

The Prevalence of Problem Gambling Among Young Adults (18-25) and Related Risk Factors in Türkiye

Veysi Aka¹

Citation: Aka, V. (2026). The Prevalence of Problem Gambling Among Young Adults (18-25) and Related Risk Factors in Türkiye. Journal of Gambling Issues.

Editor-in-Chief: Nigel Turner, Ph.D.

Received: 02/17/2026
Accepted: 07/17/2026
Published: 10/07/2026



Copyright: ©2026 Aka, V. Licensee CDS Press, Toronto, Canada. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>)

¹ Department of Social Work, Faculty of Arts and Sciences, Bingöl University, Türkiye

*Corresponding author: Veysi Aka: veysi.aka@gmail.com

Abstract: This study aims to reveal the prevalence of gambling among individuals aged 18-25 in Türkiye and the associated risk factors. To this end, the Problem Gambling Severity Index Turkish Form (PGSI-T) and a questionnaire prepared by the researcher, consisting of questions about the participants' various socio-demographic and addiction status, were administered to 1,653 individuals from seven geographical regions of Türkiye. The study found that lifetime gambling prevalence among young adults aged 18-25 was 13.2%, gambling prevalence in the past year was 10.8%, and problem gambling prevalence was 5.32%. The results of the analysis aimed at identifying risk factors associated with gambling indicated that being male, smoking, alcohol and substance use, being single or married but living separately from one's spouse, part-time employment, family history of gambling, and living in a shared home, being in the 22-25 age range, having an associate degree, and residing in the Aegean region are significant risk factors. Factors increasing the severity of gambling included participating in more than one type of gambling, being divorced/separated, smoking, alcohol use, and using both online and land-based platforms together. Finally, participation in multiple types of gambling, smoking, alcohol consumption, and low economic status were found to predict problem gambling. These findings reveal that gambling is quite prevalent among young adults in Türkiye. They also highlight the urgency of developing preventive and protective services and treatment programs, taking risk factors into account.

Keywords: Addictive behavior, gambling, gambling addiction, prevalence, risk factors.

Introduction

Gambling is described as a type of behavioral addiction that carries many negative consequences in an individual's life from biological, psychological, and social perspectives (Aka & Yaman, 2024) and is associated with comorbidity with many other diseases/disorders (Lorains et al., 2011; Salonen et al., 2025). Historically, gambling behavior, which dates back to ancient times (Schwartz, 2006), has taken on a new form in terms of both diversity and accessibility in contemporary times. Indeed, with the impact of technological developments, gambling has largely transitioned from traditional gambling venues to online platforms. It has become industrialized, appearing in many different forms and structures, while access to gambling has accelerated in parallel with the speed of the internet (Gainsbury, 2015). In this regard, identifying the prevalence of gambling within society will provide a basis for both assessing the situation and developing policies and practices.

When examining studies on the prevalence of gambling worldwide, although differences exist between societies and depending on the methodological approach used (Sassen et al., 2011), large-scale meta-analyses and prevalence studies on the subject are important for gaining insight into the issue. Studies conducted in this regard found that 46.2% of adults gambled in the last 12 months, 8.7% of them engaged in risky gambling, and 1.41% engaged in problem gambling (Tran et al., 2024). Another study on this topic concluded that the prevalence of problem gambling was 1.29%, a similar rate (Gabellini et al., 2023). Additionally, Calado and Griffiths (2016) reported that the global prevalence ranged from 0.12% to 5.8%, while in Europe it ranged from 0.7% to 6.5%. However, these rates generally show an upward trend among young people. Indeed, Hing et al. (2016) identified the 18-24 age group as a risk factor for both women and men, while Nedeljković et al. (2024) described the 18-24 age group as the most vulnerable group in terms of gambling, and Mosconi et al. (2025) drew particular attention to the 18-24 age group. Calado and Griffiths (2016) similarly found that individuals aged 18-25 were more likely to engage in problem gambling. Hollén et al. (2020) reported that 6-8% of women and 13-18% of men aged 17-24 gambled regularly on a weekly basis, concluding that gambling habits are established by the age of 20. Cabral et al. (2025), in their study targeting young people aged 18-25, found that 3% of young people exhibited severe gambling addiction and identified the typical gambling profile as being under the age of 23.5. Calado et al. (2017) stated that the rate of problem gambling among individuals under the age of 25 ranged from 0.2% to 12.3%, while Nowak (2018), in an extensive study (1987-2016) targeting university students, found the rate of problem gambling to be 6.13%. Considering these rates, it is clear that gambling behavior is of particular importance for young individuals.

The risk factors associated with at-risk and problem gambling hold as much significance as the overall prevalence of gambling. In this context,

factors such as gender, age, smoking, alcohol and substance use, marital status, educational level, immigrant/minority status, parental status, socioeconomic status, and online gambling are frequently cited as risk factors (Allami et al., 2021; Bastiani et al., 2013; Burth et al., 2017; Castrén et al., 2013; Cunha et al., 2017; Economou et al., 2019; González-Roz et al., 2017; Hodgins et al., 2012; Kastrike et al., 2015; Moreira et al., 2023; Russell et al., 2019; Volberg et al., 2018; Welte et al., 2015).

When examining studies conducted in Türkiye on this subject, it is evident that prevalence studies are very limited. One of the most comprehensive studies on the subject was conducted by the Turkish Green Crescent Society. According to this report, 10.1% of individuals aged 15 and over had gambled at least once in their lifetime, and the vast majority (71.1%) of their first gambling experiences occurred between the ages of 15 and 24. Again, according to the same report, 7.7% of individuals who had gambled at least once in their lifetime were between the ages of 15 and 24 (Turkish Green Crescent Society, 2025). In another study, Altıntaş et al. (2024) reported that 6.81% of individuals over the age of 15 had gambled at least once in their lifetime, concluding that 14.7% of this percentage was in the 18-24 age group. Notably, the sample of the current study and several similar cross-sectional studies specifically focused on university students. Looking at these studies, Köksoy Vayisoğlu et al. (2019) determined the rate of problem gambling among university students to be 1.2%, reporting that all participants who gambled at a problematic level were male and had high rates of cigarette use. Akpınar Aslan et al. (2021) determined this rate to be 2% and found that male gender was a risk factor for pathological and risky gambling. Koç et al. (2023) determined the rate of problem gambling to be 14.2%. In addition to this finding, they highlighted male gender, the presence of an addict in one's environment, and smoking and alcohol use as risk factors. Gürbüz and Gürcan Yıldırım (2025) concluded that the rate of problem gambling among undergraduate psychology students was 3.3%, and similarly to other studies, they found that men were at greater risk than women in this context.

Considering all these academic data, determining the prevalence of gambling among young people in Türkiye and identifying risk factors will form the basis for sound assessments within the context of this topic and will serve as a resource for preventive and protective measures. Therefore, this study aims to address this critical gap in the literature.

Method

Participants and Data Collection

Permission was obtained from the author who adapted the Turkish version of the scale to be used in this study. Subsequently, the form containing sociodemographic information and questions related to addiction developed by the researcher of this study was combined with the scale questions, and an application was submitted to the ethics committee. After obtaining ethical committee approval, the form prepared by the

researcher, along with the Turkish version of the Problem Gambling Severity Index (PGSI-T), was converted into an online survey via Google Forms. As the study was a prevalence study, the aim was to have participants from different geographical regions of Türkiye. Accordingly, efforts were made to collect data from seven distinct geographic regions of Türkiye in proportions corresponding to regional population shares. Online data collection took place between January and September 2025. In this context, 1,653 volunteers aged 18-25 participated in the study.

Instruments of Assessment

Socio-Demographic Form

This form was created by the researcher conducting the current study. The form includes socio-demographic questions such as gender, age, economic status, marital status, education level, employment status, and geographical region of residence, as well as questions about participants' smoking, alcohol, and substance use, and whether they had gambled in their lifetime or in the past year.

Problem Gambling Severity Index (PGSI-T)

This form was developed by Ferris and Wynne (2001) to measure the severity of gambling in individuals. The form was adapted into Turkish by Altıntaş et al. (2022), and this Turkish form was used in the current study. The scale consists of 9 items and a single dimension and is constructed using a 4-point rating system: “Never = 0, Sometimes = 1, Most of the time = 2, Almost always = 3.” The possible score range for the scale is 0-27. “0 = non-problem gambling,” 1-2 = low-risk gambling, 3-7 = moderate-risk gambling, and >7 = problem gambling. Cronbach's alpha coefficient for the original scale was found to be 0.83, and Cronbach's alpha coefficient for the Turkish version was found to be 0.96.

Statistical Analysis

All statistical analyses were performed using jamovi version 2.7.4 (2025). Participants' sociodemographic data were analyzed using descriptive statistics, with numbers (n) and percentages (%) indicated. Chi-square (χ^2) test, independent samples t-test, and analysis of variance (ANOVA) followed by Tukey's post-hoc test where applicable were used for intergroup comparisons. Logistic regression and linear regression analyses were also performed to determine the relationship between variables. Statistical significance was set at a p -value of $p < .05$.

Results

As presented in Table 1, the study sample consisted of young adults aged 18-25 ($N = 1,653$; $M = 21.3 \pm 2.18$). When examining the gender distribution of participants, women (56.9%) outnumbered men (43.1%). The vast majority of participants were single (74.8%) and had a bachelor's degree (40.6%). Participants mostly described their economic status as middle class (61%). When examining the employment status of young people, students were in the majority (36.8%), followed by full-time workers (33%) and unemployed individuals (19.9%). Most participants lived with their families (64.1%), while a significant proportion also indicated that they lived in dormitories (21.2%). Looking at the diagnosed mental health conditions among participants (1.81%), it was understood that stress and anxiety (41.1%) were prevalent.

In terms of geographical distribution, it was observed that the distribution corresponded to Türkiye's approximate geographical distribution ratios. Looking at the addiction status of the participating young people, it was understood that smoking (34.4%) and alcohol consumption (12.9%) were significantly high, while substance use (0.7%) was significantly lower compared to smoking and alcohol consumption.

A significant proportion of participants (33%) stated that there was at least one individual in their social circle who gambled. It was observed that the lifetime gambling rate among participants was 13.2%, while the gambling rate within the last year was 10.8%. In terms of gambling types and platforms, sports betting emerged as the leading modality (43.3%), with online platforms being the predominantly preferred medium (57.7%).

It was found that the first gambling experience of individuals who had gambled at least once in their lifetime (Mean Age = 17.6 ± 2.68) coincided with late adolescence, and that they were introduced to gambling mostly through friends (58.6%).

Table 1. Descriptive Information on Participants' Socio-Demographic Characteristics and Addiction Status

Socio-demographic characteristics and addiction status	<i>n</i>	%	Socio-demographic characteristics and addiction status	<i>n</i>	%
Gender (<i>n</i> = 1653)			Alcohol use (<i>n</i> = 1653)		
Female	941	56.9	Yes	213	12.9
Male	712	43.1	No	1440	87.1
Marital status (<i>n</i> = 1653)			Substance use (<i>n</i> = 1653)		
Single	1235	74.8	Yes	11	0.7
Married	389	23.5	No	1642	99.3
Divorced	22	1.3	Diagnosed psychological disorder (<i>n</i> = 30) *		
Married but living separately	7	0.4	Stress/Anxiety	12	41.1
Economic situation (<i>n</i> = 1653)			Depression	4	13.3
Very high	34	2.1	ADHD	4	13.3
High	351	21.2	OCD	3	10.0
Moderate	1008	61.0	Panic attack	3	10.0
Low	187	11.3	Other	4	13.3
Very low	73	4.4	Type of gambling played (<i>n</i> = 179) *		
Education level (<i>n</i> = 1653)			Sports betting	136	43.3
Literate	12	0.7	Online casino and scratch card games	83	26.4
Primary education	35	2.1	Lotteries	63	20.1
Secondary education	73	4.4	Illegal club games	20	6.4
High school	400	24.2	Horse racing	12	3.8
Associate degree	407	24.6	Gambling venue/Platform (<i>n</i> = 179) *		
Bachelor's degree	670	40.6	Online gambling platforms	145	57.7
Postgraduate degree	56	3.4	Betting and/or lottery retailer	70	27.9
Employment status (<i>n</i> = 1653)			Horse race betting retailer	15	6.0
Full-time	546	33.0	Illegal club/association gambling venues	12	4.8
Part-time	83	5.0	Internet cafe-based gambling	9	3.6
Not working	329	19.9	Gambling in the social environment (<i>n</i> = 1653)		
Student	607	36.8	Yes	546	33.0
Other	88	5.3	No	1107	67.0
Residential/Living space (<i>n</i> = 1653)			Mode of introduction to gambling (<i>n</i> = 218)		
With family	1058	64.1	Friends	128	58.6
In a dormitory	351	21.2	Online platforms	47	21.6
Alone	159	9.6	Relatives	7	3.2
Shared house with friends	85	5.1	Family members	5	2.3
Geographic region of residence (<i>n</i> = 1653)			Through television gambling advertisements	1	0.5
Marmara	490	29.6	Other	30	13.8
Central Anatolia	261	15.8	Lifetime gambling (<i>n</i> = 1653)		
Mediterranean	216	13.1	Yes	218	13.2
Aegean	216	13.1	No	1435	86.8
Southeastern Anatolia	169	10.2	Past-year gambling (<i>n</i> = 1653)		
Black Sea	162	9.8	Yes	179	10.8
Eastern Anatolia	139	8.4	No	1474	89.2
Smoking status (<i>n</i> = 1653)			m	sd	
Yes	568	34.4	Age (<i>n</i> = 1653)	21.3	2.18
No	1085	65.6	Age at gambling initiation (<i>n</i> = 218)	17.6	2.68

*Participants were allowed to provide multiple responses

As shown in Figure 1, among the total participants ($N = 1,653$), the proportion of individuals with problem gambling ($n = 88$) was found to be 5.32%. Additionally, the proportion of moderate-risk gamblers was 2.84%, low-risk gamblers was 1.45%, and non-problem gamblers was 1.21%.

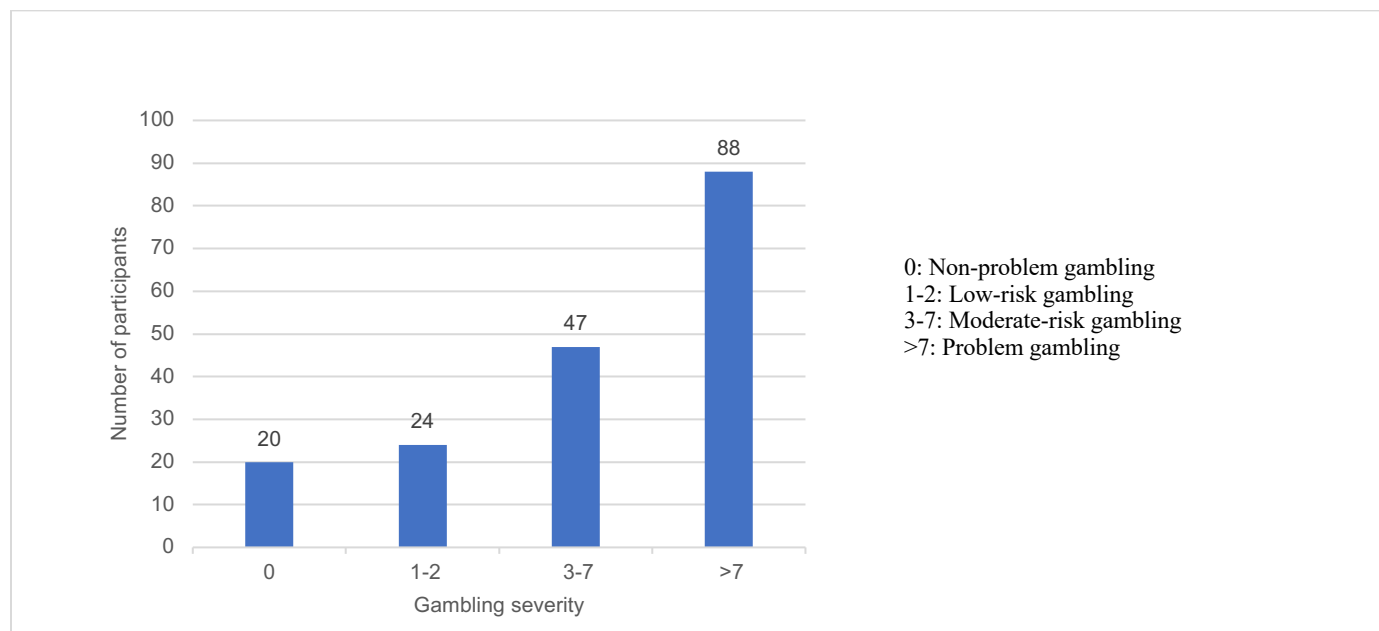


Figure 1 Problem Gambling Severity Index (PGSI) total scores

As shown in Table 2, which presents participants' gambling status over the past year ("Yes": Those who gambled; "No": Those who did not gamble) with their socio-demographic and addiction status using the Chi-Square (χ^2) test results, it was observed that gambling status had a significant relationship ($p < .05$) with all factors except income status and diagnosed mental illness. In this regard, it was understood that, in addition to gender, alcohol, smoking, and substance use were the strongest risk factors. Indeed, among male participants, the rate of those who reported gambling (22.19%) was significantly higher than among females (2.23%). Forty percent of participants who reported alcohol use also reported gambling in the past year. This rate was significantly higher than among non-alcohol users (6.46%). Individuals who smoked (22.18%) reported gambling more than those who did not smoke (4.88%), and individuals who used drugs (45.45%) reported gambling more than those who did not use drugs (10.60%). On the other hand, it was found that those living in shared homes with friends (29.41%) as their residence/living space were at greater risk of gambling than those living with their families (8.13%). Furthermore, having a family member who gambled, working part-time, being married

but living separately from one's spouse, and being between the ages of 22 and 25 were found to be risk factors for gambling. Regionally, although the rates were not very high, the Aegean and Black Sea regions were found to carry a significantly higher risk than other regions.

Table 2. Comparison of Participants' Gambling Status According to Socio-Demographic and Addiction-Related Factors (N = 1,653)

Variables	Yes		No		χ^2	<i>p</i>	<i>V</i>	Variables	Yes		No		χ^2	<i>p</i>	<i>V</i>
	<i>N</i>	%	<i>N</i>	%					<i>N</i>	%	<i>N</i>	%			
Gender					167	<.001	.31	Residential/Living space					46.1	<.001	.16
Male (<i>n</i> = 712)	158	22.19	554	77.81				With family (<i>n</i> = 1058)	86	8.13	972	91.87			
Female (<i>n</i> = 941)	21	2.23	920	97.77				Alone (<i>n</i> = 159)	28	17.61	131	82.39			
Age					4.58	0.032	.05	Shared house with friends (<i>n</i> = 85)	25	29.41	60	70.59			
18-21 (<i>n</i> = 891)	83	9.31	808	90.69				In a dormitory (<i>n</i> = 351)	40	11.40	311	88.60			
22-25 (<i>n</i> = 762)	96	12.60	666	87.40				Smoking status					116	<.001	.26
Marital status					25.6	<.001	.12	Yes (<i>n</i> = 558)	126	22.18	442	77.82			
Single (<i>n</i> = 1,235)	158	12.79	1077	87.21				No (<i>n</i> = 1,085)	53	4.88	1032	95.12			
Married (<i>n</i> = 389)	16	4.11	373	95.89				Alcohol use					221	<.001	.36
Divorced (<i>n</i> = 22)	3	13.64	19	86.36				Yes (<i>n</i> = 213)	86	40.38	127	59.62			
Married but living separately (<i>n</i> = 7)	2	28.57	5	71.43				No (<i>n</i> = 1,440)	93	6.46	1347	93.54			
Education level*					12.8	0.034	.08	Substance use					13.7	<.001	.09
Literate (<i>n</i> = 12)	0	0.00	12	100.00				Yes (<i>n</i> = 11)	5	45.45	6	54.55			
Primary education (<i>n</i> = 35)	0	0.00	35	100.00				No (<i>n</i> = 1,642)	174	10.60	1468	89.40			
Secondary education (<i>n</i> = 73)	10	13.70	63	86.30				Gambling in the social environment					18	<.001	.10
High school (<i>n</i> = 400)	41	10.25	359	89.75				Yes (<i>n</i> = 47)	14	29.79	33	70.21			
Associate degree (<i>n</i> = 407)	57	14.00	350	86.00				No (<i>n</i> = 1,606)	165	10.27	1441	89.73			
Bachelor's degree (<i>n</i> = 670)	63	9.40	607	90.60				Geographic region of residence *					13.2	0.034	.08

Postgraduate degree ($n = 56$)	8	14.29	48	85.71				Marmara ($n = 490$)	47	9.59	443	90.41
Employment status				21.4	<.001	.11		Central Anatolia ($n = 261$)	19	7.28	242	92.72
Full-time ($n = 546$)	68	12.45	478	87.55				Mediterranean ($n = 216$)	29	13.43	187	86.57
Part-time ($n = 83$)	16	19.28	67	80.72				Aegean ($n = 216$)	33	15.28	183	84.72
Not working ($n = 329$)	15	4.56	314	95.44				Southeastern Anatolia ($n = 169$)	14	8.28	155	91.72
Student ($n = 607$)	70	11.53	537	88.47				Black Sea ($n = 162$)	23	14.20	139	85.80
Other ($n = 88$)	10	11.36	78	88.64				Eastern Anatolia ($n = 139$)	14	10.07	125	89.93
Economic situation				1.76	0.779	.03		Diagnosed psychological disorder				0.54 0.459 .01
Very high ($n = 34$)	3	8.82	31	91.18				Yes ($n = 30$)	2	6.67	28	93.33
High ($n = 351$)	36	10.26	315	89.74				No ($n = 1,623$)	177	10.91	1446	89.09
Moderate ($n = 1,008$)	106	10.52	902	89.48								
Low ($n = 187$)	24	12.83	163	87.17								
Very low ($n = 73$)	10	13.70	63	86.30								

* The analysis was performed using Fisher's Exact Test, $p < .05$

Table 3, which shows the results of the Independent Samples t -test and One-Way Analysis of Variance (ANOVA) examining the relationship between the total scores of participants who gambled on the Problem Gambling Severity Index (PGSI) and their sociodemographic characteristics and addiction status, revealed that the strongest relationship was observed in the diversity of the types of gambling played. Participants who gambled on multiple types of games ($M = 9.38$) scored significantly higher than those who gambled on a single type ($M = 6.17$, $p < .001$). In addition to the type of gambling, individuals who smoked ($p = .047$) and those who consumed alcohol ($p = .01$) scored significantly higher than those who did not. On the other hand, divorced individuals ($M = 17.00$) and married but separated individuals ($M = 12.50$) scored significantly higher than single ($M = 7.37$) and married ($M = 7.31$) individuals ($p < .01$). Finally, participants who used both online and land-based gambling venues ($M = 9.17$) for gambling scored significantly higher than individuals who only gambled in virtual environments ($M = 6.60$, $p = .044$).

Table 3. Comparison of PGSI Scores of Gambling Participants According to Socio-Demographic and Addiction-Related Factors (*n* = 179)

Variables						Variables				
Marital status	<i>n</i> (%)	<i>M</i> (<i>SD</i>)	<i>p</i>	η^2	<i>d</i>	Gender	<i>n</i> (%)	<i>M</i> (<i>SD</i>)	<i>p</i>	<i>Cohen's d</i>
Single	158(88.3)	7.37(5.65)	.00	.05	(1-3,3-2)	Male	158(88.3)	7.82(6.01)	.15	.33
Married	16(8.9)	7.31(6.79)				Female	21(11.7)	5.86(4.25)		
Divorced	3(1.7)	17.00(6.24)				Age			.37	-.13
Married but living separately	2(1.1)	12.50(0.70)				18-21	83(46.4)	7.17(5.30)		
Economic situation			.39	-	-	22-25	96(53.6)	7.95(6.30)	.98	-.01
Very high	3(1.7)	5.67(2.89)				Diagnosed psychological disorder				
High	36(20.1)	6.44(5.40)				Yes	2(1.1)	7.50(6.36)		
Moderate	106(59.2)	7.44(5.64)				No	177(98.9)	7.59(5.87)		
Low	24(13.4)	9.67(7.39)	.37	-	-	Smoking status			.047	.32
Very low	10(5.6)	8.80(5.71)				Yes	126(70.4)	8.15(6.04)		
Education level						No	53(29.6)	6.25(5.20)	.01	.37
Postgraduate degree	8(4.5)	5.75(4.53)				Alcohol use				
Bachelor's degree	63(35.2)	7.68(6.12)	.42	-	-	Yes	86(48.0)	8.72(6.23)	.48	.31
Associate degree	57(31.8)	6.70(5.56)				No	93(52.0)	6.54(5.30)		
High school	41(22.9)	8.49(5.68)				Substance use			<.001	-.56
Secondary education	10(5.6)	9.80(7.19)				Yes	5(2.8)	9.40(7.47)		
Residential/Living space			.044	.03	(3-1)	No	174(97.2)	7.53(5.82)	.28	.30
With family	86(48.0)	7.63(5.95)				Type of gambling played				
Alone	28(15.6)	8.36(6.14)				Single	100(55.9)	6.17(5.37)	.95	.00
Shared house with friends	25(14.0)	8.44(6.31)				Multiple	79(44.1)	9.38(5.99)		
In a dormitory	40(22.3)	6.42(5.15)	.004	.03	(3-1)	Presence of gambling in the family			.95	.00
Gambling venue/Platform						Yes	14(7.8)	9.21(5.28)		
Online gambling platforms	99(55.3)	6.60(5.26)				No	165(92.2)	7.45(5.90)	.95	.00
Other	34(19.0)	8.32(6.56)				Age at gambling initiation				
Both online and land-based gambling venues	46(25.7)	9.17(6.23)				11-18	63(35.2)	7.62(6.31)		

Geographic region of residence			.75	-	-	19-25	116(64.8)	7.57(5.62)
Marmara	47(26.3)	8.68(6.29)						
Central Anatolia	19(10.6)	7.63(5.00)						
Mediterranean	29(16.2)	7.10(5.94)						
Aegean	33(18.4)	7.27(5.36)						
Southeastern Anatolia	14(7.8)	8.64(6.90)						
Black Sea	23(12.8)	6.17(6.76)						
Eastern Anatolia	14(7.8)	6.86(3.59)						

$p < .05$

Table 4, which presents the results of the logistic regression analysis conducted to determine how various socio-demographic and addiction factors affected participants' likelihood of gambling, showed that gender, marital status, age, educational status, employment status, housing/living space, the presence of gambling in the family, and cigarette, alcohol, and substance use predicted gambling. In terms of gender, being male was found to increase the likelihood of gambling by 12.5 times ($OR = 12.49$, 95% CI [7.83, 19.94], $p < .001$). Furthermore, individuals who consumed alcohol were 9.8 times more likely ($OR = 9.81$, 95% CI [6.95, 13.85], $p < .001$), and individuals who used drugs were 7 times more likely ($OR = 7.03$, 95% CI [2.12, 23.28], $p = .001$), and individuals who smoked were approximately 5.5 times more likely ($OR = 5.55$, 95% CI [3.95, 7.80], $p < .001$) to gamble. On the other hand, being single increased the likelihood of gambling by approximately 3.4 times ($OR = 3.42$, 95% CI [2.01, 5.80], $p < .001$) compared to being married. Furthermore, individuals who were married but separated from their spouse were at approximately 9.3 times greater risk compared to married individuals ($OR = 9.31$, 95% CI [1.68, 51.8], $p = .011$). When examining other factors with significant associations, participants working part-time jobs were 5 times more likely ($OR = 5.00$, 95% CI [2.35, 10.61], $p < .001$) than those not working, and those with a family member who gambled were 3.7 times more likely ($OR = 3.71$, 95% CI [1.94, 7.07], $p < .001$), and those living in shared accommodation with friends were 4.7 times ($OR = 4.71$, 95% CI [2.81, 7.89], $p < .001$) and 3.2 times ($OR = 3.24$, 95% CI [1.83, 5.73], $p < .001$) more at risk, respectively, compared to those living with their family and in a dormitory. Finally, although the level of significance was not as strong as the above, those aged 22-25 were 1.40 times ($OR = 1.40$, 95% CI [1.03, 1.92], $p = .033$) more likely to be at risk than those aged 18-21, and those with an associate's degree were 1.57 times more likely ($OR = 1.57$, 95% CI [1.07, 2.30], $p = .021$) to gamble more than those with a bachelor's degree. In terms of geographic regions, the Aegean region stood out, followed by the Black Sea and Mediterranean regions.

Table 4. Logistic Regression Analysis Results Regarding Socio-Demographic Characteristics Predicting Participants' Gambling Status and Their Addiction Status ($N = 1,653$)

Variables	Comparison Group	<i>B</i>	<i>p</i>	<i>OR</i> 95 % CI
Gender	Female - Male *	2.53	<.001	12.49 (7.83-19.94)
Age	18-21 - 22-25 *	0.34	.033	1.40 (1.03-1.92)
Marital status	Married - Single*	1.23	<.001	3.42 (2.01-5.80)
	Married - Married but living separately *	2.23	.011	9.32 (1.68-51.8)
Education level	Bachelor's degree - Associate degree *	0.45	.021	1.57 (1.07-2.30)
Employment status	Not working - Full-time working*	1.09	<.001	2.98 (1.67-5.30)
	Not working - Part-time working *	1.61	<.001	5.00 (2.35-10.61)
	Not working - Student*	1.00	<.001	2.73 (1.53-4.85)
	Student- Part - time working *	0.60	.048	1.83 (1.00-3.34)
Residential/Living space	With family - Shared house with friends *	1.55	<.001	4.71 (2.81-7.89)
	Alone - Shared house with friends *	0.67	.035	1.95 (1.05-3.62)
	In a dormitory - Shared house with friends *	1.17	<.001	3.24 (1.83-5.73)
	With family - Alone*	0.88	<.001	2.41 (1.52-3.84)
Geographic region of residence	Southeastern Anatolia - Aegean *	0.69	.040	2.00 (1.03-3.87)
	Marmara-Aegean*	0.53	.029	1.70 (1.05-2.74)
	Central Anatolia - Aegean *	0.83	.006	2.30 (1.26-4.17)
	Central Anatolia - Black Sea*	0.74	.023	2.11 (1.11-4.01)
	Central Anatolia - Mediterranean *	0.68	.029	1.97 (1.07-3.63)
Smoking status	No - Yes*	1.71	<.001	5.55 (3.95-7.80)
Alcohol use	No - Yes*	2.28	<.001	9.81 (6.95-13.85)
Substance use	No - Yes*	1.95	.001	7.03 (2.12-23.28)
Presence of gambling in the family	No - Yes*	1.31	<.001	3.71 (1.94-7.07)

*Reference group, $p < .05$

An examination of Table 5, which illustrates the extent to which various socio-demographic and addiction-related factors predicted the severity of gambling among participants who gambled within the last year, revealed that the strongest association was related to the type of gambling activity. Compared to those who engaged in a single type of gambling, the scores of those who engaged in multiple gambling types—specifically more than one type—increased by $B = 3.21$ units ($p < .001$, $R^2 = .07$). In addition to the diversity in gambling types, it was found that alcohol consumption ($B = 2.18$, $R^2 = .03$, $p = .012$), smoking ($B = 1.91$, $R^2 = .02$, $p = .047$), and having a low economic status ($B = 3.22$, $R^2 = .03$, $p = .038$) also significantly predicted the severity of gambling.

Table 5. Linear Regression Analysis Results Regarding Socio-Demographic Characteristics Predicting Gambling Severity and Addiction Status Among Participants ($n = 179$)

Variables	Comparison Group	<i>B</i>	<i>R</i> ²	<i>p</i>	95% CI
Economic situation	Low-High*	3.22	.03	.038	0.19-6.26
Smoking status	Yes-No*	1.91	.02	.047	0.03-3.78
Alcohol use	Yes-No*	2.18	.03	.012	0.48-3.89
Type of gambling played	Multiple-Single*	3.21	.07	< .001	1.53-4.89

*Reference group, $p < .05$

Discussion

In this study, which included individuals aged 18-25 from different geographical regions of Türkiye, the lifetime gambling rate was found to be 13.2%, the gambling rate in the last year was 10.8%, and the problem gambling rate was 5.32%. These results are higher than the lifetime gambling rate among individuals over the age of 15 in Türkiye (10.1%) reported by the Turkish Green Crescent Society (2025) and the rate (6.81%) found by Altıntaş et al. (2024). However, it is thought that the main reason for this difference is that the sample of the current study was aged 18-25. Indeed, the fact that a large proportion (71.1%) of the first gambling experience in Turkish Green Crescent Society's study was between the ages of 15 and 24 (2025) reinforces this assumption. When looking at other studies in Türkiye with sample groups similar in age to the current study, the rate of problem gambling was found to range from 1.2% to 14.2% (Köksoy Vayisoğlu et al., 2019; Akpınar Aslan et al., 2021; Koç et al., 2023). Although the findings of the current study fall within this range, the significant differences between the results of the studies make comparison and discussion difficult. However, the most important difference between the current study and the other studies mentioned is that the sample comprises participants from all geographical regions of Türkiye and various educational levels, rather than from a specific region only.

When reviewing the latest meta-analysis studies conducted globally on this subject, it is observed that the studies focus on adults, university students, and adolescents. While the rate of problem gambling among adults is 1.41% (Tran et al., 2024), among university students it is 6.13% (Nowak, 2018), and among adolescents aged 10-24, the rate of problem gambling ranges from 0.2% to 12.3% (Calado et al., 2017), numerous studies indicate that young individuals are at a much higher risk of problem gambling than adults (Meyer et al., 2015; Abbott et al., 2014). The findings of the current study are consistent with the prevalence rates reported among university students and fall well within the range observed for adolescent. On the other hand, the fact that young people are at greater risk than adults shows that

the findings of the current study largely coincide with the global literature data in the context of the subject.

Another important finding of the current study is the risk factors associated with gambling. The current study attempted to identify three levels of risk factors in terms of gambling/non-gambling, risky gambling, and problem gambling. According to the study findings, being male, smoking, alcohol and substance use, being single or married but living separately from one's spouse, living in a shared house with friends, the presence of gambling in the family, working part-time, being in the 22-25 age range, having an associate degree, and living in the Aegean, Black Sea, and Mediterranean regions rather than other geographical areas were found to predict gambling. In other words, these factors can be said to constitute risk factors for gambling. On the other hand, among those who gambled, participants who engaged in multiple types of gambling, used cigarettes and alcohol, were divorced/separated, and use both online and land-based platforms had significantly higher gambling scores. In other words, these factors have been identified as decisive elements in terms of risky gambling. In terms of problem gambling, it has been determined that playing multiple types of gambling, smoking and alcohol use, and having a low economic level predicted problem gambling. It is seen that the specified elements largely coincide with other studies. Indeed, being male (Dellosa & Browne, 2024; Sharman et al., 2019), smoking (Díaz & Pérez, 2021; Griffiths et al., 2010), alcohol (Caldeira et al., 2017; Peters et al., 2015), or substance use (Dowling et al., 2017; Johansson et al., 2009), being single, divorced, or married but living apart from one's spouse (Black et al., 2012; Syvertsen et al., 2023), living in a shared home (Hing et al., 2016), presence of gambling in the family (Irie and Kengo, 2022; Massati et al., 2017; Mazar et al., 2018), part-time employment (Hing et al., 2016), playing multiple types of gambling (Mazar et al., 2020), and low economic status (Christensen et al., 2015; Economou et al., 2019), and using both online and land-based platforms for gambling (Gainsbury et al., 2015) have been associated with gambling at various risk levels in many studies, similar to the current study. Another finding of the current study predicting gambling was related to the 22-25 age range. Carneiro et al. (2020) concluded that men typically encounter gambling in their 20s and that gambling-related problems take three years to develop. A key finding—that living with a friend is identified as a risk factor for gambling—suggests that peer and friend groups may play a significant role in gambling behavior. Indeed, Mazar et al. (2018) found a strong association between the presence of friends or family members who gamble regularly and risky and problem gambling. Finally, the results of this study indicate that the Aegean region stands out in terms of problem gambling. One possible reason for this is that alcohol consumption in the Aegean region is higher than in many other geographic regions (Buzrul, 2016). Indeed, numerous studies in the literature have demonstrated a significant association between alcohol use and gambling (Horn et al., 2024; Martinac et al., 2019). The existence of a significant association between

alcohol use and gambling suggests that alcohol use may contribute to the prevalence of problem gambling.

Limitations and Directions for Future Research

Firstly, considering the sample of the study, the collection of data from different geographical regions of Türkiye and in proportion to the approximate population ratios of these regions is considered to strengthen the study in terms of prevalence and, accordingly, enhances the findings of the study. However, the study also has some limitations. The most fundamental limitation of the current study is in the context of age. Since this study targets young people aged 18-25, the findings of this study cannot be generalized to the entire population. Another limitation of the study relates to gender. Although the difference is not very large (approximately 13.8%), the number of female participants exceeds that of male participants. This indicates that women are more heavily represented in the study. Since it is known from this study and the relevant literature that men gamble more than women, this may have led to an underestimation of overall gambling rates and the prevalence of problem gambling compared to actual levels. Therefore, the findings of this study should be interpreted with this limitation in mind. In this context, it is thought that future studies should collect data in a way that better reflects Türkiye's population dynamics in terms of broader age groups and gender, as this will be important for understanding the place of gambling within the population.

Conclusion

The study results show that the prevalence of gambling among young people aged 18-25 is notably high. Furthermore, several risk factors have been identified for gambling, risky gambling, and problem gambling. In light of these findings, it is recommended that this issue be considered a public health problem and that urgent social policies, preventive and protective services, and treatment programs be implemented.

STATEMENT OF COMPETING INTERESTS

None declared.

ETHICS APPROVAL

Research conducted with human participants was conducted in accordance with the ethical standards of the 1964 Helsinki Declaration and its subsequent amendments. The study has been deemed compliant with scientific research and publication ethics as of January 2, 2025, based on the decision of the Social and Human Sciences Scientific Research and Publication Ethics Committee of Bingöl University (Approval No: 33117789/730.08/191755).

RELATIVE CONTRIBUTIONS

VA conceived and designed the study, collected and analyzed the data, and wrote and approved the final manuscript.

ACKNOWLEDGEMENTS AND FUNDING SOURCES

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

RESEARCH PROMOTION

This study investigates the prevalence of problem gambling and associated risk factors among young adults aged 18–25 in Türkiye. The findings highlight key vulnerability factors contributing to gambling severity, underscoring the urgent necessity of targeted prevention strategies and public health awareness campaigns for youth.

ARTIFICIAL INTELLIGENCE STATEMENT

During the preparation of this manuscript, DeepL Translator (by DeepL SE) and Gemini (by Google) were used solely for English translation and language editing to improve readability. The authors carefully reviewed and revised the generated output and take full responsibility for the integrity and originality of the text.

References

- Abbott, M. W., Romild, U., & Volberg, R. A. (2014). Gambling and problem gambling in Sweden: Changes between 1998 and 2009. *Journal of Gambling Studies*, 30(4), 985-999. <https://doi.org/10.1007/s10899-013-9396-3>
- Aka, V., & Yaman, Ö. M. Kumar Oynama Davranışının Biyopsikososyal Sonuçlarına İlişkin Fenomenolojik Bir Araştırma. *Anemon Muş Alparslan Üniversitesi Sosyal Bilimler Dergisi*, 12(3), 966-987. <https://doi.org/10.18506/anemon.1481507>
- Akpınar Aslan, E., Batmaz, S., Çelikbaş, Z., Kılınçel, M. O., Hızlı Sayar, G., & Ünübol, H. (2021). Prevalence of risk for substance-related and behavioral addictions among university students in Turkey. <https://doi.org/10.5152/addicta.2021.21023>
- Allami, Y., Hodgins, D. C., Young, M., Brunelle, N., Currie, S., Dufour, M., ... & Nadeau, L. (2021). A meta-analysis of problem gambling risk factors in the general adult population. *Addiction*, 116(11), 2968-2977. <https://doi.org/10.1111/add.15449>
- Altıntaş, M., Başgöl, Ş. S., Avcu, A., Macit, R., Büyüköztürk, Ş., Dinçer, D., ... & Öztürk, M. (2024). A Study on Gambling Behavior in Türkiye: Perceptions, Attitudes, Thoughts, and Behaviors Toward Gambling. *Psychiatry and Clinical Psychopharmacology*, 34(4), 311. <https://doi.org/10.5152/pcp.2024.24907>
- Altıntaş, M., Tunç, E. B., Dinçer, D., Özdenler, M., Olcay, A. N. H., & Barın, C. (2022). Problemlili kumar oynama şiddet endeksi Türkçe versiyonunun psikometrik özellikleri. *Bağımlılık Dergisi*, 23(4), 492-501. <https://doi.org/10.51982/bagimli.1064774>
- Bastiani, L., Gori, M., Colasante, E., Siciliano, V., Capitanucci, D., Jarre, P., & Molinaro, S. (2013). Complex factors and behaviors in the gambling population of Italy. *Journal of Gambling Studies*, 29(1), 1-13. <https://doi.org/10.1007/s10899-011-9283-8>
- Black, D. W., Shaw, M. C., McCormick, B. A., & Allen, J. (2012). Marital status, childhood maltreatment, and family dysfunction: A controlled study of pathological gambling. *The Journal of clinical psychiatry*, 73(10), 11273. <https://doi.org/10.4088/jcp.12m07800>
- Buth, S., Wurst, F. M., Thon, N., Lahusen, H., & Kalke, J. (2017). Comparative analysis of potential risk factors for at-risk gambling, problem gambling and gambling disorder among current gamblers—results of the Austrian representative survey 2015. *Frontiers in psychology*, 8, 2188. <https://doi.org/10.3389/fpsyg.2017.02188>
- Buzrul, S. (2016). Türkiye’de alkollü içki tüketimi. *Journal of Food and Health Science*, 2(3), 112-122. <https://doi.org/10.3153/jfhs16012>
- Cabral, R. M., Cunha, C., Pires, P., Santos, I., Cunha, F., Oliveira, A., ... & Coias, F. (2025). The rise of online gambling addiction: A mental health challenge. *European Psychiatry*, 68(S1), S103-S104. <https://doi.org/10.1192/j.eurpsy.2025.308>
- Calado, F., & Griffiths, M. D. (2016). Problem gambling worldwide: An update and systematic review of empirical research (2000–2015). *Journal of behavioral addictions*, 5(4), 592-613. <https://doi.org/10.1556/2006.5.2016.073>
- Calado, F., Alexandre, J., & Griffiths, M. D. (2017). Prevalence of adolescent problem gambling: A systematic review of recent research. *Journal of gambling studies*, 33(2), 397-424. <https://doi.org/10.1007/s10899-016-9627-5>
- Caldeira, K. M., Arria, A. M., O’Grady, K. E., Vincent, K. B., Robertson, C., & Welsh, C. J. (2017). Risk factors for gambling and substance use among recent college students. *Drug and alcohol dependence*, 179, 280-290. <https://doi.org/10.1016/j.drugalcdep.2017.06.024>

- Carneiro, E., Tavares, H., Sanches, M., Pinsky, I., Caetano, R., Zaleski, M., & Laranjeira, R. (2020). Gender differences in gambling exposure and at-risk gambling behavior. *Journal of gambling studies*, 36(2), 445-457. <https://doi.org/10.1007/s10899-019-09884-7>
- Castrén, S., Basnet, S., Salonen, A. H., Pankakoski, M., Ronkainen, J. E., Alho, H., & Lahti, T. (2013). Factors associated with disordered gambling in Finland. *Substance abuse treatment, prevention, and policy*, 8(1), 24. <https://doi.org/10.1186/1747-597x-8-24>
- Christensen, D. R., Dowling, N. A., Jackson, A. C., & Thomas, S. A. (2015). Gambling participation and problem gambling severity in a stratified random survey: Findings from the second social and economic impact study of gambling in Tasmania. *Journal of Gambling Studies*, 31(4), 1317-1335. <https://doi.org/10.1007/s10899-014-9495-9>
- Cunha, D., Sousa, B. D., & Relvas, A. P. (2017). Risk factors for pathological gambling along a continuum of severity: Individual and relational variables. *Journal of Gambling Issues*, 35, 49-73. <https://doi.org/10.4309/jgi.2015.31.10>
- Delloso, G., & Browne, M. (2024). The influence of age on gambling problems worldwide: A systematic review and meta-analysis of risk among younger, middle-aged, and older adults. *Journal of Behavioral Addictions*, 13(3), 702-715. <https://doi.org/10.1556/2006.2024.00051>
- Díaz, A., & Pérez, L. (2021). Gambling and substance use: A cross-consumption analysis of tobacco smoking, alcohol drinking and gambling. *Substance Abuse*, 42(4), 1016-1021. <https://doi.org/10.1080/08897077.2021.1903657>
- Dowling, N. A., Merkouris, S. S., Greenwood, C. J., Oldenhof, E., Toumbourou, J. W., & Youssef, G. J. (2017). Early risk and protective factors for problem gambling: A systematic review and meta-analysis of longitudinal studies. *Clinical psychology review*, 51, 109-124. <https://doi.org/10.1016/j.cpr.2016.10.008>
- Economou, M., Souliotis, K., Malliori, M., Peppou, L. E., Kontoangelos, K., Lazaratou, H., ... & Papageorgiou, C. (2019). Problem gambling in Greece: prevalence and risk factors during the financial crisis. *Journal of Gambling Studies*, 35(4), 1193-1210. <https://doi.org/10.1007/s10899-019-09843-2>
- Ferris, J. A., & Wynne, H. J. (2001). The Canadian problem gambling index (pp. 1-59). Ottawa, ON: Canadian Centre on substance abuse. <https://doi.org/10.1037/t00772-000>
- Gabellini, E., Lucchini, F., & Gattoni, M. E. (2023). Prevalence of problem gambling: A meta-analysis of recent empirical research (2016–2022). *Journal of Gambling Studies*, 39(3), 1027-1057. <https://doi.org/10.1007/s10899-022-10180-0>
- Gainsbury, S. M. (2015). Online gambling addiction: the relationship between internet gambling and disordered gambling. *Current addiction reports*, 2(2), 185-193. <https://doi.org/10.1007/s40429-015-0057-8>
- Gainsbury, S. M., Russell, A., Blaszczynski, A., & Hing, N. (2015). The interaction between gambling activities and modes of access: A comparison of Internet-only, land-based only, and mixed-mode gamblers. *Addictive behaviors*, 41, 34-40. <https://doi.org/10.1016/j.addbeh.2014.09.023>
- González-Roz, A., Fernández-Hermida, J. R., Weidberg, S., Martínez-Loredo, V., & Secades-Villa, R. (2017). Prevalence of problem gambling among adolescents: A comparison across modes of access, gambling activities, and levels of severity. *Journal of gambling studies*, 33(2), 371-382. <https://doi.org/10.1007/s10899-016-9652-4>
- Griffiths, M., Wardle, H., Orford, J., Sproston, K., & Erens, B. (2010). Gambling, alcohol, consumption, cigarette smoking and health: Findings from the 2007 British Gambling

- Prevalence Survey. *Addiction Research & Theory*, 18(2), 208-223.
<https://doi.org/10.3109/16066350902928569>
- Gürbüz, N., & Gürcan-Yıldırım, D. (2025). Behavioral addictions and psychological distress: Insights from psychology students in Eastern Turkey. *Humanities and Social Sciences Communications*, 12(1), 1-12. <https://doi.org/10.1057/s41599-025-04623-3>
- Hing, N., Russell, A., Tolchard, B., & Nower, L. (2016). Risk factors for gambling problems: An analysis by gender. *Journal of gambling studies*, 32(2), 511-534.
<https://doi.org/10.1007/s10899-015-9548-8>
- Hodgins, D. C., Schopflocher, D. P., Martin, C. R., el-Guebaly, N., Casey, D. M., Currie, S. R., ... & Williams, R. J. (2012). Disordered gambling among higher-frequency gamblers: who is at risk?. *Psychological medicine*, 42(11), 2433-2444.
<https://doi.org/10.1017/s0033291712000724>
- Hollén, L., Dörner, R., Griffiths, M. D., & Emond, A. (2020). Gambling in young adults aged 17–24 years: A population-based study. *Journal of gambling studies*, 36(3), 747-766.
<https://doi.org/10.1007/s10899-020-09948-z>
- Horn, T. L., Lerma, M., Pfund, R. A., & Whelan, J. P. (2024). Expectations about how alcohol consumption influences gambling. *International Gambling Studies*, 24(2), 171-184.
<https://doi.org/10.1080/14459795.2023.2224858>
- Irie, T., & Kengo, Y. (2022). The impact of gamblers' behaviors and problems on families and relationship partners: A scoping literature review. *Journal of Gambling Issues*.
<https://doi.org/10.4309/jgi.2022.49.1>
- Johansson, A., Grant, J. E., Kim, S. W., Odlaug, B. L., & Götestam, K. G. (2009). Risk factors for problematic gambling: A critical literature review. *Journal of gambling studies*, 25(1), 67-92. <https://doi.org/10.1007/s10899-008-9088-6>
- Kastirke, N., Rumpf, H. J., John, U., Bischof, A., & Meyer, C. (2015). Demographic risk factors and gambling preference may not explain the high prevalence of gambling problems among the population with migration background: Results from a German nationwide survey. *Journal of Gambling Studies*, 31(3), 741-757. <https://doi.org/10.1007/s10899-014-9459-0>
- Koç, Ş., Kocakaya, R., Türkmen, A. S., & Çakıcı, A. B. (2023). University students' Gaming and gambling behaviors, related factors, and the relationship between gaming and gambling. *Journal of Gambling Studies*, 39(4), 1661-1674. <https://doi.org/10.1007/s10899-023-10209-y>
- Köksoy Vayisoğlu, S., Öncü, E. ve Güven, Y. (2019). Üniversite öğrencilerinde kumar oynama sıklığı ve heyecan arama davranışı ile ilişkisi. *Addicta: The Turkish Journal on Addictions*, 6, 69–90. <https://doi.org/10.15805/addicta.2019.6.1.0041>
- Lorains, F. K., Cowlishaw, S., & Thomas, S. A. (2011). Prevalence of comorbid disorders in problem and pathological gambling: Systematic review and meta-analysis of population surveys. *Addiction*, 106(3), 490-498. <https://doi.org/10.1111/j.1360-0443.2010.03300.x>
- Martinac, M., Karlović, D., & Babić, D. (2019). Alcohol and gambling addiction. In *Neuroscience of alcohol* (pp. 529-535). Academic Press. <https://doi.org/10.1016/b978-0-12-813125-1.00054-4>
- Massatti, R. R., Starr, S., Frohnapfel-Hasson, S., & Martt, N. (2016). A Baseline Study of Past-Year Problem Gambling Prevalence Among Ohioans. *Journal of Gambling Issues*, (34).
<https://doi.org/10.4309/jgi.2016.34.3>

- Mazar, A., Williams, R. J., Stanek III, E. J., Zorn, M., & Volberg, R. A. (2018). The importance of friends and family to recreational gambling, at-risk gambling, and problem gambling. *BMC Public Health*, 18(1), 1080. <https://doi.org/10.1186/s12889-018-5988-2>
- Mazar, A., Zorn, M., Becker, N., & Volberg, R. A. (2020). Gambling formats, involvement, and problem gambling: which types of gambling are more risky?. *BMC Public Health*, 20(1), 711. <https://doi.org/10.1186/s12889-020-08822-2>
- Meyer, C., Bischof, A., Westram, A., Jeske, C., de Brito, S., Glorius, S., ... & Rumpf, H. J. (2015). The “Pathological Gambling and Epidemiology”(PAGE) study program: Design and fieldwork. *International Journal of Methods in Psychiatric Research*, 24(1), 11-31. <https://doi.org/10.1002/mpr.1458>
- Moreira, D., Azeredo, A., & Dias, P. (2023). Risk factors for gambling disorder: a systematic review. *Journal of gambling studies*, 39(2), 483-511. <https://doi.org/10.1007/s10899-023-10195-1>
- Mosconi, G., Bertuccio, P., Lugo, A., Mastrobattista, L., Mortali, C., Pichini, S., ... & Odone, A. (2025). When Do the Stakes Get Higher? Examining Factors Associated with At-Risk or Problem Gambling in a Large Sample of Italian Adult Recent Gamblers. *International Journal of Mental Health and Addiction*, 1-15. <https://doi.org/10.1007/s11469-025-01472-8>
- Nedeljković, B., Zubović, J., & Kilibarda, B. (2024). Exploring socioeconomic, demographic and psychological predictors of at-risk gambling and participation in specific gambling activities: a comparative approach. *Journal of gambling studies*, 40(2), 873-891. <https://doi.org/10.1007/s10899-023-10278-z>
- Nowak, D. E. (2018). A meta-analytical synthesis and examination of pathological and problem gambling rates and associated moderators among college students, 1987–2016. *Journal of gambling studies*, 34(2), 465-498. <https://doi.org/10.1007/s10899-017-9726-y>
- Peters, E. N., Nordeck, C., Zanetti, G., O'Grady, K. E., Serpelloni, G., Rimondo, C., ... & Schwartz, R. P. (2015). Relationship of gambling with tobacco, alcohol, and illicit drug use among adolescents in the USA: Review of the literature 2000–2014. *The American Journal on Addictions*, 24(3), 206-216. <https://doi.org/10.1111/ajad.12214>
- Russell, A. M., Hing, N., & Browne, M. (2019). Risk factors for gambling problems specifically associated with sports betting. *Journal of Gambling Studies*, 35(4), 1211-1228. <https://doi.org/10.1007/s10899-019-09848-x>
- Salonen, A. H., Latvala, T. A., Vuori, M., Levola, J., Castrén, S., & Grönroos, T. (2025). Gambling disorder and increased psychiatric comorbidity: A Finnish register-based study. *Nordic Studies on Alcohol and Drugs*, 14550725251380172. <https://doi.org/10.1177/14550725251380172>
- Sassen, M., Kraus, L., & Bühringer, G. (2011). Differences in pathological gambling prevalence estimates: facts or artefacts?. *International journal of methods in psychiatric research*, 20(4), 83-99. <https://doi.org/10.1002/mpr.354>
- Schwartz, D. G. (2006). *Roll the bones: The history of gambling*(Vol. 494). New York: Gotham Books.
- Sharman, S., Butler, K., & Roberts, A. (2019). Psychosocial risk factors in disordered gambling: A descriptive systematic overview of vulnerable populations. *Addictive Behaviors*, 99, 106071. <https://doi.org/10.1016/j.addbeh.2019.106071>
- Syvvertsen, A., Leino, T., Pallesen, S., Smith, O. R., Sivertsen, B., Griffiths, M. D., & Mentzoni, R. A. (2023). Marital status and gambling disorder: a longitudinal study based on national registry data. *BMC psychiatry*, 23(1), 199. <https://doi.org/10.1186/s12888-023-04697-w>

- Tran, L. T., Wardle, H., Colledge-Frisby, S., Taylor, S., Lynch, M., Rehm, J., ... & Degenhardt, L. (2024). The prevalence of gambling and problematic gambling: a systematic review and meta-analysis. *The Lancet Public Health*. [https://doi.org/10.1016/s2468-2667\(24\)00126-9](https://doi.org/10.1016/s2468-2667(24)00126-9)
- Volberg, R. A., McNamara, L. M., & Carris, K. L. (2018). Risk factors for problem gambling in California: Demographics, comorbidities and gambling participation. *Journal of Gambling Studies*, 34(2), 361-377. <https://doi.org/10.1007/s10899-017-9703-5>
- Welte, J. W., Barnes, G. M., Tidwell, M. C. O., Hoffman, J. H., & Wieczorek, W. F. (2015). Gambling and problem gambling in the United States: Changes between 1999 and 2013. *Journal of gambling studies*, 31(3), 695-715. <https://doi.org/10.1007/s10899-010-9195-z>
- Yeşilay. (2025). Türkiye Kumar Raporu Eylül 2025.
<https://www.yesilay.org.tr/assets/uploads/pdf/turkiye-kumar-raporu-2025.pdf>.

Article Submission: <https://gamb.manuscriptmanager.net/>