevant to that topic. For instance, studies on consumer behavior have showed that individuals' reception and adoption of new products can be predicted based on their SRs of the novel technologies involved and of other relevant issues [35, 36]. This also implies that prevention campaigns should carefully consider people's SRs about the targeted behavior and attempt to modify the content of these representations in order to provoke actual behavioral changes. Past findings support this claim, as research conducted within SRT that examined how individuals make sense of well-being and illness has provided important guidance for tailoring prevention and intervention campaigns [37]. On another note, SRs of various issues with societal relevance have been the focus of extensive research on the Romanian population [38–41]. Another study recommends that the SR of "individual with problem gambling" should be considered within the context of gambling to gain a deeper understanding of this practice [42].

In this regard, based on SRT [25–28], we consider that the SR of gambling shared by members of certain social categories may foster the belief that involvement in gambling is sometimes acceptable and even a desirable practice. This type of belief would motivate their engagement in gambling-related practices. Hence, SRs may constitute a predisposing factor for the negative outcomes associated with gambling, such as financial difficulties, relationship problems, anxiety, depression, or psychological distress [15, 42–45]. This study aims to highlight the specificities of the SR of problem gambling shared by people with a history of gambling, which may provide valuable guidance for (1) future strategies for preventing problem gambling and (2) psychotherapeutic or mental health intervention models for problem gambling.

1.2 Sex differences regarding involvement in gambling

Individuals engaged in gambling activities are predominantly men [23, 46, 47]. In comparison to females, the risk of males to be exposed to gambling, to engage in this type of behavior and to develop problem gambling is significantly higher [48]. For instance, there are findings indicating that males are nearly three times more likely than females to develop gambling-related problems [47], while others show that the male-to-female ratio transitions from approximately 1:1 in social gambling to 3:1 in cases of problem and pathological gambling [49, 50]. This phenomenon may occur because males are significantly more predisposed than females to take risks and perceive outcomes of involvement in gambling as positive, by holding SRs that highlight the potential benefits of gambling [51].

1.3 Life satisfaction, stigma and gambling

Life satisfaction involves a holistic and subjective emotional assessment of one's life [52, 53]. Past findings suggest significant relationships between low levels of life satisfaction and the risk of developing problem gambling, as negative life outcomes such as low income, unemployment, being single, or undergoing a divorce, were pinpointed as risk factors for the emergence of gambling-related issues [54]. Conversely, problem gambling affects life satisfaction, as past findings indicated that excessive involvement in gambling brings about different types of psychological distress such as anxiety, depression, alcohol consumption, financial difficulties resulting from loss of money, relationships problems and strain on close relationships [20, 21, 49, 50, 52, 55–58]. Additionally, problem gambling often exposes the individual to social stigma, including from close associates and family members [55]. It is very common for individuals with problem gambling to hide their involvement in gambling to avoid stigmatization [56, 57]. Nevertheless, this can create a vicious cycle, as the more individuals hide their involvement in gambling, the more they may suffer and perceive themselves as increasingly stigmatized [58]. Additionally, stigma among individuals involved in gambling has been identified as a significant barrier for seeking help and treatment when gambling becomes problematic [56, 59]. Also, stigma associated with involvement in gambling affects families and close individuals due to the embarrassment and shame it causes [60, 61]. Considering that stigma is negatively linked with life satisfaction [62], it is not surprising that life satisfaction has been suggested as a relevant measure of the general psychological outcomes of problem gambling [63]. Our study also aims to explore the stigma attached to individuals with problem gambling through the examination of the content of the SRs of this issue, as well as the differences between people with high and low levels of life satisfaction with regards to the SR of problem gambling.

1.4 The present study

The aforementioned research findings and the increased frequency of gambling in the general population worldwide have raised awareness about the risk of problem gambling and the significant difficulties involved in developing effective interventions addressing this condition in those affected. As such, highlighting the lay people's understanding of problem gambling may provide important benchmarks in conceptualizing and implementing strategies aiming both to prevent it and to provide effective support to those already affected. To this aim, the present study explores the content of the SR of problem gambling in the general population of a country with a high prevalence of this issue, i.e., Romania [64, 65]. Another important objective of this research is to examine whether and how the main elements of the content of this SR vary according to individuals' personal experiences related to gambling involvement, as well as to their sex and life satisfaction.

2 Method

2.1 Participants and procedure

Three hundred thirteen participants took part in this research, ranging in age from 18 to 65 years (M = 28.04; SD = 8.87). Out of the total participants, 105 individuals are female (65.5%), 104 individuals are male (33.2%), and 4 individuals are non-binary (1.3%). The majority of individuals come from urban areas (68.7%) and have postgraduate education (at least a college degree) at 48.2%. In terms of marital status, the majority of participants are in a relationship (37.4%), with the duration of the relationship ranging up to 396 months (M = 40.63 months; SD = 66.89). The characteristics of the participants are presented in Table 1.

The data were collected through the Google Forms platform. The questionnaire link was distributed within virtual groups associated to gambling as well as within groups related to different cities in Romania, including Facebook groups for residents in these urban communities (e.g., Suceava, Baia Mare, Bacău, etc.). To ensure participant diversity, the link was not posted in groups targeting specific demographics, such as university-related groups. Instead, it was shared in community-based groups, e.g., "Residents of Suceava". This recruitment method has been employed in other studies involving the Romanian population [66, 67]. The present study was approved by the Research Ethics committee of the Faculty of Psychology and Education Sciences, Alexandru Ioan Cuza University of Iași, Romania (Approval No. 1902 of November 2023). The study was performed in accordance with the principles of the Declaration of Helsinki. The authors obtained informed consent from the participants.

2.2 Measures

Social representations of gambling. Each participant was asked to write the first, second, and third word or phrase they associated with the notion of "individual with problem gambling". Optionally, participants were also given the opportunity to rate a fourth word or phrase they associate with "individual with problem gambling", along with their sentiments toward that particular word/phrase. This approach is based on the "Associative Network" [68] instrument and has demonstrated its validity in other studies that examine the content of social representations [39, 40, 69].

Life satisfaction. We used The Satisfaction with Life Scale (SWLS) [53] to measure life satisfaction. The scale consists of 5 items (e.g., *"The conditions of my life are excellent."*), scored on a Likert-type scale ranging from 1 = strongly disagree to 7 = strongly agree. Higher scores indicate a higher level of life satisfaction. The scale had good reliability, with Cronbach's $\alpha = 0.88$.

Variables related to involvement in gambling. Participants reported whether they had engaged in gambling activities in the last 6 months.

Socio-demographic variables. Participants reported their sex, age, place of origin, marital status, and the duration of their relationship.

Table 1 Sample characteristics

	N	%
Sex		
Male	108	34.5
Female	205	65.5
Place of origin		
Rural area	98	31.3
Urban area	215	68.7
Level of education		
Postgraduate education (at least a college degree)	194	54
Pre-university education (at most high school completed/vocational school completed, without pursuing a college degree)	48	13.4
Ongoing university studies (currently attending college)	50	13.9
Marital status		
Married	80	25.6
Divorced	8	2.6
Single	106	33.9
In a relationship, but not officially married	117	37.4
Widow/widower	2	0.6
Involvement in gambling in the last 6 months		
No	206	65.81
Yes	107	34.19

2.3 Analyses

First, we analyzed the associations between the independent variables of our study, i.e., gender, involvement in gambling and life satisfaction. Second, participants were divided into two categories based on involvement in gambling activities in the last 6 months: (1) individuals engaging in gambling, and (2) individuals not engaging in gambling. Additionally, participants were further divided into two categories based on life satisfaction, using the median as a reference point: (1) individuals with low life satisfaction, and (2) individuals with high life satisfaction.

Then, we used multiple correspondence analysis in T-Lab 10.2 [70] to examine the content of the SR, specifically through the frequency of each of the lexical elements associated by participants with the inductor used (i.e., "individual with problem gambling") and the co-occurrences of these elements. Moreover, this method provides an assessment of the degree to which each lexical element is specific to each of the groups of the variables introduced as independent (or "active") in the analysis. We used sex, past involvement in gambling, and life satisfaction as active variables. The method identifies latent factors that explain the data variability (i.e., the co-occurrences between the words or expressions evoked by participants) and represents the co-occurrences between the lexical elements and their relationships to the active variables in a bi-dimensional space (see Fig. 1).

Each factor represents an axis in this space, representing underlying structures or themes in the data that capture the main sources of variation in and associations among the lexical elements collected from participants. Each factor reflects a principal dimension of variation in the data. Factors are ranked by their importance, measured by the percentage of inertia (or data variance) they explain. Each factor is composed by two semi-axes, i.e., opposing sets of lexical elements, labeled as "negative" and "positive" depending on their t-values. The respective factor reflects, on the one hand, the co-occurrences of the lexical elements in each semi-axis set, and on the other hand the opposition between these two sets, in the sense that participants who elicited the words in one set tend to be different from those who elicited the elements in the second. The specificity of each lexical element to its semi-axis is reflected in the magnitude of its t-value.

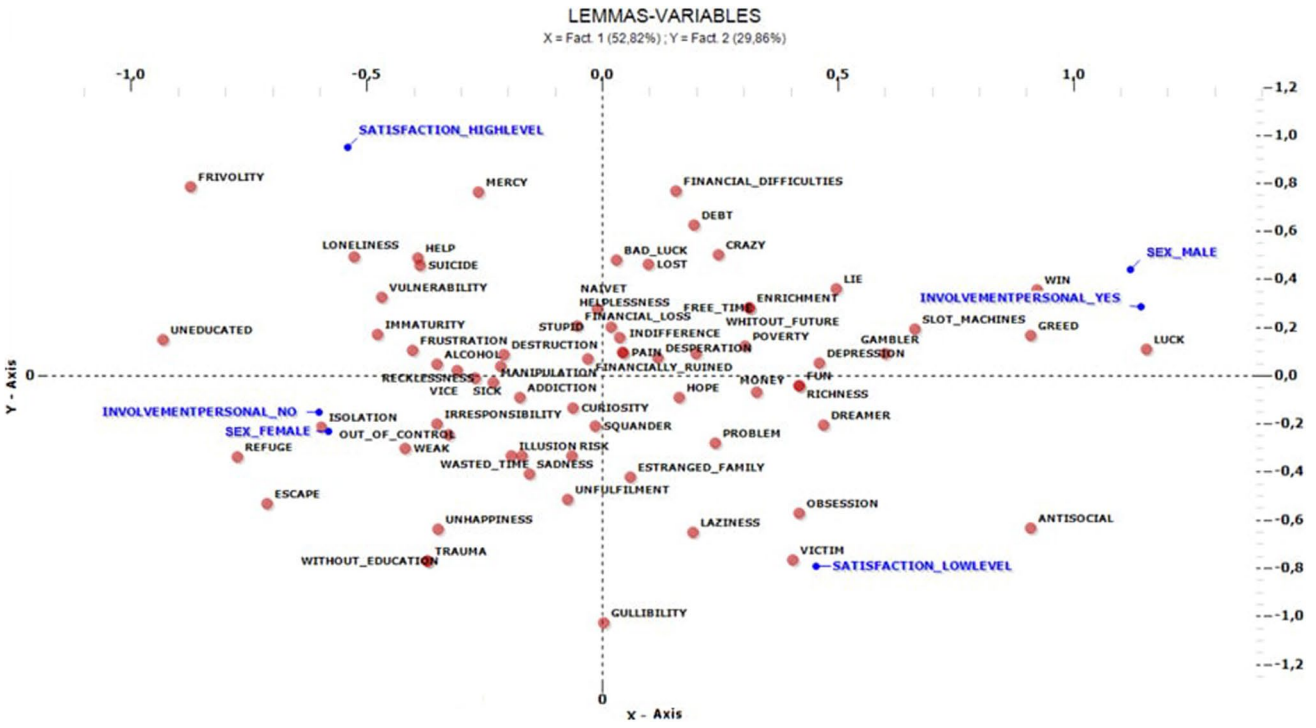

Fig. 1 Results of the multiple correspondence analysis

3 Results

3.1 Associations between independent variables

The Chi-Square association test showed that gender was significantly associated with involvement in gambling, χ^2 (2, 313) = 72.40; $p < 0.001$. Most female participants (81.5%) had no gambling involvement, while most male participants (67.3%) had involved in gambling. Conversely, among participants with no gambling involvement most were females (82.3%) and 16.7% were males, while among participants who had involved in gambling 63.6% were males and 34.5% were females. We then examined the relationship between gender and life satisfaction using the Independent *t*-Test, which showed that females in our sample ($M = 25.05$; $SD = 6.61$) had higher life satisfaction than males, $M = 21.83$; $SD = 7.35$; $t(307) = 3.90$; $p < 0.001$. The *t*-test comparison using gambling involvement as grouping variable indicated that participants with no involvement in gambling ($M = 25.24$; $SD = 6.37$) had higher life satisfaction than those who had involved in gambling, $M = 21.56$; $SD = 7.76$; $t(311) = 4.51$; $p < 0.001$.

3.2 Descriptive statistics

T-Lab 10.2 [70] generated a list of words that participants elicited at least 4 times. Consequently, there are 68 different words elicited at least 4 times. The list of words and their frequencies can be seen in Table 2. The words were provided in Romanian, with their English translations included in Table 2.

3.3 Multiple correspondence analysis

The multiple correspondence analysis extracted two factors. Factor 1 (vertical) explains 59.82% of the data inertia (variance). The defining words for Factor 1 (i.e., the lexical elements with the highest t-values) are presented in the Table 3.

Factor 2 (horizontal) explains 29.86% of the data inertia (variance), and its defining words are presented in Table 4.

Considering the lexical elements specific to each semi-axis of the two latent dimensions, Factor 1 reflects a spectrum of perceptions ranging from negative attributes associated with problem gambling (e.g., addiction, irresponsibility) specific to the negative semi-axis to more neutral or positive attributes (e.g., luck, winning) on the positive semi-axis. The second latent dimension (Factor 2) may capture another spectrum of perceptions, such as personal traits (e.g., gullibility, laziness) versus financial consequences (e.g., debt, financial loss).

Examining the sets of lexical elements that emerged as more closely associated to each of the groups defined by our independent variables, results indicate that male participants and participants with past involvement in gambling are characterized by common lexical elements, i.e.: *slot machines, win, greed, and luck*. These words could fit into a descriptive category named "*Gambling Dynamics*" considering that this category encompasses the broader themes and elements that influence gambling experiences, including both physical machines and abstract concepts. In addition, female participants and those who have not engaged in gambling activities in the last 6 months also share a set of common elements, such as *trauma, sadness, wasted time, uneducated, addiction, and irresponsibility*. These words could fit into a descriptive category named "*Gambling's Dark Side*" considering that this category effectively captures the adverse effects and broader consequences that gambling can have on individuals and society. The associations to problem gambling specific to individuals with a low level of life satisfaction were: *laziness, obsession, victim, antisocial, and gullibility*. These words could fit into a descriptive category named "*Downfall Dynamics*" considering that this category effectively captures the broader themes and elements that influence negative outcomes related to gambling, including practices, tendencies, and personal vulnerabilities. In addition, those with a high level of life satisfaction associated the inductor with lexical elements such as: *frivolity, mercy, help, loneliness, and financial loss*. These words could fit into a descriptive category named "*Gambling's Social and Emotional Costs*", considering that this category effectively captures the broader themes and elements related to the social and emotional repercussions of gambling, including both interpersonal dynamics and personal financial impacts.

We further examined the specificity of the content of the SR of participants who have engaged in gambling in the last 6 months and that of individuals not involved in gambling through the set of typical and exclusive words, respectively, of each of these two categories. The typical lexical elements are those that emerged more frequently in one of the groups, as indicated by a chi-square test comparing their frequencies across categories, while the exclusive elements are those

Table 2 List of words produced by participants and their frequencies

Word	Frequency	Word	Frequency
Addiction	161	Weak	7
Financial_loss	79	Without_future	7
Irresponsibility	33	Alcohol	7
Financially_ruined	31	Greed	7
Stupid	28	Gullibility	7
Recklessness	21	Fun	6
Poverty	19	Lie	6
Sick	17	Isolation	6
Wasted_time	17	Bad_luck	6
Squander	16	Mercy	6
Out_of_control	16	Richness	6
Depression	16	Without_education	5
Desperation	15	Victim	5
Problem	15	Trauma	5
Money	14	Crazy	5
Immaturity	14	Curiosity	5
Luck	13	Escape	5
Debt	13	Frivolity	5
Sadness	13	Frustration	5
Naivet	12	Hope	5
Illusion	11	Indifference	4
Vice	11	Helplessness	4
Destruction	11	Manipulation	4
Gambler	11	Free_time	4
Loneliness	10	Financial_difficulties	4
Win	10	Antisocial	4
Vulnerability	10	Dreamer	4
Risk	9	Enrichment	4
Laziness	9	Uneducated	4
Lost	8	Unfulfillment	4
Help	8	Unhappiness	4
Estranged_family	8	Suicide	4
Slot_machines	8	Refuge	4
Obsession	8	Pain	4

Table 3 Defining words for Factor 1

Semi-axis negative	t-value	Semi-axis positive	t-value
Addiction	– 2.47	Antisocial	1.81
Frivolity	– 1.95	Depression	1.85
Immaturity	– 1.80	Gambler	1.99
Irresponsibility	– 2.05	Greed	2.41
Loneliness	– 1.68	Luck	4.18
Uneducated	– 1.86	Slot Machines	1.88
		Win	2.93

which were associated to the inductor only by participants in one of the groups. The two types of elements pertaining to gambling involvement as active variable are presented in Table 5.

Table 4 Defining words for Factor 2

Semi-axis negative	t-value	Semi-axis positive	t-value
Gullibility	– 2.72	Debt	2.27
Laziness	– 1.96	Financial loss	1.95
Trauma	– 1.72	Frivolity	1.75
Victim	– 1.70	Mercy	1.88
Without education	– 1.72		

Table 5 Typical and exclusive words based on involvement in gambling

Individuals with involvement in gambling				Individuals with no involvement in gambling			
Typical words	χ^2	p	Exclusive words	Typical words	χ^2	p	Exclusive words
Luck	21.12	0.001	Antisocial	Addiction	4.12	0.04	Isolation
Win	14.96	0.001					Escape
Gambler	8.02	0.004					Frivolity
Depression	6.48	0.01					Trauma
Debt	4.91	0.02					Without education
							Uneducated
							Unhappiness
							Refuge

4 Discussions

Using the SRT [25–28] coined by Serge Moscovici, we aimed to explore the content of the SR of "*individual with problem gambling*" in the Romanian population. Our findings highlighted a set of important elements comprising the content of this SR and significant differences between groups with different positioning on the three psycho-social coordinates considered, i.e., gambling involvement, life satisfaction, and sex.

Firstly, we found that females and individuals who have not engaged in gambling activities in the last 6 months predominantly associated problem gambling to words such as "*trauma*", "*sadness*", "*without education*", "*addiction*", "*irresponsibility*" or "*wasted time*". The other words that emerged as specific to individuals who have not engaged in gambling activities from our analyses on the typical and exclusive words of each social category are "*isolation*", "*escape*", "*frivolity*", "*unhappiness*", and "*refuge*". Some of these lexical elements, i.e., "*trauma*", "*sadness*", "*isolation*", and "*unhappiness*" have a strong negative emotional connotation, highlighting, together with *"addiction"*, the psychological risks of gambling. The explanations for this result can originate from various aspects. For instance, they can be interpreted in light of the fact that these females have not engaged in gambling. At the same time, this finding can also be explained in the context of previous research that showed females are more likely to perceive negative outcomes associated with involvement in gambling activities [51]. In other words, this negative association could arise either from the absence of gambling or from being female, and future research should disentangle these possible sources of variation. Some of the other words in this set, i.e., "*without education*", "*wasted time*", "*irresponsibility*", and "*frivolity*", suggest that in this group problem gambling is interpreted as a vain activity rooted in one's poor education and consequent irresponsible lifestyle. Gambling is represented as one of the available options for individuals facing difficulties in life, offering a risky yet alluring "refuge" for them to "*escape*" their problems. Overall, this pattern of content at the core of this SR composes a coherent account of the social and psychological trajectory of people with problem gambling, highlighting the predisposing factors and the negative consequences of gambling. It also implies a detached and quite judgmental perspective on those affected by this practice, highlighting their responsibility (or lack thereof) in preventing this existential downfall or recovering from it, complementing past findings on the substantial social stigma attributed to gamblers, even by their close ones and family members [55]. This stigmatization, shared within the SR of gambling among those not involved, can cause affected individuals to further conceal their struggle with gambling and refrain from seeking help.

Secondly, the content of the SR of the people who have engaged in gambling activities in the last 6 months, most of them being male, is centered on "*slot machines*", "*win*", "*greed*", and "*luck*". While "*slot machines*" and "*luck*" can be considered as descriptive elements, conveying the prototypical components of gambling as involving games of chance on dedicated

devices, "*win*" and "*greed*" may indicate mixed feelings about betting. More specifically, "*win*" can be accompanied by an extremely high sense of joy generated by success in gambling. Equally, "*greed*" suggests the type of occurrences in which the gambler, driven by greed, continues betting after a series of initial wins and ends up losing. Nevertheless, because of the initial wins, the brain may register the received dopamine, potentially creating a vicious cycle of addiction. The high prevalence of "*win*" and "*greed*" further suggests that people with involvement in gambling (mostly male) share a SR that also provides an explanation of problem gambling, different from the one identified above in the group of female and individuals with no gambling involvement. While the latter highlights the social and personal roots of this addiction, the SR shared by people who gamble is focused on the internal dynamics of gambling, specifically on the reinforcements brought by winnings and the psychological forces that maintain one's compulsive gambling.

The SR of problem gambling shared by people with involvement in gambling can be further outlined with reference to the lexical elements that emerged as typical or exclusive words to this group, i.e., "*antisocial*", "*depression*" and "*debt*". The first two indicate that the psychological risks of gambling are also part of the core SR of people who are involved in these activities, paralleling the content of this SR among individuals who refrain from this type of activities. Past studies on the same population (i.e., Romanian) have highlighted that individuals in Romania who engage in gambling activities are prone to depression [15, 42], which, in turn, among other negative outcomes, can be generated by the stressful life conditions in times of financial difficulties. The emergence of *"debt"* as highly prevalent in the SR of participants with involvement in gambling suggests the salience of this causal route and, in conjunction with the other elements, the awareness of the risks of mental problems brought by problem gambling among the members of this group. Moreover, it can also indicate their fear of the risks of social marginalization of individuals struggling with compulsive gambling, thus shedding more light on the internal struggles that they face.

Thirdly, our findings indicate substantive differences in the SR of problem gambling according to participants' life satisfaction. Those with a high level of life satisfaction predominantly associated problem gambling with "*frivolity*", "*mercy*", "*financial loss*", "*help*", "*loneliness*", or "*suicide*". While "*frivolity*" denotes superficiality in life decisions, highlighting an internal attribution regarding gambling, the other elements suggest a more empathetic perspective on the challenges individuals in this condition face. Specifically, "*loneliness*", "*financial loss*" and "*suicide*" highlight important risks of problem gambling, while "*mercy*", and "*help*" may suggest various aspects, such as individuals with high life satisfaction being inclined to show empathy towards gamblers or emphasizing the importance of providing assistance to those struggling with problem gambling, including their own willingness to offer such help themselves. Building on the premise that SR can influence norms and values in a society [25, 26, 28], as well as social practices [29], our results indicate that individuals with high life satisfaction are more inclined to support societal initiatives offering help and treatment to people addicted to gambling.

Conversely, participants with a low level of satisfaction associated problem gambling to "*laziness*", "*obsession*", "*victim*", "*gullibility*" and "*antisocial*". Overall, this set of lexical elements conveys a SR that portrays people with a problem gambling as victims of their own character flaws, gullible and lazy enough to fall in the trap of gambling. Past research highlighted adverse outcomes such as anxiety, depression, financial issues or relational problems that drastically affect the life satisfaction of individuals chronically involved in gambling [15, 16, 42, 43, 45, 63, 71–73]. Our findings further suggest that people affected by other personal factors that diminish their life satisfaction share a SR of problem gambling that highlights the personal responsibility for this condition. This indicates that among this group, problem gambling is socially constructed as a stigma associated to the inability of those affected to control their impulses when facing this type of temptation, more manageable in comparison to other more serious life struggles.

There are several limitations of our study. Firstly, involvement in gambling is a taboo subject in Romania, hence some of our participants may have concealed their real engagement in gambling because of social desirability concerns. Future studies should complement this type of assessment with objective measures of problematic involvement in gambling, such as the value of money lost or the number of hours spent in gambling activities. Secondly, we consider it a limitation that we only used a subjective assessment of life satisfaction, and we did not include objective measures of relevant protective demographic factors such as high income. The inclusion of such objective factors should be considered in future studies. Thirdly, a limitation that needs to be addressed is that the study did not include a measure for criteria related to problem gambling. Future studies should incorporate such a measure, which would also facilitate a comparison between those who do and do not meet the criteria for problem gambling and the types of words they elicit. Future research should consider this direction for a deeper understanding of SR. We also didn't address other factors that may impact people's SRs of problem gambling, such as personality or risk preferences.

To conclude, our study has highlighted several significant variations in the content of the SR of problem gambling according to individuals' personal experiences in this respect, their sex and their level of life satisfaction. Our findings suggest several elements of social stigmatization of people struggling with problem gambling within the SRs shared by

certain groups, specifically by individuals with no gambling involvement and by those with low life satisfaction. Both SRs stress the people with a problem gambling and implicit blame for his condition, but while the representational content of the former group also highlights the role of external, social factors, the SR of latter focus on the personality flaws that predispose those affected to fall prey to their gambling temptation. These findings are important in light of the fact that social stigma in SR and discourse can lead people with gambling problems to experience greater psychological distress and be less likely to seek help. Also, we found that the SR of individuals with gambling involvement focuses on the psychological dynamics that attract and keep one's involvement in gambling, but also on the psychological but also of the social risks of gambling, including that of social exclusion. Finally, the core representational content of individuals with high life satisfaction was found to suggest a more empathic perspective on the struggles confronted by people with problem gambling and presumably more open towards offering them the assistance and support they need.

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Code availability Not applicable.

Declarations

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