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Problem gambling among older people. An Italian study on habits, representations, levels of engagement and psychosocial determinants

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Abstract

Gambling participation among older people has grown over the years. Elders constitute a large and fast-growing population in Italy, but little empirical evidence describes gambling patterns among older Italian adults and the problem gambling (PG)'s psychosocial determinants, so a range of questions which are crucial to orient prevention strategies remain unanswered. The present study aims to investigate habits, representations, levels of engagement in gambling among Italian elders and the role of loneliness, social support and well-being in explaining their problem with gambling. A convenience sample of 165 participants (mean age: 66.93; *SD* = 5.73; women: 43.1%) was involved. Gambling activities, habits, representations and PG rates were examined. A group "at moderate risk/problem gambling" (scoring >7 on PGSI, *n* = 40) and a control group (scoring 0 on PGSI, *n* = 40) were selected from the whole sample, balanced on socio-demographic characteristics; a one-way analysis of variance (ANOVA) was used to compare the two groups on the target psychosocial variables. 11.5% of the sample was found to meet the PGSI criteria for PG; 26.7% for moderate risk; 11.5% for problem gambling; 50.3% were classified as no-problem gamblers. Scratch cards were the main form of gambling among all groups; the chance to make more money and to distract oneself from other problems were the main reasons to gamble. Finally, the group "at moderate risk/problem gambling," compared to the control group, expressed higher loneliness, as well as lower perceived social support and well-being.

Keywords: problem gambling, older people, loneliness, social support, well-being, Italy

Résumé

La pratique des jeux de hasard chez les personnes plus âgées augmente au fil des années. Les aînés représentent un segment important et à croissance rapide de la

population en Italie, mais peu de données empiriques décrivent les habitudes de pratique de jeux de hasard des adultes italiens plus âgés et les déterminants psychosociaux du jeu compulsif. Tout un éventail de questions essentielles à l'orientation des stratégies de prévention reste sans réponse. La présente étude se penche sur les habitudes, les représentations et les niveaux de pratique de jeux de hasard chez les aînés italiens, ainsi que le rôle de la solitude, du soutien social et du bien-être pour expliquer leurs problèmes liés au jeu, à l'aide d'un échantillon de commodité de 165 participants (moyenne d'âge : 66,93; écart-type de la population = 5.73; femmes : 43,1 %). La pratique des jeux de hasard, les habitudes, les représentations et le jeu compulsif ont été examinés. Un groupe « à risque moyen/jeu compulsif » (pointage >7 sur l'indice de gravité de jeu compulsif (IGJC), n = 40) et un groupe témoin (pointage de 0 sur l'IGJC, n = 40) ont été choisis parmi l'ensemble de l'échantillon, équilibrés du point de vue des caractéristiques sociodémographiques; une analyse de variance à un critère de classification (ANOVA) a été utilisée pour comparer les deux groupes par rapport aux variables psychosociales cibles. On a constaté que 11,5 % de l'échantillon répondaient aux critères de jeu compulsif de l'IGJC; 26,7 % répondaient aux critères de risque modéré; 11,5 %, aux critères de jeu compulsif; et 50,3 % étaient classés comme des joueurs ne présentant pas de problème. Les cartes à gratter constituaient la forme principale de jeu de hasard dans tous les groupes; les principales raisons de jouer étaient la possibilité de faire plus d'argent et d'oublier d'autres problèmes. Enfin, par rapport au groupe témoin, le groupe « à risque moyen/jeu compulsif » a exprimé un plus grand sentiment de solitude et percevait un moins grand soutien social et un moins grand bien-être.

Introduction

Problem gambling (PG)—defined as "gambling behaviour that creates negative consequences for the gambler, others in his or her social network, or for the community" (Ferris & Wynne, 2001, p. 3)—constitutes a serious health problem in many countries of the world. It has been estimated that in Europe there could be up to ten million people afflicted with a gambling problem (Jensen, 2017).

Prevention programs have been mainly addressed to high school students, wheras older people have been overlooked in public policy as legitimate subjects (Southwell et al., 2008; Williams et al., 2012). Many PG prevalence statistics and surveys have shown that rates of gambling participation and expenditure decline with age (e.g., Abbott & Volberg, 2000; Wiebe & Cox, 2005). However, gambling participation rates among older persons (65+ years) have been increasing over the last twenty years (Ariyabuddhiphongs, 2012; Zaranek & Chapleski, 2005). A review on the prevalence of gambling disorder among older adults aged 60 years, based on 25 eligible studies (Subramaniam et al., 2015) found that the prevalence of a lifetime gambling disorder ranged from 0.01% to 10.6% across studies, while prevalence of

current “pathological gambling” for older adults sampled from a combination of community and gambling venues ranged from 1.0% to a high of 11%. It is possible that factors such as differences in the cultural meaning of retirement and being socially inactive play a role in explaining a part of the percentage differences.

The existing studies on older people suggest that problems related to gambling are more likely to develop among women (Guillou-Landréat et al., 2019; Moccia et al., 2017), to decline with age (Guillou-Landréat et al., 2019) and to be related to issues such as poor mental and physical health (Desai et al., 2004; Vander Bilt et al., 2004), the decline of executive functioning and the impairment of favourable decision-making (Ariyabuddhiphongs, 2012). However, a considerable body of research demonstrates that the well-being of the elderly is significantly influenced not only by their physical health but also by the quality of their relationship with family members and community. This fact is indicated by the perceived social support, loneliness and sense of belonging, on the part of the elderly themselves (Chen and Feeley, 2014; Fernández-Ballesteros, 2011). The prevailing focus on individual characteristics has often meant medicalization of problems related to gambling and depoliticization of the social dimensions which act as risk factors on individual health and ability to deal with stressors (Abbott et al., 2018; Billieux et al., 2015; Edman & Berndt, 2016; Heaney & Israel, 2008; Venuleo, Ciavolino et al., 2018; Venuleo & Marinaci, 2017). Indeed, when problem gambling is interpreted as a matter of individual health more than a political, cultural, or social concern, neither the government nor the social network (family, peers, neighborhood) is responsible for restricting its consumption (Reith, 2007), or for reflecting on the ways they fuel or constrain individual attitudes towards gambling: the individual becomes the privileged target of the intervention.

In this paper, according to a sociocultural standpoint on hazardous behaviours (Borrell & Boulet, 2005; Messerlian et al., 2005; Oei & Raylu, 2009; Venuleo et al., 2016; Venuleo et al., 2017; Venuleo, Mossi et al., 2018; Venuleo, Mossi et al., 2019), we emphasize that problem gambling cannot be understood independently of people’s social and cultural context—which offers conditions, instruments and meanings for gambling—nor independently of the relational resources people possess to cope with problems in life, including those related to significant life changes affecting seniors (e.g., retirement, death of a spouse and/or gradual loss of close friends). This perspective does not neglect the role of genetics, emotional disorder or other causal factors (such as age related health problems) made clear by the research in the field; rather, it emphasizes that the symbolic, relational and material resources people possess can either encourage or discourage hazardous behaviour—for instance, they may make individuals prone to a greater or lesser degree to approach gambling as way to cope with problems in life.

What follows is a brief overview of the literature about the impact of social and psychosocial factors on PG. Then, a study designed to investigate habits, representations, levels of engagement in gambling, attitude toward help-seeking among Italian elders and psychosocial determinants of PG is presented.

Background

From a sociocultural standpoint, it was emphasized that older people do not in fact constitute a homogeneous group (Munro et al., 2003). It is instead their social and relational context that play a part in constructing the meaning of their age-group, furthered by the problems they face and of the strategies to solve them. Consistent with this tenet, the WHO European review of social determinants of health and the health divide recommended elective strategies "to promote healthy, active, and independent lives in old age, through early preventive action to delay the onset of age-related mental and physical disabilities" (Marmot et al., 2012, p. 1018) and the World Health Organization (WHO) encourages European member states to take initiatives to "give years to life, but also give life to your years" (Contoli et al., 2017).

Hereafter, three main aspects which could help to explain the increasing participation of older people in gambling are highlighted:

(1) *Political choices and cultural views concerning old age.* Certain of the so-called age-related circumstances of the elderly, which are recognized as risk factors for PG—such as being without a partner or having a disability that affects everyday activities—affect significantly the social and material resources available to the individual to cope with the situation. For instance, in their systematic review of qualitative and quantitative data on gambling among culturally diverse older adults, Luo and Ferguson (2017) noted that the level of satisfaction with life, health care and support services were found to be a significant buffer between culturally diverse older adults and gambling. Lai (2006) argued that, when culturally diverse older adults were content and had their needs sufficiently met, they were then unlikely to gamble. Other age-related circumstances, such as having a low annual income or no longer participating in the workforce, are not intrinsically related to age; rather, they reflect political and cultural choices. For instance, Guerci (2005) recorded that often a series of stereotyped negative images characterizes older people and have an impact on their poor well-being: old age is viewed as an illness and a burden on society, and older people as having the same universal inabilities, which make them unable to play any role in society. Challenging such ways of understanding the role of the individual within society could have a significant effect on old people's circumstances and constitute a protective barrier toward PG, reducing social malaise. Previous studies found that where people feel that institutions, politics, and public services are unreliable and an anomic view of their social environment comes to the fore, they are then likely to engage in hazardous behaviours, including gambling (Marinaci et al., 2019; Venuleo, Mossi et al., 2018).

(2) *Conditions and instruments of gambling made available by the social context*, i.e., legislative, regulatory, commercial and cultural forces determine the availability and accessibility of gambling products and venues, as well as the advertising and promotion of gambling on a wide scale (Messerlian et al., 2005; Reith, 2007; Wardle et al., 2019). Worldwide, public policies liberalizing gambling and the

technological innovations providing new gambling opportunities have led to a global expansion of the gambling market (Littler, 2007; Paton et al., 2009). The case of Italy—currently, the largest European gambling market and among the most important in the world—is a good example. The market has risen exponentially in the last two decades (Guiso, 2016), mainly because of the liberalization of the market, the number of licenses allowed, the progressive reduction in the level of taxation on most games (Ufficio Parlamentare di Bilancio, 2018), and the related increase in the number of betting outlets and public places such as bars and tobacco shops. Gambling market liberalization has also encouraged the view of gambling as a harmless form of entertainment among the general population, including elders (Edman & Berndt, 2016; Hagen et al., 2005; Wiebe et al., 2003). Again, the case of Italy is emblematic. The kind of connotation of gambling encouraged by the Italian advertising for national lotteries is that of a chance (to solve all kinds of problems) which it would be "unreasonable" to waste, if not also as a way to solve problems in life. Adverts for the "national ticket to luck" have presented winning as an accessible reality and a matter of individual intentionality/will ("Today might be the lucky day. Take the chance"; "Do you like easy wins?"; "Win often, win now"). Furthermore, the gambling industry has recognized older adults as a valuable target and systematic marketing campaigns have been conducted to attract more seniors to gambling venues (Hagen et al., 2005).

(3) *Psychosocial conditions.* Previous studies, mainly focused on adolescents and young adults had supported the positive relationship between psychosocial problems and PG (Porter et al., 2004; Savolainen et al., 2020). This relationship is often explained through compensatory models, arguing that people can seek emotional relief from their problems in life through gambling and over-reliance on such coping can lead to adverse consequences. People's relational context might be represented as a source of psychological distress or on the contrary of material and symbolic resources to cope with life's circumstances, supporting well-being and preventing PG and other hazardous behaviours (Borrell & Boulet, 2005; Reith & Dobbie, 2012; Venuleo et al., 2016; Venuleo et al., 2020; Venuleo & Marinaci, 2017). In the frame of a general decline of social networks and family bonds in contemporary society (Beck & Beck-Gernsheim, 2002; Putnam, 2000; Stolle & Hooghe, 2004), it is worth pointing out that social disconnectedness, perceived isolation, and lack of social support have been found to present distinct associations with mental health (Choenarom et al., 2005; De Jong Gierveld et al., 2018), including PG among adolescents (Canale et al., 2017) and elders (Vander Bilt et al., 2004). Lee and colleagues (2014) have stressed the connection between poorer subjective well-being and harmful gambling, and between greater subjective well-being and engagement in social, responsible gambling. Of course, the psychosocial factors cited above widely affect people across all ages, but specific old age-related problems—such as retirement, lack of opportunities to socialize, death of a spouse and friends, and chronic illness—may make older adults more exposed to those determinants and more vulnerable to the appeal of gambling's stimulating environment (McNeilly & Burke, 2000; Zaranek & Lichtenberg, 2008).

However, studies on PG in older adults and psychosocial determinants are rarely found in the literature (for a review, see Nordmyr & Forsman, 2020). The study of Tse and colleagues (2012) systematically reviewed 75 empirical studies concerning older adults' gambling and noticed how most studies analyzed participation rates, motivation for initially beginning to gamble, and risk and protective factors such as age, gender, gambling motives and frequency, and other addiction problems, but an important gap exists in the analysis of the psychosocial and cultural determinants of PG. In the above cited systematic review of Luo and Ferguson (2017) it emerges that, although much research on gambling has focused on gambling motivation, patterns and impacts among some vulnerable groups (e.g., young people, women), research efforts to understand the development and maintenance of gambling behaviour among older adults with diverse cultural backgrounds is scarce. Finally, most of the studies were conducted in North America: the United States or Canada. Few have been conducted in Europe (Guillou-Landréat et al., 2019), and a concomitant lack of attention has been paid to non-Anglo-Saxon groups.

The present study

The present study focused on older people (defined as individuals 60 years and older) who gamble in Italy. Elders constitute one of the fastest growing population groups in this country. People over 64 represented 15% of the population in 1990, 23%, in 2014 and the projection for 2050 is that one Italian resident in three will be elderly (Contoli et al., 2017; Lattanzio et al., 2010). Studies suggest that the demand for gambling from Italian people of all ages has increased: the prevalence of individuals having gambled at least once in the last year increased from 27.9% in 2014 to 42.8% in 2017 (Cerrai et al., 2018). According to the Management Report of the Customs and Monopolies Agency, at the end of 2017, 17 million Italians were estimated to gamble, and the prevalence of subjects with gambling disorders among the general population (15/64 years) was between 1.3% (Barbaranelli et al., 2013) and 2.2% (Bastiani et al., 2013). A study from Abele Group, Association for Active Ageing (AUSER) and Libera (Grosso, Reynaudo, & Rascazzo, 2013), involving a convenience sample of 864 people over the age of 60 selected in 15 Italian regions, revealed that 70.7% of the sample had played at least one gambling game in the last year (mainly scratch card and instant lotteries). The study identified 8.5% of gamblers at medium risk and 7.9% of problem gamblers, based on the Canadian Problem Gambling Index (Ferris & Wynne, 2001).

However, to our knowledge, no systematic studies have been conducted in Italy on the prevalence of gambling among seniors. Furthermore, whereas previous research on older people and gambling worldwide offers various insights into the gambling motivations and behaviours of this cohort and suggested the relationship between social malaise and PG, there is little empirical evidence thus far to describe gambling patterns among Italian older adults and their psychosocial determinants. A range of questions which are crucial to orient prevention strategies in this country remain therefore unanswered.

To fill this gap, the current study pursues two main goals:

(1) to explore gambling activities and habits, level of engagement with gambling, representations of gambling and of those who gamble, attitudes and constraints underlying help-seeking in a convenience sample of older Italian people; and

(2) to examine the capability of measures of perceived social support, loneliness, and well-being to differentiate older people manifesting problems with gambling from older people who do not. Based on the few existing studies among the elderly, we expect that the higher the loneliness and the lower the perceived social support and well-being, the higher the likelihood of belonging to the problem group.

Method

Sample

The study is based on a convenience sample (N = 165) of older Italian people (age: +60 years; mean = 66.93; SD = 5.73; women: 43.1%), recruited in family practitioner offices, in casinos and betting centres and in several informal contexts (coffee bars, post offices, senior centres) in three Italian regions (Sicily, Puglia, and Liguria). The socio-demographic characteristics (sex, age, social status, occupational status; education, perceived income) of the participants, disaggregated for the three contexts of recruitment, are reported in Table 1. The three subsamples show significant differences on all characteristics: age [χ^2 = 11.624; df = 2; $p < .003$)], sex [χ^2 = 16.726; df = 2; $p < .000$]; occupational status [χ^2 = 20.935; df = 6; $p < .002$]; education [χ^2 = 20.920; df = 8; $p < .007$]; perceived income [χ^2 = 12.282; df = 4; $p < .015$], except social status [χ^2 = 8.710; df = 6; $p < .191$]

Instruments

A battery of instruments was administered divided into two sections:

(1) Gambling section aimed to assess gambling activities and habits, representation of gambling and help-seeking behaviour and gambling problem rates;

(2) Psychosocial factors section aimed to assess loneliness, social support, and well-being.

Gambling section

Gambling activities and habits. Participants were presented with a list of various types of gambling activities and asked if they had spent money on any in the past 12 months. Response options included never, one or two times a year, about once a month, about once a week, several times a week and daily. Furthermore, participants were asked about their habit of mainly gambling alone, with the family, with friends (or not gambling).

Table 1
Socio-demographic characteristics of the participants

Variables	Informal Contexts (bars, post offices) (n=70)	Family practitioner offices (n=42)	Casinos and betting centres (n=53)	Total (N=165)	Chi-square	p-value
Gender						
Men	45 (27.3%)	13 (7.9%)	37 (22.4%)	95 (57.6%)	16.726	.000
Women	25 (15.2%)	29 (17.6%)	16 (9.7%)	70 (42.4%)		
Age						
60–70	56 (33.9%)	26 (15.8%)	48 (29.1%)	130 (78.8%)	11.624	.003
>70	14 (8.5%)	16 (9.7%)	5 (3.0%)	35 (21.2%)		
Education Status						
Elementary	7 (4.3%)	14 (8.5%)	6 (3.7%)	27 (16.5%)	20.920	.007
Middle	23 (14.0%)	18 (11.0%)	22 (13.4%)	63 (38.4%)		
High	25 (15.2%)	7 (4.3%)	19 (11.6%)	51 (31.1%)		
Degree	14 (8.5%)	2 (1.2%)	5 (3.0%)	21 (12.8%)		
No qualification	1 (0.6%)	0 (0.0%)	1 (0.6%)	2 (1.2%)		
Social Status						
Single	7 (4.3%)	1 (0.6%)	5 (3.0%)	13 (7.9%)	8.710	.191
Married	44 (26.8%)	29 (17.7%)	37 (22.6%)	110 (67.1%)		
Separated	12 (7.3%)	5 (3.0%)	9 (5.5%)	26 (15.9%)		
Widow/er	7 (4.3%)	7 (4.3%)	1 (0.6%)	15 (9.1%)		
Occupational Status						
Employee	28 (17.2%)	6 (3.7%)	20 (12.3%)	54 (33.1%)	20.935	.002
Unemployed	11 (6.7%)	0 (0.0%)	7 (4.3%)	18 (11.0%)		
Temporary employee	3 (1.8%)	2 (1.2%)	2 (1.2%)	7 (4.3%)		
Retired	28 (17.2%)	33 (20.2%)	23 (14.1%)	84 (51.5%)		

Representation of gambling and help-seeking. The analysis of the representation of gambling and help seeking was based on an ad hoc 4-item questionnaire, based on the existing literature and questionnaires (Carroll et al., 2013; Hing and Russell, 2017; Lee et al., 2007):

(1) one item explores the representation of people's motivation to gamble ("*People gamble …*"); a list of five alternatives is offered: (a) to distract themselves from other problems; (b) because it is exciting; (c) to earn more money; (d) because it is a fun pastime; and (e) to socialize; respondents were asked to select two answers.

(2) one item explores the connotation of those who gamble ("*A gambler is …* person"); a list of eight alternatives is offered: (a) unreliable; (b) weak; (c) insensitive; (d) skilled; (e) depressed; (f) sick; (g) irrational; and (h) deviant. Respondents were asked to select two answers.

(3) two items explore help-seeking for a gambling problem—"Would you ask for help with a gambling problem?" (yes, no)—and any obstacles in the request: "What could stop you from asking for help with gambling"; in this case, a list of 4 alternatives is offered: (a) the fear of being judged by others, (b) not knowing where to turn; (c) problems have to be tackled alone; and (d) "other"; respondents were asked to select only one answer.

Problem gambling. The Problem Gambling Severity Index (PGSI; Ferris & Wynne 2001) was used to assess problem gambling severity. PGSI is intended as a continuous scale and it was designed specifically for use with a general population rather than in a clinical context. The instrument is part of a larger battery, the Canadian Problem Gambling Index (CPGI) and consists of 9 items on scales ranging from 0 (never) to 3 (almost always). It asks respondents, within a 12-month time frame, to rate how frequently they engaged in various problematic gambling behaviours. It has a total score ranging from 0 to 27. The PGSI demonstrated good internal consistency ($\alpha = .84$) and good criterion-related validity. A study by Barbaranelli and colleagues (2013) on a sample of gamblers confirms the internal validity, reliability, and concurrent validity of the Italian version of the PGSI. In this study the alpha value is .910.

Psychosocial factors section

Multidimensional Scale of Perceived Social Support (MSPSS) (Poortinga, 2012). The instrument consists of seven statements ("there are people I know—amongst my family or friends—who: (1) do things to make me happy; (2) make me feel loved; (3) can be relied on no matter what happens; (4) would see that I am taken care of if I needed to be; (5) accept me just as I am; (6) make me feel an important part of their lives; (7) give me support and encouragement). There are three response categories (1): "not true," (2): "partly true," and (3): "certainly true." The instrument has shown good parameters of reliability ($\alpha = 0.87$) (Poortinga, 2012). In this study the alpha value is .913.

De Jong-Gierveld Loneliness Scale (DJGLS) (De Jong Gierveld & Kamphuis, 1985). It is an 11-item scale for the evaluation of people's loneliness. DJGLS is composed of two sub-scales to evaluate the subjective evaluation of the situation individuals are involved in, characterized either by a number of relationships with friends and colleagues considered smaller than is desirable (social loneliness), as well as situations where the intimacy one wishes for in close relationships has not been realized (emotional loneliness) (De Jong Gierveld & van Tilburg, 2010). Sample items are "I miss having a really close friend" (emotional loneliness subscale) and "There are plenty of people I can lean on when I have problems" (social loneliness subscale). It uses a 5-point Likert Scale ranging from 0 (none of the time) to 4 (all of the time). DJGLS can be used both as a measurement of the complete loneliness scale, as well as emotional loneliness and social loneliness separately (De Jong Gierveld & Kamphuis, 1985). The scale proves to have adequate internal consistency with a Cronbach's alpha of .86 and has been tested for construct validity. In this study the alpha value is .631.

Flourishing Scale (FS) (Diener et al., 2009). FS was used as a measure of well-being. FS is a short 8-item summary survey of the person's self-perceived functioning in important areas such as positive relationships, self-esteem, purpose and meaning in life, and optimism. Each item is answered on a 1–7 scale that ranges from Strong Disagreement to Strong Agreement. All items are phrased in a positive direction. Scores can range from 8 (Strong Disagreement with all items) to 56 (Strong Agreement with all items). High scores signify that respondents view themselves in highly positive terms in diverse areas of functioning. The scale provides a single overall psychological well-being score and presents good psychometric characteristics in different countries, including Italy (Giuntoli et al., 2017). In this study the alpha value is .883.

Confirmatory Factorial Analyses (CFA) were run on all the instruments used to measure the target psychosocial variables—social support (MSPSS), loneliness (DJGLS), and well-being (FS)—and the Problem Gambling Severity Index (PGSI), with the aim of testing whether their original factor structure fit the hypothesized measurement model in our sample. CFAs confirm the factor structures of the instruments on our sample (Table 2). The factor scores detected through CFAs were then used for the subsequent analysis to obtain more appropriate measures.

Procedure

In each context of recruitment (i.e., family practitioner offices, betting centres, post offices), we approached participants singly and administration was done individually, taking care to ensure privacy; for this purpose, in betting centres the questionnaires were administered in a room made available by the centre. In the case of family practitioner offices and post offices, although the administration happened in a public room, a desk at quite a distance from other people was made available. Subjects were informed about the general aim of the questionnaires and the voluntary nature of the participation.

Table 2
Fit indices for PGSI - PSS – DJGLS – FS tested with CFA

	N	SRMR	CFI	TLI
PGSI factor model	9	0.048	0.92	0.90
MSPSS factor model	7	0.040	0.95	0.92
DJGLS factor model	11	0.074	0.95	0.93
FS factor model	8	0.051	0.94	0.91

Note: CFI = Comparative Fit Index; TLI = Tucker-Lewis Index; SRMR = Standardized Root Mean Square; PGSI = Problem Gambling Severity Index; PSS = Perceived Social Support; DJGLS = De Jong Gierveld Loneliness Scale; FS = Flourishing Scale.

Data Analysis

The analysis was performed in two steps.

Step 1. Gambling activities and habits, representations and problem gambling rates

Firstly, gambling activities, related representations and problem gambling rates were examined on the whole sample (*N* = 165). Following indications from Ferris and Wynne (2001), subjects scoring 0 on PGSI were classified as "non-problem" gamblers, those scoring between 1 and 2 were classified as "low risk" gamblers, those scoring between 3 and 7 as "moderate-risk" gamblers and those scoring higher than 7 as "problem" gamblers. Chi-square procedures were used to explore the association between the variables.

Step 2. Comparison between "moderate risk/problem gambling" group and control

This step aimed at comparing gamblers manifesting a moderate or a high risk for problem gambling with a healthy control group. To this end, a subsample (*n* = 80) was extracted from the whole sample, to obtain two comparable groups. Respondents scoring more than 3 were selected as "moderate risk/problem gambling" group, which thus comprises participants manifesting "moderate-risk" for gambling or problem gambling based on PGSI score (Ferris & Wynne, 2001). Forty subjects were thus selected (13 frequenters of casinos and betting centres, 7 recruited in family practitioner offices, 20 in several informal contexts) for this group; then, 40 participants (11 frequenters of casinos and betting centres, 11 recruited in family practitioner offices, 18 in several informal contexts) were randomly selected from the 102 (43%) respondents scoring 0 on PGSI score as Control Group. Age, gender, occupational status and social status were balanced in the control group. One-way ANOVAs were performed, each of them having PGSI as dependent variable and the other dimensions as independent variable.

Results

Gambling activities, habits and problem gambling rates

PGSI scores revealed a highly skewed distribution (skewness value = 2.005; Kurtosis = 4.685). The results indicated that 11.5% of the whole sample (N = 165) met the PGSI criteria for problem gambling; 26.7% met the criteria to be classified as moderate risk gamblers; 11.5% were classified as low risk; the other 50.3% of responders was classified as non-problem gamblers.

One-way analysis of variance (ANOVA) showed that the four subgroups differed in mean age [$F(3, 161) = 3.608$; p =.015]. Post-hoc Bonferroni analysis indicated that the moderate-risk gambler group (M = 65.09; SD = 4.0; p = .005) revealed itself as a little younger than the non-gambler group (M = 68.27; SD = 6.117; p = .005), while there were no significant differences between the problem gambler group and the moderate-risk gambler group, nor between the non-problem group and the low-risk group.

Table 3 shows gambling preferences and habits of our sample in the past 12 months. As shown, the most common gambling activities, through the four PGSI categories, were purchasing scratch-cards (47.0%), followed by Lotto (26.2%). The distribution of frequency revealed that moderate-risk gamblers and problem-gamblers were more likely than non-problem gamblers to play slot machines (respectively, 11.6% and 5.5%). Most gamblers declared a preference to play alone (41%) through the PGSI categories.

Representations of gambling, gamblers and help-seeking

Table 4 shows frequency and percentages of the modalities of answers selected to represent people's attitudes to gambling and of those who gamble, help-seeking for a gambling problem and the perceived obstacles to the request.

According to the respondents, the chance to make more money (65.5%) and to distract oneself from other problems (50.9%) are the main reasons that push people to gamble. The main representation of the gambler was a weak person (51.1%), but differences can be seen among PGSI categories: "weak" and "sick" were the response modalities with a higher frequency (29.1%) among non-gamblers; the first two options among moderate-risk gamblers are irrational (9.7%) and depressed (9.1%); finally, among problem gamblers, the first two options are weak (7.9%) and depressed (4.8%).

Over 50 of the participants (50.9%) stated that they would not ask for help for their problems with gambling. The percentage proved higher among non-gamblers (25.8%) compared to low-risk gamblers (8.2%), moderate-risk gamblers (10.7%) and problem gamblers (6.3%). The idea that gambling is a problem that can be tackled alone and the fear of being judged were the main reasons stopping people from

Table 3
Preferences, habits, motivations for gambling

Items	Category of PGSI						
	No-problem gamblers	Low risk gamblers	Moderate-risk gamblers	Problem gamblers	*TOT*	Chi-square	*p*-value
Gambling preferences (*)							
Card games	4 (2.4%)	1 (0.6%)	6 (3.7%)	1 (0.6%)	12 (7.3%)	3.547	.315
Bingo	1 (0.6%)	2 (1.2%)	7 (4.3%)	4 (2.4%)	14 (8.5%)	12.594	.006
Slot Machines	0 (0.0%)	4 (2.4%)	19 (11.6%)	9 (5.5%)	32 (19.5%)	44.992	.000
Scratch card	27 (16.5%)	8 (4.9%)	28 (17.1%)	14 (8.5%)	77 (47.0%)	17.024	.001
Lottomatica	17 (10.4%)	7 (4.3%)	10 (6.1%)	9 (5.5%)	43 (26.2%)	7.055	.070
Sports betting	10 (6.1%)	9 (5.5%)	16 (9.8%)	4 (2.4%)	39 (23.8%)	15.826	.001
Casino / Online casino	1 (0.6%)	1 (0.6%)	6 (3.7%)	4 (2.4%)	12 (7.3%)	12.490	.006
Gambling habits							
Gambles alone	20 (12.4%)	7 (4.3%)	22 (13.7%)	17 (10.6%)	66 (41.0%)	85.742	.000
Gambles with the family	5 (3.1%)	1 (0.6%)	9 (5.6%)	1 (0.6%)	16 (9.9%)		
Gambles with friends	2 (1.2%)	6 (3.7%)	12 (7.5%)	1 (0.6%)	21 (13.0%)		
No gambling	53 (32.9%)	4 (2.5%)	1 (0.6%)	0 (0.0%)	58 (36.0%)		

(*) Dummy variables.

Table 4

Motivations, representations of gambling and help-seeking

Items	Category of PGSI						
	No-problem gamblers	Low risk gamblers	Moderate-risk gamblers	Problem gamblers	*TOT*	Chi-square	*p*-value
Motivations for gambling (*)							
To distract yourself from other problems	40 (24.2%)	10 (6.1%)	24 (14.5%)	10 (6.1.5%)	84 (50.9%)	.523	.914
Because it's exciting	17 (10.3%)	5 (3.0%)	10 (6.1%)	38 (7.9%)	38 (23.0%)	1.205	.752
To earn more money	56 (33.9%)	13 (7.9%)	25 (15.2%)	14 (8.5%)	108 (65.5%)	2.244	.523
Because it's a fun pastime	5 (3.0%)	4 (2.4%)	15 (9.1%)	4 (2.4%)	28 (17.0%)	16.661	.001
To socialise	6 (3.6%)	0 (%)	5 (3.0%)	2 (1.2%)	13 (7.9%)	2.593	.459
Representation of a gambler (*)							
Weak	48 (29.1%)	10 (6.1%)	14 (8.5%)	13 (7.9%)	85 (51.1%)	10.344	.016
Insensitive	3 (1.8%)	1 (0.6%)	1 (0.6%)	1 (0.6%)	6 (3.6%)	.512	.914
Skilful	4 (2.4%)	0 (0.0%)	10 (6.1%)	2 (1.2%)	16 (9.7%)	12.842	.005
Depressed	21 (12.7%)	7 (4.2%)	15 (9.1%)	8 (4.8%)	51 (30.9%)	2.859	.414
Sick	48 (29.1%)	5 (3.0%)	13 (7.9%)	6 (3.6%)	72 (43.6%)	13.793	.003
Irrational	8 (4.8%)	5 (3.0%)	16 (9.7%)	4 (2.4%)	33 (20.0%)	13.420	.004
Deviant	0 (0.0%)	2 (1.2%)	7 (4.2%)	2 (1.2%)	11 (6.7%)	12.879	.005
Unreliable	26 (15.8%)	6 (3.6%)	10 (6.1%)	2 (1.2%)	44 (26.7%)	4.036	.258
Help-seeking for a gambling problem?							
Would you ask for help?							
Yes	38 (23.9%)	6 (3.8%)	25 (15.7%)	9 (5.7%)	78 (49.1%)	4.214	.239
No	41 (25.8%)	13 (8.2%)	17 (10.7%)	10 (6.3%)	81 (50.9%)		
What could stop you from asking for help?							
The fear of being judged by others	14 (10.0%)	5 (3.6%)	22 (15.7%)	8 (5.7%)	49 (35.0%)	18.513	.030
Not knowing where to turn	13 (9.3%)	2 (1.4%)	11 (7.9%)	2 (1.4%)	28 (20.0%)		
Problems have to be tackled alone	31 (22.1%)	8 (5.7%)	10 (7.1%)	7 (5.0%)	56 (40.0%)		
Other	5 (3.6%)	0 (0.0%)	0 (0.0%)	2 (1.4%)	7 (5.0%)		

(*) Dummy variables.

asking for help. Specifically, 15.7% of moderate-risk gamblers and 5.7% of problem players feared being judged by other persons.

Social support, loneliness and well-being. Comparison between "moderate risk/ problem gambling" group and control

The "moderate risk/ problem gambling" group (N = 40) was aged 66 ± 4 years, the control group (N = 40) 67 ± 5 years. ANOVA indicated that the two groups are significantly different from each other (Table 5) with regards perceived social support [(F (1,78) = 4.863; $p < .001$], social loneliness [F (1,78) = 14.114; $p < .001$] and well-being (flourishing scores) [F (1,78) = 18.379; $p < .001$], while no significant differences emerged with respect to emotional loneliness scores.

The figures below show that the "moderate risk/problem gambling" group scores lower on social support (Figure 1) and well-being (Figure 2) and higher on social loneliness (Figure 3).

Discussion

The results from this research fill an important gap in the available literature related to seniors' gambling in Italy and provide direction for the development and enhancement of initiatives to prevent PG in the elderly population. In terms of gambling activities and habits, the findings show that almost 50% of the respondents (47%, specifically) play scratch cards (the main form of gambling among all groups),

Table 5
"*Moderate risk/problem gambling*" *group vs Control comparison: One-way analysis of variance (ANOVA)*

	Sum of Squares	*df*	Mean Square	*F*	Sig.
CFA Factor score PSS (*)					
Between Groups	.776	1	.776	4.863	.030
Within Groups	12.445	78	.160		
Total	13.221	79			
CFA Factor score FS (*)					
Between Groups	18.072	1	18.072	14.114	.000
Within Groups	99.874	78	1.280		
Total	117.946	79			
CFA Factor score EL (*)					
Between Groups	.074	1	.074	.197	.658
Within Groups	29.025	77	.377		
Total	29.099	78			
CFA Factor score SL (*)					
Between Groups	8.304	1	8.304	18.379	.000
Within Groups	34.790	77	.452		
Total	43.094	78			

(*) PSS = Perceived Social Support; FS = Flourishing Scale; EL = Emotional loneliness; SL = Social loneliness.

Figure 1
Means plot of Perceived Social Support (PSS) vs Problematic and Control Group

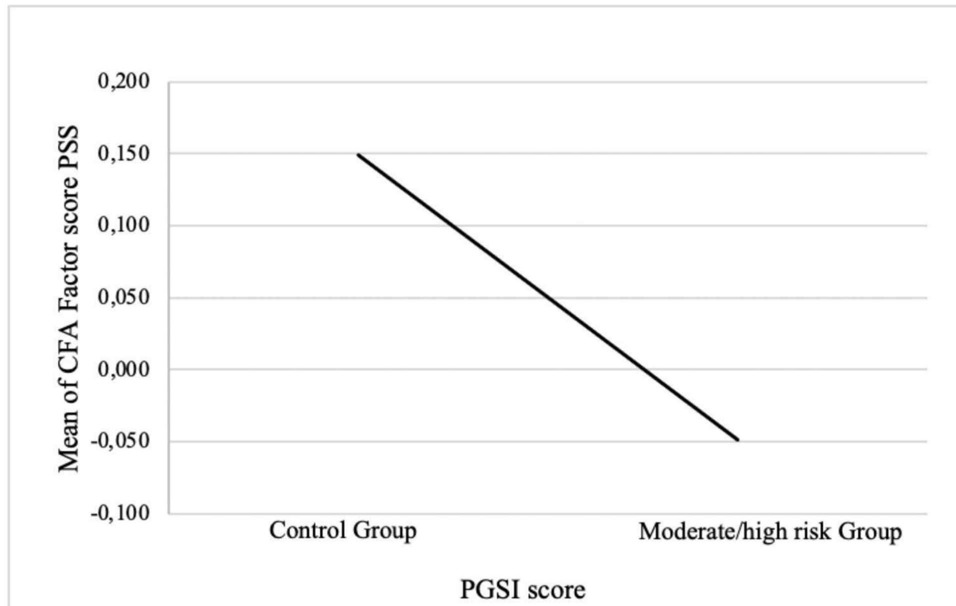
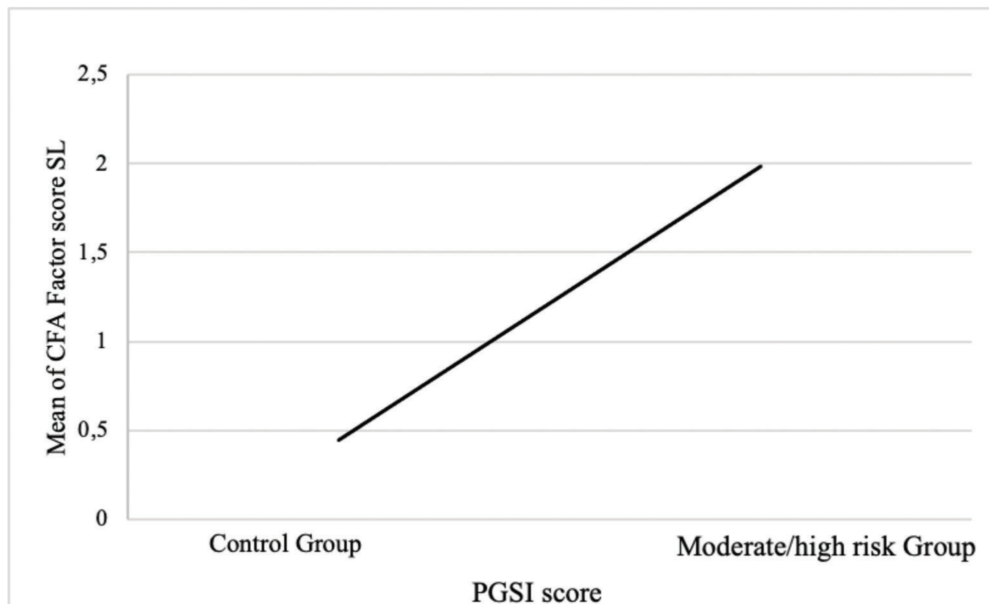
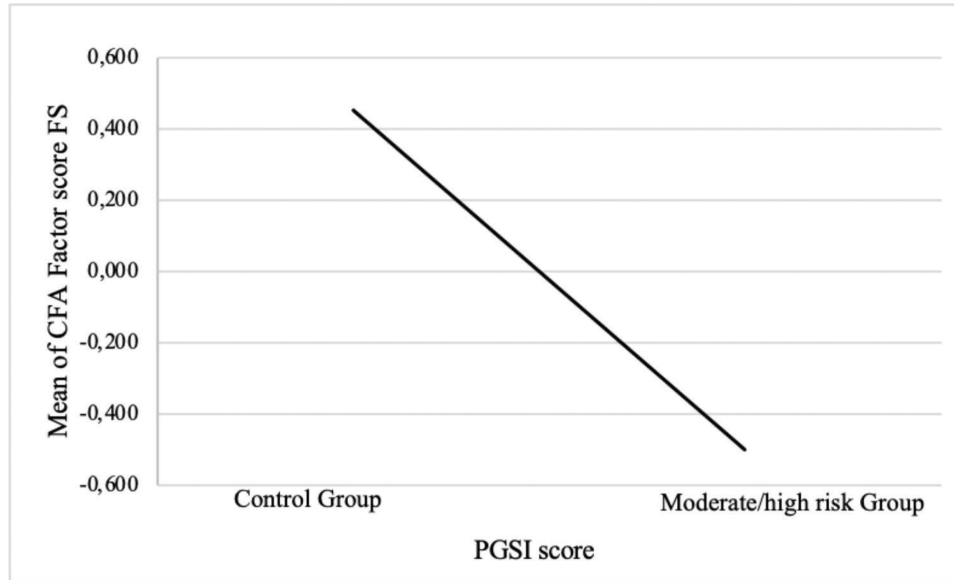


Figure 2
Means plot of Social Loneliness (SL) vs Problematic and Control Group



and more than a quarter (26.2%) play Lotto. The relatively low requirement for cognitive capacity, physical skills and financial resources required for these gambling activities can enable older adults to choose gambling over other leisure activities associated with cognitive, physical and/or financial barriers (Luo & Ferguson, 2017). Gambling does not appear to be a means to socialize: scratch tickets and lottery

Figure 3
Means plot of Flourishing Scale (FS) vs. Problematic and Control Group



are generally solitary activities and, as observed, most respondents declare they gamble alone.

Similar to non-problem gamblers, those in the problem gambling categories explain gambling with the purpose of winning money and forgetting problems. Winning money and seeking a quick-fix solution for financial problems are the main reasons of gambling among elders found also by previous studies (Luo & Ferguson, 2017; Vander Bilt et al., 2004). Forgetting problems is a reason consistent with the findings obtained in previous studies which suggest that some age-related circumstances such as widowhood, low annual income, isolation from society, physical disabilities and health problems that limit older adults' daily activities might motivate older adults to participate in gambling (Southwell et al., 2008; Sullivan, 2001; for a review, see Tse et al., 2012). Economic concerns associated with retirement and a lack of policies to ensure social support for elders may contribute to making these motives for gambling relevant within this age-group. Passing the time and relieving boredom (amotivation) are among other common motivations cited in the literature (McNeilly & Burke, 2000; Munro et al., 2003).

It is worth noticing that nearly 50 of the participants declared that they would not ask for help for their gambling. Luo and Ferguson (2017) observe that denial of gambling problems was common among culturally diverse older gamblers. Although this aspect may play a role, our findings suggest the role of beliefs and cultural dimensions—such as the idea that gambling can be tackled alone and the fear of being judged, consistently with previous studies, which found that older adults are more likely to hide gambling-related problems than other age groups also because of expectations of older adults' moral and ethical behaviour (Bazargan et al., 2000; Martin et al., 2011).

The findings related to the comparison between the “moderate risk/problem gambling” group and the non-gamblers provide support for the hypothesis that psychosocial factors play a significant role in problem gambling. ANOVA showed that the higher the perceived social loneliness (namely the feeling that the number of relationships with friends and colleagues is considered smaller than is desirable) and the lower the perceived social support and perceived well-being (person’s self-perceived functioning in important areas such as relationships, self-esteem, purpose and meaning), the higher the probability of belonging to the “moderate risk/problem gambling.” The findings are consistent with previous studies among elders (Botterill et al., 2016; Vander Bilt et al., 2004; Zaranek & Lichtenberg, 2008) and other groups (Pace et al., 2020; Petry & Weiss 2009; Holdsworth & Tice, 2011). Different hypotheses can be made to explain the association between problem gambling and psychosocial factors (Holdsworth et al., 2015). Loneliness and social support may constitute risk and protective factors in themselves, consistently with the idea that people who feel “left out” may gamble to compensate for their problems in life, including the lack of social relationships, and thus to cope with loneliness resulting from more free time and disconnection from others, as well as lack of purpose and meaning (Borrell & Boulet, 2005; Venuleo, Mossi et al., 2018).

Psychosocial problems can also be recognized as the result of problems related to gambling, according to the idea that disruption of significant relationships is a frequent form of harm characterizing PG (Langham et al., 2015). Psychosocial problems can also have a mediating/moderating effect on the links between various factors and PG by functioning as resiliency factors and in influencing coping (Nordmyr & Forsman, 2020): for instance, few scholars have suggested that the lack of social support and social loneliness may work as vulnerable terrain for anxiety and depression, as well recognized risk factors for gambling (Brooks, 2000; Raylu & Oei, 2004, Wood & Griffiths, 2007). In the absence of a support network, people may see gambling as a way to escape from difficulties related to their unpleasant emotions (Gupta et al., 2004; Wood & Griffiths, 2007), as already observed in studies concerning other kinds of addictions (Holahan et al., 2001; Venuleo et al., 2020). Finally, poor relational resources (high loneliness, low support) and PG may mutually reinforce each other, in that poor relational resources may influence gambling escapism, which in turn may lead to harmful consequences, including disruption of existing relationships, with a resulting increase or decrease in psychological distress. However, longitudinal studies are needed to support this circular linkage.

The lack of influence of emotional loneliness is worth mentioning. The findings suggest that the extent to which the elderly feel that the intimacy wished for in close relationships has not been achieved (emotional loneliness) (De Jong Gierveld & van Tilburg, 2010) is not associated with PG. This result may suggest that emotional support from family and close relationships is not enough to make up for the perceived social isolation and lack of social role which may derive from retirement and other circumstances related to old age.

Limitations

Several cautions and limitations are attached to the study's findings. First, given the convenience nature of the sample, the results have to be related to the specific cultural context under analysis. Loneliness and social support have been found to acquire a different meaning and evaluation in different cultures (van Tilburg et al., 2004) and variations in meanings may have different impacts on gambling. On this point, Luo and Ferguson (2017) noted that social networks and social support may also encourage gambling in culturally diverse older adults. For instance, older Chinese adults in Canada with stronger and broader social networks tended to gamble more frequently than those with fewer social networks (Lai, 2006). The impact of cultural variation in the evaluation of the value of loneliness and social bonds should be considered in examining the role of relational resources in gambling. Second, appropriate caution should be exercised in drawing causal inferences from data. We proposed an interpretation of the psychosocial dimensions as risk factors towards PG, but the cross-sectional survey data used here is limited when it comes to studying changes in gambling over time and/or across the life course. Third, the use of self-reported data to explore gambling patterns may be influenced by recall bias and answer accuracy. For instance, the question about the representation of the gambler presents only one positive attribute (skilled) among a series of negative attributes which is an obvious limitation. Finally, we have to acknowledge that other individual and psychosocial factors (e.g., physical and psychological health) may mediate the effects of the variables investigated or suggest alternative hypotheses.

Implications for prevention strategies

The study has deepened our knowledge of the psychosocial factors related to PG among Italian seniors and highlights the need for a greater attention to the elderly in gambling research and preventive interventions. Particularly, the findings support and strengthen the view that prevention should not concentrate exclusively on risk and protective factors for the individual, but also address the interpersonal and social level (Nordmyr & Forsman, 2020). As observed, poor relations and well-being were found to be significant risk factors for PG within our Italian sample; previous cross-national studies showed Italians elders score a lower median level of life satisfaction than did participants from other countries (Fagerström et al., 2007) and higher score on the loneliness rate associated to poor health and economic deprivation (Fokkema et al., 2012). Innovative and effective efforts to blunt the impacts of social isolation and bolster social connectivity among elders, ensuring health care and support services are critical in preventing PG. For instance, encouraging community organizations such as churches and associations to assess the socialization needs of older adults and to offer alternative ways to answer these needs is a strong, solidstep in this direction (Martin et al., 2011).

We must address the psychosocial determinants of gambling, which are, in turn, influenced by cultural as well as structural drivers (economic arrangements, collective resources provided by the communities of which people are part, and welfare state

institutions). The right to health entails rights to equity in the social determinants of health.

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