

## Internet Addiction as a Digital Behavior: A Bibliometric Analysis

Araştırma Makalesi / Research Article

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**ABSTRACT:** Today, digital technologies have become central to everyday life, and the time individuals spend in online environments has increased significantly. This situation has led to the emergence of a phenomenon that has become increasingly widespread and is referred to as "internet addiction." Conducted using a bibliometric analysis approach, this study aims to reveal the temporal development of academic research on internet addiction over the past decade, the prominent themes, and the collaboration networks among researchers. Internet addiction causes various negative effects on individuals' physical, psychological, and social lives, resulting in outcomes such as attention deficits, sleep problems, difficulties in concentration, and social isolation. The conscious and balanced use of technology is a critical requirement for maintaining individuals' quality of life. Within the scope of the research, a survey covering studies published between 2015 and 2025 was conducted in the Web of Science database, and 4,306 publications were examined. The obtained data were analyzed using VOSviewer and Python. The findings indicate that research on internet addiction has increased rapidly and has evolved into an interdisciplinary field.

**Keywords:** Internet addiction, Technology, Vosviewer, Psychology, Bibliometric analysis

### Dijital Bir Davranış Olarak İnternet Bağımlılığı: Bibliyometrik Analiz

**ÖZ:** Günümüzde dijital teknolojiler yaşamın merkezine yerleşmiş, bireylerin çevrimiçi ortamlarda geçirdiği süre önemli ölçüde artmıştır. Bu durum, giderek yaygınlaşan ve "internet bağımlılığı" olarak adlandırılan olgunun ortaya çıkmasına neden olmuştur. Bibliyometrik analiz yaklaşımıyla yürütülen bu çalışma, son on yılda internet bağımlılığı alanında gerçekleştirilen akademik araştırmaların zaman içindeki gelişimini, öne çıkan temaları ve araştırmacılar arasındaki iş birliği ağlarını ortaya koymayı amaçlamaktadır. İnternet bağımlılığı, bireylerin fiziksel, psikolojik ve sosyal yaşam alanlarında çeşitli olumsuzluklara yol açmakta; dikkat dağınıklığı, uyku problemleri, odaklanma güçlüğü ve sosyal izolasyon gibi sonuçlar doğurmaktadır. Teknolojinin bilinçli ve dengeli biçimde kullanılması, bireylerin yaşam kalitesini sürdürebilmeleri açısından kritik bir gerekliliktir. Araştırma kapsamında, 2015–2025 yılları arasında yayımlanan çalışmalarını içeren bir tarama Web of Science veri tabanında gerçekleştirilmiş ve 4.306 yayın incelenmiştir. Elde edilen veriler, bibliyometrik analiz ve görselleştirme amacıyla VOSviewer ve Python programları kullanılarak değerlendirilmiştir. Bulgular, internet bağımlılığı araştırmalarının son yıllarda hızla artış gösterdiğini ve disiplinler arası bir yapıya evrildiğini ortaya koymaktadır.

**Anahtar Kelimeler:** İnternet bağımlılığı, Teknoloji, Vosviewer, Psikoloji, Bibliyometrik analiz

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## 1. Introduction

The use of digital technologies is radically transforming individuals' lifestyles. Thanks to the numerous advantages offered by digital technologies, they have begun to play a central role in almost every field, from communication and education to business processes and social interactions. Advances in internet speed have enabled individuals to instantly access the information they need, anytime, anywhere. This rapid technological advancement and the proliferation of mobile devices, coupled with the intense use of social media platforms, has significantly increased individuals' dependence on digital environments. While digital transformation facilitates access to information, it also brings with it various problems at the individual and societal levels. One of these problems, internet addiction, is increasingly attracting attention not only for its psychological and social impacts but also for its negative impact on individuals' quality of life, productivity, and mental balance.

Internet addiction is a behavioral addiction characterized by individuals' uncontrolled use of the internet and digital devices, often beyond their needs. This leads to distraction, impaired decision-making, time management issues, and increased vulnerability in digital environments. In particular, increased time spent on digital platforms reduces individuals' awareness of cyber threats, leaving them vulnerable to risks such as phishing, malware, and social engineering attacks (Lin, 2020). McNicol and Thorsteinsson (2017) studied participants aged 16-71 and found that, in adolescents, internet addiction was associated with frequent forum use, heightened rumination, and reduced self-care, whereas in adults, it was linked to online gaming, adult-oriented content, elevated anxiety, and reliance on avoidant coping strategies. Additionally, avoidant coping was identified as a mediator in the relationship between internet addiction and psychological distress (McNicol and Thorsteinsson, 2017). Ostovar et al. (2016) reported that among 1,052 Iranian adolescents and young adults, internet addiction was strongly associated with depression, anxiety, stress, and loneliness, with males showing higher vulnerability than females (Ostovar et al., 2016). Understanding these dynamics highlights the importance of considering how age, behavioral tendencies, and coping strategies shape internet addiction, which is essential for informing effective preventive measures and policy development.

Müller and colleagues (2016) conducted a study investigating patterns of intense and potentially addictive social media use among adolescents. The research showed that the frequency of social networking use in adolescents is associated with symptoms of internet addiction, while excessive use is linked to addictive characteristics such as loss of control and preoccupation (Müller et al., 2016). A study by Schimmenti et al. (2015) examined the role of gender in the relationship between traumatic experiences, difficulty with emotional expression (alexithymia), and internet addiction. In a study conducted with 358 high school students aged 18-19, trauma was more strongly associated with internet addiction in men, while

emotional dysregulation was more strongly associated with internet addiction in women. The findings point to the need for gender-specific prevention and intervention (Schimmenti et al., 2017: 314-317). A meta-analysis by Zhang et al. (2018) examined the prevalence of internet addiction among medical students. Based on data from 3,651 students from different countries, approximately 30% of students are internet addicted—a rate five times higher than the general population. The findings showed that rates varied depending on the measurement tool used, but age, gender, and addiction severity did not significantly differ. The study highlights the seriousness of internet addiction among medical students and the need for early interventions (Zhang et al., 2016: 88-90). O'Brien et al., (2015) conducted a qualitative study with U.S. college students to examine the characteristics of internet addiction. It was determined that participants who use the internet for recreational purposes for more than 25 hours per week generally became acquainted with the internet at age 9 and began excessive use around age 16. While sadness, stress, and boredom are the primary reasons for excessive use, negative consequences such as sleep deprivation, academic decline, and a decrease in social relationships have been observed when social media use is prevalent (Liv et al., 2015).

Internet addiction is a significant behavioral problem that arises from individuals' excessive and uncontrolled use of digital platforms. The increased time spent in digital environments reduces individuals' interest in offline life and leads to negative consequences such as distraction and difficulty concentrating. Social media, online games, and the constant desire to stay connected negatively impact individuals' daily routines, productivity, and psychological well-being. In this context, internet addiction is not only a matter of individual habits but has also become an increasingly important societal issue with its social and psychological dimensions. This study aims to comprehensively examine the effects of internet addiction on individuals' lifestyles, behavioral patterns, and social interactions. The rapid increase in internet addiction in recent years has significantly increased interest in research on the causes, consequences, and preventive strategies of this phenomenon.

This study aims to provide a comprehensive bibliometric mapping of the academic literature on internet addiction as a form of digital behavior. Within this scope, descriptive bibliometric indicators are examined together with visualization-based network analyses, including co-authorship, co-citation, keyword co-occurrence, and bibliographic coupling. The concept of digital behavior is framed as a multidimensional lens that encompasses not only internet addiction-related activities but also the patterns and structures revealed by co-occurrence, co-citation, and bibliographic coupling analyses. This framework enables a comprehensive interpretation of the field's intellectual structure and developmental trends through the perspective of digital behavior. Therefore, this study seeks to identify the structural development, intellectual foundations, thematic evolution, and

collaboration patterns of the field through a data-driven approach based on the Web of Science database.

The research questions guiding this study are as follows:

(1) How are publications on internet addiction distributed by year, country, subject area, and document type between 2015 and 2025? (2) Which authors have the highest citation impact in the field of internet addiction, and how is the intellectual structure of the literature shaped through co-citation patterns? (3) Which countries demonstrate the highest scientific productivity and citation influence in internet addiction research, and what is the structure of international research collaboration? (4) How are the author co-authorship, author co-citation, country bibliographic coupling, and keyword co-occurrence networks structured within the internet addiction literature?

The remainder of the paper is organized as follows. First, the conceptual framework of internet addiction as a digital behavior is presented. Next, the methodology outlines the data source and bibliometric procedures. The findings are then reported through descriptive and visualization analyses, and the paper concludes with the conclusion section.

## **2. Literature Review**

### **2.1. Internet Addiction**

The concept of technology addiction began to take shape in the late 20th century with the development of the internet and mobile devices. The concept of internet addiction was first mentioned in 1996 during the research of Kimberly Young, who coined the term "Internet Addiction." Since then, the concept of addiction has evolved to encompass a broader range of technologies and behaviors (Gritenco et al., 2024: 769). The unabated advancement of digital technologies in the 21st century has significantly transformed the way individuals live their daily lives. From laptops and smartphones to smartwatches and tablets, these digital devices have become indispensable tools for entertainment, work-related tasks, social interaction, and information-seeking activities. Navigating the modern world without the aid of some form of electronic device is virtually unthinkable. This new digital ecosystem provides near-instant access to information, facilitates global connectivity, and provides a constant flow of stimuli and resources. While these features are significantly beneficial for productivity, communication, and even leisure, they have also raised concerns about the long-term use of such devices. Among the widely discussed issues is the mental health impact of excessive digital interaction, particularly when the internet leads to addiction and overreliance on electronic devices (Jaffer et al., 2024: 1069). Digital devices are deeply embedded in many areas of daily life, such as education, work, and entertainment. Nevertheless, their widespread use can lead to significant risks, including excessive usage and, in certain cases, problematic behaviors or internet addiction (Ding et al., 2023). Internet addiction, the problematic use of digital devices associated with

negative behaviors, is a new phenomenon that raises ethical concerns about how we develop software. There are several reasons why people become addicted to the internet. People experiencing anxiety and distress are thought to be more likely to develop internet addiction (Nirwana and Muthoifin, 2024: 2). Internet addiction refers to a detrimental dependence on digital media and devices such as smartphones, computers, and video games. It includes various forms of addiction, such as social media addiction, smartphone addiction, and general internet dependence. This behavioral disorder is marked by an excessive preoccupation with online activities, ongoing cognitive patterns centered around self-imposed limits and regulation of internet use, difficulty controlling the urge to go online, and continued engagement in internet-related behaviors despite harmful effects on daily life. Individuals may experience a gradual increase in the amount of time spent online, a strong compulsion to access the internet when it is unavailable, and an overwhelming need to stay connected. Excessive or compulsive use of digital technologies-particularly among young people-can result in numerous adverse outcomes (Han et al., 2023: 1-2).

The concept of technology addiction emerged in the late 20th century with the development of the internet and mobile devices, and “internet addiction” was first coined by Kimberly Young in 1996 (Gritenco et al., 2024: 769). The rapid advancement of digital technologies in the 21st century has transformed daily life, making devices like laptops, smartphones, smartwatches, and tablets indispensable for work, social interaction, and entertainment. While these technologies offer productivity and connectivity benefits, excessive use can lead to problematic behaviors or internet addiction, particularly among individuals experiencing anxiety or distress (Jaffer et al., 2024: 1069; Ding et al., 2023; Nirwana and Muthoifin, 2024: 2). Internet addiction manifests as excessive preoccupation with online activities, difficulty regulating use, and continued engagement despite negative consequences, including social, psychological, and behavioral problems (Han et al., 2023: 1-2).

Digital addiction has been examined not only as an individual disorder but also as a structural and security-related issue. Kuczabski (2021) argues that digital addictive technologies pose a potential threat to state security. Similarly, Li et al. (2018b) propose an unconventional information-hiding method that uses everyday digital behaviors (e.g., clicking, browsing, sharing) as carriers of hidden data rather than traditional digital files. Herbert et al. (2024) further emphasize that digital security perceptions vary significantly across social groups. Research has also extensively examined the psychological and social dimensions of internet addiction. Educational stress has been shown to increase negative emotions and internet addiction tendencies among adolescents (Jun and Choi, 2015). Gender differences play a significant role in the relationship between internet addiction and depression (Liang et al., 2016). Studies conducted in Bangladesh, Japan, China, and Hong Kong indicate a strong association between internet addiction, depression, family functioning, and parenting styles (Hassan et al., 2020; Seki et al., 2019;

Kawabe et al., 2016; Wu et al., 2016). During the COVID-19 pandemic, problematic internet use among children and adolescents was also linked to psychological factors (Dong et al., 2020). Systematic and large-scale studies confirm the widespread nature of the problem. A comprehensive meta-analysis including 70 studies revealed that internet addiction is highly prevalent among Chinese university students (Li et al., 2018a), while a systematic review highlighted the limited number of prevention-focused studies in the field (Vondráčková and Gabrhelík, 2016).

The symptoms of internet addiction can appear in both physical and emotional forms. Common emotional symptoms include anxiety, depression, and social withdrawal, while the main physical effects involve back pain, headaches, weight fluctuations, sleep problems, and blurred or strained vision. Digital addiction also possesses unique characteristics that set it apart from traditional forms of addiction. Firstly, the physical and psychological harm caused by digital addiction often develops gradually and may not be immediately noticeable. Secondly, most digital products and services are inexpensive or even free, meaning that their use is rarely limited by financial concerns, which can increase their addictive potential. Lastly, the interactive and reciprocal nature of the internet has contributed to the widespread appeal of social media platforms and online games. The fluidity of online social interactions—and the challenges of forming meaningful personal connections—plays a significant role in determining the intensity of user addiction (Gao and Du, 2025: 2). Symptoms of internet addiction include (Razykova and Mamedova, 2024: 89):

*Loss of control over time spent on the internet, psychological discomfort due to lack of access to digital devices, feeling anxious or depressed if the person cannot use the internet or devices, neglecting important responsibilities, social life, and real relationships, in most cases, addiction develops gradually and unnoticed by the person, but the consequences can be very serious.*

Spending too much time on social media, video games, or the internet can lead to addiction. Many people struggle to manage screen time. This can negatively impact mental health, productivity, and relationships (Asatullayev and Chinmirzayeva, 2025: 171). Internet addiction has become a serious mental health problem in many countries. Global lockdowns during the COVID-19 pandemic have led to a sharp increase in cases of internet addiction, particularly among children and young adolescents (Ding and Li, 2023: 3).

The first step for any organization is to recognize the extent of internet addiction among employees. Although research in corporate settings is limited, excessive digital use can reduce productivity, harm quality of life, and increase the risk of errors or security breaches (Lam and Harcourt, 2024: 522). Constant online engagement can generate digital fatigue and FOMO, leading to anxiety, difficulty disconnecting, and ultimately digital burnout (Choi and Kim, 2024: 3). Favoring virtual over face-to-face interactions may also increase social isolation and

loneliness, especially among younger employees. Internet addiction is therefore a complex challenge requiring balanced digital engagement, enhanced awareness, community support, and appropriate legal and institutional measures to mitigate its negative effects (Chaudhari and Sharma, 2024: 2).

### 3. Research Method

In this study, the Web of Science database was used as the data source. A comprehensive search was conducted in the All Fields section using the keywords “internet addiction” OR “digital addiction,” covering the period from 2015 to 2025. The search was performed on 25 October 2025, and all document types indexed in the database were included, resulting in a total of 4,306 records. In terms of novelty, although numerous bibliometric studies have examined internet addiction, the findings and analyses presented in this study demonstrate its distinct contribution, as this large dataset of 4,306 publications was examined using VOSviewer, providing an updated, interdisciplinary perspective on research trends, thematic developments, and collaboration networks. The obtained data were analyzed using bibliometric analysis methods to identify trends and patterns in scientific production within the research field. Data processing, analysis, and visualization were carried out using VOSviewer software and the Python programming language. Table 1 presents the findings related to the yearly distribution of the Web of Science records.

**Table 1:** Document Count by Year

Year	Number of Documents
2025	393
2024	506
2023	481
2022	481
2021	448
2020	392
2019	400
2018	342
2017	332
2016	288
2015	243

Based on 4,306 publications obtained from a search of the keywords "internet addiction" and "digital addiction" in the Web of Science database between 2015 and 2025, an analysis of the annual publication numbers reveals a general upward trend during the 2015–2024 period. The increase after 2018 is particularly striking; while there were 243 publications in 2015, this number nearly doubled to 506 publications in 2024. The increase observed between 2020 and 2022 coincides with a period of increasing scientific interest in digital life and online interactions. The number of publications, which was 243 in 2015, reached 481 by 2022. This trend indicates a steady increase in research activity during this period. The 393

publications for 2025, however, are below the annual average; this may be due to the limited period for which data was collected or the fact that the year has not yet been completed.

**Figure 1:** Number of Documents Published Over Time

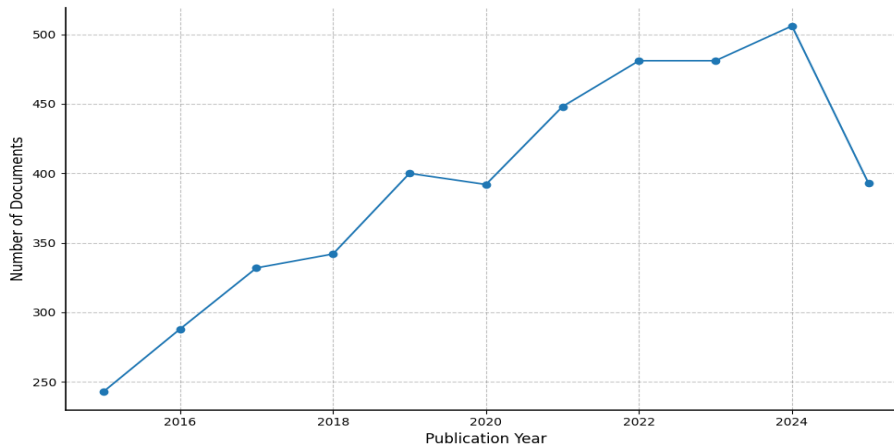


Figure 1 visually illustrates the change in the number of publications released each year from 2015 to 2025. The period between 2015 and 2024 represents a period of steady and significant growth in research production. This increase, particularly observed between 2019 and 2024, indicates a strengthening of interest in the field and a rapid acceleration of scientific research. The sharp increase in the number of publications between these years may be related to the emergence of new research trends, the acquisition of important findings in the field, or increased institutional support for research activities. The decline in data for 2025 is likely due to the fact that the year is not yet complete. The period between 2019 and 2024 stands out as the years in which academic productivity reached its highest levels. This trend demonstrates that the foundations for the research momentum that has continued to this day were laid in previous years.

**Table 2:** Distribution of Documents by Type

Document Type	Count
Article	3400
Meeting Abstract	352
Review Article	267
Proceeding Paper	178
Early Access	97
Book Chapters	49
Editorial Material	48
Letter	37
Correction	19
Book Review	8

As shown in Table 2, articles (3,400) constitute the most common document type and represent the dominant form of empirical and original research in the field. This

suggests that studies on digital and internet addiction are largely based on primary data and systematic research, thus reflecting a mature and evidence-based research landscape.

Meeting abstracts (352) constitute a smaller yet significant portion of the total output. These documents are often based on preliminary findings presented at academic conferences or on ongoing research, indicating the presence of an active and discussion-oriented scholarly community in the field.

Review publications (267) play a crucial role in summarizing and synthesizing existing knowledge. The significant number of review publications demonstrates that the field is making increasing efforts to integrate diverse research findings and develop a more comprehensive understanding.

Publications in the Early Access category (97) demonstrate the rapid publication of ongoing research and the field's ability to respond sensitively to emerging issues. Such publications provide timely access to new findings before studies are officially assigned an issue or volume.

Overall, this distribution suggests that articles constitute the dominant form of scholarly communication, with conference proceedings and review articles contributing a smaller but dynamic contribution. The inclusion of Early Access publications demonstrates the field's rapid and continuous interaction with current research developments. This diversity reflects the interdisciplinary nature of the subject and the ways it is addressed across different academic platforms.

**Table 3:** Distribution of Publications by Country

<b>Country</b>	<b>Documents</b>
People's R. China	1006
USA	508
Türkiye	465
India	275
England	272
Italy	261
Germany	226
South Korea	217
Taiwan	183

As seen in Table 3, the distribution of publications varies across countries. An examination of the country-by-country distribution reveals that internet addiction research is particularly concentrated in Asia and North America. The analysis reveals that China stands out as the country with the highest research output, with 1,006 publications, and holds a leading position globally in this field. The United States ranks second with 508 publications, making it another significant hub for digital addiction literature.

China's leading position in internet addiction research can be attributed to its large population, dense network of academic institutions, and targeted governmental

support for studies on digital behaviors, collectively shaping global research trends. The United States also holds a prominent role, driven by extensive research funding, established academic networks, and early engagement in digital behavior studies. Türkiye's increasing research output reflects its digitally active youth population and expanding academic infrastructure, highlighting its growing contribution to the field. For analytical consistency, variations in the country's name within the dataset were standardized; specifically, records labeled as "Turkey" and "Türkiye" were merged under a single entry, removing duplicates and providing a more precise representation of Türkiye's research productivity. As a result of this consolidation, the entries "Turkey" (276) and "Türkiye" (189) were combined, and Türkiye's total contribution was determined to be 465 publications.

Based on this finding, Türkiye has risen to become the third most productive country in terms of publications, following China and the United States. Türkiye's high ranking can be associated with its young and digitally inclined population, the development of online education infrastructure, the widespread use of digital technologies, and the growing societal awareness of this issue. This trend indicates that academic interest in the field of internet addiction is rapidly increasing in Türkiye, and research productivity has significantly strengthened.

The topic clearly has an interdisciplinary nature, and as shown in Table 4, Psychiatry and Psychology stand out with 1,389 and 1,171 studies, respectively. This indicates that digital addiction is primarily examined through behavioral and clinical perspectives. On the other hand, the presence of 430 studies in Public Health, 229 in Education, and 170 in Computer Science demonstrates that the issue is addressed not only at the individual level but also within the contexts of public health, educational approaches, and technological infrastructure analyses.

**Table 4:** Distribution of Documents by Area

<b>Subject Area</b>	<b>Document Count</b>
Psychiatry	1389
Psychology	1171
Public Environmental Occupational Health	430
Substance Abuse	327
Neurosciences Neurology	316
Education Educational Research	229
General Internal Medicine	213
Computer Science	170
Environmental Sciences Ecology	152
Pediatrics	133

This distribution clearly reveals the multi-layered and interdisciplinary nature of digital addiction, demonstrating the increasingly strengthened network of interactions among the fields of health, social sciences, and technology.

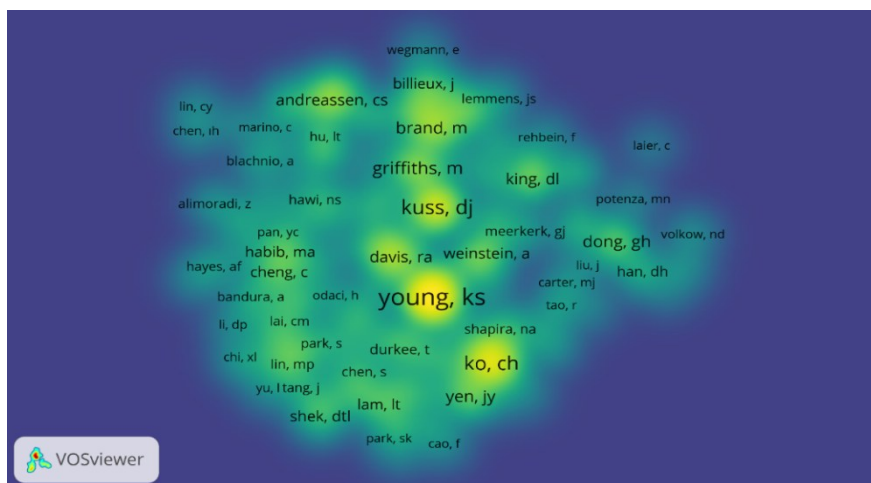




discussions of internet addiction toward more differentiated and behavior-specific forms (e.g., gaming disorder, smartphone addiction), further reinforcing the dynamic and evolving nature of digital behavior as reflected in the empirical knowledge structure of the field. The colored clusters on the map illustrate the multilayered nature of the topic: the blue cluster focuses on psychological outcomes, the green cluster on social and developmental aspects, and the red cluster on behavioral addiction subtypes (e.g., internet gaming disorder, behavioral addiction, problematic internet use). The yellow clusters represent methodological and measurement-validity themes.

Overall, the network demonstrates that research directions in the field have recently expanded from the broad concept of internet addiction to more specific topics such as social media and smartphone addiction, indicating both a deepening and diversification of the literature. In this context, the close proximity of keywords within clusters highlights the conceptual coherence of dominant research themes. Additionally, the interconnections between clusters suggest that these thematic areas are not isolated but are analytically linked within the broader research framework. This structure reinforces the interpretation that the field is evolving in a systematic and integrative manner rather than through fragmented lines of inquiry.

**Figure 4:** Co-citation of Cited Authors

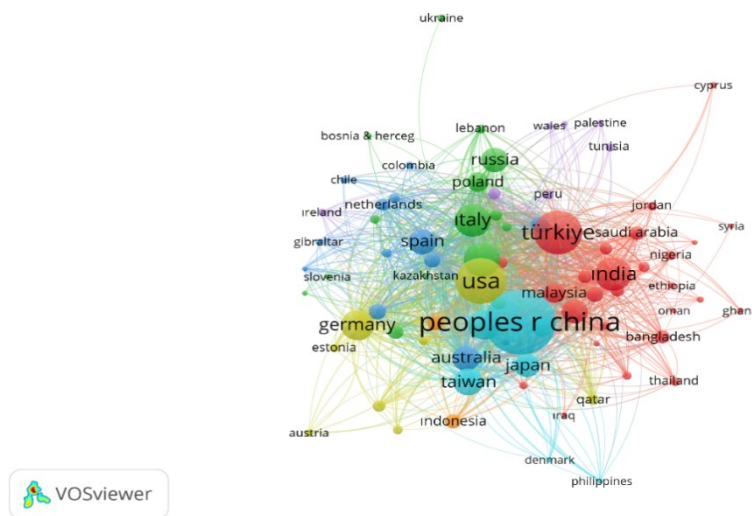


The author co-citation network created using VOSviewer reveals the intellectual backbone of the literature on digital addiction and the intensity of scientific interactions among leading researchers. At the center of the map in Figure 4, Young (K.S.) stands out as the founding figure of the field with a high level of co-citations, indicating that the foundations of the concept of internet addiction are largely built upon Young's work. Surrounding him, authors such as Kuss (D.J.), Griffiths (M.), and Ko (C.H.) strengthen this core structure by focusing on behavioral addiction theories and the psychological effects of online interactions. On the left side of the map, prominent figures like Andreassen (C.S.), Billieux (J.), and Brand (M.) represent multidisciplinary approaches particularly related to social media and

smartphone addiction; meanwhile, researchers located on the right side, such as Dong (G.H.), Han (D.H.), and Volkow (N.D.), contribute a biological depth to the literature by concentrating on neuroimaging and brain-based addiction mechanisms.

The “Citation Countries” network created using VOSviewer illustrates the scientific impact and flow of knowledge between countries in internet addiction research. As shown in Figure 5, the sizes of the nodes represent the total citation volume of each country, while the thickness of the lines indicates the strength of international citation relationships. Positioned at the center of the map, China (People’s R. China) stands out with the largest node and the most intense network of connections, indicating that China not only has a high number of publications but also exerts significant citation influence in the global literature. Countries such as the United States (USA) and Germany are located within the Western cluster due to their strong scientific infrastructure and maintain high-level reciprocal citation relationships with numerous countries.

**Figure 5:** Citation Countries



Countries like Türkiye, India, and Italy act as moderately central players distinguished by their regional collaborations; in particular, Türkiye’s multifaceted citation connections with Asia, Europe, and Middle Eastern countries highlight its role as a bridging actor in the literature. The prominent presence of Asia-Pacific countries such as Malaysia, Taiwan, Japan, and Australia on the map further reveals that internet addiction research has evolved into an Asia-centered knowledge production network. Overall, the network structure demonstrates that the internet addiction literature exhibits a geographically multi-centered pattern, with scientific influence distributed strongly not only along the Western axis but also among East and South Asian countries.

#### **4. Conclusion**

The penetration of internet technologies into every aspect of life has brought great conveniences but also introduced some serious problems. This study examines the phenomenon of internet addiction in detail, exploring the risks arising from individuals' unbalanced relationships with the internet and the preventive strategies that can be developed to address these risks. Individuals who use the internet unconsciously and uncontrollably are adversely affected not only in terms of their social development but also their psychological health. As a result, many areas such as work productivity, academic achievement, and social relationships suffer.

In particular, social media, online games, and video content platforms are among the main areas that fuel intensive internet usage habits and trigger addiction. As individuals struggle to control the time they spend on these platforms, their connections to offline life weaken, and they may neglect their real-world responsibilities. This situation lays the groundwork for various psychological and social problems at both individual and societal levels.

In this context, developing individuals' internet literacy and digital awareness skills is of great importance to ensure conscious and balanced internet use. Strengthening these skills enables individuals to better recognize potential risks associated with excessive or uncontrolled digital engagement and to adopt healthier online behaviors. It should be remembered that combating internet addiction should not be limited to individual efforts alone; comprehensive solutions must be developed within the framework of government policies, education systems, and the responsibilities of technology companies, all of which play a crucial role in shaping digital environments and user behaviors. Preventive, awareness-raising, and supportive programs, especially for children and young people, need to be widely implemented and sustained over time, as early intervention and continuous education are essential for reducing the long-term negative effects of internet addiction and promoting well-being in increasingly digital societies.

Accordingly, to support the theoretical framework of the study, the academic literature on internet addiction was compiled from the Web of Science (WoS) database, and the obtained data were analyzed using the VOSviewer software. The bibliometric analysis, conducted considering scientific publications published between 2015 and 2025, observed a significant increase in academic interest in this field over the years. This indicates that the topic of internet addiction is receiving growing global attention and has become an interdisciplinary area of research.

The results of this study clearly demonstrate a significant increase in academic output in the field of internet addiction over the past decade. The rise observed especially after 2018 indicates that the field has been gaining growing scientific interest and research dynamism. The distribution of publication types reveals that the field is enriched by both original empirical studies and comprehensive reviews, and, thanks to the presence of early access publications, it responds quickly to

current scientific developments. These findings prove that research on internet addiction has an interdisciplinary character and that its adaptation to technological and sociocultural changes is a continuous and dynamic process.

Country-based analyses show that digital addiction research is conducted within a geographically multi-centered and interactive scientific network. Countries such as China, the United States, and Türkiye stand out as leading actors in the field in terms of publication volume and citation levels, while Türkiye's strong academic collaborations with Asian and European countries highlight its role as a scientific bridge at the regional level. Additionally, contributions from diverse disciplines—including psychiatry and psychology, as well as public health, education, and computer science—enable a holistic approach to addressing the biological, psychosocial, and environmental dimensions of internet addiction. This multidisciplinary approach facilitates the development of more comprehensive and effective strategies in combating internet addiction.

In conclusion, while harnessing the opportunities offered by the internet, it is essential to cultivate a conscious and healthy culture of use that protects individuals from becoming lost in the digital world. Effectively combating internet addiction will serve as the foundation for building a sustainable and balanced digital society.

## **Research and Publication Ethics Declarations**

### **1. Author Contributions Statement**

All authors involved in this study have made significant, direct, and original contributions to the research design, data collection, analysis and interpretation processes, and the writing of the manuscript. The authors' contributions are as follows: P.K.: research design, methodology development, data curation and analysis, writing of the manuscript, review and editing. Authors have read and approved the final version of the manuscript and have agreed to take responsibility for its content.

### **2. Conflict of Interest Statement**

The author(s) declare that there are no financial, academic, or personal relationships or interests that could have influenced the preparation, conduct, data analysis, interpretation of results, or publication of this study.

### **3. Ethical Statement**

This study was conducted in accordance with the research and publication ethics principles established by the Committee on Publication Ethics (COPE). The research does not involve any experimental procedures with human or animal participants. Therefore, ethics committee approval was not required. All data used in this study were obtained from publicly available sources or were evaluated through secondary data analysis. The data and materials used in this research can be made available by the authors upon reasonable request.

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