

Chapter-1

Introduction

The internet's extensive accessibility and the quick development of digital technology have surely revolutionized a lot of contemporary cultures. The Internet has many advantages, including access to a wealth of knowledge, ease of international contact, and a venue for entertainment and leisure pursuits (Lee et al., 2021). However, as the internet spreads more widely, worries have been raised about its possible adverse impacts on people, notably in terms of addiction and its influence on reading attitudes.

Internet

The global system of computer networks is commonly known as "Net" simply and mostly used for the term Internet. If the permission is granted to the user then the user can easily get data from one computer about the information he wants to get from the other computer. This is all about the vast approach of the network which is available for the users all over the world (Helsper & Eynon, 2010).

With the passage of time and revolution, the internet has become public, it is accessible to millions of people globally due to its cooperative and self-sustaining facility, and it is being used for many purposes including the rich source of information, sharing of content and much more and what not. (Helsper & Eynon, 2010).

The Internet is an increasingly necessary tool that is increasingly necessary for adolescents to use for both work and recreation. Younger generations' use of technology has become such a defining aspect of their life that it foresees a fundamental shift in the way they interact, communicate, create, and learn (Helsper & Eynon, 2010)

Structure and Functionality

The Internet is a vast interconnected network of computers, servers, and other devices that span the globe. Its structure is decentralized, meaning there is no central governing authority controlling it. Instead, a system of protocols, known as TCP/IP (Transmission Control Protocol/Internet Protocol), enables the seamless transmission of data across different networks (Kurose & Ross, 2020).

Access to Information and Knowledge

The Internet has democratized access to information and knowledge, empowering individuals with a wealth of resources at their fingertips. Search engines like Google have made it possible to find information on virtually any topic, enabling users to educate themselves and explore new ideas. Online platforms for education, such as massive open online courses (MOOCs), have expanded learning opportunities, making quality education accessible to a global audience (Belanger & Thornton, 2013).

The Internet is an effective technology that may be used by a variety of users. All people now have access to a wider range of opportunities thanks to technology, but young people in particular benefit because they have the tools and know-how to interact with, explore, and learn about the world around them. (Wang, 2010). Numerous advantages associated with its use are also making children and teenagers' acceptance of it increasingly necessary. (Hiller et al., 2012) asserts that adolescents can benefit greatly from the Internet's educational and psychological resources.

Children under nine years old enjoy a range of online activities, according to the European Union Kids survey, including watching videos, playing games, finding information, doing their schoolwork, and interacting with other kids in kid-friendly

virtual worlds (Holloway et al., 2013). While some people use the Internet for good, others use it as a means of expressing their anger and frustration (Kowalski et al., 2014). As a result, the Internet offers chances to people with criminal intent, making the many users who access it extremely vulnerable to a wide range of online threats (Choo, 2011).

Types of Internet

Broadband Internet

Broadband Internet refers to high-speed Internet connections that provide faster data transmission rates compared to traditional dial-up connections (Smith, 2018). It includes technologies such as Digital Subscriber Line (DSL), cable modem, fiber optic, and satellite Internet.

Mobile Internet

Mobile Internet refers to Internet connectivity provided through mobile networks, allowing users to access the Internet using smartphones, tablets, and other mobile devices (Johnson, 2019). It relies on cellular networks, such as 3G, 4G, and 5G, to provide wireless Internet access.

Wired Internet

Wired Internet refers to Internet connections that use physical cables or wired infrastructure to transmit data (Rahman, 2020). Examples include Ethernet connections, fiber optic cables, and coaxial cables used for cable Internet.

Wireless Internet

Wireless Internet refers to Internet connections that use wireless technologies to transmit data (Johnson, 2019). It includes Wi-Fi networks, which allow devices to

connect to the Internet without the need for physical cables, as well as cellular networks used for mobile Internet.

Public Internet

Public Internet refers to the global network accessible to the general public. It is open and available to anyone with an Internet connection and does not require any specific authorization or subscription (Livingston, 2016). Public Internet includes websites, online services, and resources available to all users.

Private Internet

Private Internet refers to networks that are restricted to specific individuals, organizations, or groups. These networks often require authentication and access control measures to ensure privacy and security (Rahman, 2020). Private Internet is commonly used in corporate intranets, virtual private networks (VPNs), and closed networks within organizations.

Addiction

Addiction is commonly defined as a chronic, relapsing brain disorder characterized by the compulsive pursuit and use of substances or engagement in activities despite negative consequences (American Psychiatric Association, 2013). It goes beyond mere substance abuse, extending to behaviors such as gambling, gaming, and even certain types of internet use. The addictive process disrupts the brain's reward system, leading to changes in neural pathways that reinforce the compulsive behavior (Volkow & Morales, 2015).

As time passes, addiction starts interfering seriously with the daily life of a person. People who are addicted are also predisposed to the cycle of relapse and

remission. Addiction is something which leads to health complications and worse consequences with time. As addiction can result in severe emotional, psychological and physical challenges to those who are affected by it. (Tyler & Slater 2018).

Causes of Addiction

Addiction arises from a combination of genetic, environmental, and psychological factors. Genetic predisposition plays a significant role, as certain individuals may possess a higher vulnerability to addiction due to inherited traits (Volkow & Morales, 2015). Environmental factors, such as exposure to substance abuse or traumatic experiences, can contribute to the development of addictive behaviors (Kreek et al., 2005). Psychological factors, including stress, mental health disorders, and low self-esteem, also influence the likelihood of addiction (Volkow & Morales, 2015).

Effects of Addiction

Addiction has profound effects on various aspects of an individual's life. Physically, substance abuse can lead to deteriorating health, organ damage, and increased risk of infectious diseases (APA, 2016). Psychologically, addiction often co-occurs with mental health disorders, exacerbating symptoms and impairing overall well-being (Volkow & Morales, 2015). Socially, addiction strains relationships, disrupts family dynamics, and can result in loss of employment, financial instability, and legal consequences (APA, 2013).

Types of addiction

Following are some types of addiction

Physical addiction

The most prevalent addictions are physical ones. These physical addictions are commonly ingested or put into an individual's body in the form of a substance. The most common examples of physical addiction include: (Potenza, 2017).

- Alcohol
- Tobacco
- opioid

Behavioral addiction

Behavioral addiction is the term used to describe when a person loses control over their behavior to engage in an activity that gives them a fleeting feeling of satisfaction. This type of addiction is turned out as a dependence on the behavior or action that provides pleasurable feelings and the person acts compulsively on that particular behavior. (Potenza, 2017).

Some of the most behavioral addiction includes the following

- Food addiction
- Internet addiction
- Sex addiction
- Pornography addiction
- Gambling addiction

Signs of behavioral addiction

- The most amount of time is spent on engaging in the behaviour and using a particular substance
- Problems in relationships or social settings
- Inability to stop using or engaging in the behaviour
- Inability to complete commitments at home, at work, or in school
- Increased tolerance, withdrawal symptoms after quitting, and the abandonment of formerly favored pastimes

Whether it is a physical addiction or a behavioral addiction, it has an impact on many significant aspects of a person's life. Repeated use of action or behavioral substance eventually leads to physical changes in the brain, impairment in learning, problems in decision-making, errors in memory, and difficulty in making judgments. If the use of addiction increases it may cause organ damage and contribute to increasing risk factors of communicable disease. Talking about psychological illness addiction can cause depression and suicidal thoughts and it may affect interpersonal relationships with family and friends. Moreover, financial and legal problems are the most common issues associated with addiction. (Kuss et al., 2018).

Internet addiction

Internet addiction refers to excessive and compulsive use of the internet, resulting in impairment of daily life activities. It may involve excessive gaming, social media use, online shopping, or other online activities that interfere with personal relationships, work, and overall well-being (Kuss et al., 2017).

Compulsive computer use is another name for internet addiction, a frequent type of behavioral addiction. Despite the fact that there is no universally recognized definition of Internet addiction, researchers are aware of this phenomenon. As a subclass of behavioral addictions like compulsive gambling and a form of technology addiction (like computer addiction), Griffiths (1998) also sees Internet addiction. When seen through the lens of these definitions, inappropriate Internet usage behaviors do qualify as behavioural addiction (Chou et al., 1999).

According to a (Kuss et al., 2018), approximately 6% of the global population suffers from internet addiction, with higher prevalence rates observed among adolescents and young adults. As a result, they are more vulnerable to mental illness and Internet addiction. So, this problem was attempted to be addressed in the current study.

Impact on Physical and Mental Well-being

Physical Impact

Excessive internet use often leads to sedentary behavior, which increases the risk of various health problems such as obesity, cardiovascular diseases, and musculoskeletal disorders (Kuss et al., 2018). Moreover, irregular sleep patterns and sleep deprivation are commonly associated with internet addiction, negatively affecting overall physical health.

Mental Health Implications

Internet addiction has been linked to a range of mental health issues, including depression, anxiety, and social isolation (Andreassen et al., 2018). Studies have demonstrated a bidirectional relationship between internet addiction and poor mental well-being, with excessive internet use serving as both a cause and consequence of psychological distress.

Academic Performance

Internet addiction can have a detrimental effect on academic performance. Frequent engagement in online activities, such as gaming or social media, can result in decreased productivity, poor time management, and reduced academic achievement (Andreassen et al., 2018). Students struggling with internet addiction may exhibit lower grades, diminished concentration, and compromised learning outcomes.

Risk Factors and Causes

Personal Factors

Investigate individual characteristics such as personality traits, self-esteem, and coping mechanisms that may contribute to the development of internet addiction (Brand et al., 2019).

Environmental Factors

Examine the role of environmental factors, such as family dynamics, peer influence, and access to the internet, in the onset and maintenance of internet addiction (Kuss et al., 2018).

Reading Attitude

Reading is a fundamental skill that plays a vital role in education, personal development, and lifelong learning. It involves the active interpretation of written text, enabling individuals to acquire knowledge, expand their vocabulary, and develop critical thinking skills. Beyond its functional aspects, reading also holds significant value in terms of personal enrichment, imagination, and emotional engagement. (Patel & Jain, 2008).

Reading, according to Grabe and Stoller (2002), is the capacity to deduce information's meaning from the printed word and apply it properly. When you look at the series of symbols that are written and you try to interpret the meaning of those symbols, this process is commonly known as reading.

A wide range of electronic sources with screens for reading, such as e-readers, computers, and tablets, have emerged as a result of relatively recent technological advancements, replacing paper as the primary medium for reading (Shenoy & Aithal, 2016). Reading from these screens has become more and more common for both leisure and academic purposes (Hyman et al., 2014). Reading on paper is preferable to reading from screens, according to a 2008 assessment, but the authors pointed out that this trend might alter as technology develops (Noyes & Garland, 2008). Numerous studies have looked at the pros and cons of reading from electronic versus paper sources in terms of how well students perform on reading exams and how they read the text (i.e., the reading process).

Reading attitude refers to an individual's emotional and cognitive response towards reading activities (Wigfield & Guthrie, 1997). It encompasses their preferences, motivations, and enjoyment of reading. A positive reading attitude is characterized by a genuine interest in reading, intrinsic motivation, and a sense of pleasure derived from the reading experience. In contrast, a negative reading attitude may manifest as disinterest, reluctance, or even aversion towards reading.

Reading attitude plays a crucial role in shaping reading behaviors and outcomes. Individuals with positive reading attitudes are more likely to engage in voluntary reading, which exposes them to a wide range of texts and enhances their vocabulary and

comprehension skills (Guthrie et al., 2004). Positive reading attitudes are also associated with higher reading achievement, academic success, and overall literacy development (Wigfield et al., 2016).

Factors Influencing Reading Attitude

Several factors contribute to the development of reading attitude, including personal, social, and educational influences. Personal factors encompass individual characteristics, such as prior reading experiences, reading self-efficacy, and reading interests (Guthrie & Wigfield, 2000). Social factors include parental reading practices, family literacy environment, and peer influences (Baker & Wigfield, 1999). Educational factors encompass classroom practices, teacher-student interactions, and the availability of diverse and engaging reading materials (McKenna & Kear, 1990).

Educators can promote positive reading attitudes by creating a supportive reading environment, providing access to a variety of high-interest reading materials, and incorporating engaging reading activities into the curriculum. By understanding the factors that influence reading attitude, teachers can tailor instruction to individual students' needs, interests, and reading preferences (Guthrie & Wigfield, 2000).

Additionally, fostering partnerships with families and promoting a culture of reading can further enhance students' reading attitudes and overall literacy development.

Personal Interests

Individuals' reading attitudes are influenced by their personal interests and preferences. Studies have shown that when individuals have the freedom to choose their reading materials based on their interests, their reading attitudes tend to be more positive (Smith, 2018).

Reading Experiences

Positive or negative reading experiences play a vital role in shaping reading attitudes. Negative experiences, such as struggling with comprehension or being forced to read uninteresting texts, can contribute to negative attitudes (Brown & Lee, 2020).

Parental Influence

Parents serve as significant role models and can impact their children's reading attitudes. When parents actively engage in reading themselves and create a reading-friendly environment at home, children are more likely to develop positive attitudes towards reading (Smith & Anderson, 2018).

Reading Attitude and Academic Achievement

Research has demonstrated a strong correlation between positive reading attitudes and academic achievement. Garcia and Cain (2014) found that students with positive reading attitudes tend to have higher reading comprehension skills and perform better academically. Wang and Guthrie (2022) conducted a longitudinal study and revealed that positive reading attitudes in early childhood predicted higher academic achievement in later grades.

Operational definitions of variables

Reading Attitude

Reading attitude can be defined as an individual's emotional, cognitive, and behavioral disposition towards reading materials, encompassing their preferences, motivations, and engagement in reading activities. (Gambrel et al., 1996).

Internet addiction

Internet addiction can be operationalized as a maladaptive pattern of Internet use that leads to significant impairment in various areas of functioning, such as interpersonal relationships, work or academic performance, and psychological well-being. It involves symptoms such as excessive time spent online, inability to control Internet use, and withdrawal symptoms when attempting to reduce or stop Internet activities (Griffiths et al., 2005).

Chapter-2

Literature review

Theoretical framework

Having a theoretical framework that can explain phenomena like internet addiction and reader attitudes is vital. The cognitive-behavioral model, the social-cognitive theory, and the self-determination theory are only few of the explanations put up for obsessive internet use. (Bandura , 1997; Griffiths, 2005; Deci & Ryan, 2000) says that. Within these theoretical frameworks, the roles of internal motivation, social influence, and the loss of self-control are highlighted as primary causes of problematic internet use.

Following are three theoretical frameworks that can be considered:

Interaction between thoughts, feelings, and behaviors comes under the focus of approach named as the cognitive-behavioral approach, According to this theory, cognitive issues like self-regulation issues, cognitive biases, and dysfunctional attitudes about internet use can all have an impact on internet addiction (Griffiths, 2005). By using this model in the study, researchers can investigate the cognitive processes that underlie the reading preferences of university students in Lahore and how they may contribute to internet addiction.

Self-determination theorists contend that everyone has an inherent need for freedom, group identification, and mental stimulation. Those who have their basic psychological needs addressed are more likely to engage in reading and other pleasurable activities, according to study by Deci and Ryan (2000). This theoretical framework might be used to investigate how students' online time affects their reading habits.

Social Cognitive Theory: Social Cognitive Theory, proposed by Albert Bandura(n.d), suggests that individuals' behaviors and attitudes are influenced by social and environmental factors, as well as their own cognitive processes. In the context of reading attitude and internet addiction, this theory can explain how observing others' reading behaviors or internet use can shape individuals' attitudes and behaviors towards these activities. For example, positive role models who engage in reading may foster a more positive reading attitude, while excessive internet use by peers may contribute to internet addiction.

This research attempts to provide a more nuanced picture of the relationship between students' internet usage and their reading preferences by looking at the topic from many theoretical perspectives. The primary purpose of the research is to ascertain whether and how internet addiction affects students' choice of reading content. The study's findings will provide Pakistani university students a positive outlook on the interplay between literature and technology.

The purpose of this research was to examine the reading habits of heavily online-engaged college students in Lahore, Pakistan. This chapter looks at college students' attitudes on reading and internet use in Lahore, Pakistan. Researchers from all across the world have been studying how much time college students spend online and how it affects their reading habits. This section summarizes research from a range of countries that investigates the connection between excessive internet use and low reading habits among college students.

According to the study by Bjork and Turk (2001), in various countries many scholars and researchers about the topic related to effects of internet on learners mind are

doing studies and the analysis was also conducted about the same topic. At the same time the usage of internet is greater between the age of 35 and 45 than the ones who are younger or older. According to another research conducted by Hong Kong it was clear that students use internet for academic knowledge rather than books.

Comprehensive model of internet addiction

A comprehensive model of internet addiction recognizes the multifaceted nature of this phenomenon. One widely accepted model is the "Components Model of Internet Addiction" proposed by Young (1999). This model suggests that internet addiction involves excessive use, salience, mood modification, tolerance, withdrawal symptoms, conflict, and relapse. Excessive use refers to uncontrolled and excessive internet use that impairs other areas of life. Salience involves the internet becoming a dominant focus in the individual's life. Mood modification relates to using the internet to alleviate negative emotions or enhance positive feelings. Tolerance and withdrawal symptoms indicate the need for increasing internet use and experiencing distress when usage is restricted. Conflict refers to conflicts arising from neglecting responsibilities or offline relationships. Finally, relapse highlights the difficulty in sustaining behavior changes.

Theories on internet addiction

Cognitive-Behavioral Theory

The Cognitive-Behavioral Theory posits that internet addiction is driven by cognitive and behavioral factors. It suggests that distorted thoughts and beliefs about internet use, such as the need for constant online validation or the fear of missing out (FOMO), contribute to problematic internet use. These cognitive factors, along with

reinforcement mechanisms and conditioning, lead to maladaptive patterns of internet use and the development of addiction. (Davis, 2001).

Self-Determination Theory (SDT)

SDT proposes that internet addiction can be understood in the context of basic psychological needs for autonomy, competence, and relatedness. According to this theory, when these needs are not adequately met offline, individuals may turn to the internet as a means of fulfilling these needs. The internet provides a sense of autonomy, opportunities for skill development, and social connections. Excessive internet use can then become a compensatory behavior that satisfies these unmet needs, leading to addiction. (Chou, & Hsiao 2000)

Interaction of Person-Affect-Cognition-Execution (I-PACE) Model

The I-PACE model provides a comprehensive framework that integrates multiple factors contributing to internet addiction. It suggests that predisposing factors (e.g., personality traits, cognitive biases), affective factors (e.g., emotional regulation), cognitive factors (e.g., cognitive processes, decision-making), and executive control processes interact to influence the development and maintenance of internet addiction. This model highlights the interplay between individual characteristics, emotional factors, cognitive processes, and self-regulation mechanisms. (Brand et al., 2016).

Biopsychosocial Model

The Biopsychosocial Model posits that internet addiction is influenced by a combination of biological, psychological, and social factors. Biological factors include genetic predispositions and neurochemical imbalances, psychological factors encompass cognitive processes, personality traits, and mental health conditions, while social factors

involve social interactions, social support, and environmental influences. This model emphasizes the complex interplay between biological, psychological, and social factors in the development and progression of internet addiction. (Griffiths, 2012)

Comprehensive model on reading attitude

A comprehensive model of reading attitude incorporates various factors that contribute to individuals' attitudes towards reading. One widely recognized model is the Socio-Cognitive Model of Reading Attitudes, which highlights cognitive, affective, and social components. According to this model, cognitive factors include reading skills, reading self-efficacy, and reading comprehension, which influence individuals' confidence and ability to engage with reading materials. Affective factors encompass personal interest, intrinsic motivation, and enjoyment of reading, which contribute to individuals' positive emotional experiences associated with reading. Social factors, such as social support, peer influence, and cultural background, shape individuals' perceptions and values related to reading. (Rosenblatt, 1978)

These components interact and influence each other, impacting individuals' reading attitudes.

Theories on reading attitude

Transactional Theory of Reading

The Transactional Theory of Reading, proposed by Louise Rosenblatt, emphasizes the interaction between the reader and the text. According to this theory, reading is a transactional process where the reader brings their own background, experiences, and interpretations to the text. The reader's attitudes and responses, influenced by their personal and cultural perspectives, shape their understanding and

engagement with the text. This theory highlights the importance of individual reader characteristics and the dynamic nature of the reading experience. (Rosenblatt, 1978).

Social Cognitive Theory

Social Cognitive Theory, proposed by Albert Bandura, focuses on the role of self-efficacy beliefs in shaping attitudes and behaviors. In the context of reading attitude, self-efficacy refers to an individual's belief in their ability to engage in and successfully perform reading tasks. According to this theory, individuals with higher reading self-efficacy are more likely to have positive attitudes toward reading and engage in reading activities. Self-efficacy beliefs are influenced by various factors, including past experiences, social modeling, and feedback from others. (Bandura,1997)

Situated Cognition Theory:

Situated Cognition Theory suggests that knowledge and learning are influenced by the context in which they occur. In the context of reading attitude, this theory emphasizes the role of social and cultural influences on reading behavior and attitudes. Reading attitudes are shaped by the cultural values and practices surrounding reading, as well as the social interactions and support individuals receive in their reading environment. This theory highlights the importance of considering the socio-cultural context in understanding reading attitudes. (Brown & Duguid, 1989).

Studies on internet addiction and reading attitude

In a study she did in 2006 to determine how technology affected reading habits of students, Li-Bi Shen came to the conclusion that these students now prefer to read online rather than on paper. According to a survey by the China Research Institute of Publishing Science, fewer Chinese are reading traditional books, but the number of

people reading online publications has dramatically increased. According to the findings the book reading process was declined by 11% in past six years and it was the report given by (People's Daily Online, 2007).

According to another researcher, Americans' book reading habits are declining as evidenced by a study's finding that the percentage of people who are illiterate even when no one read a book in a year increased twice between 1975 and 1990 (from 8% to 16%). According to Broddason (2006), the advent of the Internet has resulted in a decline in print reading overall as well as in book reading. He claims that in 1968, 89% of young people reported reading the newspaper every day, but by 2003, only 40% of young people reported doing so. The results of all the studies show that the Internet has had both beneficial and negative effects on reading habits.

Johnson et al. (2020) studied the prevalence and effect of numerous factors on young people's usage of the Internet in the United States. Heavy internet usage was blamed by the authors since they found a link between online addiction and a decline in reading interest among college students.

College students' social media use, sleep habits, and academic performance were studied by (Chen et al., 2018). People's negative reading attitudes were shown to rise in direct correlation with their time spent online, especially on social networking sites. Some internet users say they've lost their curiosity for learning because they spend so much time on social media. The effect of smartphone use on college students' propensity to read was studied by Park and Kim (2017). Conclusion Students' smartphone addiction may impair their reading habits and preferences, as shown by a negative correlation between smartphone use and reading attitudes.

More usage of the Internet has negative effects on academic performance was studied by Jelenchick et al. of the United States in 2013. Researchers found a negative correlation between internet addiction and academic indifference despite the fact that the study's primary emphasis was not on students' reading attitudes. This discovery may have far-reaching effects on how individuals read and how they see the world.

(Lee, et al., 2017) looked at the impact of youth internet addiction on Singaporean adolescents' ability to read. Results showed a negative connection between internet addiction and reading literacy, indicating that it may impede reading attitudes, even when the sample was limited to high school students rather than college freshmen.

Xin et al. (2019) conducted research that inspected the attitude of reading related to college pupils in China, South Korea, and the United States. Internet usage was shown to be negatively associated to a preference for reading in all three nations. Chinese college freshmen were surveyed by Zhang and Yang (2018) to know about the effect of internet use on reading habits. In order to foster a love of reading among students, the study's authors concluded that those participants who exhibited the highest degrees of internet addiction would benefit most from intervention.

Hughes-Hassel and Rodge's (2007) study of 1,340 American adolescents found that 72.2% of them read books for fun. In addition, the study found that fewer of them read for pleasure over the summer (only 15% of men and 20% of women) since so much of their leisure book reading was done to gain incentives from school (through the reading incentive program). The most striking finding was that these students favored popular magazines over serious works of literature.

Local context

College students' reading attitude may be influenced by their time spent online, but this relationship needs context-specific study to fully grasp. Many Pakistani studies that aimed to shed light on how much time college students at Lahore University spend online and how much they read. Several studies have investigated the occurrence of internet dependence among university scholars in Pakistan.

Javed et al. 2019 observed that 28.5% of Pakistani college students showed symptoms of internet addiction. The prevalence rate was similarly found to be 28.6 percent in research done by Waheed et al. (2020) among Pakistani university students. These findings highlight the need for more study into the root causes and long-term effects of internet use among Pakistani university students.

However, there hasn't been a lot of study on how internet dependence affects students' reading habits in Pakistani universities. Shahzad and Ali (2018) found that Internet-dependent college students in Pakistan had a pessimistic view of the importance of reading. The authors warn that spending too much time online might make people dislike reading, which can lead to their giving up the habit entirely.

The occurrence of internet compulsion among university scholars in Pakistan was investigated by Raza et al. (2018), According to their research, university students in Pakistan who spend too much time on the internet have less of a desire to read than their peers who spend less time online. The consequences of internet addiction on the academic performance of university students in Pakistan were studied by Anwar and Basit (2016). Despite the fact that the authors didn't touch on reading preferences, they

did discover that too much time spent online had a detrimental influence on students' grades, which might have repercussions for how often and how much they read.

College students in Pakistan were studied to see whether there was a correlation between internet use, emotional well-being, and reading interests (Iqbal et al., 2019). Their findings highlighted the need for therapies to reduce online addiction and promote reading engagement, since higher levels of internet addiction were linked to lower levels of psychological well-being and less positive opinions about reading. College students' use of the internet and its influence on their academic performance was studied by Rasool and Aslam in 2016. The findings demonstrated that internet addiction severely impacted academic achievement, even though reading attitudes were not the objective of the study. The reading habits and outlooks of pupils may change as a result of this.

Rationale

According to earlier studies, internet addiction is widespread among university students in Pakistan. According to a study by Jahanzeb and Hussain (2018), 45% of university students in Pakistan admitted to using the internet excessively, with male students being more likely to be hooked than female students. Similarly, to this, Shahzad et al.'s study from 2019 found that 55.6% of university students in Pakistan were internet addicts, with students from urban regions more likely to be addicted.

Also, academic progress and lifetime learning are severely hindered by the detrimental effects of internet addiction on reading attitudes. Internet addiction and reading attitude are negatively correlated, according to earlier studies. Internet addicts tend to have poorer reading attitudes, which impede their ability to succeed in school and develop in their careers. For instance, a study by Wu and Chen (2018) found that

Taiwanese university students' views towards reading were negatively impacted by internet addiction.

Also, generally, teachers complain about changing the attitude of students toward reading, to keep this in mind and seeing the situation we found that not much work has been done regarding the relationship between internet addiction and reading attitude. That's why this area needs to be explored and this study will fill the gap in knowledge in the Pakistani context. The findings of this study will advance our understanding of Pakistani university students' attitudes towards reading and internet addiction and have immediate practical implications for educators, policymakers, and mental health professionals in fostering positive digital habits and encouraging a positive attitude toward reading among university students.

Objectives of the study

The objectives of the current research are as follows.

- To assess the association between internet addiction and reading attitude
- To assess the predictive association between internet addiction and reading attitude

The Hypothesis of the Study

- There would be a significant negative association between internet addiction and reading attitude
- There would be a predictive association between internet addiction and reading attitude

Chapter-3

Methodology.

Research design

The correlational research approach of the current study demonstrates the link between internet addiction and reading attitude among university students of Lahore, Pakistan

Participant and Sampling Strategy

The data was collected from 502 university students from age 19-25 years of age (Young Adults) through simple random sampling. Scales were used for data collection, and participants were taken from government and private universities.

Exclusion and Inclusion Criteria

Inclusion and exclusion criteria were drawn for the study to control the effect of confounding variables. Inclusion Criteria include (a) Internet users (b) smart android phones (c) enrolled in undergraduate programs. Exclusion criteria include (a) diagnosed mental disorder (b) Hospitalized (c) physical disable

Table 1*Demographic characteristics of the study sample (N=502)*

Variables	Frequency	Percentage
<i>Gender</i>		
Male	253	50.4
Female	249	49.6
<i>Religion</i>		
Muslim	500	100
<i>Family Status</i>		
Nuclear	349	69.5
Joint	153	30.5
<i>Birth Order</i>		
First Born	124	24.7
Middle Born	223	44.4
Last Born	130	25.9
Only Child	25	5.0
<i>Marital Status</i>		
Single	500	99.6
Married	2	0.4
<i>Mother Tongue</i>		
Urdu	307	61.2
Punjabi	150	29.9
Pashto	12	2.4
Sindhi	2	0.4
Siraiki	16	3.2
Others	15	3.0

Measures***Informed Consent Form***

The study's objective was laid out in the informed consent form, and participants were requested to voluntarily participate. Additionally included in the form was a formal agreement for their cooperation. Participants were informed that the study's goal was to determine the association between internet addiction and reading attitude. The

confidentiality of all information has been guaranteed. In the event of any discomfort, while participating in the study, volunteers may withdraw.

Demographic information form

The demographic information form included all the basic information of the participant including age, education, university name, marital status, family income, religion, family setup, the order of siblings, any diagnosis of mental illness or chronic illness etc.

The Internet Addiction Test (IAT; Young, 1998)

To assess the level of Internet and technology dependency among people, the Internet Addiction Test (IAT; Young, 1998) was developed. The 20-item IAT questionnaire assesses traits and behaviours linked to obsessive Internet use. The examinee reacts to each statement with a number between 1 and 5, which represents a continuum on the Likert scale. According to studies, the IAT is a trustworthy indicator that captures the essential elements of problematic Internet use. The IAT is a tested and recognized testing tool on a global scale. Numerous types of research have examined the IAT's reliability, and overall, the psychometric qualities of the instrument have been favourable. The scale's internal reliability was determined to have a Cronbach's alpha coefficient of 0.91.

Young Adult Reading Attitude scale

Smith, et al., (n.d) Develop survey questions for measuring Reading Attitude from Childhood to Adulthood. It consist of 9 item which include the questions like I'm really not the studying type, It doesn't pay for a person to study too much. I. The

examinee reacts to each statement with a number between 1 and 4, which represents a continuum on the Likert scale.

Procedure

The scales used in the study were only used with permission from the authors who created them to perform the research. For Data Collection, permission was taken from higher authorities of universities. After that, participants gave their informed consent. They were told what the study was about and how long it would take them to complete the questionnaire. They were told that the goal of the study was to see the relationship between internet addiction and the reading attitude of university students in Lahore, Pakistan. Their confidentiality was also ensured. The demographic sheet was filled out by the participants after the introduction and the informed permission form, and they were requested to complete both questionnaires. During the research, ethical considerations were taken into account when collecting data and performing the study. Participants had the option of withdrawing from the study at any time.

Ethical consideration

All ethical considerations were taken into account while preparing and distributing the questionnaires. The participants were assured of their confidentiality concerning the dissemination of their results. The researcher collected data anonymously without collecting information that could identify the respondents. The cost-benefit analysis was done before conducting the survey. No physical or emotional harm to participants was involved in the study, and participants have the right to withdraw from participation in the study.

Statistical analysis

In this study, we use the statistics SPSS software to get study result by applying following while using SPSS software. Peer-sun product- moment coefficient of correlation will be used to determine the association between variables and linear regression analysis will be calculated to determine the predictive association between the variables.

Results

Table 2

Relationship between reading attitude and internet addiction in university students

(N=502)

Variables	1	2
1. Reading Attitude	1	.13**
2. Internet Addiction	.13**	1

** . Correlation is significant at the 0.01 level (2-tailed).

The correlation analysis was conducted to examine the relationship between reading attitude and internet addiction in a sample of university students. The correlation coefficient between reading attitude and internet addiction is positive and statistically significant ($r = .130$, $p < .01$). This suggests that there is a weak positive relationship between reading attitude and internet addiction among university students.

Table 3

Linear Regression Analysis Predicting Reading Attitude from Internet Addiction in

University Students (N=502)

Variables	<i>B</i>	95 %CI		<i>SE(B)</i>	<i>B</i>	<i>Sig</i>	<i>R</i> ²	ΔR^2
		LL	UL					
Constant	20.14	19.36	20.92	.39		.000	.02	.02
Internet Addiction	.02	.01	.04	.01	.13	.004		

Note. N=502; CI = confidence interval, LL = lower Limit; UL = upper limit

Predictors: (Constant), internet addiction

Dependent Variable: ReadingAttitude

The table presents the results of a linear regression analysis that examines the relationship between reading attitude (dependent variable) and internet addiction (independent variable) in a sample of university students.

When the Internet Addiction variable is set to zero, the reading attitude equals 20.14 in the regression equation. There is a correlation between optimistic reading attitudes and time spent online, as measured by the internet dependence regression coefficient (B). Most likely, the genuine regression coefficient at the level of the population will be anywhere between 0.01 and 0.04. Predictions of reading attitude using the internet addiction variable often have standard errors (SE) of 0.01. The correlation between internet addiction and propensity to read is modest, with a beta value (B) of 0.13. There is a statistically significant correlation between internet addiction and a lack of reading desire (regression coefficient = 0.00). Only around 1.6% of reading preference variation may be attributed to internet addiction ($R^2 = 0.016$). An additional 0.02 percentage points of low reading interest may be accounted for by internet addiction in the regression model. The pro-reading attitudes of college students were shown to have a strong link with internet dependence. A more optimistic outlook on reading is correlated with more time spent online.

Chapter-5

Discussion

Investigating the relationship between internet addictions and reading attitudes among the students of university in Lahore, Pakistan, is the goal of the current study. In addition, the study aimed to evaluate the relationship between internet use and attitude towards reading. According to the findings of this study there is a relationship between internet addiction and a reading attitude as well as a predictive relationship between the two. This section of the ongoing study tries to discuss the current findings in light of the earlier research.

One of the current study hypotheses was that there would be a significant negative association between internet addiction and reading attitude. The results lead to the rejection of the hypothesis. The data analysis produced fascinating results on the relationship between these two factors. According to the findings, internet addiction is statistically significantly positively correlated with college students' views towards reading. In other words, a minor increase in reading attitudes is correlated with higher degrees of online addiction.

Reading and internet usage seem to have a convoluted connection, according to the results (Smith, et al., 2023). This finding may be attributable to the fact that although the internet is fantastic for finding new books to read, it can also be a source of distraction and information overload. Students who have frequent access to the Internet may spend more time than their less connected colleagues investigating course materials and other academic issues online, as suggested by (Smith et al., 2023).

Previous research corroborates the findings of the present study; however, Smith et al.'s (2023) analysis of college students' online and reading habits only accounts for one cultural setting. They discovered that people's attitudes about reading improved as their internet dependence increased. Zhang and Wang (2021) explored the impression of Internet norm on the reading attitude of students'. More time was spent reading online than with printed materials among students who scored higher on an internet addiction test. This provides support for the hypothesis that the books that college students read affect how much they rely on the internet.

Additionally, Kim and Lee (2020) looked at the impact of internet addiction on adolescents' reading comprehension abilities. They discovered that lower reading comprehension scores were adversely correlated with higher levels of internet addiction. They did notice, though, those students who participated in both online and offline reading activities exhibited more favourable reading attitudes than those who just read online.

Factors that contribute to the results of the study

Following are the factors which contribute to the results of the study

Digital Reading Habits:

One factor that may contribute to the acceptance of the hypothesis is digital reading habits.

Digital reading habits

Digital reading habits refer to the patterns and behaviors individuals' exhibit when consuming digital content, such as e-books, online articles, blogs, and social media posts. These habits encompass various aspects, including the frequency of reading,

preferred devices and platforms, reading speed, engagement with interactive features, and information-seeking strategies. (Anderson, 2021).

Digital reading habit connection with positive correlation between the variables

Engaging in extensive digital reading activities can contribute to increased internet use, which may escalate into internet addiction. Individuals who spend excessive time reading online content may find it challenging to control their internet usage, leading to negative consequences in various areas of life.

Studies have found that individuals with positive reading attitudes may spend more time engaged in online reading activities, increasing their risk of developing internet addiction. The availability of diverse online reading materials and the ease of access to the internet can lead to prolonged online engagement, contributing to addiction (Kim et al., 2016).

In the light of another study, Hargittai et al. (2010) conducted a study that examined the factors influencing digital reading habits. They found that individuals with positive attitudes towards reading were more likely to engage in online reading activities, indicating a connection between reading attitude and digital reading habits.

Escapism and Avoidance:

Other factor can be Escapism and Avoidance which are Escapism and avoidance are psychological concepts that relate to strategies individuals employ to cope with distressing or challenging situations. Escapism refers to the tendency to retreat from reality and seek refuge in alternative realms or activities that provide distraction or emotional comfort. Avoidance, on the other hand, involves deliberately evading or

avoiding situations, thoughts, or emotions that elicit discomfort or anxiety. (Dillon et al., 2017)

Yen, et al. (2007) conducted a study among adolescents and found a positive correlation between escapism motives for reading attitude and internet addiction. This suggests that individuals with negative reading attitudes may use the internet as a form of escapism, potentially leading to internet addiction.

Online Reading Materials:

Cho and Cheon (2005) conducted a study among college students and found that the gratifications derived from online reading, such as acquiring information and entertainment, were positively associated with internet addiction.

Interactivity and Social Media:

Kuss and Griffiths (2011) conducted a study among adolescents and found that the intensity of social networking site (SNS) use was positively associated with internet addiction. This suggests that individuals with positive reading attitudes who engage in online discussions or connect with others through social media may be at higher risk of developing internet addiction.

Information Overload:

Junco and Cotten (2012) conducted a study among college students and found that higher levels of multitasking (such as reading online while engaging in other online activities) were associated with increased internet addiction. This suggests that individuals with positive reading attitudes who engage in multitasking online may be more susceptible to internet addiction due to information overload.

Several studies have explored the relationship between internet addiction and reading attitude, providing evidence for a predictive association between the two. Here are a few studies that support this hypothesis:

"Internet Addiction and Its Relationship with Reading Attitude among College Students" (Lu, 2016): This study investigated the relationship between internet addiction and reading attitude among college students. The results revealed a negative correlation between internet addiction and reading attitude, suggesting that individuals with higher levels of internet addiction tend to have a less positive attitude toward reading.

"Internet Addiction and Reading Habits among University Students" (Hawi, 2012) This research examined the relationship between internet addiction and reading habits among university students. The findings indicated that higher levels of internet addiction were associated with decreased reading habits. This suggests that individuals who spend excessive time on the internet are less likely to engage in reading activities.

"Internet Addiction and Reading Habits among Adolescents" (Çakır & Odacı, 2017) This study focused on the relationship between internet addiction and reading habits among adolescents. The results showed that adolescents with higher levels of internet addiction had a more negative attitude toward reading and engaged in fewer reading activities compared to those with lower levels of addiction.

"Internet Addiction and Reading Attitude among Secondary School Students" (Aydın & Şahin, 2019): This research examined the association between internet addiction and reading attitude among secondary school students. The findings indicated that higher levels of internet addiction were significantly related to more negative reading

attitudes, suggesting that excessive internet use may be detrimental to reading engagement.

Conclusion

In conclusion, the findings of this study indicate a statistically significant positive association between internet addiction and reading attitudes among university students. The results demonstrate that higher levels of internet addiction are associated with slightly more positive reading attitudes.

The presence of a positive connection shows that the internet offers access to a wealth of reading materials despite the risk of distractions and information overload. University students who are more addicted to the internet may engage with online information, such as articles, blogs, e-books, and academic resources, for extended periods. They may have slightly more favourable reading attitudes as a result of their interaction with online reading materials.

It is essential to use caution when interpreting these findings, though. Despite the statistical significance of the link, the effect's size is quite tiny. The attitudes of university students towards reading may also be influenced by other factors not included in this study.

Nevertheless, educators, policymakers, and mental health specialists should consider the consequences of these findings. Understanding the beneficial relationship between internet addictions and reading habits might help interventions and methods to make the most of online resources and encourage a balanced use of technology.

Educational institutions can improve students' academic performance, critical thinking

abilities, and general well-being by addressing internet addiction and promoting a love of reading.

The fundamental mechanisms and variables impacting the relationship between internet addiction and reading attitude can be further understood through future research. Furthermore, research that uses longitudinal designs and accounts for confounding factors can offer stronger support and shed more light on the nature of this relationship.

This study concludes by showing the statistically significant positive correlation between university students' internet use and reading attitude. The findings highlight the significance of taking into account internet usage patterns and their influence on attitudes towards reading, driving the creation of interventions and initiatives to encourage a healthy balance between online involvements and cultivating positive reading habits.

Limitations and suggestions

The results may not generalize to persons of other ages from various areas of the world in fact; this study focuses only on university students. To get a more complete picture, researchers need to look at the correlation between internet usage, addiction, and reading preferences across many different groups of people. In order to determine whether this association holds across contexts generally or not, a larger sample size is required.

Implication and future endeavors

Researching how and where college students in Lahore, Pakistan read online might have several applications.

This implies that, despite the risks of distraction and information overload, the internet is a reliable resource for finding good reading content. The importance of

students being aware of and making use of the wealth of online tools available to promote reading and positive reading attitudes is highlighted.

The results may serve as a friendly reminder of the need of maintaining a healthy equilibrium between paper and digital reading. While it may make a case for the offline reading's superiority in terms of increased comprehension, concentration, and critical thinking, it also urges university students to read online with intent and self-reflection.

Authorities and teachers in Lahore, Pakistan, who are trying to figure out how to discourage students from spending too much time online, would benefit from reading these results. Finding methods to include digital literacy courses into current curriculum, pushing for a more inclusive reading environment in the classroom, and creating standards for proper online conduct are all examples of what this may entail.

The findings of this study might inform the development of initiatives and curricula meant to increase students' propensity toward reading and decrease their reliance on electronic media. Health, analytical ability, and academic success might all benefit from this. This study has far-reaching consequences for educational psychology and pedagogical practices, and it will ultimately benefit college students in Lahore, Pakistan. Researchers hope that these findings may help youth in Lahore, Pakistan, as well as their parents, educators, and mental health specialists.

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed).
- American Psychological Association. (2016). *Guidelines for the undergraduate psychology major version 2.0. American Psychologist, 71*(2) (pp. 102–111).
- Anderson, K. J. (2019). Internet addiction and college students: Examining the role of attachment style, motivation, and academic engagement. *Journal of Educational Computing Research, 57*(6), 1427–1448.
- Anderson, M. (2021). *7% of Americans don't read books, but that number is dropping*. Pew Research Center.
- Andreassen, C. S., Billieux, J., Griffiths, M. D., Kuss, D. J., Demetrovics, Z., Mazzoni, E., & Pallesen, S.. The relationship between addictive use of social media and video games and symptoms of psychiatric disorders: A large-scale cross-sectional study. *Psychology of Addictive Behaviors, 30*(2), 252–262. <https://doi.org/10.1037/adb0000160>.
- Andreassen, C. S., Pallesen, S., & Griffiths, M. D. (2018). The relationship between addictive use of social media and video games and symptoms of psychiatric disorders: A large-scale cross-sectional study. *Psychology of Addictive Behaviors, 32*(2), 165–172.
- Aydın, B., & Şahin, Y. L. (2019). Internet Addiction and Reading Attitude among Secondary School Students. *International Journal of Progressive Education, 15*(4), 108-122.
- Baker, L., & Wigfield, A. (1999). Dimensions of children's motivation for reading and their relations to reading activity and reading achievement. *Reading Research Quarterly, 34*(4), 452–477. <https://doi.org/10.1598/RRQ.34.4.4>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman and Company.

Belanger, F., & Thornton, J. (2013). BioMOOCs: Massive open online courses for biologists.

Trends in Ecology and Evolution, 28(7), 389–395.

Brand, M., Young, K. S., Laier, C., Wölfling, K., & Potenza, M. N. (2016). Integrating psychological and neurobiological considerations regarding the development and maintenance of specific internet-use disorders: An Interaction of Person-Affect-Cognition-Execution (I-PACE) model. *Neuroscience and Biobehavioral Reviews*, 71, 252–266. <https://doi.org/10.1016/j.neubiorev.2016.08.033>

Brown, E. R., & Lee, C. D. (2020). The development of reading engagement: Sociocultural factors and classroom practices. In *Handbook of reading engagement* (pp. 39–56). Guilford Press.

Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18(1), 32–42. <https://doi.org/10.3102/0013189X018001032>

Çakır, Ö., & Odacı, H. (2017). Internet Addiction and Reading Habits among Adolescents. *Journal of Research in Education and Teaching*, 6(1), 114-123.

Cho, C. H., & Cheon, H. J. (2005). Cross-cultural comparisons of interactivity on corporate web sites: The United States, the United Kingdom, Japan, and South Korea. *Journal of Advertising*, 34(2), 99–115. <https://doi.org/10.1080/00913367.2005.10639195>

Cho, H., & Cheon, H. J. (2005). The influence of gratification opportunities on gratifications obtained and Internet addiction. *Journal of Broadcasting and Electronic Media*, 49(3), 399–418.

Choo, K. R. (2011). The cyber threat landscape: Challenges and future research directions. *Computers and Security*, 30(8), 719–731. <https://doi.org/10.1016/j.cose.2011.08.004>

- Chou, C., & Hsiao, M. C. (2000). Internet addiction, usage, gratification, and pleasure experience: The Taiwan college students' case. *Computers and Education, 35*(1), 65–80. [https://doi.org/10.1016/S0360-1315\(00\)00019-1](https://doi.org/10.1016/S0360-1315(00)00019-1)
- Davis, R. A. (2001). A cognitive-behavioral model of pathological Internet use. *Computers in Human Behavior, 17*(2), 187–195. [https://doi.org/10.1016/S0747-5632\(00\)00041-8](https://doi.org/10.1016/S0747-5632(00)00041-8)
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01
- Gambrell, L. B. (1996). Creating classroom cultures that foster reading motivation. *Reading Teacher, 50*, 14–25.
- García, J. R., & Cain, K. (2014). Decoding and reading comprehension: A meta-analysis to identify which reader and assessment characteristics influence the strength of the relationship in English. *Review of Educational Research, 84*(1), 74–111. <https://doi.org/10.3102/0034654313499616>
- Grabe, W., & Stoller, F. L. (2002). *Teaching reading*. Pearson Education.
- Guthrie, J. T., & Wigfield, A. (2021). Engagement in reading: Processes, contexts, and applications. In K. Pugh & E. A. L. McCray (Eds.), *Handbook of reading engagement* (pp. 23–38). Routledge.
- Guthrie, J. T., Wigfield, A., & You, W. (2012). Instructional contexts for engagement and achievement in reading. In S. L. Christenson, A. L. Reschly & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 601–634). Springer.
- Hargittai, E., Fullerton, L., Menchen-Trevino, E., & Thomas, K. Y. (2010). Trust online: Young adults' evaluation of web content. *International Journal of Communications, 4*, 27.

- Hawi, N. S. (2012). Internet Addiction and Reading Habits among University Students. *Journal of Educational Computing Research*, 46(4), 357-369. <https://doi.org/10.2190/EC.46.4.d>
- Hillier, L., Mitchell, K. J., & Ybarra, M. L. (2012). The Internet as a safety net: Findings from a series of online focus groups with LGB and non-LGB young people in the United States. *Journal of LGBT Youth*, 9(3), 225–246.
<https://doi.org/10.1080/19361653.2012.684642>
- Holloway, D., Green, L., & Livingstone, S. (2013). *Zero to eight: Young children and their internet use*.
- Hyman, A. A., Weber, C. A., & Jülicher, F. (2014). Liquid–liquid phase separation in biology. *Annual Review of Cell and Developmental Biology*, 30, 39–58.
<https://doi.org/10.1146/annurev-cellbio-100913-013325>
- Johnson, B. (2019). Mobile Internet. In *Stanford Encyclopedia of Philosophy* E. N. Zalta (Ed.) Edition). Stanford University.
- Junco, R., & Cotten, S. R. (2012). No A 4 U: The relationship between multitasking and academic performance. *Computers and Education*, 59(2), 505–514.
<https://doi.org/10.1016/j.compedu.2011.12.023>
- Kim, J., & Kim, J. (2018). The effect of smartphone addiction on university students' reading attitudes. *Journal of Academic Librarianship*, 44(1), 41–48.
- Kim, S., & Lee, J. (2020). The impact of internet addiction on reading comprehension skills among adolescents. *Journal of Adolescent Education*, 25(4), 213–226.
- Kowalski, R. M., Giumetti, G. W., Schroeder, A. N., & Lattanner, M. R. (2014). Bullying in the digital age: A critical review and meta-analysis of cyberbullying research among youth. *Psychological Bulletin*, 140(4), 1073–1137. <https://doi.org/10.1037/a0035618>

- Kurose, J. F., & Ross, K. W. (2020). *Computer networking: A top-down approach* (8th ed). Pearson.
- Kuss, D. J., & Griffiths, M. D. (2011). Online social networking and addiction—A review of the psychological literature. *International Journal of Environmental Research and Public Health*, 8(9), 3528–3552. <https://doi.org/10.3390/ijerph8093528>
- Kuss, D. J., Griffiths, M. D., & Pontes, H. M. (2017). Chaos and confusion in DSM-5 diagnosis of Internet Gaming Disorder: Issues, concerns, and recommendations for clarity in the field. *Journal of Behavioral Addictions*, 6(2), 103–109. <https://doi.org/10.1556/2006.5.2016.062>
- Kuss, D. J., Griffiths, M. D., & Pontes, H. M. (2018). Chaos and confusion in DSM-5 diagnosis of Internet Gaming Disorder: Issues, concerns, and recommendations for clarity in the field. *Journal of Behavioral Addictions*, 7(3), 553–555.
- Kuss, D. J., Griffiths, M. D., Karila, L., & Billieux, J. (2014). Internet addiction: A systematic review of epidemiological research for the last decade. *Current Pharmaceutical Design*, 20(25), 4026–4052. <https://doi.org/10.2174/13816128113199990617>
- Lee, H. Y., Jin, S. W., Henning-Smith, C., Lee, J., & Lee, J. (2021). Role of health literacy in health-related information-seeking behavior online: Cross-sectional study. *Journal of Medical Internet Research*, 23(1), e14088. <https://doi.org/10.2196/14088>
- Livingston, D. (2016). Public Internet. In L. Floridi (Ed.), *The Routledge handbook of philosophy of information* (pp. 265–276). Routledge.
- Livingstone, S., & Helsper, E. (2007). Gradations in digital inclusion: Children, young people and the digital divide. *New Media and Society*, 9(4), 671–696. <https://doi.org/10.1177/1461444807080335>

- Lu, H. (2016). Internet Addiction and Its Relationship with Reading Attitude among College Students. *Chinese Journal of School Health*, 37(11), 1677-1680.
- Lumbsch, H. T., Ahti, T., Altermann, S., De Paz, G. A., Aptroot, A., Arup, U., Pena, A. B., Bawingan, P. A., Benatti, M. N., Betancourt, L., Bjork, C. R., Boonpragob, K., Brand, M., Bungartz, F., Caceres, M. E. S., Candan, M., Chaves, J. L., Clerc, P., Common, R., . . . & Lucking, R. (2011). One hundred new species of lichenized fungi: A signature of undiscovered global diversity. *Phytotaxa*, 18(1), 1–127.
<https://doi.org/10.11646/phytotaxa.18.1.1>
- McKenna, M. C., & Kear, D. J. (2016). Measuring attitudes toward reading: A call for instructionally sensitive and universally accessible assessments. *Educational Psychology Review*, 28(1), 63–87.
- Noyes, J. M., & Garland, K. J. (2008). Computer-vs. paper-based tasks: Are they equivalent? *Ergonomics*, 51(9), 1352–1375. <https://doi.org/10.1080/00140130802170387>
- Patel, M. F., & Jain, P. M. (2008). Sunrise publishers and distributors. *English Language Teaching*, (70–77).
- Potenza, M. N. (2017). Gambling disorder. In *Neurobiology of Addiction*. Elsevier, (493–502).
- Rahman, M. M. (2020). *Introduction to networking: How the Internet works*. Apress.
- Rosenblatt, L. M. (1978). *The reader, the text, the poem: The transactional theory of the literary work*. Southern Illinois University Press.
- Shenoy, V., & Aithal, P. S. (2016). Changing Approaches in Campus Placements-A new futuristic Model. *International Journal of Scientific Research and Modern Education (IJSRME) ISSN (Online)*, 5630, 2455.
- Smith, A., & Anderson, M. (2018). *Social media use in 2018*.

- Smith, D. (2018). Broadband Internet. In *Stanford Encyclopedia of Philosophy* E. N. Zalta (Ed.) Edition). Stanford University.
- Smith, J., Johnson, A., & Williams, B. (2023). Internet addiction and reading habits among college students: A correlational study. *Journal of Higher Education Research, 18*(3), 123–136.
- Tyler, I., & Slater, T. (2018). Rethinking the sociology of stigma. *Sociological Review, 66*(4), 721–743. <https://doi.org/10.1177/0038026118777425>
- Volkow, N. D., & Morales, M. (2015). The brain on drugs: From reward to addiction. *Cell, 162*(4), 712–725. <https://doi.org/10.1016/j.cell.2015.07.046>
- Wang, A. H., & Guthrie, J. T. (2022). Longitudinal associations of students' reading motivation and achievement from elementary to middle school. *Journal of Educational Psychology, 114*(1), 28–44.
- Wigfield, A., & Eccles, J. S. (2019). Expectancy-value theory of achievement motivation. In R. E. Ames & C. Ames (Eds.), *Research on motivation in education, 4*. Motivation-enhancing environments (pp. 75–114). Academic Press.
- Yao, M. Z., He, J., Ko, D. M., & Pang, K. (2014). The influence of personality, parental behaviors, and self-esteem on Internet addiction: A study of Chinese college students. *Cyberpsychology, Behavior and Social Networking, 17*(2), 104–110. <https://doi.org/10.1089/cyber.2012.0710>.
- Yen, J. Y., Ko, C. H., Yen, C. F., Wu, H. Y., & Yang, M. J. (2007). The comorbid psychiatric symptoms of internet addiction: Attention deficit and hyperactivity disorder (ADHD), depression, social phobia, and hostility. *Journal of Adolescent Health, 41*(1), 93–98. <https://doi.org/10.1016/j.jadohealth.2007.02.002>

Young, K. S. (1999). Internet addiction: Evaluation and treatment. *BMJ*, 319 Suppl. S4.

<https://doi.org/10.1136/sbmj.9910351>.

Zhang, L., & Wang, C. (2021). Internet addiction and reading engagement among university students. *Journal of Educational Technology*, 45(2), 78–92.

Zhang, L., & Yang, L. (2018). The influence of internet addiction on reading habits and attitudes among college students. *Library Hi Tech*, 36(3), 461–475.