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# Leisure Time Internet Usage and Online Gambling Addiction: Investigation of Individuals Playing Gambling

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## **ABSTRACT**

This study aimed to examine the relationship between leisure time activities, internet gambling and internet gambling addiction levels of individuals regarding their demographic characteristics. The descriptive scanning model, which was widely used in social sciences, was preferred in this study. The study group included a total of 356 participants, 222 male and 134 female. The participants consisted of university students, graduates, individuals who gamble on online platforms, and individuals reached through social media groups. Demografic information form, "Leisure Time Internet Usage" scale and "Online Gambling Addiction" scale were used data collection tool in the study. In the statistical presentation of the data, normality analyses and descriptive statistical analyses, independent sample t-test, one-way analysis of variance (ANOVA) and Pearson correlation test were performed. According to the results, statistically significant differences were found in the variables of gender, education level, welfare status, leisure time period and gambling reason on the leisure time internet usage and online gambling addiction of the gamblers. Statistically significant relationship did not detected between online gambling addiction and leisure time internet usage sclaes. The research results revealed that the impact of online gambling on individuals' leisure time activities varies according to demographic characteristics and that was an important factor in understanding the lifestyles of individuals with gambling addiction.

Keywords: Online gambling, Leisure internet usage, gambling addiction

## **INTRODUCTION**

The rapid development of technology and the impact of digitalization on every aspect of life have radically changed the structure and content of individuals' leisure time activities. The Internet has become not only a means of accessing information, but also a platform that individuals prefer for socializing, entertainment, and relaxation. In particular, Internet-based activities have become central to their leisure time habits. Leisure time Internet use includes all kinds of activities, such as online shopping or playing games, regardless of whether it occurs working hours or off-hours. In addition, individuals' purposes for using the Internet have

diversified considerably; activities such as online shopping, digital games, social media use, and online gambling have gained popularity (Gao et al., 2020).

Online gambling is becoming a common leisure activity that attracts people's attention for various reasons (Díaz et al., 2023). The ease of access to online gambling platforms (websites) makes gambling easier and provides the opportunity to gamble from anywhere and at any time through smartphones, computers and other technological devices (Törrönen et al., 2020). Easy access eliminates the need to travel and makes gambling easier (McBride & Derevensky, 2017). However, it can be said that such activities go beyond the entertainment dimension of leisure activities and



have the risk of creating potential negative effects on individuals.

In recent years, it has been observed that there was a significant increase in online gambling advertisements. In particular, since 2016, the doubling of advertising expenditures of online casinos has increased the visibility and accessibility of online gambling (Henriksen et al., 2022). This increase is reflected in the promotion of online casinos through television advertisements, thus reaching a wide audience (Håkansson & Widinghoff, 2019). Furthermore, the widespread usage of digital and social media advertising in the gambling industry has become a major concern due to its potential negative impact on vulnerable consumers, including individuals in medium and high-risk groups (Gainsbury et al., 2016).

Online gambling addictions of individuals who use the internet in their leisure time are an important social and psychological problem today. Online gambling is spreading rapidly thanks to the easy access and anonymity of users, and this increases the risk of addiction. Research shows that Online gambling has more addictive properties than traditional gambling methods. In particular, the constant accessibility of online gambling increases users' gambling behaviors, and this creates a basis for addiction development (Lee et al., 2012; Gainsbury et al., 2014). It has been found that individuals who gamble online have higher impulsivity levels than those who gamble offline (Han et al., 2018). This situation shows that factors such as easy access and privacy provided by online gambling can trigger impulsive behaviors (López-Torres et al., 2021). As a result, online gambling addiction is directly related to individuals' use of the internet in their leisure time. In this context, increasing awareness about gambling addiction and taking preventive measures are of critical importance for the health of individuals (Auer & Griffiths, 2012; Wood & Williams, 2011; Tomei et al.,2022).

This study aims to examine the place of online gambling in leisure activities and the levels of online gambling addiction according to the demographic characteristics of individuals. In addition, the effects of variables such as gender, welfare status and education on online gambling addiction and leisure internet usage were discussed. In this context, the study aimed to provide important data both to understand the approach of individuals to leisure activities and to discuss the individual and social consequences of these activities

#### **METHOD**

#### **Research Model**

The descriptive scanning model, which was widely used in social sciences, was preferred in this study. This model is based on the data collection process aimed at determining the characteristics of a specific group that is the subject of research. The descriptive scanning model aims to define the problem, individual or object within the scope of the research, as it is, in its natural conditions (Karasar, 2012). In the study, the survey method, which was frequently used in scanning models, was adopted as the data collection tool.

# **Research Group**

The study group of the research consisted of individuals determined by the convenience sampling method, which is one of the non-random sampling methods, and who volunteered to participate in the study. The study group included a total of 356 participants, 222 male and 134 female, with a mean age of 21.89. The participants consisted of university students, individuals who gamble on online platforms, and individuals reached through social media groups. The main purpose of this method was to allow all individuals who want to participate in the study to be included in the sample. Participant recruitment continued until the targeted sample size was reached.

## **Data Collection Tools**

In the data collection process of the research, personal information form, Leisure Time Internet Usage Scale (LIUS) and Online Gambling Addiction Scale (OGAS) were used

**Personal Information Form:** The personal information form developed by the researcher included questions about the participant's age, gender, marital status, welfare status, leisure period, university graduation, and gambling reasons.

Leisure Time Internet Usage Scale: The "Leisure Time Internet Usage" scale, developed by Şimşek and Çevik (2023), was used to analyze the basic structures of leisure time internet usage and participation in internet activities. The scale consisted of 16 items and social interaction, shopping, Multimedia usage, information/self-improvement sub-dimensions. It had a 5-point Likert-type evaluation. There was no reverse-coded expression in the scale. The reliability coefficient (Cronbach's Alpha) for this research was determined to be 0.74.



Online Gambling Addiction Scale: The "Online Gambling Addiction" scale, developed by Karaibrahimoğlu et al. (2021) to determine the levels of online gambling addiction, was used. The scale consisted of 21 items and motivation, addiction and negative psychology sub-dimensions. It had a 5-point Likert-type evaluation. There was no reverse-coded expression in the scale. The reliability coefficient (Cronbach's Alpha) for this research was determined to be 0.85.

#### **Data Collection**

The data collection tools used in the study were developed online via Google Forms and the participants were allowed to answer the questions via mobile devices. In the instructions prepared for the data collection process, detailed explanations for filling in the measurement tools were included. The study was conducted following the principle of voluntariness, and forms that were incomplete or incorrectly completed by the participants were

excluded from the scope of the study. Valid and appropriate forms were evaluated.

# **Data Analysis**

Statistical analyses performed within the scope of the research were performed using the SPSS 25 statistical package program. Statistical methods used in the analysis of data include frequency, arithmetic mean, standard deviation, t-test for independent samples, single factor analysis of variance (ANOVA), Tukey multiple comparison tests and Pearson correlation analysis. To evaluate the applicability of parametric tests, the normal distribution of the data was examined with Skewness and Kurtosis tests, and the equality of variances was examined with Levene test (Tabachnick, 2013). Cronbach Alpha internal consistency coefficients were calculated for the reliability analyses of the scales. The significance level was accepted as 0.05 in statistical analyses.

#### **RESULTS**

Table 1. t Test Result of Online Gambling Addiction Scale Sub-dimension and Gender Veriable Mean Scores

	Gender	N	$\overline{\overline{\mathbf{X}}}$	Sd	df	t	р
Mativation	Male	222	2.68	0.82	274.17	2.32	0.02*
Motivation	Female	134	2.46	0.85	2/4.1/	2.32	0.02*
A ddietie	Male	222	2.29	0.90	200.00	2.65	0.00*
Addiction	Female	134	2.03	0.83	298.88	2.65	0.00*
Nonetive nevel elem	Male	222	2.23	0.90	206.88	2.44	0.01*
Negative psychology	Female	134	2.00	0.84	296.88	2.44	0.01*
(OGAS)	Male	222	2.46	0.69	284.66	3.08	0.00*
Total	Female	134	2.23	0.67	204.00	3.08	0.00**

<sup>\*</sup>p<.05

When Table 1 was examined, it was determined that there was a statistically significant difference between the participants' online gambling addiction sub-dimensions and total score mean according to their gender. According to this result, it was noticed

that male participants had higher mean than female participants. It was determined that male participants had higher mean than female participants in all sub-dimensions of the online gambling addiction scale and total score.

Table 2. t Test Result of Leisure Usage Scale Sub-dimension and Gender Variable Mean Scores

	Gender	N	$\overline{\overline{\mathbf{X}}}$	Sd	df	t	р
Cocial interaction	Male	222	3.89	0.99	261.65	1.02	0.20
Social interaction	Female	134	4.01	1.08	261.65	-1.02	0.30
Chamain a	Male	222	3.03	1.04	270.25	4.00	0.01*
Shopping	Female	134	3.51	1.09	270.35	-4.09	0.01*
Multimedia usage	Male	222	4.00	0.82	287.25	0.14	0.88



	Female	134	3.99	0.79			•
Information/	Male	222	3.80	0.96	269.27	0.60	0.40
self-improvement	Female	134	3.73	1.01	268.37	0.68	0.49
(LIUS)	Male	222	3.67	0.57	260.64	1 70	0.07
Total	Female	134	3.79	0.60	268.64	-1.79	0.07

<sup>\*</sup>p<.05

When table 2 was examined, no statistically significant difference was found between the participants' total scores of social interaction, Multimedia Usage, Information/self-improvement sub-dimensions and (LIUS) from the leisure time

internet usage sub-dimensions (p<.05). On the other hand, it was determined that female participants had a higher mean score than male participants in the shopping sub-dimension from the leisure time internet usage scale sub-dimensions

**Table 3**. t Test results of Online gambling addiction scale sub- dimensions and educational status mean scores

	University Graduation	N	$\overline{X}$	Sd	df	t	р
Mativation	Graduate	45	2.97	0.91	F4 74	2.10	0.00*
Motivation	Non-Graduate	311	2.54	0.82	54.74	3.19	0.00*
Addiction	Graduate	45	2.61	1.03	F2 00	2 41	0.00**
Addiction	Non-Graduate	311	2.13	0.85	52.98	3.41	0.00**
Nogotivo povehology	Graduate	45	2.56	0.98	54.26	2.26	0.00**
Negative psychology	Non-Graduate	311	2.08	0.86	54.20	3.36	0.00
(OGAS)	Graduate	45	2.77	0.77	53.74	4.15	0.00**
Total	Non-Graduate	311	2.31	0.66	55.74	4.15	0.00

<sup>\*\*</sup>p<.05

When table 3 was examined, it was determined that there was a statistically significant difference between participants' online gambling addiction subdimensions and online gambling addiction total score mean according to their educational status.

According to this result, it was noticed that university graduate participants have higher mean scores than non-university graduate participants in all sub-dimensions of the online gambling addiction scale and total scores.

Table 4. Leisure Internet Usage Scale Sub-dimension and educational status mean scores

	University Graduation	N	$\overline{X}$	Sd	df	t	р
Cocial interaction	Graduate	45	3.62	0.96	FO F4	2 22	0.02*
Social interaction	Non-Graduate	311	3.98	1.03	59.54	-2.33	0.02*
Champing	Graduate	45	3.01	1.23	53.91	-1.33	0.18
Shopping	Non-Graduate	311	3.24	1.06	55.91	-1.33	0.16
Multimodia usasa	Graduate	45	4.05	0.77	59.28		0.65
Multimedia usage	Non-Graduate	311	3.99	0.81	59.28	0.45	0.65
Information/self	Graduate	45	3.75	1.03	FF 0F	0.21	0.02
improvement	Non-Graduate	311	3.78	0.97	55.95	-0.21	0.83
(LIUS)	Graduate	45	3.61	0.69	F2 02	1 21	0.10
Total	Non-Graduate	311	3.73	0.56	52.92	-1.31	0.19

<sup>\*</sup>p<.05

When Table 4 was examined, no statistically significant difference was found between the Shopping, Multimedia usage, Information/self-improvement sub-dimensions and LIUS Total scores of the participants in the leisure time internet usage sub-dimensions (p<.05). On the other hand, it was

determined that the participants who were not university graduates had a higher mean score than the participants who were university graduates in the social interaction sub-dimension of the leisure time internet usage sub-dimensions and that there was a statistical difference (p < .05).



**Table 5.** One-way Analysis of Varience Results of Online Gambling Addiction Scale Sub-dimensions regarding welfare status

	Welfare Status	N	$\overline{X}$	Sd.		Sum of Squares	df	F	р	Difference
	1-Good	67	2.73	093	Between Groups	7,402	2	_		
Motivation	2- Medium	208	2.47	0.79	Within Groups	245,578	353	5.32	0.01*	2-3
	3-Bad	81	2.79	0.85	Total	252,980	355	<del>-</del> '		
	Total	356	2.60	0.84		•		_		
	1-Good	67	2.24	1.04	Between Groups	4,549	2			
Addiction	2- Medium	208	2.10	0.79	Within Groups	275,244	353	2.91	0.04*	2-3
	3-Bad	81	2.38	0.94	Total	279,793	355	<del>-</del> "		
	Total	356	2.19	0.88				_		
	1-Good	67	2.29	1.02	Between Groups	4,880	2			
Negative Psychology	2- Medium	208	2.04	0.83	Within Groups	276,908	353	3.11	0.06	-
	3-Bad	81	2.28	0.88	Total	281,788	355	_		
	Total	356	2.14	0.89				_		
	1-Good	67	2.49	0.84	Between Groups	5,776	2	_		
(OGAS) Total	2- Medium	208	2.27	0.61	Within Groups	166,032	353	6.14	0.01*	2-3
	3-Bad	81	2.55	0.70	Total	171,808	355	_		
	Total	356	2.37	0.69				_		

\*p<.05

Table 5 showed that the results of one-way analysis of variance (ANOVA) of the online gambling addiction scale (OGAS) sub-dimensions in terms of welfare status. In the "Motivation" sub-dimension, significant differences were found between the groups (F=5.32, p=0.01), especially between moderate (2) and poor (3) welfare status. Significant differences were also observed in the "Addiction" sub-dimension (F=2.91, p=0.04), again between moderate (2) and poor (3) welfare status. However,

no significant difference was found between the groups in the "Negative Psychology" sub-dimension (F=3.11, p=0.06). OGAS total score showed significant differences (F=6.14, p=0.01), especially between moderate (2) and poor (3) welfare status. These results showed that welfare status has a significant effect on the online gambling addiction sub-dimensions, especially on motivation and total addiction scores.

**Table 6.** One-way analysis of variance results of Online Gambling Addiction Scale sub-dimensions regarding the gambling reason

	Gambling Reason	N	$\overline{\overline{X}}$	Sd		Sum of Squares	df	Mean Square	F	р	Difference
	1-Pleasure	130	2.41	0.80	Between Groups	8,806	2	4,403	_		
Motivation	2-Excitement seeking	94	2.60	0.91	Within Groups	244,174	353	0,692	6.36	0.01*	1-3
	3-Earn money	132	2.77	0.79	Total	252,980	355		_		
	Total	356	2.60	0.84					_		
	1-Pleasure	130	2.02	0.85	Between Groups	6,864	2	3,432			
Addiction	2- Excitement seeking	94	2.37	0.93	Within Groups	272,929	353	0,773	4.43	0.01*	1-2
	3-Earn money	132	2.23	0.85	Total	279,793	355		_		
	Total	356	2.19	0.88							



	1-Pleasure	130	1.90	0.86	Between Groups	12,422	2	6,211			
Negative psychology	2- Excitement seeking	94	2.33	0.90	Within Groups	269,367	353	0,763	8.13	0.01*	1-2 1-3
	3-Earn money	132	2.25	0.86	Total	281,788	355				
	Total	356	2.14	0.89							
	1-Pleasure	130	2.18	0.67	Between Groups	7,811	2	3,906	_		
(OGAS) Total	2- Excitement seeking	94	2.47	0.75	Within Groups	163,996	353	0,465	8.40	0.01*	1-2 1-3
	3-Earn money	132	2.49	0.63	Total	171,808	355		_		
	Total	356	2.37	0.69					_		
Ψ											

<sup>\*</sup>p<.05

When Table 6 was examined, significant differences were found between the mean scores in all sub-dimensions and total scores of online gambling addiction according to gambling reason. According to the result, it was determined that individuals whose reason for gambling was pleasure have higher mean scores on the motivation, negative psychology and online gambling addiction scale total score than

individuals whose reason for gambling is to earn money, and there was a statistically significant difference. Furthermore, it was determined that individuals whose reason for gambling was pleasure have lower mean scores on the addiction, negative psychology and online gambling addiction scale total score than individuals whose reason for gambling was to seek excitement, and there was a statistically significant difference.

**Table 7.** One-way analysis of variance results of Online Gambling Addiction Scale sub-dimensions regarding the leisure time period

	Leisure Time Period	N	$\overline{X}$	Sd		Sum of Squares	df	Mean Square	F	р	Difference
Motivation	1-Well	82	2.80	0.93	Between Groups	5,241	2	2,620	3.73	0.02*	1-3
	2-Enough	197	2.57	0.80	Within Groups	247,739	353	0,702	-		
	3-Poor	77	2.44	0.81	Total	252,980	355		-		
	Total	356	2.60	0.84					-		
Addiction	1-Well	82	2.23	0.96	Between Groups	0,326	2	0,163	0.20	0.20	-
	2-Enough	197	2.20	0.84	Within Groups	279,467	353	0,792	_		
	3-Poor	77	2.14	0.92	Total	279,793	355		-		
	Total	356	2.19	0.88					-		
Negative psychology	1-Well	82	2.10	0.93	Between Groups	0,670	2	0,335	0.42	0.42	-
	2-Enough	197	2.13	0.86	Within Groups	281,118	353	0,796	_		
	3-Poor	77	2.22	0.91	Total	281,788	355		_		
	Total	356	2.14	0.89					_		
(OGAS)	1-Well	82	2.47	0.79	Between Groups	1,174	2	0,587	1.21	1.21	-
Total	2-Enough	197	2.36	0.63	Within Groups	170,633	353	0,483	_		



	3-Poor	77	2.30	0.72	Total	171,808	355
-	Total	356	2.37	0.69			

<sup>\*</sup>p<.05

When Table 7 was examined, a significant difference was found in the motivation sub-dimension of online gambling addiction according to the leisure time period, but no statistically significant differences were found in the other sub-dimensions and the total

score of the scale (p>0.05). According to this result, it was seen that the mean score of the motivation sub-dimension of individuals with well leisure time period was higher than those with poor leisure time period.

Table 8. Correlation Test Results of the Leisure Internet Usage and Online Gambling Addiction Scales

	LIUS (Total)	OGAS (Total)
LIUS (Total)	1	
OGAS (Total)	0.056	1

There was not any statistically significant relationship was found between the two variables according to the conducted correlation analysis between online gambling addiction and leisure time internet usage sclaes. Since this situation did not provide any data to establish a causal link between the variables, it was not deemed appropriate to conduct a regression analysis.

## **DISCUSSION AND CONCLUSION**

Nowadays, with the development of technology and the increase in welfare levels, there was an increase in people's leisure time. The increase in people's access to new technologies and the internet has changed the form of leisure time activities. The internet becoming a leisure time activity was becoming increasingly common as individuals in various online activities participate entertainment, socialization and relaxation. Studies showed that leisure internet use covers a wide range of activities such as browsing websites, playing games and watching videos (Gao et al., 2020; Zhou et al., 2014; Dyck et al., 2011).

Online gambling has also become a recreational activity within leisure Internet use, but the recreational nature of Online gambling may conceal potential risks, especially for adolescents and vulnerable groups (Wong & So, 2013).

According to the research results, It was determined that there was a statistically significant difference between the participants' online gambling addiction scale sub-dimensions and the total score averages of the LIUS according to gender (p<.05) and this difference was seen to be in favor of males. In other words, it can be said that males were more addicted to online gambling than females. When the literature was examined, there were studies that

reached similar conclusions. The results obtained in the study conducted by Çakal and Subaşı (2023) on gambling addiction were consistent with the results of this study. On the contrary, the study conducted by Merkouris et al. (2016) revealed that some characteristic features of gambling addiction were more common in females. When a general literature review based on gender was made, it was understood that males were more addicted to online gambling than females. For example, in the study conducted by Wong and So on high school students in Hong Kong, it was determined that the participation rate of males in online gambling was 82.9% and that of females was 17.1% (Wong & So, 2013). This situation showed that males tend to engage in online gambling more in their leisure time activities. In another study conducted by Lee and his colleagues, the relationship between internet addiction and pathological gambling was examined and it was determined that males exhibited higher levels of impulsivity and therefore were more prone to online gambling (Lee et al., 2012). Impulsivity was defined as an important personality trait that increased the risk of addiction and can be effective in transforming leisure time preferences into pathological tendencies. Male's higher impulsivity levels may lead them to use online gambling more intensively as an entertainment tool in their leisure time. In Karlsson et al.'s study, a strong relationship was found between problematic gambling behaviors and internet use, and it was found that this situation was more common in males (Karlsson et al., 2019). These results supported that male's tendency to spend their leisure time on online gambling is more pronounced than female's and that this situation affected addiction levels. In conclusion, studies conducted in the context of leisure time showed that males were at greater risk for online gambling



addiction than females. The results provided a critical basis for the development of preventive policies and intervention strategies for online gambling addiction in leisure time activities. Taking gender differences into account can contribute to the design of effective programs to reduce the risk of addiction, especially in males. In the process of prevention and treatment of gambling addiction, help can be obtained from social support groups, especially women can come together with people who have similar experiences, talk about the difficulties they face and receive emotional support, which can contribute positively to the treatment process.

When the research results were examined in terms of leisure time internet use and gender, a significant difference was found in the shopping subdimension of the leisure time internet usage scale (p<.05). This difference was seen to be in favor of females. In this case, it can be said that females use the internet more for shopping in their leisure time. These results were parallel to many studies in the literature (Šramová & Pavelka, 2019; Rose & Dhandayudham, 2014; Acılar, 2022; Akhlaq & Ahmed, 2016). Öztürk and Ayaz-Alkaya stated that internet addiction was especially common among young females and that this was associated with online activities such as shopping (Öztürk & Ayaz-Alkaya, 2021). This situation showed that female's increased use of the internet for shopping may be linked to internet addiction. Female's increased use of the Internet for shopping was also associated with social interaction and leisure time management. stated that inadequate leisure time management can lead to internet addiction and this situation may be more pronounced among women (Wang, 2018). In this context, the way females manage their leisure time can affect activities such as internet shopping. In addition, Machimbarrena and colleagues state that misuse of the internet can lead to psychological problems and that this was more common among women (Machimbarrena et al., 2019). This situation showed that female's greater use of the Internet for shopping may also be related to psychological effects.

In the comparison between the participants' educational status and online gambling addiction, higher results were obtained in the mean scores of university graduates compared to those who did not graduate (p<.05). It was observed that university graduate participants had higher online gambling addiction than those who did not graduate. When the literature was examined, Gainsbury (2015) observed that individuals with online gambling addiction had higher education levels. In addition, Yan et al. (2016) stated that online gambling addiction was related to

education level and may differ in individuals with different education levels. Gambling addiction can have important consequences not only at the individual level but also at the societal level. Mowrer et al. Emphasize the importance of implementing gambling education and prevention programs on university campuses. Such programs were critical for raising awareness of gambling addiction and taking preventive measures (Mowrer et al., 2016). Neighbors et al. showed that university students' gambling behaviors interact with social norms and the gambling behaviors of other individuals. This suggested that university graduates may be more prone to gambling addiction (Neighbors et al., 2015). In addition, there were studies in the literature that did not support this study (Effertz et al., 2018; Vallés, 2021; Lelonek-Kuleta and Bartczuk, 2021).

Comparisons made between the participants' leisure time internet usage sub-dimensions showed that there was no statistically significant difference especially for the "Shopping", "Multimedia usage", "Information/self-improvement" sub-dimensions (p<.05). These results revealed that educational status did not have a significant effect on the use of these sub-dimensions of the internet. For example, Kuss and Griffiths stated that the use of social networks can negatively affect individuals' interactions with real-life communities (Kuss & Griffiths, 2011). This situation showed that the internet can increase individuals' sense of loneliness instead of social interaction. Therefore, similar usage habits can be observed between university graduates and non-graduates in these subdimensions. On the other hand, it was determined that non-university graduate participants had a higher mean in the "Social interaction" subdimension and there was a statistically significant difference (p<.05). This situation suggests that university graduates meet their social interaction needs in different ways. Elms and his colleagues examined the interaction between online shopping and physical store shopping and stated that the Internet plays a complementary role in shopping behaviors (Elms et al., 2016). In this context, it can be thought that individuals without a university degree tend to meet their social interaction needs more over the Internet.

When the relationship between online gambling addiction and welfare status of the individuals participating in the study was examined, it was determined that there was a statistically significant difference between individuals with low welfare and those with medium welfare. This difference showed that individuals with low welfare have higher levels of gambling addiction compared to individuals with medium welfare. These results revealed the effect of



welfare level on gambling addiction and suggested that individuals in the low welfare group may be more tended to gambling addiction. There were many studies in literature that low welfare level was associated with gambling addiction. For example, a study by Custer and Milt (1985) revealed that individuals with low welfare levels were more tended to gambling addiction. The study showed that low welfare level can increase individuals' motivation to gamble, and this situation may increase the risk of gambling addiction (Zhao et al., 2017). In addition, another study by Grun and McKeigue (2000) stated that low socioeconomic status was associated with gambling addiction and that this situation increased the frequency of gambling in individuals (Poe, 2019). There were several reasons why individuals with low welfare tend to gamble more to explain the relationship between gambling addiction and welfare status. First of all, individuals with low welfare levels may see gambling as a solution to their financial difficulties. This may cause gambling to function as a kind of escape mechanism (Fluharty & Paul, 2022). In addition, it was thought that individuals with low welfare levels may be more affected by social norms and environmental factors towards gambling. These individuals may be more tended to gambling in line with the pressures and expectations from their social environment (Mowrer et al., 2016). However, the effect of low welfare on gambling addiction was also related to the psychological state of individuals. Individuals with low welfare levels may encounter psychological problems such as stress, anxiety, and depression more. This may lead them to use gambling as a coping mechanism (Neighbors et al., 2015). In addition, it was thought that low welfare individuals have less awareness of gambling addiction and did not have enough information about it (Teeters et al., 2013). As a result, it was found that individuals with low welfare levels have higher levels of gambling addiction compared to individuals with medium welfare levels. This situation emphasizes the effect of low welfare levels on gambling addiction and showed that individuals in this group require more support and intervention for gambling addiction. Educational institutions and health services should develop awareness-raising programs and support services for individuals with low welfare levels.

When participants' reasons for gambling were analysed, it was seen that the effect of gambling motivations on Online gambling addiction varied on the basis of sub-dimensions. In the 'motivation' sub-dimension, a significant difference between the groups was determined between those who gambled for pleasure and those who gambled to earn money. This result indicated that gambling motivations were effective on gambling addiction levels. Hagfors et al.

stated that gambling motivations were related to gambling behaviours and that gaining profit and positive emotions were among the most common gambling motivations (Hagfors et al., 2022). It can be concluded that the level of gambling addiction of those who play for pleasure may be lower than those who play with the purpose of earning money. In the 'addiction' sub-dimension, a significant difference was detected between those who play for pleasure and those who seek excitement in gambling behaviour. This indicated that excitement seeking has a significant effect on gambling addiction. Thrill seeking may increase the frequency of gambling by causing individuals to seek risky and intense emotional experiences. Individuals with high levels of thrill seeking in leisure activities may be expected to get more satisfaction from these activities and prefer such experiences more frequently. Moreover, it can be said that recreational activities had a strong impact on the psychological development and identity perception of the individual (Beşikçi & Dinc, 2022). The study of Sundqvist et al. (2016) revealed that thrill seeking was associated with problematic gambling behaviours. In this context, it was considered that thrill seeking strengthens individuals' motivation to gamble and may increase their addiction levels. Individuals who were seeking excitement may have higher frequency of gambling and higher addiction levels.

In the 'Negative Psychology' sub-dimension, there was a significant difference between the groups, and this difference was found between those who play for pleasure and those who seek excitement, and between those who play for pleasure and those who aim to make money. This emphasised the relationship between the negative psychological effects of gambling and motivations. Parhami et al. stated that gambling was associated with intrinsic positive reinforcements, and this may increase gambling addiction (Parhami et al., 2012). Gambling motivations may influenced also individuals' psychological states. In OGAS total scores, differences were deceted between those who gambled for pleasure and those who gambled for excitement, and between those who gambled for pleasure and those who gambled to make money. These results indicate that the effect of the reasons for gambling on Online gambling addiction varies in terms of sub-dimensions. In a studty conducted by Mathieu et al., (2020), a relationship was detected between gambling motivations and gambling violence and emphasised that these motivations may affect gambling behaviours. Gambling motivation can be concluded to be an significant factor affecting the gambling addiction levels of individuals. As a result, significant differences were found between the sub-dimensions of the Online gambling addiction



scale and the reasons for gambling. Thus, these results emphasise the effect of gambling motivations on gambling addiction and show that motivations should be considered in the fight against gambling addiction.

The analysis conducted in the 'Motivation' subdimension of the Online gambling addiction scale revealed the effect of leisure on gambling motivations. A significant difference was detected between individuals with a good level of leisure and individuals with insufficient leisure time. According to this result, adequate leisure may strengthen individuals' motivation to gamble by increasing their search for social interaction and entertainment. Wang and Bellringer (2022) stated that leisure increased individuals' participation in social and entertaining activities and this may affect their motivation to gamble. The impact of leisure on gambling motivations was also important in terms of strengthening individuals' social connections and increasing their psychological well-being. Wang and Bellringer demonstrated that leisure activities significantly affected individuals' social commitment, which in turn modulated their gambling behaviours (Wang & Bellringer, 2022). In this context, sufficient leisure may support individuals' pursuit of social interaction and entertainment by increasing their motivation to gamble.

On the other hand, no significant difference was found between the groups in the 'Addiction' and 'Negative Psychology' sub-dimensions. This suggested that the effect of leisure on gambling addiction and negative psychological states was limited. Gambling addiction affected by many factors such as individuals' living conditions, psychological states and social interactions. Therefore, it can be concluded that leisure duration alone did not play a predictive role on gambling addiction. In conclusion, these results suggested that leisure had a significant effect on online gambling addiction only in the motivation dimension, while it did not have an effect on the other sub-dimensions. This situation emphasised the importance of leisure management in the fight against gambling addiction and showed that programs that encourage individuals to use their leisure more efficiently should be developed.

According to the correlation analysis between online gambling addiction and leisure internet usage, no statistically significant relationship was detected. These results also coincide with some studies in literature. For example, Gainsbury and colleagues (2015) did not find a relationship between online gambling addiction and online social interactions (Zhao et al., 2017). Similarly, Kuss and Griffiths (2012) did not find a significant relationship between internet addiction and gambling addiction (Poe,

2019). These results supported that individuals' internet usage habits did not have a direct effect on gambling addiction. In conclusion, the correlation analysis between online gambling addiction and leisure internet usage showed that there was no statistically significant relationship between the two variables. Therefore, the regression analysis was unnecessary and did not provide data to establish a causal link between the variables. These results suggested that more comprehensive research on gambling addiction should be conducted, and more variables should be considered to understand the effects of individuals' internet usage habits on addiction.

## **Author Contributions**

C.F.R: data collection. T.B: data analysis and original draft preparation. C.F.R, T.B: review and editing. All authors have read and agreed to the published version of the manuscript.

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#### **Institutional Review Board Statement**

The research was conducted in accordance with the Declaration of Helsinki after receiving approval from the Ethics Committee of the Health Sciences Institute of Manisa Celal Bayar University on 29.02.2024 (Approval No.: 06/779).

#### **Informed Consent Statement**

Informed consent was obtained from all subjects involved in this study.

# **Data Availability Statement**

Datasets are available through the corresponding author upon reason-able request.

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## **Conflicts of Interest**

The authors unequivocally assert that this research was undertaken while devoid of any commercial or financial affiliations that might be perceived as potential conflicts of interest.

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