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# Mapping Research on Online Gambling: A Bibliometric Analysis

## Çevrimiçi Kumar Üzerine Haritalama Araştırması: Bibliyometrik Bir Analiz

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### Abstract

This study aimed to conduct a bibliometric analysis of studies on online gambling. Web of Science Core database was used to obtain all publications on online gambling between 1998 and 2024. The bibliometric analysis was confined to studies published up to 2024, given that 2025 is still in progress and the complete body of literature for that year is not yet accessible. The bibliometric analysis was conducted using the VOSviewer program. The study initially determined that the number of studies in the domain of online gambling exhibited an overall increase from 1998 to 2024, with a few exceptions. A co-authorship analysis indicates that England is the most prolific nation in this field of study. Subsequently, Australia, Canada, the United States of America, and Spain are in descending order of productivity. The analysis yielded the conclusion that Nerilee Hing is the most influential researcher in the field of online gambling. The results of the co-occurrence analysis indicated that the most frequently used keywords were related to "gambling", "online gambling", "problem gambling", "responsible gambling", "addiction", "COVID-19", and "adolescent". In this study, it was concluded that research on online gambling addiction has increased over the years and that online gambling addiction has been emphasized in different cultures.

Keywords: Gambling addiction, online gambling, online gambling addiction, bibliometric analysis

### Öz

Bu çalışma, çevrimiçi kumar üzerine yapılan çalışmaların bibliyometrik analizini yapmayı amaçlamıştır. 1998 ile 2024 yılları arasında çevrimiçi kumar üzerine yapılan tüm yayınları elde etmek için Web of Science Core veri tabanı kullanılmıştır. Bibliyometrik analiz, 2025 yılı henüz devam ettiği ve bu yıla ait tüm literatüre henüz erişilemediği için 2024 yılına kadar yayımlanmış çalışmalarla sınırlandırılmıştır. Bibliyometrik analiz VOSviewer programı kullanılarak gerçekleştirilmiştir. Çalışma, başlangıçta çevrimiçi kumar alanındaki çalışma sayısının birkaç istisna dışında 1998'den 2024'e genel bir artış gösterdiğini belirlemiştir. Ortak yazarlık analizi, İngiltere'nin bu çalışma alanında en üretken ülke olduğunu göstermektedir. Daha sonra, Avustralya, Kanada, Amerika Birleşik Devletleri ve İspanya üretkenlik açısından azalan sıradadır. Analiz, Nerilee Hing'in çevrimiçi kumar alanında en etkili araştırmacı olduğu sonucuna varmıştır. Eş-oluşum analizinin sonuçları, en sık kullanılan anahtar kelimelerin "kumar", "çevrimiçi kumar", "problemli kumar", "sorumlu kumar", "bağımlılık", "COVID-19" ve "ergen" ile ilgili olduğunu göstermiştir. Bu çalışmanın bulguları, online kumar bağımlılığının yıllara göre artış gösterdiğini ve farklı kültürlerde incelendiğini göstermektedir.

Anahtar kelimeler: Kumar bağımlılığı, online kumar, online kumar bağımlılığı, bibliometrik analiz

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# Introduction

In recent years, gambling has emerged as a concept of increasing research interest. While gambling is engaged in purposes such as entertainment and socialization, it can also lead to negative consequences for individuals who engage in excessive and uncontrolled participation (1). This harmful form of gambling is referred to as gambling disorder, pathological gambling, or problem gambling. Gambling disorder was first included in the Diagnostic and Statistical Manual of Mental Disorders (DSM)-3 (2). In this edition, gambling was defined as "pathological gambling" in the "impulse control disorders" category (2). The inclusion of gambling disorders in the Diagnostic and Statistical Manual of Mental Disorders (DSM-III) marked a significant turning point in the field of gambling research (3). In DSM-4, published in 1994, pathological gambling was classified within the “Impulse-Control Disorders Not Elsewhere Classified” category (4). Therefore, it is seen that it is not included in the addiction category. Finally, in DSM-5, it was included in the addictions category and was placed under the title of “Non-Substance-Related Disorders” in the “Substance-Related and Addictive Disorders” category (5). Consequently, gambling disorder has been emphasized for many years during which it began to be considered an addiction.

Gambling is an activity observed across various age groups (1, 6, 7). For example, a study examining 2,257 elderly Chinese individuals in Canada reported a gambling participation rate of 26.6%. This study was conducted on Chinese Canadians due to the large size of the Chinese population in Canada and the limited research on gambling behavior within this group (8). Another study examined the prevalence of problem gambling in 44 studies conducted in Europe on adolescent gambling. The study found that the prevalence of problem gambling among youth in Europe ranged from 0.2% to 12.3% (9). Welte and colleagues examined the prevalence of gambling among 2,274 U.S. residents between the ages of 14 and 21, finding that the prevalence of problem gambling was 2.1% and the prevalence of gambling in the past year was 68% (10). In conclusion, problem gambling is common among different age groups living in different parts of the world.

Technological developments in recent years (such as the widespread use of the Internet and smartphones, the development of artificial intelligence, and the metaverse) have led to changes in gambling (11, 12). People can gamble through various online applications and platforms (13). The privacy and anonymity features provided by technological advancements (14) have made the detection of problematic gambling behaviors more challenging. Therefore, efforts to prevent gambling addiction are becoming more challenging. Today, online gambling takes various forms such as card games, roulette games, sports betting, online bingo, online slots and various avatars (15, 16). Online gambling behavior is a risk factor for individuals to engage in problem gambling behaviors (17, 18). Problem gambling can be explained as excessive gambling behavior that causes the individual to experience negative consequences in various areas of life (19). Therefore, online gambling behavior can make individuals vulnerable to online gambling addiction.

Online gambling addiction is now found in various age groups. A study by of a large group of adolescents (N = 14,778) found that 15.6% of participants were classified as online gamblers in the past 12 months, with a prevalence rate of problem gambling among online gamblers at 21.9% (20). A study conducted in Spain found that 6.5% of 3,772 students, aged between 12 and 17 years, were online gamblers (21). Griffiths and colleagues observed a higher prevalence rate of problem gambling among Internet gamblers compared to non-Internet gamblers (22). The researchers suggested that while the prevalence of online gambling addiction is currently lower among the elderly compared to other age groups, several factors could contribute to an increase in the coming years (23). These factors include the growing adoption of digital technologies among the elderly and increased access to online platforms. Additionally, some elderly individuals may be driven towards online gambling due to social isolation. The rising prevalence of mental health issues among the elderly also contributes to the potential increase in online gambling addiction in the future (23, 24).

Online gambling addiction has been linked to a number of adverse consequences for individuals' psychological well-being. A growing body of research suggests that there is a correlation between online gambling addiction and the use of other addictive, such as substances, tobacco, and alcohol (24, 25).

Additionally, studies have indicated that online gambling can have detrimental effects on individuals' financial and physical health (26). Given the hypothesized link between online gambling behaviors and online gambling addiction, it is crucial to map existing online gambling research and identify the gaps in knowledge that future studies should address to prevent online gambling addiction.

In recent years, there has been an increase in online gambling behavior (27). In the literature, various terms such as "problem gambling," "gambling disorder," and "online gambling addiction" are used to describe this phenomenon. Although these terms are often used interchangeably, they actually refer to different levels of gambling behavior patterns. According to the DSM-5, gambling disorder is defined as a persistent and recurrent pattern of gambling behavior that leads to significant impairment in personal, social, or occupational functioning, and it is classified under the category of “Substance-Related and Addictive Disorders.” (5). In contrast, the term problem gambling refers to gambling behavior that does not fully meet the diagnostic criteria of the DSM-5, yet may still result in harmful consequences (28). Online gambling addiction, on the other hand, is used to describe gambling behaviors that occur on digital platforms and reach a level of addiction, although it is not recognized as a distinct diagnosis in the DSM-5 (15). Finally, gambling participation refers to an individual’s involvement in gambling activities. It encompasses characteristics such as gambling frequency, types of games played, and the mode of gambling. In this respect, gambling participation pertains solely to engagement in gambling behavior, regardless of its potential negative consequences (29).

Online gambling is prevalent across different age groups and is associated with a range of negative psychological consequences. However, the existing body of research on online gambling may not be sufficient to comprehensively explain the emergence of this phenomenon, its underlying issues, and its increasing prevalence. Previous bibliometric studies, such as Gambling in Young People (6) and Patterns of Disciplinary Involvement and Academic Collaboration in Gambling (30), have primarily focused on general gambling trends or specific subpopulations, leaving a gap in the bibliometric exploration of online gambling specifically.

Despite the growing academic interest in online gambling in recent years, there remains a lack of studies employing bibliometric methodologies to map the intellectual and collaborative landscape of this field. Therefore, the present study aims to provide a comprehensive overview of the scientific literature on online gambling by applying bibliometric network analysis techniques. In particular, the study investigates trends in the volume of publications over time, identifies the most prolific authors and contributing countries, and explores the most frequently used keywords in the literature, thereby offering insights into the structure and evolution of research on online gambling.

In line with the topic and purpose of the study, it is important to consider research conducted in Turkey on online gambling. There are a limited number of studies on online gambling in Turkey. One such study indicates that online gambling has spread through its applications on social media, and this presents a risk for children and adolescents (31). A study conducted on 70 adults receiving treatment at AMATEM found that as individuals' levels of impulsivity increased, so did their internet gambling addiction (32). Additionally, scale studies have been conducted to measure online gambling addiction among university students (33). As a result, it is observed that while studies on traditional gambling have been common in Turkey, research on online gambling has only been carried out in recent years (34, 35). It is believed that the broad perspective on global research on online gambling presented in this study will serve as a guiding resource for researchers working in this field in Turkey.

# Method

This study used the VOSviewer program to conduct a bibliometric analysis of publications in the field of gambling addiction. VOSviewer is software that enables the establishment of relationships between research articles and the creation of visual networks (36). This study visualized the connections between publications, keywords, authors, and countries through VOSviewer. In this study, bibliometric analysis was employed to

scientifically map research on online gambling. The bibliometric analysis is a statistical method employed to determine the structure and development of a scientific field (37). A bibliometric analysis allows for the examination of past research on a given scientific topic, as well as the identification of changes that have occurred over time. This may include an analysis of keywords used, the most prolific authors, and the countries most actively engaged in the field. Furthermore, it offers insights into potential future trends in a scientific field (38). Since this study uses the bibliometric method, ethics committee approval is not required.

The bibliographic data can be accessed from databases such as WoS (39). In this study, bibliometric data was accessed using the Wos database on April 28, 2024. The bibliometric analysis was confined to studies published up to 2024, given that 2025 is still in progress and the complete body of literature for that year is not yet accessible. The initial search was conducted using the keywords "online gambling" or "internet gambling.". When no filter was applied, a total of 1054 publications were found. Upon applying the English filter in the "Language" tab, the number of publications was reduced to 1,010. Subsequently, when the filter was applied as "Book, review article, book chapter, early access, and book review" from the "Document Types" tab, a total of 847 studies remained. Finally, according to the Web of Science Categories, 636 studies remained, as they were not included in the scope of this research, which excluded fields such as law, business, mathematics, and economics. These categories were excluded because this study aimed to examine the concept of online gambling in psychology. Bibliometric analysis was performed on these 636 studies. The PRISMA flowchart, which outlines the steps for including studies in the analysis, is presented in Figure 1.

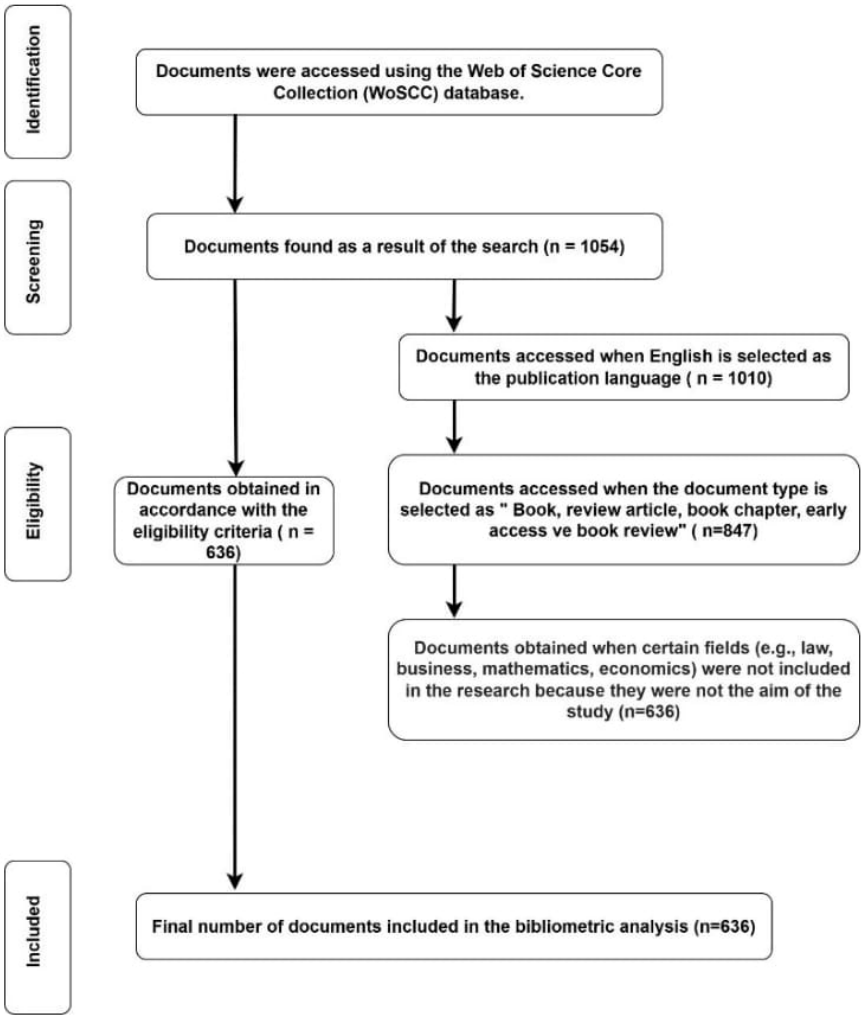


**Figure 1. PRISMA flowchart outlining the steps for inclusion of studies in the analysis,**

The present study examined the trends in online gambling research by analyzing the number of publications over time. Additionally, it identified the most frequently used keywords in the field of online gambling, as well as the authors and countries that contributed the most. Furthermore, the study conducted co-authorship analyses to explore scientific collaboration networks among authors and countries, aiming to identify leading contributors. Co-authorship analyses allow the examination of collaborations among researchers and countries involved in scientific studies (40). The study also performed co-occurrence analyses to identify the most frequently used keywords in the literature on online gambling. This study does not require ethics committee approval.

# Results

The distribution of online gambling publications accessed in WoS by year is depicted in Figure 2. Upon examination of Figure 2, it becomes evident that the greatest number of publications on online gambling were produced in 2021 (n = 93). Subsequently, the greatest number of publications on online gambling were published in 2022 (n = 68), 2023 (n = 68), and 2020 (n = 65). Therefore, researchers' interest in online gambling has increased in recent years.

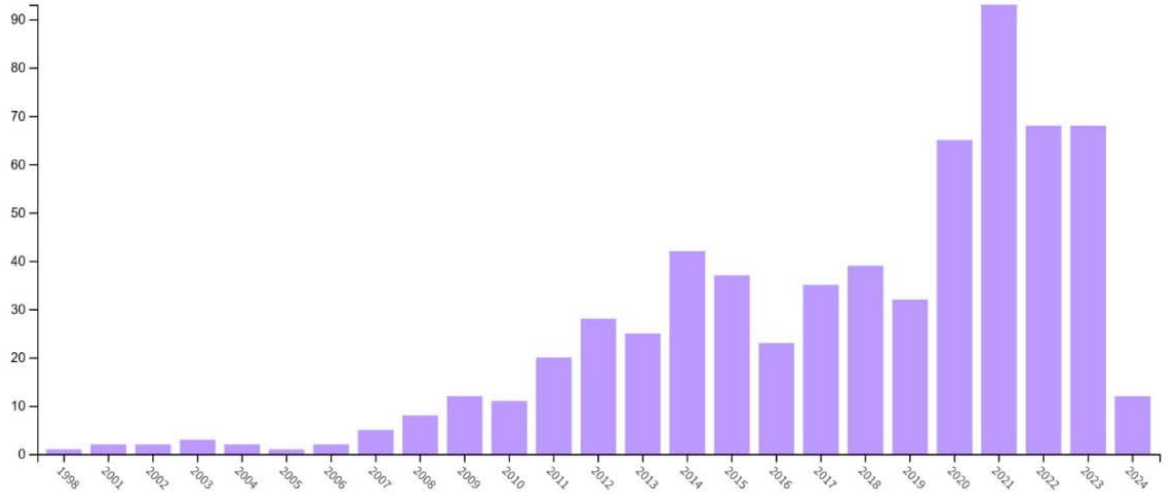


**Figure 2. Distribution of online gambling publications accessed in WoS by year**

## Co-authorship on Authors

The co-authorship analysis was conducted to determine the collaborations among authors contributing to publications in the field of online gambling. A total of 636 articles were included in the analysis. In line with previous studies, the minimum number of documents for each author was determined as 5, and the minimum number of citations for each author was determined as one (41, 42). This condition was met by 77 out of 1,271 authors. As 71 out of the 77 authors had collaborated with each other, the analysis was continued with these 71 authors. For each of the 71 authors, the total strength of their co-authorship connections with other authors was calculated. The results of the analysis are presented in Figure 3. The size of the circles indicates the large number of documents by the authors; the lines between the circles indicate the link strength between the authors. In Figure 3, there are a total of 10 clusters; 206 links and 747 total link lengths. The largest of the linked items is the red cluster, which comprises 11 authors. The cluster colored green and consisting of 10 authors in second place. The author with the highest total link strength is Nerilee Hing (total link strength: 79). Nerilee Hing conducts studies focusing on the behavioral and psychological aspects of online gambling compared to traditional gambling (eg. A digital revolution: Comparison of demographic profiles, attitudes and gambling behavior of internet and non-internet gamblers ). The researcher's studies include the themes of the impact of the Internet on gambling behavior and risk

factors for problem gambling (eg, A taxonomy of gambling and casino games via social media and online technologies; Greater involvement and diversity of Internet gambling as a risk factor for problem gambling). The researcher also examines how demographic factors, mental health, and the transformation of gambling platforms contribute to problem gambling. Therefore, it can be said that the researcher examines the concept of online gambling from different aspects.

Nerile Higg is followed by Sally M. Gainsbury (total link strength: 72; citations: 1737); Alex M. T. Russell, (total link strength: 72; citations 1076); followed by debi A. Laplante (total link strength: 61), and Mark D. Griffiths (total link strength: 59). The ten authors with the highest total link strength are presented in Table 1.

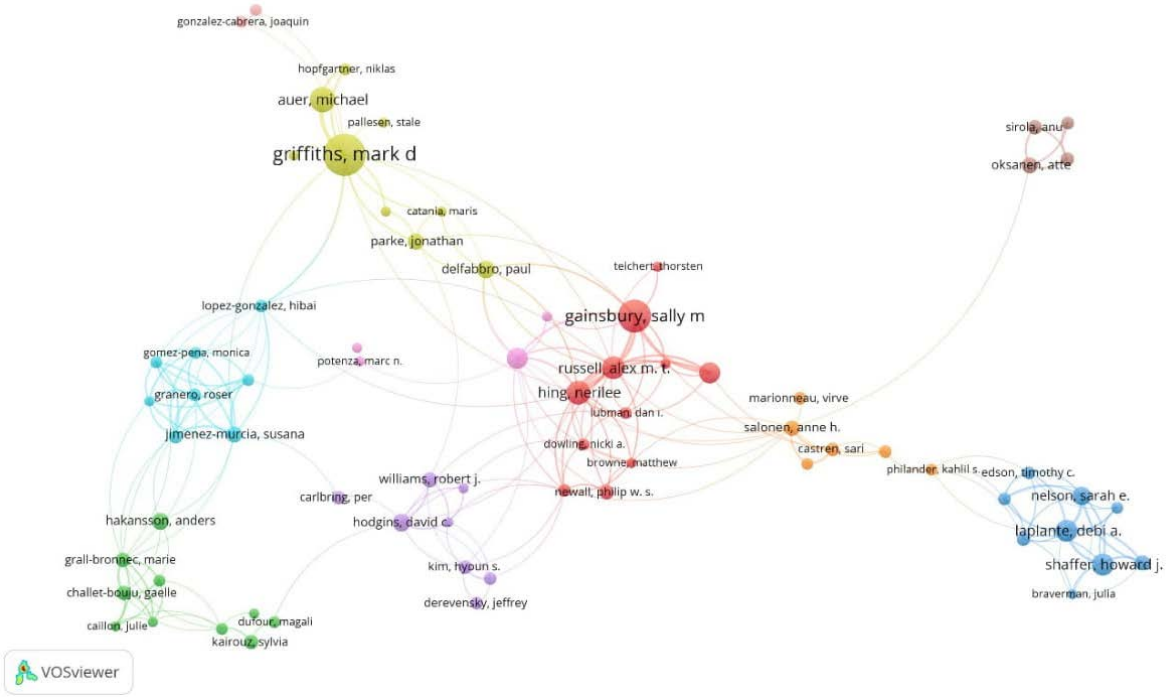


**Figure 3. Total strength of co-authorship of 71 authors' connections with other authors**

**Table 1. Documents, citations and total link strength numbers of authors**

| Author | Documents | Citations | Total Link Strength |
|---|---|---|---|
| Hing, Nerilee | 24 | 1203 | 79 |
| Gainsbury, Sally M | 46 | 1737 | 72 |
| Russell, Alex M. T. | 22 | 1076 | 72 |
| Laplante, Debi A. | 21 | 997 | 61 |
| Griffiths, Mark D | 77 | 2999 | 59 |
| Nelson, Sarah E. | 15 | 827 | 47 |
| Jimenez-Murcia, Susana | 11 | 190 | 45 |
| Shaffer, Howard J. | 21 | 1210 | 43 |
| King, Daniel L. | 19 | 506 | 41 |
| Blaszczynski, Alex | 19 | 1010 | 40 |

## Co-occurrence Analysis

A co-occurrence analysis was conducted to identify the most frequently utilized keywords in publications about online gambling literature. The minimum number of occurrences of a keyword was determined to be

five. Of the 1,217 keywords analyzed, 86 met this condition. The analysis yielded seven clusters, 888 links, and 2,183 total link strengths. The size of the bubble indicates the frequency of occurrence and strength of connections with other keywords. The colors of the circles indicate the years during which the keywords were utilized. It was thus demonstrated which years saw a greater preference for synonymous terms. For example, the mean publication year of the concept of "online gambling" was determined to be 2019.46, while the mean publication year of the concept of "Internet gambling" was found to be 2014.72. In other words, the concept of "online gambling" was employed in more recent publications than the concept of "Internet gambling." An additional example can be provided between the concepts of "gambling disorder" and "problem gambling."

**Table 2. Documents, citations and total link strength numbers of keywords**

| Keywords | Documents | Total Link Strength |
|---|---|---|
| Gambling | 188 | 438 |
| Online gambling | 179 | 405 |
| Problem gambling | 147 | 383 |
| Internet gambling | 96 | 229 |
| Gambling disorder | 63 | 184 |
| Responsible gambling | 54 | 149 |
| Addiction | 51 | 147 |
| Covıd-19 | 34 | 99 |
| Internet | 39 | 98 |
| Adolescent | 34 | 86 |

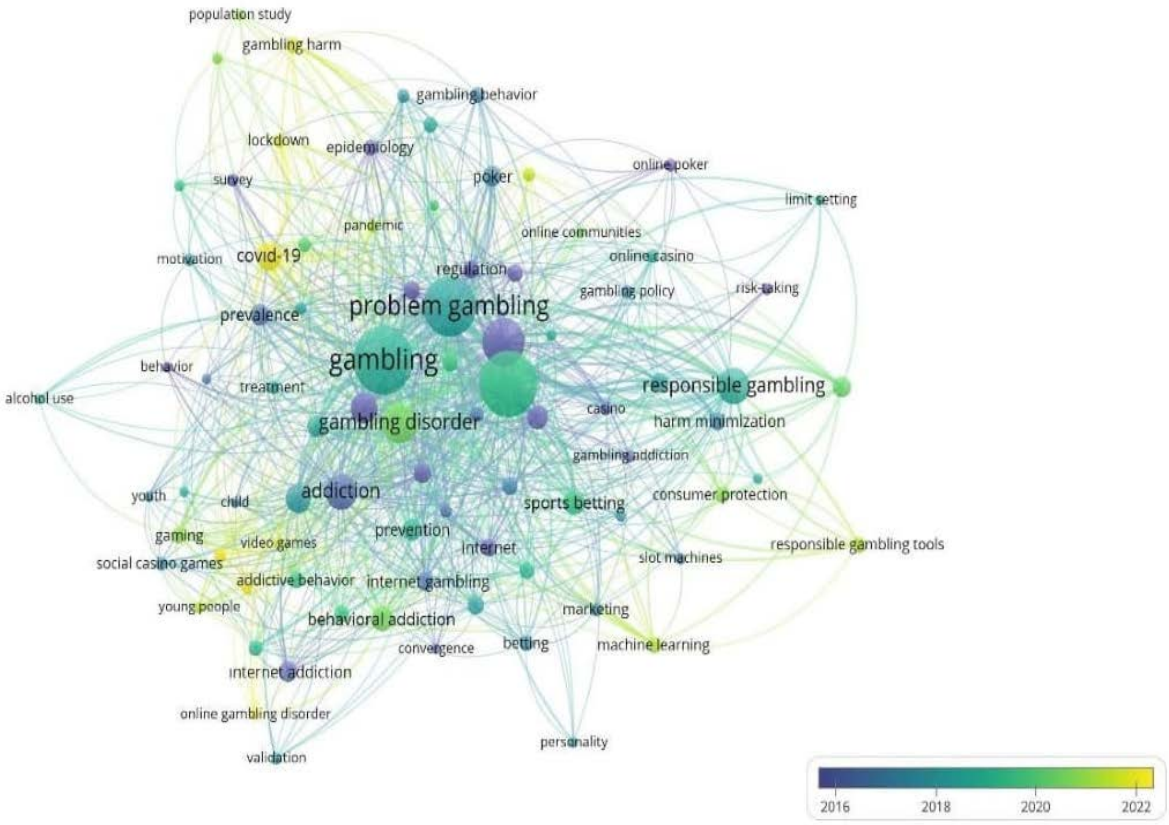


**Figure 4. Co-occurrence map derived from ten keywords with the highest total link strength**

The average publication year of the concept of "gambling disorder" was found to be 2020.41, while the average publication year of the concept of "problem gambling" was found to be 2018.39. This indicates that the concept of gamling disorder is more prevalent in recent publications. The connecting lines between the circles illustrate the interrelationship between the keywords. The keyword with the highest total link strength is "gambling," with a total link strength of 438. The next most frequently occurring keywords are "online gambling" (total link strength: 405), "problem gambling" (total link strength: 383), "Internet gambling" (total link strength: 229), and "gamling disorder" (total link strength: 184). The ten keywords with the highest total link strength are presented in Table 2. The ten keywords with the highest total link strength are presented in Table 2. The resulting co-occurrence map is presented in Figure 4.

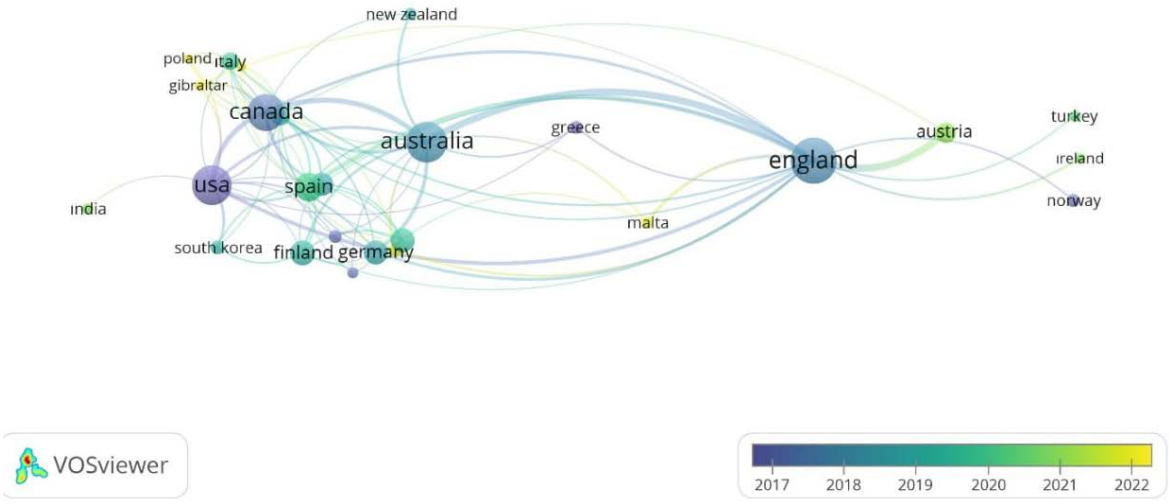


**Figure 5. Countries that have contributed to the publications in the field of online gambling.**

**Table 3. Documents, citations and total link strength numbers of countries**

| Country | Documents | Citations | Total Link Strength |
|---|---|---|---|
| England | 145 | 4072 | 94 |
| Australia | 111 | 2996 | 70 |
| Canada | 91 | 3981 | 49 |
| USA | 102 | 3235 | 44 |
| Spain | 51 | 897 | 33 |
| Switzerland | 23 | 304 | 31 |
| Germany | 36 | 741 | 25 |
| Austria | 25 | 339 | 22 |
| Denmark | 10 | 153 | 16 |
| Finland | 38 | 730 | 15 |

## Country Analysis

Figure 5 presents the findings of the analysis, which identify the countries that have contributed to the publications in the field of online gambling. In line with previous studies, the minimum number of documents required to be obtained from a country was determined as five, and the minimum number of citations was determined as one (42) 26 out of 55 countries met these criteria. Therefore, the analysis continued with these 26 countries. The size of the bubbles is indicative of the number of connections to other countries and the total link strength. The colors of the circles indicate the years during which the countries in question contributed to the literature on online gambling. For instance, while the mean publication year of publications in the USA was determined to be 2015.59, the mean publication year of publications about online gambling in Turkey was found to be 2020.29. England exhibits the highest total link strength (94). Subsequently,

Australia (70), Canada (49), the USA (44), and Spain (33) are the countries that follow England in the ranking. The total link strength of publications in Turkey was determined to be 2. The 10 countries with the highest total link strength are presented in Table 3.

# Discussion

This study was conducted to map the literature on online gambling and provide a comprehensive overview. The publications on online gambling from the past to the present were mapped holistically and presented to researchers working in this field. In addition, this study provides a basis for future research on online gambling. In this study, the distribution of publications on online gambling from 1998 to 2024 was initially examined by year. Upon examination of the graph, it becomes evident that the number of publications on online gambling is notably higher, particularly in the 2020s, in comparison to other years. Additionally, it is observed that the number of publications on online gambling has increased, with some exceptions (2009 → 2010; 2012 → 2013; 2015 → 2016; 2018 → 2019). However, a approximately 30% decrease is observed in the two years following 2021. This may be attributed to external factors such as the impact of the COVID-19 pandemic or changes in the interest and focus within the research field.

This finding of the study can be interpreted as an increase in the interest of researchers in online gambling. Additionally, the rise in negative psychological, physical, and economic outcomes associated with online gambling (43) may be contributing to the observed increase in online gambling research in recent years. This finding of the study is consistent with those of previous studies. For instance, Stehmann examined the citation numbers of research in the field of online gambling and gaming from 1965 to 2017 (44). Stehmann observed that, with some exceptions, the number of citations of research in the field of online gambling and gaming increased from 1965 to 2009 (44). He posited that the decline in citations after 2009 was attributable to the time lag inherent in the citation process.

In order to investigate the second research question, a co-authorship analysis was conducted to identify the most influential authors and their joint studies in the field of online gambling. The analysis revealed that Nerilee Hing is the most influential researcher in the field of online gambling. The number of studies conducted by Hing (n = 24) and the citations she has received (n = 1203) indicate that she is an influential researcher in the field of online gambling addiction. Following Hing, the next most influential researchers in the field are Gainsbury, Russell, Laplante, Griffiths, Nelson, Jimenez-Murcia, and Shaffer. The findings of the co-authorship analysis indicate that, although Griffiths is the author with the most publications (n = 77) in the field of online gambling, he is in fifth place in terms of total link strength.

Co-occurrence analysis was used to determine popular keywords in online gambling literature for the third research question. The ten most frequently occurring keywords in studies on online gambling are: gambling, online gambling, problem gambling, Internet gambling, gambling disorder, responsible gambling, addiction, COVID-19, and Internet. Notably, all the first five keywords are negative, indicating a need for further research into the potential adverse effects of online gambling. The sixth keyword is "responsible gambling.". Gambling behavior can result in a multitude of psychological, physical, and financial issues for those who engage in it. Consequently, governments are endeavoring to implement responsible gambling policies to mitigate the adverse effects of gambling behavior. Responsible gambling involves policies aimed at preventing and reducing potential harms associated with gambling (19). Responsible gambling policies include setting spending limits and time constraints, as well as providing information on gambling addiction (19, 45). Some researchers have suggested that the concept of responsible gambling is not an effective strategy for preventing and reducing the harms associated with gambling. For instance, Livingstone and Rintoul argue that the discourse on responsible gambling imposes responsibility on consumers but does not impose the necessary responsibility on the gambling industry (46). Researchers also argue that the concept of responsible gambling is used by the gambling industry as an escape from accusations of individual and societal problems caused by gambling (47). van Schalkwyk and colleagues argue that this concept aligns with industry narratives and diverges from a public health perspective, emphasizing the need for more system-level interventions to reduce gambling-related harms (48). Consequently, the perspective of

responsible gambling has been a dominant theme in reducing the harms associated with gambling. However, researchers hold disparate views on the efficacy of programs developed from a responsible gambling perspective. Consequently, it can be posited that this perspective should be subjected to further investigation in future studies.

The results of the co-occurrence analysis show that the seventh most popular keyword related to online gambling is the concept of "addiction." Indeed, several studies (49, 13, 50) have identified online gambling as a potential addiction. Therefore, online gambling behaviors may lead to the development of online gambling addiction in the future. The findings of the current study suggest a need for further research into the prevention of online gambling. As a result of the co-occurrence analysis, the eighth most frequently occurring keyword related to online gambling was "COVID-19". During the COVID-19 period, there was an increase in smartphone usage frequency, addiction, and internet addiction (51; 52; 53). Nevertheless, there were instances when individuals were prohibited from leaving their residences during the COVID-19 period (54). Consequently, the period of the global pandemic presented a multitude of potential risks in the context of online gambling. It can thus be stated that researchers are examining the phenomenon of online gambling during the period of the global pandemic caused by the novel coronavirus, designated as "COVID-19.". Another important finding regarding the keywords is the inclusion of the concept of “adolescent”. Although gambling is not legal among adolescents, adolescents also engage in gambling activities with the various features provided by online environments (55). Indeed, numerous studies have demonstrated that gambling and problem gambling are prevalent among adolescents (20, 56, 57). Indeed, numerous studies have demonstrated that gambling and problem gambling are prevalent among adolescents (20, 56, 57). The high prevalence of smartphone use addiction (58) and internet addiction (59) among adolescents may have contributed to the prominence of the "adolescent" keyword in online gambling studies. For these reasons, it is recommended that policymakers focus on efforts to prevent the prevalence of online gambling in adolescents.

The present study's final research question aimed to identify the countries that have contributed significantly to the field of online gambling research. The results indicated that England has been the leading country in this regard, followed by Australia, Canada, the USA, Spain, Switzerland, Germany, Austria, Denmark, and Finland. This finding highlights the high level of research productivity in gambling studies in England. This can be linked to the support provided by research institutions in the country and the approaches of policymakers towards this issue. For instance, the National Centre for Social Research (Gambling Commission) provides data on gambling behaviours based on information collected from thousands of individuals (60). Moreover, researchers have noted that gambling-related policies in England are often situated between the interests of the gambling industry and public health (61). In a bibliometric study on gambling among young people, it was concluded that Russia does not rank highly, similar to this study (6). The reason for Russia's lack of significant contribution to studies on online gambling may be the implementation of policies banning online gambling (62). However, further scientific studies are needed to determine the reason for this situation more clearly. It appears that Turkey, similar to Russia, does not significantly contribute to research on online gambling. In Turkey, people aged 16-64 spend an average of 7 hours per day on the internet. In addition, people in this age group spend more time on the internet using mobile phones than on computers and tablets (63). Considering that smartphone and internet use are risk factors for online gambling, it can be said that studies on online gambling in Turkey should be focused on.

Although the current study makes significant contributions to the online gambling literature, it has several limitations. Primarily, the study did not focus on online gambling in any age group. Research has demonstrated that problem gambling is prevalent in various age groups, including university students (1), adults, and adolescents (6). Consequently, it is recommended that future studies address online gambling in different age groups. A further limitation of this study is that the analyses were conducted only on publications scanned in WoS. It can also be said that there are studies that make significant contributions to online gambling that are not scanned in WoS. Therefore, bibliometric analyses can be conducted on the literature on online gambling using different databases in future studies. The data in this study were accessed on April 28, 2024. Studies published after this date were not included in the analysis. A further

limitation of this study is that a significant number of areas within the Web of Science Categories, including law, business, mathematics, and economics, were excluded from the analysis. Upon examination of the studies within these areas, it was found that there were no studies related to psychology. Consequently, these areas were excluded from the analysis. In future studies, researchers can perform bibliometric analyses by including publications in all categories in Wos for a more comprehensive approach to online gambling literature. The study reviewed existing literature on online gambling but did not examine the findings of these studies. Instead, it mapped out the online gambling literature by years, authors, keywords, and countries. Future studies may clarify the relationship between online gambling and different variables using diverse methodologies, like meta-analysis. Finally, in this study, no comparisons were made between years or groups in terms of publication and citation counts, and this limitation can be addressed in future research through comparisons between different years and groups.

In conclusion, this study provides a systematic overview of the online gambling literature using data obtained from the Web of Science database. The findings indicate a general upward trend in studies published between 1998 and 2024, highlighting the increase in academic research on online gambling. It is anticipated that with the integration of advanced technologies such as the metaverse and artificial intelligence into gambling, research in this field will continue to grow. The dominance of key terms such as "gambling," "problem gambling," "gambling disorder," "gambling harm," and "gambling addiction" underscores the complex and multifaceted nature of online gambling. These keywords suggest a behavioral pattern that progresses from participation in gambling to gambling addiction. Furthermore, the study found that keywords like "Internet addiction," "alcohol use," and "addictive behavior" were also dominant. The use of these keywords in online gambling research indicates an exploration of the potential connections between online gambling and other behavioral addictions. Additionally, the prominence of the "responsible gambling" keyword in online gambling research points to the prevalence of individual-focused studies in this area. Finally, the frequent appearance of keywords such as "adolescence," "child," and "youth" may be due to the heightened sensitivity of these age groups to issues related to online gambling.

In line with the results obtained in the study, future research can examine the connection between different levels of online gambling and psychological factors. Research needs to be conducted to clarify understudied areas related to online gambling (see Figure 4). In addition, the dominance of the keyword responsible gambling tools in studies on online gambling suggests that policymakers should focus more on online gambling prevention efforts (at a societal level). Finally, this study provides a broad perspective on online gambling. Studies on the underlying mechanisms of online gambling and the possible psychological effects of online gambling need to be expanded.

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