DEPARTMENT OF PSYCHIATRY, SCHOOL OF MEDICINE,

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ADDIS ABABA UNIVERSITY

INTERNET ADDICTION AMONG HIGH SCHOOL STUDENTS IN ARADA SUB-CITY, ADDIS ABABA, ETHIOPIA: A CROSS-SECTIONAL STUDY

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Internet Addiction among High School Students in Arada Sub-City, Addis Ababa, Ethiopia: A cross-sectional study

A thesis paper submitted to Addis Ababa University, College of Health Science, school of Medicine, in partial fulfillment of the requirements for sub-specialty certificate in child and adolescent psychiatry

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APPROVAL SHEET

This is to certify that the research paper entitled: "Internet Addiction Among High School Students in Arada Sub-City, Addis Ababa, Ethiopia: A cross-sectional study" submitted by Dr. Rehana Abdurahman, in partial fulfillment of the requirements for the Sub-specialty Program in Child and Adolescent Psychiatry at the School of Medicine, Addis Ababa University, has been examined and approved by the under-mentioned examiners.

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DECLARATION OF ORIGINAL WORK

I hereby declare that this sub-specialty thesis titled: “Internet Addiction Among High School Students in Arada Sub-City, Addis Ababa, Ethiopia: A cross-sectional study” is my original work and has not been presented for a degree or diploma in any other university or institution. Any scholarly work of others used in this thesis has been duly acknowledged and referenced in accordance with the academic standards of Addis Ababa University.

I understand that plagiarism in any form constitutes a serious academic offense and is subject to disciplinary action by the university. I declare that this work is free from any form of plagiarism or academic misconduct to the best of my knowledge.

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This thesis has been submitted to the department of psychiatry with my approval as a supervisor

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LIST OFABBREVIATION

Abbreviation	**Full Term**
AAU	Addis Ababa University
DSM-5	"Diagnostic and Statistical Manual of Mental Disorders, 5th Edition"
IA	"Internet Addiction"
IAT	Internet addiction test
ICD-10	International classification of disease tenth edition
IGD	Internet gaming disorder
PHQ-9	Patient health questionnaire 9
SES	Socioeconomic status
WHO	World health organization
BMHD	Bio-Ecological Model of Human Development

ABSTRACT

Internet addiction is defined as "excessive and uncontrollable use of the internet, resulting in psychological distress and functional impairment". While internet offers numerous advantages that encourage frequent use, it can also lead to significant negative consequences, especially among adolescents. Adolescents are specifically exposed due to their developmental stage, increased accessibility to digital technology, and susceptibility to peer influence. Factors directly and indirectly related to the individual, including mental health status and family environment, may contribute to the risk of internet addiction. Despite the growing concern globally, there is limited data on the extent and related factors of internet addiction among adolescents in Ethiopia. This study aimed to assess the prevalence of internet addiction and its associated factors among high school students in Arada sub-city, Addis Ababa, Ethiopia. A school-based cross-sectional study was conducted among 879 students enrolled in grade 9 to 11 in both public and private high schools. A multistage sampling technique was used to select study participants. Data were collected using a structured, self-administered questionnaire. Descriptive statistics summarized the data. Binary logistic regression was used to identify factors associated with internet addiction followed by multivariable logistic regression model. The overall prevalence of internet addiction was 53.1%. Among the students, 29.9% exhibited mild addiction, 21.8% moderate addiction, and 1.6% severe addiction. Additionally, 30% of the students were screened positive for depression. Multivariable logistic regression analysis revealed that being in Grade 10, daily internet use of 4–6 hours, using the internet during sleep and meal times, lack of parental control over the content accessed online, and the presence of depressive symptoms were significantly associated with internet addiction. The study highlights a high prevalence of internet addiction among adolescents. This study has some limitations that should be considered when interpreting the findings. The cross-sectional design limits the ability to establish causal relationships between internet addiction and associated factors. Additionally, the reliance on self-reported data may introduce reporting bias, as participants might underreport or over report their internet use and psychological symptoms. The study was also conducted in a single sub-city, which may limit the generalizability of the results to adolescents in other sub-city of Addis Ababa. The findings underscore the importance of addressing internet addiction as a public health concern among adolescents in Ethiopia. Targeted, context-specific interventions are urgently needed to reduce internet addiction and mitigate its psychological impacts. These may include school-based awareness programs, promoting healthy digital habits, enhancing parental supervision, and integrating mental health support services. Further research using longitudinal designs and broader geographic samples is recommended to explore causal relationships and inform evidence-based prevention and intervention strategies tailored to the Ethiopian context.

Keywords: *internet addiction, adolescents, high school students, prevalence, Addis Ababa, parental influence, psychological factors, Ethiopia*

CHAPTER ONE

INTRODUCTION

1.1 Background

Over recent decades, the internet has become a necessity that facilitates an individual's communication, interaction and access to information. This transformation has evolved from passive media such as televisions and radios to more interactive technologies, including smartphones, computers, tablets, gaming consoles, e-readers, social media platforms, mobile apps, and streaming services (1-3). These technologies facilitate engagements for various purposes, including entertainment, education, personal achievement, communication, commerce, and social connectivity and people also turn to the internet for escapism and problem avoidance (1, 3-6).

The use of websites and online forums has grown rapidly over time annually, monthly, daily, and even hourly resulting in unprecedented levels of global connectivity. Internet access has expanded dramatically, rising from just 1% of the global population in 1995 to approximately 62% in 2021, with an average increase of over one million new users per day, or about 13 new users every second.(2) However, this rapid growth has not been uniform across the globe. Variations in internet access and usage are shaped by differences in national income, infrastructure, and human capital, as well as legal, political, cultural, religious, and educational contexts. (2, 3, 7) For instance, North America has the highest regional internet penetration, with 93.9% of the population connected, compared to just 43% in Africa (2). In terms of mobile connectivity, global mobile phone usage reached 67.1% in 2021, Showing similar discrepancy between regions smartphone ownership among adolescents in the United States is 95% (2), while Sub-Saharan Africa had a mobile-cellular subscription rate of only 80% in 2019. In Ethiopia, mobile cellular service coverage was just 39% in the same year (3). Although cellular mobile connections in Ethiopia rose to 63.8% by 2025 (8), internet penetration remains limited—estimated at only 20% in 2019 and projected to increase marginally to 21.3% by 2025. Similarly, social media usage in Ethiopia remains low, at just 6.2%(8) Alongside increased access to digital devices and platforms, the duration spent on digital media based on US study has steadily risen,

gradually displacing traditional print media such as books, magazines, and newspapers. By 2016, average daily time spent online had reached approximately six hours(9).

According to the Digital Ethiopia 2025 strategy, the country has made progress in digital access. Mobile phone ownership has reached 63.8%, with an 11% increase from the previous year, while internet penetration stands at 21.3%, reflecting 4% annual growth. However, social media access remains low at 6.2%..(8)In Addis Ababa, where digital infrastructure is comparatively better, access to internet-enabled devices and public Wi-Fi is increasing. A recent study found that significant urban-rural disparities in households ownership of mobile phone: 87.4% in urban areas versus 59.1% in rural areas. Another comparative study between Addis Ababa and Arbaminch reported that 94.7% of respondents in Addis Ababa owned smartphones, though disparities remain in terms of device quality, income, education, and digital literacy.

Urban adolescents—especially in Addis Ababa—tend to have greater daily internet access, primarily for social media, entertainment, and online learning. Despite these gains in connectivity, Ethiopia ranks 112th out of 149 countries in digital literacy. This low ranking is attributed to several barriers, including: language challenges, limited basic literacy and numeracy, inadequate access to digital devices, lack of locally relevant digital content and lack of formal digital literacy education in the school curriculum. Most adolescents acquire digital skills through peer learning or self-exploration, rather than structured instruction. As a result, comprehensive digital literacy—covering information retrieval, communication, critical thinking, digital ethics, and online safety—is largely absent.(10)

While the internet offers numerous benefits—including enhanced access to information, improvements in public health, and expanded economic opportunities—it also poses notable risks, particularly for children and adolescents. According to the World Health Organization (WHO, 2014), electronic technologies can support time management, knowledge acquisition, and pro-social behavior (11, 12). The internet facilitates affordable long-distance communication and simplifies a range of everyday tasks, such as engaging in scientific research, conducting business transactions, online shopping, bill payments, remote education, and maintaining relationships with family and friends, making it an indispensable tool in modern life(5, 6). For adolescents, the internet is a primary medium for socialization and leisure activities, including watching videos, listening to music, and playing online games. Benefits such as convenience,

improved time efficiency, and closer interpersonal connections are widely recognized.(13) Some studies even suggest that increased online engagement may contribute to reduced exposure to certain risky behaviors, such as substance use and traffic-related injuries (14) The COVID-19 pandemic further underscored the internet's critical role in maintaining continuity in education, work, commerce, and social interaction.(15). It offers support to individuals facing challenges in learning, attention, or social engagement. However, excessive or unregulated use may lead to adverse outcomes, especially in adolescents, who are in the process of critical biological, behavioral and social developmental transitions. (16)

The harmful effect of excessive internet use in this population include increased social isolation, distorted perceptions of reality, mood disturbances, and impaired academic and social functioning. Prolonged screen time contributes to sedentary behavior, raising the risk of obesity and metabolic disorders such as diabetes, while also potentially interfering with neurodevelopment. Physical interactions are progressively being substituted by digital communication, often through text-based platforms. (13, 16)

Moreover, adolescents are particularly vulnerable to exposure to inappropriate or harmful online content, including material that is violent, sexual, or related to self-harm and suicide. Prolonged or repeated exposure to such content can lead to psychological desensitization and, in some cases, the imitation of risky or harmful behaviors. These concerns highlight the increasingly recognized risks associated with the darker aspects of digital technology use among adolescent populations.(14) (17)

During the last three decades, the phenomenon of internet addiction (IA) has gained growing attention within both clinical and academic communities. However, it continues to lack a universally accepted definition, creating ambiguity in its conceptualization and diagnosis. Most frequently used diagnostic systems, such as the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), and the International Classification of Diseases, 11th Revision (ICD-11), formally recognize only certain technology-related disorders and behavioral addiction—namely, internet gaming and gambling disorders—thereby leaving internet addiction without a standardized clinical status(18, 19) . The term "Internet Addiction Disorder" was originally introduced by Dr. Ivan Goldberg in 1995,(20) and was subsequently developed further by Dr. Kimberly Young, who characterized it as an impulse-control disorder (21). Alternative

theoretical models, such as those proposed by Griffiths, have framed IA as a non-substance behavioral addiction rooted in maladaptive interactions between individuals and digital technologies (22). The terminology used to describe this condition has continued to evolve, incorporating expressions such as "excessive internet use," "compulsive internet use," "problematic digital media use," "problematic internet use" and "behavioral addiction."This paper uses internet addiction which is operationally defined as a compulsive pattern of engagement in internet-related activities, marked by an inability to regulate use, which leads to significant psychological distress and/or functional impairment in daily life (23). Currently there are multiple tests to assess internet addiction but the most frequently used ones include Internet Addiction Test (IAT) which is developed by: Dr. Kimberly Young and is a 20-item self-report questionnaire assessing the degree of problematic internet use. It covers areas such as compulsive use, escapism, productivity impairment, and interpersonal problems. Responses are scored on a Likert scale. It is widely used and validated across multiple cultures has advantage of ease of administration and scoring and it covers a broad spectrum of internet-related behaviors.(21) But one need to be conscious about cultural bias as it is developed in a western context and some items may not align with non-western cultural or behavioral norms, which is resolved in Ethiopia as it is recently validated in Ethiopian adult.(24) Other commonly used tools include problematic Internet Use Questionnaire (Thatcher & Goolam, 2005), internet Addiction Disorder Scale (Goldberg, 2000), Internet Addiction Scale (Chen, 2005) and Internet Stress Scale (Valleur & Velea, 2002).All are used in adolescents but are not adapted in Ethiopia.

The global prevalence of internet addiction shows considerable variation, ranging from 0.2% to 67% in high-income countries(3, 7, 25-32), and between 20% and 88.3% in African countries.(33, 34) Adolescents are especially susceptible to internet addiction, influenced by factors such as peer pressure, increased autonomy, sensation-seeking behaviors, and immature self-regulation abilities. (16) Other contributing risk factors include urban residency, male gender, individualistic cultural orientations, ongoing cultural transitions, low levels of social engagement, and prolonged screen exposure .(28, 33) From a neurobiological perspective, adolescence—particularly the middle phase—is characterized by heightened development of the brain's reward circuitry coupled with a lag in the maturation of executive control systems, leading to greater impulsivity and risk-taking behaviors (28, 35-37)

Excessive internet use has been shown to lead to negative psychosocial outcomes, including increased risks of depression, anxiety, attention-deficit/hyperactivity disorder (ADHD), substance use, suicidal ideation, and low self-esteem(3, 38, 39)These issues can further impair adolescents' ability to maintain healthy relationships with family and peers, regulate screen time, and achieve academic success.. (25, 40-44).

Internet use in Ethiopia has been particularly linked to negative outcomes for youth well-being and mental health, including reduced study time and diminished academic interest. Increased time spent online is often associated with unproductive activities such as passive browsing or mindless scrolling, which may disproportionately affect adolescents from lower socioeconomic backgrounds.(45) These conditions highlight the urgent need for research on the behavioral and psychological impacts of internet use among adolescents in urban Ethiopian contexts. Despite growing global interest in internet addiction, there remains a notable lack of empirical research focused on Ethiopian adolescents an important gap this study aims to address.

1.2 Statement of the Problem

The increasing rate of internet use has become a major global public health concern, particularly among adolescents. This population is especially susceptible to excessive internet use due to developmental characteristics such as heightened peer influence and immature impulse control. Excessive internet use has been associated with substantial harm, including functional impairments and clinically significant psychological distress. These effects tend to be more pronounced in vulnerable groups, notably individuals in their teens and early twenties, who have been consistently identified as high-risk populations. (46)

Adolescence represents a critical period of development, during which individuals undergo a series of complex biological, psychological, and social transitions. These transitions contribute to both healthy and maladaptive patterns of internet use. Characteristics typical of this developmental stage including a strong orientation toward peer affiliation, a drive for autonomy from parental figures, increased risk-taking behavior, and heightened sensation-seeking have been shown to increase vulnerability to behavioral addictions, including internet addiction (22). Furthermore, adolescents often demonstrate a preference for immediate gratification, a desire for novel and stimulating experiences, and limited capacity for long-term planning and emotional

regulation. These tendencies further heighten the risk of adverse outcomes related to excessive electronic media use. Personality features such as impulsivity, aggression, and neuroticism have also been implicated as potential predisposing factors for internet addiction (36)

The surge in social media engagement among adolescents has been correlated with several negative psychosocial outcomes, including diminished self-esteem, reduced body satisfaction, increased exposure to cyber bullying and sexually explicit content, leading to sexual indiscretion.(37). As a result of poor control system, digital technology may exert a deleterious influence on adolescent health and development(15) Among the most critical consequences of excessive electronic media use is internet addiction, which can lead to marked psychological distress and impairments in daily functioning. In addition to addiction itself, internet overuse is found to have association to a number of physical, mental, emotional, and social problems. These include sleep disturbances, anxiety disorder, depression, attention-deficit/hyperactivity disorder, substance use disorder, low self-esteem, and suicidality(12)

A large number of literatures have documented increasing prevalence of internet addiction and its frequent comorbidity with various psychiatric morbidities. A Nigerian research identified a strong link between internet addiction and depression(47) , while another investigation in the same context found that patterns of access and duration of use were highly associated with higher chance of having internet addiction (48) Additional studies conducted in other settings using comparable methodologies have reported even higher prevalence rates, often attributing this trend to increased access to digital devices and the internet. Motivations for internet use, including boredom, stress, anxiety, and peer pressure, have been identified, along with documented impacts on academic performance, social functioning, and sleep quality(32)

In urban areas like Addis Ababa, anecdotal reports from school counselors and teachers describe students staying up all night, being less alert during day time, not doing their assignment or arriving late to school due to overnight internet use. Parents have expressed concern over adolescents isolating themselves in their rooms, becoming irritable when asked to disconnect, or losing interest in academic tasks. Some students reportedly spend more than six hours per day online, mostly engaged in non-educational activities such as social media scrolling, gaming, and watching YouTube videos. These behavioral patterns are often accompanied by declining grades,

withdrawal from family life, and sleep deprivation, further compounding academic and mental health challenges.

Cumulatively, these findings underscore the significant adverse consequence of excessive internet use on the overall presence of positive health of children and adolescents (37) Academic performance, interpersonal relationships, and the development of social skills are adversely affected. The generational divide between adolescents and their parents may further hinder effective monitoring and regulation of online behavior. Furthermore, unregulated use of electronic devices may intrude upon time allocated for educational activities, thereby undermining the teaching and learning process.

Despite the growing international evidence base on various aspect of internet addiction, there remains a paucity of data on internet addiction among adolescents in Ethiopia. Existing studies have largely focused on university students, who fall within the adult age group, while research involving Ethiopian adolescents has primarily targeted specific behaviors such as gambling. Consequently, there is a significant gap in understanding the prevalence and associated consequences of internet addiction in this group.

This study planned to narrow this gap by assessing the prevalence of internet addiction among adolescents, identifying socio-demographic characteristics associated with higher risk, examining related psychological factors mainly depression, and evaluating the impact of internet use on academic achievement. Additionally, this study looked into the role of peer pressure, self-esteem, and parental monitoring in influencing patterns of internet use among adolescents.

1.3 Significance of the Study

The internet has transformed modern life by enhancing communication, education, entertainment, and access to information. While these advancements offer clear benefits, excessive internet use has become a growing concern for public health. Evidence links internet addiction to a range of psychological, emotional, social, and behavioral issues—including social withdrawal, anxiety, depression, impaired academic performance, (43, 49) strained parent–adolescent relationships(50), sleep disturbances, reduced concentration, and in severe cases, self-harming behaviors, suicidal ideation, and attention-deficit/hyperactivity disorder (ADHD).(51)

The global prevalence of addiction to internet varies widely, It ranges from 0.2% to as high as 88% (7, 31-33, 52, 53). This disparity reflects inconsistencies in diagnostic criteria, conceptual definitions, and the contextual variability of internet use across different populations. Despite the expanding volume of literature, there remains no clear consensus on whether the use of internet-enabled technologies is inherently detrimental or beneficial, as the outcomes largely depend on usage patterns and contextual factors. Importantly, there is a notable research gap regarding the extent and severity of internet addiction among adolescents, especially in low-income settings such as Ethiopia. Most existing studies have concentrated on adult populations, whose developmental profiles differ significantly from adolescents. This limits the relevance and applicability of those findings to younger age groups, who are uniquely vulnerable due to ongoing neurodevelopmental and psychosocial transitions.

Moreover, the existing literature often focuses narrowly on specific devices or platforms, such as smartphones or social media, without accounting for the broader and more diverse forms of internet engagement that characterize adolescent behavior. This limited scope overlooks adolescents who may be exposed to multiple online environments simultaneously. In addition, there has been insufficient exploration of the role of parenting in the digital age, particularly with regard to how parental monitoring and involvement influence adolescent internet use across different cultural and socioeconomic contexts.

The rapid expansion of internet access in Ethiopia has brought numerous benefits, including improved communication, access to information, and educational opportunities. However, it also leads to behavioral health problems, such as internet addiction, particularly among adolescents and young adults. Despite the growing relevance of this issue, there is limited empirical evidence on the level of addiction to internet and psychosocial, behavioral, and demographic factors associated with it, in Ethiopia.

Given these limitations, this study is both timely and imperative. It seeks to assess the prevalence and severity of internet addiction among adolescents in Ethiopia and to identify key associated factors, including depression, peer pressure, self-esteem, and parental monitoring. By adopting a more comprehensive framework that encompasses various forms of internet use, the study planned to reveal how prevalent internet addiction is and what factors are linked with condtion.

Culturally, Ethiopian society is characterized by strong familial ties, communal living, and deeply rooted traditions. Excessive and uncontrolled internet use may disrupt these cultural norms by reducing face-to-face interactions, weakening family communication, and altering traditional value systems. Understanding the cultural dimensions of internet addiction is crucial for developing prevention and intervention strategies that are respectful of and aligned with Ethiopian social norms and values

The result of the current research offers critical insights for health professionals, educators, policymakers, and mental health service providers. In particular, the results can guide the development of culturally and contextually appropriate screening tools, evidence-based preventive strategies, and targeted intervention programs tailored to Ethiopian setting. The recommendations may encompass school-based awareness programs, psychological counseling services, digital literacy education, and family-focused interventions that align with local parenting norms and community values. Additionally, this study will offer empirical baseline data to guide national policies on adolescent mental health, digital education, and technology regulation, ensuring that strategies to address internet addiction are informed by the real-life experiences of Ethiopian adolescents.

Importantly, this research represents the first systematic investigation of internet addiction among adolescents in Ethiopia that considers the country's unique cultural and socioeconomic landscape. The insights derived from this study not only addressed a significant knowledge gap but also support the development of culturally sensitive and adolescent-centered mental health and education policies. Ultimately, this research aims to safeguard and enhance the mental, emotional, and academic well-being of Ethiopian adolescents amidst the challenges posed by an increasingly digital world.

CHAPTER TWO

LITERATURE REVIEW

2.1 Overview of the Literature.

Internet use is pervasive among children and adolescents, raising substantial concerns about its impact on brain development, interpersonal relationships, academic achievement, and overall well-being. There is continuing discussion concerning the extent of its prevalence and associated factors. This literature review synthesizes research on the prevalence of internet addiction, its associated psychosocial and behavioral correlates, and its association with depression, academic performance, peer influence, self-esteem, and parental control. By doing so, the review critically examines methodological choices in existing studies and draws attention to theoretical frameworks that underpin the understanding of internet addiction.

2.2 Prevalence of Internet Addiction

Internet addiction has increasingly been observed as a significant public health issue, especially among teenagers, who are especially susceptible due to their developmental stage and widespread access to digital technologies. With the internet becoming deeply embedded in daily life—serving educational, social, and recreational purposes—the potential for excessive or uncontrolled use has markedly increased. International researches showed highly variable rates of internet addiction among adolescents, varying from as low as 2% to as high as 88%, based on factors such as the assessment instruments employed, demographic characteristics of the study population, and cultural context. Previous research has examined specific applications, devices, or online activities, or has addressed general internet use encompassing multiple functions. This review considers both specific and general patterns of excessive internet use and also explores how these patterns differs according to socioeconomic status of the country

2.2.1 High-Income and Upper-Middle-Income Countries

Studies in high-income settings report highly variable prevalence rates for internet addiction, depending on the population, methodology, and assessment tools used. For instance, a systematic review of Internet Gaming Disorder in youth found prevalence rates ranging from 0.2–12.3 % with variation between countries as shown by 0.6% in Norway to 50% in South Korea, with a

median of 5.5% (37) Adolescent problem gambling rates also vary significantly: 0.2–12.3% in Europe, 0.2–4.4% in Oceania and Australia, and 2.1–2.6% in the Americas, rates were 4.4% in Cyprus,1.6% in Denmark, and 2.2% in Germany(54) According to another meta-analysis, the prevalence of internet gaming disorder and general internet addiction worldwide is 2.47% and 7.02%, respectively.(7). Other specific addictions include smartphone (26.99%), social media (17.42%), cybersex (8.23%), and gaming (6.04%) (7)

In Europe, a study across 11 countries found 4.4% of adolescents met criteria for pathological internet use (26) In Asia, smartphone ownership among adolescents ranged from 41% in China to 84% in South Korea, and internet addiction was highest in the Philippines at 21% (27).Internet addiction was detected in 19.1% of Hungarian high students.(55) The prevalence of internet gaming disorder was 0.5% to 1.0%, and the overall prevalence for people with "potentially dysfunctional gaming" was 2.4%, according to another major study that included data from the United States, Canada, United Kingdom and Germany,"(56)

Another data showed about 1%-2% of Italian students , 1%-12% of middle east and 2 to 18% of Asian children and adolescents was found to have problematic internet use(52, 57)

In the Gulf region, prevalence varied widely, from 4% in Saudi Arabia to 82.6% in Doha, Qatar, with an overall average of 33% (29). Country-specific figures also show substantial variation: Hungary (4.5%), China (40%), Jordan (6.3%) (58), Turkey (1.6% confirmed, 16.2% possible addiction) (59), Brazil (50.8%)(60), and Malaysia (36.9%) (41) .

2.2.2 Lower-Middle-Income and Low-Income Countries

Similar difference exists in lower-income settings. In India, Internet addiction among school going teenagers was 21.5% (moderate) and 2.6% (severe)(61) A meta-analysis in African countries found pooled internet addiction rates of 34.53% and 40.3%, with substantial heterogeneity: 44.6% in North Africa and 31.0% in sub-Saharan Africa. Country-specific rates were highly variable, including 20.8%–88.3% in Egypt, 11.6%–21.2% in Tunisia, and 7.7%–44.5% in Nigeria. As the studies included in the meta analysis encompassed both high school and university students, the pooled prevalence indicated higher rates among University students compared to high school students (36.93% vs. 28.87%).(33, 62). Recent Ethiopian studies on

internet addiction showed prevalence rate ranging from 19.4% to 85%, with all studies conducted among undergraduate university students (33, 34, 58).

Prevalence studies are valuable for highlighting the scope of internet addiction across various settings, providing critical insight into the extent of the problem. Many of these studies utilize assessment tools with strong psychometric properties that are widely accepted and validated within the respective study populations. Furthermore, existing meta-analysis and systematic reviews provide a thorough summary, combining information across multiple studies to present a broader perspective on global and regional trends in internet addiction.

Most studies utilized cross-sectional and quantitative study design on teen's internet addiction, which limit the ability to draw causal inferences and provide limited contextual insight. Although these studies offer valuable snapshots of the issue, they often fail to capture the temporal relationships between risk factors and outcomes, as well as the context and purpose of internet use. Longitudinal and qualitative studies remain scarce, particularly in low-income settings. Notably, no study to date has specifically targeted adolescents in Ethiopia, leaving the unique characteristics and experiences of this population largely unaddressed.

Overall, methodological inconsistencies—especially in tool selection, sampling strategies and definition criteria—significantly contribute to variation in reported prevalence. Some studies used small sample sizes, while others relied on convenience sampling methods. Several limited their samples to a single setting or focused exclusively on specific subgroups, such as males or females, thereby neglecting broader population representation. These methodological limitations contribute to bias and reduce the generalizability of the findings. Moreover, most studies have been skewed toward identifying risk factors, with limited attention given to exploring potential protective factors. Studies across setting used different cutoff points leading to confusion when comparing between sites. There are studies which used assessment tools without adequate validation in their contexts, raising concerns about cross-cultural applicability which might lead to inaccurate result.

In summary, prevalence data show substantial variation across and within countries due to differences in methodology, geographic context, socioeconomic status, and cultural influences. Studies that focus on specific behaviors (e.g., gaming, gambling) tend to report lower prevalence than those measuring broader internet addiction.

2.3 Associated Factors

2.3.1 Socio-Demographic Characteristics

Male gender is a common predisposing factor for internet addiction (41, 53, 57, 63-66), though some findings contradict this trend. For example, one study found females to be more affected(67), while another reported no significant relationship with gender, age, or socioeconomic status(59). Urban residence, internet access at home, and prolonged usage are frequently associated with higher addiction risk(53, 57). Other contributing factors include maternal education, being an only child, low household income, and school maladjustment (58, 63, 65). These associations are often context-specific, highlighting the need for localized research.

2.3.2 Psychosocial Factors

Weak family ties and living away from parents are significant predictors of internet addiction (64). High self-esteem and parental support act as protective factors, while peer pressure increases risk (67). Additional risk factors include personal feelings (e.g., loneliness, drug use), social dynamics (e.g., friends and family influence), and environmental aspects (e.g., access to space to gamble)(57, 66) Designing effective prevention and intervention strategies requires investigation into these factors.

2.3.3 Internet-Related Factors

The device used plays a role, with mobile phones more strongly associated with addiction than laptops or desktops (65). Ownership, unrestricted access, and nighttime use are linked to higher risk(6, 67). Extended daily use (over four hours), first early age of use, and the reason for internet use are relevant. Usage for educational or informational purposes is generally protective, while usage for entertainment, social media, online gaming, and viewing explicit content is associated with higher addiction risk (6, 53, 60, 66, 67)

2.3.4 Psychopathology

Internet addiction has been linked to several psychiatric conditions. Most consistently, it is associated with depression (6, 32, 58, 59, 66, 68), with some studies suggesting a bidirectional causal relationship(69). Anxiety disorders are also commonly reported (32, 58, 59, 66, 70), along

with ADHD and autism spectrum disorder(59, 70). Other associations include self-harm, suicide, sleep disturbances, substance use (e.g., smoking, khat), and reduced social functioning (6, 59, 68-70). However, as most studies used cross-sectional design it is difficult to determine causality.

2.3.5 Academic Performance

Numerous studies report an inverse relationship between internet addiction and academic performance, especially at higher levels of addiction (33, 34, 59, 71, 72). However, the internet is also viewed as an essential educational tool, suggesting a dual role. Teachers acknowledge its value in learning while noting that addiction interferes with social interaction and academic success (5, 73)

2.3.6 Context, Perspective, Purpose, and Consequences of Use

Qualitative research provides additional insight into user experiences. Adolescents view the internet as beneficial for accessing information but also recognize associated risks(6). Factors like peer pressure, lack of recreational options, stress, and academic pressures contribute to excessive use(71, 74) . Motives vary by gender—males often seek new social connections, while females use the internet to maintain existing relationships (72).

2.3.7 Parental Involvement

Parenting style is a critical determinant of internet addiction. Supportive and structured parenting practices are protective, while hostility and lax control increase risk (75). Lack of parental control over internet use, particularly time and content restrictions, is associated with higher addiction rates(25)

In summary, the literature reveals wide variability in internet addiction prevalence and associated factors. Consistent findings include higher risk among males and those with depression. However, there remain many contested issues—particularly concerning academic performance and psychosocial well-being. The quality of research varies considerably, with inconsistent methodologies contributing to conflicting results. As such, more context-specific, methodologically sound research is needed to inform effective policies and interventions.

CHAPTER THREE

CONCEPTUAL FRAMEWORK / THEORETICAL FRAMEWORK

Internet addiction has been explained through a variety of theoretical models that operate at both systemic (societal) and individual levels. These frameworks offer important knowledge into the complex mechanisms underlying internet addiction, particularly among adolescents.

At the systemic level, several social theories provide context for how environmental and relational factors contribute to internet addiction. Among the social theory, social–ecological Systems theory explains how internet addiction is shaped by continuous interactions between individuals and their surrounding factors, such as age mates, family members, school and its system and the broader community and social control theory states that weak bonds to conventional social institutions—like family and educational systems—can increase the likelihood of deviant behaviors, including excessive internet use. Among theories at the individual level, the Incentive-Sensitization Theory states that internet use triggers pleasurable neurochemical responses, reinforcing continued engagement and the Dual Systems Theory highlights an imbalance in adolescent brain development—where emotional drives override underdeveloped cognitive control—reducing self-regulation. It is also suggested that other psychological theories offer insights which includes psychoanalytic Theory that views internet addiction as a means to avoid internal conflicts or fulfill unconscious desires, humanistic Theory interprets internet use as an attempt to meet fundamental needs for belonging, esteem, and self-actualization, emotion regulation theory suggests that individuals may use the internet to manage or escape negative emotional states and uses and gratifications theory suggest that people use internet to satisfy their specific needs, such as information seeking, entertainment, or social interaction. Additionally self-control theory specifies poor impulse control as a key factor in susceptibility to addiction, while Self-Escape Theory underscores the place of the internet as a defense mechanism for real-life stressors; Theories which are suggested as more internet-specific include the ACE Model which highlights the role of the internet's anonymity, convenience, and escapism in leading to addictive behaviors, the Cognitive–Behavioral Theory explains internet addiction as the result of cognitive distortions and maladaptive behaviors developed over time and finally the I-PACE Model (Interaction of Person-Affect-Cognition-Execution) combine

personal predispositions, emotional responses, and executive functioning in explaining the development of addiction. (76)

Together, these theories explain multiple factors contributing to the occurrence of internet addiction and highlight the need for both contextual and individual-level approaches to understanding and addressing this growing concern—especially among adolescents in low-resource settings.

This study is grounded in the Bio-Ecological Model of Human Development (BMHD) proposed by Bronfenbrenner and Morris (2006).It suggests human development to be dynamic and reciprocal process involving continuous interactions between individuals and their environments. This framework is especially useful for understanding internet addiction, as it highlights the complex, multi-layered influences on behavior that operate through time.(77)

At the core level of individual, factors such as sex, age, mental health status (e.g., depression), and personality traits (e.g., self-esteem) both influence and are influenced by internet use behaviors. These personal attributes form the core of the model and are crucial in understanding vulnerability to internet addiction.

The microsystem includes immediate environments such as family and peers. Variables like parental internet use, parental control or monitoring of children's internet use, access to digital devices, peer influence, living arrangements, presence of siblings or friends, and parental education and occupation all play important roles. These elements directly affect, and are affected by, an individual's internet use.

Moving outward, the mesosystem represents the interrelations among microsystems. For instance, coordination and communication between parents and schools are essential in preventing and addressing internet addiction. Lack of collaboration—such as poor parental monitoring of academic performance—may lead to unregulated internet use and associated problems.

The exosystem encompasses broader social settings that indirectly influence the individual. These may include extended family, parental workplace environments, mass media, and local government involvement. For example, parents with long working hours may unintentionally allow excessive screen time due to limited supervision.

The macrosystem operates at the societal level and includes cultural values, socioeconomic conditions, and technological norms. Societies with high digital connectivity and cultural acceptance of continuous internet use may inadvertently normalize excessive use, making it more difficult to diagnose and treat cases of internet addiction.

Finally, the chronosystem addresses the dimension of time, reflecting both changes in the individual and in their environments. This includes the progressive increase in access to the internet, evolving digital platforms and devices, and developmental changes in adolescents over time.

In summary, the BMHD provides a comprehensive framework for understanding internet addiction by considering the multifaceted and evolving interactions between the individual and their ecological context across time. In this study, the model is operationalized by mapping specific variables to each level: individual-level variables (e.g., sex, age, depression, self-esteem), microsystem variables (e.g., parental monitoring, peer influence, access to devices), mesosystem dynamics (e.g., parental monitoring and academic performance, indirect school-parent interaction), exosystem factors (e.g., parental work conditions), and macrosystem influences (e.g., cultural norms around internet use and devices and applications used). Chronosystem elements, such as increased internet access over time and adolescent developmental changes, provide temporal context(Grade and age).(78)

This framework will guide data analysis by structuring the investigation of associations between ecological levels and internet addiction severity. For example, multivariate models will assess how individual vulnerabilities interact with microsystem and mesosystem variables. The ecological structure also informs interpretation by helping identify which layers exert the strongest influence and how contextual interactions may shape behavioral outcomes. Ultimately, the model supports a nuanced understanding of where and how interventions can be most effectively targeted—whether at the level of personal skills, family practices, school collaboration, or societal norms.

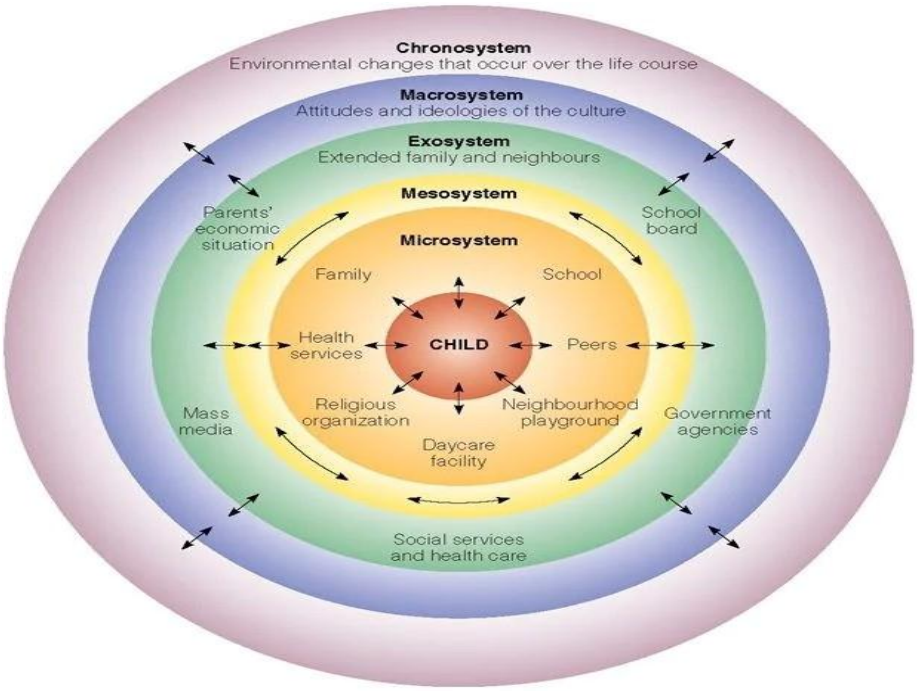

Figure 1: Conceptual Framework (Bronfenbrenner's Ecological Model)

CHAPTER FOUR

RESEARCH QUESTION AND OBJECTIVES

4.1 Research Question

What percentage of adolescents aged 15 to 19 years is affected by internet addiction in Addis Ababa, and what are associated with it?

4.2 Objectives

4.2.1 General Objective

To evaluate the prevalence of internet addiction and to identify factors associated with it among high school students aged 15 to 19 years in Addis Ababa.

4.2.2 Specific Objectives

1. To know the prevalence of internet addiction among high school students aged 15 to 19 years in Addis Ababa.
2. To assess factors associated with internet addiction among adolescents..

CHAPTER FIVE

METHODS AND MATERIALS

5.1 Study Area and Period

This study was undertaken in **Addis Ababa**, the capital city of Ethiopia The estimated population of Addis Ababa is approximately four million, accounting for about 25% of the country's urban population. Among this population, 24% are under the age of 15, and 72% are between the ages of 15 and 65. The average household size is 3.9, based on data from the Central Statistical Agency (CSA, 2013).(79)

Figure 2 Location of the Study (Arada Sub City, Addis Ababa, Ethiopia)

The Ethiopian education system comprises 12 grades, divided into primary education (grades 1–8) and secondary education (grades 9–12). The academic year typically runs from September to July. In the capital city, Addis Ababa, there are a total of 2,210 schools, including 229 secondary schools—78 public and 151 private. According to the 2016 Ethiopian Calendar (EC) Education Bureau Report, 1,199,689 students were enrolled in these schools, of which 24,078 were high

school students. Among them, 19,583 attended public schools, while the remaining students were enrolled in private institutions.

Arada Sub-City was selected as the study site out of the eleven sub-cities of Addis Ababa. This sub-city includes seven public and twelve private schools, with a student population of 7,942 in public schools and 7,671 in private schools. In terms of gender distribution, there are 6,655 male and 8,958 female students, making up the total student population of 15,613(80).Four schools from Arada Sub-City were selected for the study:Tikur Anbessa Secondary School is public school with 1,327 students. The school provides guidance and counseling services, as well as a student clinic, though both services are underdeveloped, Minilik II Secondary School is a large public school with approximately 7,000 students. The school has only one counselor, which is insufficient for its student population, Holy Trinity Cathedral School is a private secondary school with around 1,000 students. The school currently does not have an assigned counselor and Nejashi Academy is a private secondary school with approximately 200 students. The school employs a part-time counselor to serve its students.

Between February 26 and March 25, 2025 the study was conducted in selected public and private secondary schools in Addis Ababa.

5.2 Study Design

To determine the prevalence of internet addiction and its associated factors among adolescents, a cross-sectional study was done in school settings.

5.3 Population

5.3.1 Source Population

The source population consisted of all high school students aged 15 to 19 years attending grades 9 to 11 in both public and private secondary schools in Addis Ababa.

5.3.2 Study Population

The study population included high school students aged 15 to 19 years enrolled in grades 9 to 11 from selected sub-cities and schools in Addis Ababa who were present during the data collection period.

5.4 Eligibility Criteria

5.4.1 Inclusion Criteria

- Students aged 15 to 19 years enrolled in grades 9 to 11 at selected secondary schools.
- Students who provided informed consent (ages 18–19) or assent (ages 15–17), with additional consent obtained from a responsible teacher or school official for those under 18.

5.4.2 Exclusion Criteria

- Students younger than 15 or older than 19 years.
- Students with cognitive or physical impairments that prevented them from understanding or completing the questionnaire.
- Students who declined to provide consent or assent.
- Students attending international schools.

5.5 Sample Size and Sampling Procedure

5.5.1 Sample size determination

Calculation of the sample size was done by taking the prevalence of Internet addiction among adolescent to be 50 %(0.5%),as there is no previous study in adolescence in Ethiopia, 95% confidence level, marginal error of 5%, and 20% non-response rate. Using single population proportion formula, the sample size becomes 384.16. Since the sampling is multistage sampling technique involving schools and classrooms, design effect size of 2 was applied to adjust for potential intra-cluster correlation—i.e., similarities in internet use behaviors among students within the same class or school. This correlation may arise from shared academic environments, peer norms, availability of devices, or similar parental monitoring styles within the same geographic or institutional context. Design effects ranging from 1.5 to 2 are commonly used in adolescent behavioral studies with school-based sampling to compensate for clustering effects and maintain adequate statistical power. And the final total sample size becomes. With the 20% non-response rate, the total sample size will be 960.

$$n = \frac{\left(Z\frac{\alpha}{2}\right)^2 \, \mathrm{p}(1-\mathrm{p})}{d^2}$$

Where:

n = minimum sample size required for the study

Z= standard normal distribution (Z=1.96) with confidence interval of 95% and α=0.05

P= since prevalence data in adolescent in Ethiopia is not known, P= 50% (0.5)

d= tolerable margin of error (d) =5%=0.05

Sample size = $\frac{(1.96)^2 \times (0.5)(1-0.5)}{(0.05)^2} = 384.16$

Since a multistage sampling technique was employed, a design effect of 2 was applied to account for the increased variability. This yielded an adjusted sample size of:

N adjusted=384.16 ×2= 768

To account for a potential 2**0%** non-response rate, the final sample size was calculated as:

N final = $\frac{768=960}{(1-0.2)}$ = 960

Thus, the final sample size for the study was 960 students.

5.5.2 Sampling Procedure

To select participants from both public and private high schools in Addis Ababa a multistage sampling technique was employed. The procedure was conducted as follows:

1. **Sub-city Selection:** One sub-city was purposively selected from the 11 sub-cities in Addis Ababa. The selection was based on **acces**sibilit**y** (ease of transportation for fieldwork) and the diversity of schools (balanced proportion of public and private institutions) in the sub-city. This selection aimed to make the sample inclusive by including a mix of school types representing students with different socio-economic backgrounds, as sub-cities in Addis Ababa exhibit varying characteristics in terms of population density, infrastructure, and school resources. While purposive selection allows for focused data collection in a manageable area, it may introduce selection bias if the

chosen sub-city is not fully representative of the broader population of Addis Ababa. To mitigate this bias, the criteria for selection were explicitly tied to logistical feasibility and diversity, which are important for achieving a balanced and representative sample.Based on the above justification Arada sub-city is selected.

2. **School Selection:** From the Arada sub-city, two public and two private secondary schools were randomly chosen using simple random sampling. This ensured that both public and private school students were included, contributing to the representativeness of the sample.The public schools are Tikur Anbesa and Minilik, while the private schools are Holy trinity Cathedral and Nejashi Academy.
3. **Grade Stratification:** Within each selected school, students were stratified by grade level (grades 9, 10, and 11). One or more sections per grade were randomly selected in consultation with school administrators, based on proportional allocation to achieve the target sample size. This step ensured that each grade level was adequately represented in the final sample.
4. **Student Selection:** Within each selected section, students were chosen using a random sampling method, or, in cases where class size was smaller than required, all eligible students in a class were included. A sampling interval was determined based on the total number of students in the class and the number required. Selected students were invited to participate in the study and provided with informed consent or assent forms as appropriate.

This multistage strategy ensured representativeness across school types, grades, and gender distribution, while also acknowledging the logistical constraints and biases that may arise from the purposive selection of the sub-city.

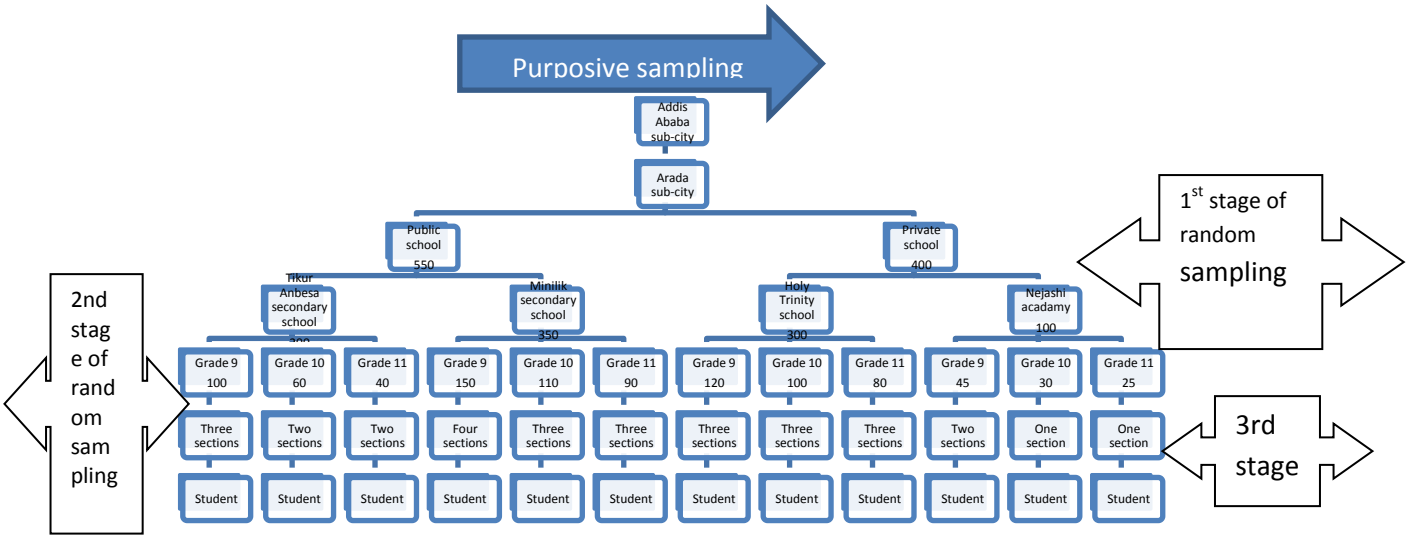

Figure 3. Multistage sampling strategy

5.6 Data Collection Method

5.6.1 Data Collection Instruments

To assess the prevalence of internet addiction and its associated factors, the study employed a structured questionnaire comprising the following components:

- **Socio-Demographic Characteristics**: This section gathers essential background information including age, sex, grade level, religion, type of school (public or private), family structure (nuclear or extended), parental education, parental age, and occupation.
- **Pattern of Electronic Device and Internet Use**: This component explores the duration and nature of internet use among adolescents. It includes items related to time spent online during school and non-school days, types of devices owned, primary motives for internet use, social networking platforms accessed, connection sources (e.g., home Wi-Fi, mobile data), and parental internet usage.
- **Internet Addiction Test (IAT)**: The IAT is a 20-item scale developed to assess internet addiction. Each item is rated on a 5-point Likert scale (0 = "never" to 5 = "always"). Total scores range from 0 to 100, with scores between 0–30 indicating normal use, 31–49 mild addiction, 49 -80 reflecting moderate addiction, and 80–100 representing severe addiction. A score of above 30 is used to identify internet addiction. Validation of IAT

was undertaken in multiple settings, including in Ethiopian adults(24), Sri Lankan adolescents(81), and Chinese students(82) For this study, the Amharic version of the IAT was translated and adapted following standard forward-backward translation procedures. The translation process involved bilingual experts fluent in both English and Amharic. The translated version was pre-tested on a small sample of Ethiopian adolescents to ensure clarity, cultural appropriateness, and comprehension. The reliability of the Amharic version was assessed using Cronbach's alpha, which yielded a value of 0.85, indicating good internal consistency. The construct validity was confirmed by correlating IAT scores with self-reported symptoms of internet addiction, showing a moderate positive relationship.

- **Patient Health Questionnaire-9 (PHQ-9)**: This nine-item tool evaluates depressive symptoms based on DSM-IV criteria. Validation in both adult and adolescent populations, including among Ethiopian adults(83) and Kenyan adolescents(84) has been done. The Amharic version of the PHQ-9 was also subjected to forward-backward translation, and its reliability was tested in a sample of Ethiopian adults. The internal consistency of the Amharic version was found to be satisfactory, with a Cronbach's alpha of 0.89. Construct validity was established by comparing PHQ-9 scores with clinical assessments of depression, showing a strong correlation.
- **Rosenberg Self-Esteem Scale (RSES)**: This 10-item measure assesses global self-worth using a 4-point Likert scale (0 = "strongly disagree" to 3 = "strongly agree"). The RSES has been validated among Eritrean youth (Cronbach's alpha = 0.82)(85), used in many nations(86) and used in previous studies in Ethiopia(34)
- **Resistance to Peer Influence Scale**: This 10-item instrument assesses the degree to which adolescents can resist peer pressure. Respondents choose between two contrasting statements per item and rate the strength of their agreement. The tool has been used in different Africa countries.

Table 1: Summary of Data Collection Instruments

Instrument	Purpose	Number of Items	Response Format	Validation Context
Socio-demographic Questionnaire	To gather background characteristics (e.g., age, sex, family, school)	~15	open-ended	Developed for this study
Electronic Device and Internet Use Pattern	To assess internet use behavior, device ownership, and access frequency	~15	Likert scale and open-ended	Adapted from previous behavioral studies
Internet Addiction Test (IAT)	To measure levels of internet addiction	20	6-point Likert scale (0 = never, 5 = always)	Validated in Ethiopia, China, and Sri Lanka
Patient Health Questionnaire (PHQ-9)	To screen for depressive symptoms	9	4-point Likert scale (0 = not at all to 3 = nearly every day)	Validated in Ethiopia and Kenya
Rosenberg Self-Esteem Scale (RSES)	To assess global self-esteem	10	3-point Likert scale (0 = strongly disagree to 3 = strongly agree)	Validated in Eritrea and used in Ethiopia
Resistance to Peer Influence Scale	To measure susceptibility to peer pressure	10	Forced choice + 4-point agreement rating	Used in Africa

5.6.2 Data Collection Procedure

Collection of data was done using a structured, self-administered questionnaire consisting of six sections with a total of 76 items. Prior to administration, participants was informed of the study's purpose and provided with an informed consent/assent form. Adolescents aged 15–17 provided assent, with additional consent from a parent and teacher, while those aged 18–19 provided direct consent.

Data collection was facilitated by homeroom teachers who received training by principal investigator. A systematic sampling list was shared with schools, and data collection occurred in classrooms during free or break periods. Each session lasted approximately 40 minutes.

To minimize response and selection biases, random sampling techniques was employed, and confidentiality and anonymity was assured. Data collectors provided clear, standardized instructions to ensure consistency and mitigate self-reporting bias.

5.7 Operational Definitions

- **Addiction**: Defined as "poorly controlled preoccupations, urges or behaviors regarding computer use and internet access that lead to impairment or distress".(23)
- **Adolescents**: "Individuals aged 10 to 19 years, representing the transitional phase between childhood and adulthood"(87)
- **Internet Services**: Encompasses activities such as web browsing, email communication, instant messaging, social media use (e.g., Facebook, Twitter), blogging, online gaming, streaming/downloading content, and video conferencing.

5.8 Data Quality Control

To ensure the validity and reliability of data collection, a pre-test was conducted prior to the main study with 10 students from a secondary school. The feedback was used to refine the questionnaire for clarity and appropriateness.

Data collectors and supervisors participated in a one-day training session covering the objectives of the study, administration procedures, and ethical considerations. Daily supervision was conducted by the principal investigator. Completed questionnaires were reviewed at the end of each session for completeness and consistency, and any issues were promptly addressed.

5.9 Methods of Data Analysis

After data collection, all responses were reviewed for completeness and consistency. The data were then coded and entered into an Excel spreadsheet, subsequently exported to STATA version 16 for cleaning and statistical analysis.

Descriptive statistics, including frequencies, percentages, means, and standard deviations, were computed to summarize the socio-demographic characteristics (e.g., age, sex, grade level, parental education) and other relevant variables of the study participants. These statistics provide a clear overview of the sample characteristics

Steps for Data Analysis:

The Analysis process followed bivariate analysis followed by multivariable binary logistic regression

1. Bivariate Analysis:

To explore the relationship between each independent variable and the dependent variable, which is the internet addiction score(internet addiction: addicted vs. not addicted), bivariate analyses were conducted. Chi-square tests were used for categorical variables, while t-tests or one-way ANOVA were employed for continuous variables. Independent variables with a p-value less than 0.25 and with clinical or theoretical relevance were selected as candidates for the multivariable logistic regression model.

2. Multivariable Logistic Regression Analysis:

To identify independent predictors of internet addiction, a binary logistic regression model was constructed. The process followed these steps:

- **Model Selection:** Variables that met the p-value threshold of < 0.25 in the bivariate analysis were included in the initial multivariable model.
- **Variable Inclusion:** Final variable selection was based on both theoretical justification and statistical significance.

3. Controlling for Confounders:

To minimize bias and isolate the true effect of each independent variable, potential confounders—such as socio-economic status, grade level, and parental control—were included as covariates in the regression model. This approach helped ensure that the observed associations were not spurious or due to the influence of these confounding factors..

4. Categorization of Severity of Internet Addiction: Internet addiction severity was categorized into **three levels** based on IAT scores:

1. **Normal use** (IAT score 0–30),
2. **Mild addiction** (IAT score 31–49),
3. **Moderate to severe addiction** (IAT score 50–100).
   Logistic regression was used to model the likelihood of being classified into one of the addiction severity categories.

5. **Statistical Significance**: Statistical significance was determined at a 95% confidence level, with a p-value threshold of less than 0.05. The **odds ratio(ORs) with 95% confidence intervals (CIs) was** reported for each independent variable to interpret the strength and direction of their associations with internet addiction.

5.10 Ethical Considerations

To ensure ethical integrity and the protection of study participants, ethical approval was obtained from the Institutional Review Board (IRB) of the College of Health Sciences, psychiatry department at Addis Ababa University. Prior to the commencement of data collection, formal permission was secured from the administrations of the selected schools.

Informed consent and assent was obtained in accordance with ethical guidelines. Written informed consent was obtained from all participants aged 18 and above. For participants aged 15 to 17, written assent was obtained in the presence of a homeroom teacher, along with written consent from their parents or legal guardians. A consent form was sent home with students under the age of 18 to be signed by their families and returned before data collection begins.

Clear communication on the purpose, procedures, potential risks, and benefits of the study were made to all participants. Participation was entirely voluntary, and students were informed of their right to withdraw from the study at any stage without any negative consequences.

To maintain confidentiality and anonymity, no personal identifiers was collected. Instead, code numbers was used on all data collection forms and during data entry. All collected data was securely stored and used solely for research purposes. In cases where a participant was found to be at risk (e.g., displaying signs of severe psychological distress), their parents or guardians was to be contacted and appropriate referral information for mental health and support services was to be provided.

CHAPTER SIX

RESULTS AND DISCUSSION

6.1 Socio-demographic characteristics of the study participants

Out of 879 participants, 55.2% were female, the majority (81.7%) fell within the 15–17 age groups, and the remaining was between 18 and 19 years old. The participants represented three grade levels: 39.4% were in Grade 9, 32.4% were in Grade 10, and 28.2% were in Grade 11. Regarding religious affiliation, the majority of participants identified as Orthodox Christians (73.3%), followed by Muslims (20.8%), Protestants made up 4.4%, and 1.5% reported belonging to other religions.

Father's Age, Education, and Occupation

Participants reported that 51.9% of their fathers were aged 41–50, while 26.7% were 51–60, 13.8% were 30–40, and 7.6% were 61 or older. The mean age of fathers was 49.2 years (SD ±7.8). In terms of education, 35.8% of fathers had completed secondary education, 35.7% had college or higher education, 16.3% had completed primary education, and 12.2% had less than primary or no formal education. For employment, nearly half (47.2%) were self-employed. Government employees made up 21.2%, while others worked in agriculture (5.2%), held non-standard jobs (7.2%), or were unemployed (6.4%).

Mother's Age, Education, and Occupation

Most mothers were aged 36–45 (58.4%), followed by those aged 46–55 (22.3%), 26–35 (15.2%), and 4.1% were 55 or older. The average maternal age was 42.1 years (SD ±6.9). Regarding education, 35.3% had completed secondary education, and 31.2% had attained college-level or higher education. The rest 26% had primary or less education, with 7.5% reporting no formal education. Occupationally, 31.5% of mothers were self-employed, while 24.3% were housewives and 23.0% worked as government employees. A smaller percentage worked in agriculture (1.9%), few held non-standard jobs (5.9%), or were not engaged in any work (6.4%).

In terms of educational performance, nearly half of the students (48.7%) reported average academic performance, 47.8% reported above-average performance, and 3.5% reported below-average performance.

Most participants (68.9%) live with both parents, while 18.5% live with a single parent. Others lived with guardians or adoptive families (1.9%), grandparents (5.2%), or other relatives and unrelated individuals (3.2%). The majority had siblings (90%) and friends (89.8%), indicating strong peer and family networks. Only 10% lacked siblings, and 10.2% reported not having friends.

6.2 Internet access and usage patterns

Most participants (92%) had internet access. A large number (78%) reported that at least one parent used the internet. Specifically, 29% said only their father used it, 11.3% said only their mother did, and 59.7% indicated both parents used it. In terms of usage, 57.7% spent 0–3 hours per day online, 37.4% spent 4–6 hours, and 4.9% exceeded 7 hours. On weekends, 44.5% used the internet for 0–3 hours, 39.8% for 4–6 hours, and 15.7% for more than 7 hours. Additionally, 48.5% reported using the internet during sleep time, and 22.9% used it during meals.

Parental control was common, with 72.5% indicating that their parents monitored internet use in general. About 70.4% said parents monitored the duration of time spent online, and 65.5% said parents controlled the type of content accessed.

Table 2 : Socio-demographic characteristics of the study participants (high school students) in Addis Ababa, Ethiopia (N = 879), 2025

Variables		Frequency	Percentage
Sex	**Male**	394	44.8%
	Female	485	55.2%
Age group	**15-17**	718	81.7%
	18-19	161	18.3%
Grade levels			
	Grade 9	346	39.4%
	Grade 10	285	32.4%
	Grade 11	248	28.2%
Religion			
	Muslim	183	20.8%
	Orthodox	644	73.3%
	Protestant	39	4.4%
	Others[a]	13	1.5%
Father's age (mean=49.2, SD=±7.8)			
	30-40	121	13.8%
	41-50	456	51.9%
	51-60	235	26.7%
	≥61	67	7.6%
Father's educational level			
	No formal education	33	3.8%
	Not completed primary education	74	8.4%
	Completed primary education	143	16.3%
	Completed secondary education	315	35.8%
	College and above	314	35.7%
Father's occupation			
	Not employed	56	6.4%
	precarious or non-standard form of	63	7.2%

employment		
Agriculture	46	5.2%
Self-employed	415	47.2%
Government employee	186	21.2%
Others	113	12.9%
Maternal age (Mean=42.1, SD±6.9)		
26-35	134	15.2%
36-45	513	58.4%
46-55	196	22.3%
≥55	36	4.1%
Mother's educational level		
No formal education	66	7.5%
Not completed primary education	94	10.7%
Completed primary education	135	15.4%
Completed secondary education	310	35.3%
College and above	274	31.2%
Mother's occupation		
Not in family business or work	56	6.4%
Precarious or non-standard form of employment	52	5.9%
Agriculture	17	1.9%
Self-employed	277	31.5%
Government employee	202	23.0%
Housewife	214	24.3%
Others	61	6.9%
School type		
Private	394	44.8%
Public	485	55.2%
Educational performance		
Above average	420	47.8%

Average	428	48.7%
Below average	31	3.5%
Living arrangement		
Living with both parents	606	68.9%
Living with single parent	163	18.5%
Living with guardians or adopting family	17	1.9%
Living with grandparents	46	5.2%
Living with Others other relatives	28	3.2%
Presence of siblings		
Yes	789	90%
No	90	10%
Presence of friends		
Yes	789	89.8%
No	90	10.2%

Table 3: Internet-related factors		
Internet access		
Yes	809	92%
No	70	8%
Parental internet use		
Yes	686	78%
No	193	22%
Who uses the internet from the family?		
Father	255	29%
Mother	99	11.3%
Both father & mother	525	59.7%
Hours used internet per day on week days		
0-3 hours	507	57.7%
4-6 hours	329	37.4%
>7 hours	43	4.9%
Hours used internet per day on weekends		
0-3 hours	391	44.5%
4-6 hours	350	39.8%
>7 hours	138	15.7%
Sleep time internet use		
Yes	426	48.5%
No	453	51.5%
Mealtime internet use		
Yes	201	22.9%
No	678	77.1%
Parental control of internet use		
Yes	637	72.5%
No	242	27.5%
Parental control of internet use time		
Yes	619	70.4%
No	260	29.6%
Parental control of internet use content		
Yes	576	65.5%
No	303	34.5%

6.3 Resistance to peer pressure

Out of 879 participants, 38.5% lacked resistance to peer pressure.

6.4 Self-esteem

Among the 879 participants, 87.3% demonstrated high self-esteem, while only 12.7% showed low self-esteem.

6.5 Depression

Among the 879 participants, 30.3% (95%CI: 27.3%-33.3%) experienced depression, indicating that nearly one-third of the sample showed signs of depressive symptoms.

In terms of depression severity, 20.3% of participants experienced mild depression, 13.5% had moderate depression, 7.7% reported moderately severe depression, and 9.0% experienced severe depression.

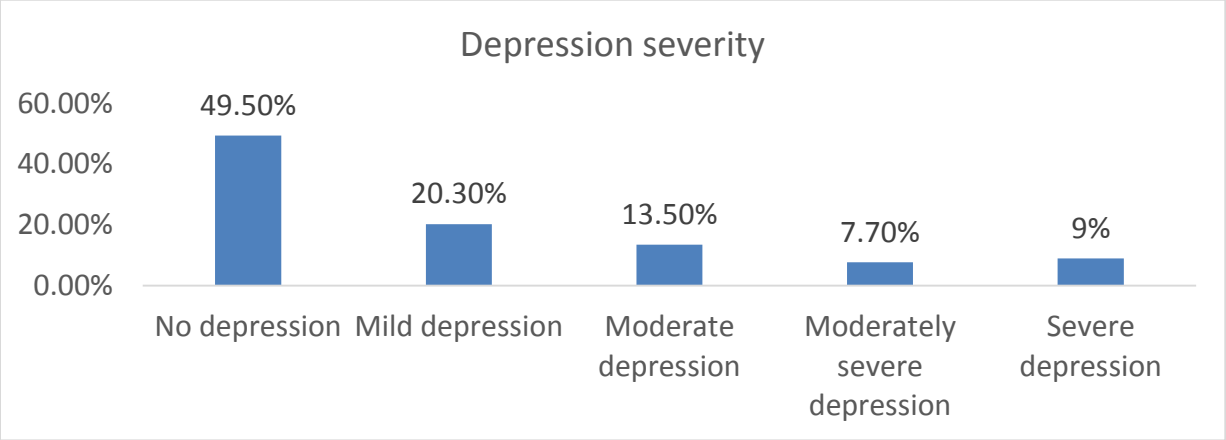

Figure 4: Severity of depressive symptoms among high school students in Addis Ababa, Ethiopia

The prevalence of internet addiction among high school adolescents in Addis Ababa

The prevalence of internet addiction among high school students in this study was found to be 53.1% (95%CI: 49.6%-56.5%). Among those with internet addiction, approximately 29.7% experienced mild addiction, 21.8% had moderate addiction, and 1.6% had severe addiction.

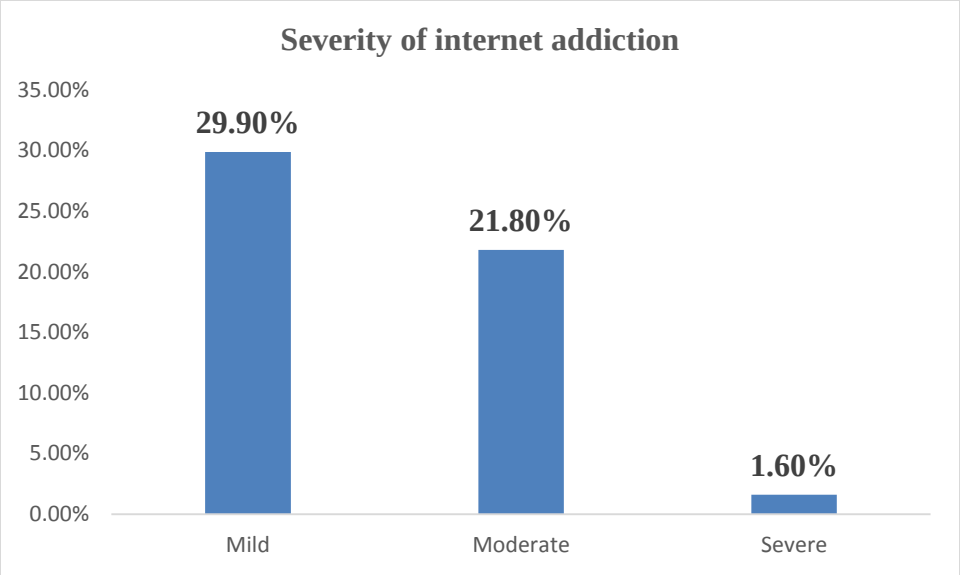

Figure 5: Severity of internet addiction among high school students in Addis Ababa, Ethiopia

6.7 Factors associated with internet addiction among high school students in Addis Ababa, Ethiopia

Table 2 presents the results of bivariate and multivariate logistic regression analyses identifying key factors linked to internet addiction among high school students in Addis Ababa, Ethiopia

In the bivariate logistic regression analysis, several factors showed a potential association with internet addiction (p-value < 0.25) and were included in the subsequent multivariable analysis. These factors included the student's age group (18-19 years), grade level, having friends, weekly and weekend internet usage hours, internet use during sleep and meals, parental controls over internet access, time, and content, as well as self-esteem, depression status, depression severity, and resistance to peer pressure.

Conversely, variables such as sex, parental age, education, and occupation, academic performance, living arrangements, sibling presence, parental internet use, and family members' internet usage were not significantly associated (p-value > 0.25) and were therefore excluded from further analysis.

In terms of demographic factors, students aged 18–19 initially showed 1.47 times higher odds of internet addiction compared to those aged 15–17 in the bivariate analysis (COR = 1.47, 95% CI:

1.038–2.09), though this association became insignificant after adjustment (AOR = 0.99, 95% CI: 0.63–1.59). Grade 10 students had significantly higher odds of addiction than Grade 9 students in both bivariate (COR = 2.212, 95% CI: 1.61–3.05) and multivariable analyses (AOR = 1.59, 95% CI: 1.08–2.35), while no significant difference was found for Grade 11 students after adjustment (AOR = 1.00, 95% CI: 0.63–1.59).

Regarding internet usage patterns, students who spent 4–6 hours online per day had 2.56 times higher odds of internet addiction compared to those using the internet for 0–3 hours (AOR = 2.56, 95% CI: 1.75–3.73). Similarly, weekend internet use of 4–6 hours was associated with 1.66 times higher odds (AOR = 1.66, 95% CI: 1.14–2.43). Additionally, using the internet during sleep time (AOR = 2.83, 95% CI: 1.99–4.04) and mealtimes (AOR = 1.79, 95% CI: 1.16–2.79) significantly increased the likelihood of internet addiction.

Parental and psychological factors also played a critical role. For instance, students whose parents did not control their internet use content had 1.76 times higher odds of internet addiction (AOR = 1.76, 95% CI: 1.12–2.74). Depression was strongly associated with internet addiction (AOR = 6.53, 95% CI: 3.19–13.37), with mild depression showing a 3.25-fold increase in odds (AOR = 3.25, 95% CI: 2.13–4.95), while moderate depression had a weaker but still significant association (AOR = 0.44, 95% CI: 0.20–0.99). Although low self-esteem was significant in the bivariate analysis (COR = 2.85, 95% CI: 1.83–4.46), it was no longer significant after adjustment (AOR = 1.32, 95% CI: 0.76–2.27).

Table 4: Factors associated with internet addiction among high school students in Addis Ababa, Ethiopia (bivariate & multivariate logistic regression) (N = 879), 2025.

Variables	Internet addiction		Bivariate analysis COR (95%CI)	Multivariable analysis AOR (95%CI)
	No	Yes		
Age group				
15-17	349	369	1	1
18-19	63	98	1.47(1.038-2.09)*	0.99(0.63-1.59)
Grade levels				
Grade 9	200	146	1	1
Grade 10	109	176	2.212 (1.61-3.05)*	1.59(1.08-2.35)*
Grade 11	103	145	1.93(1.39-2.68)*	1.00(0.63-1.59)
Presence of friends				
Yes	361	428	1.55(0.99-2.41)	1.19(0.68-2.08)
No	51	39	1	
Hours used internet per week				
0-3 hours	300	207	1	1
4-6 hours	96	233	3.52(2.62-4.73)	2.56(1.75-3.73)*
>7 hours	16	27	2.45(1.29-4.65)	1.79(0.83-3.90)
Hours used internet per weekend				

0-3 hours	247	144	1	1
4-6 hours	124	226	3.13 (2.32-422)	1.66(1.14-2.43)*
>7 hours	41	97	4.06 (2.67-6.17)	1.17(0.67-2.02)
Sleep time internet use				
Yes	113	313	5.38(4.02-7.19)	2.83 (1.99-4.04)*
No	299	154	1	1
Mealtime internet use				
Yes	45	156	4.09(2.84-5.89)	1.79 (1.16-2.79)*
No	367	311	1	1
Parental control of internet use				
Yes	323	314	1	1
No	89	153	1.77(1.31-2.39)	1.18(0.69-2.00)
Parental control of internet use time				
Yes	317	302	1	1
No	95	165	1.82(1.35-2.46)	1.04(0.63-1.71)
Parental control of internet use content				
Yes	306	270	1	1
No	106	197	2.11(1.58-2.81)	1.76(1.12-2.74)*

Self-esteem				
High self-esteem	383	384	1	1
Low self-esteem	29	83	2.85(1.83-4.46)*	1.32(0.76-2.27)
Presence of depression				
Yes	68	198	3.72(2.71-512)*	6.53(3.19-13.37)*
No	344	269	1	
Depression severity				
No depression	285	150	1	1
Mild depression	59	119	3.83(2.65-5.55)	3.25(2.13-4.95)*
Moderate depression	35	84	4.56(2.93-7.08)*	0.44(0.20-0.99)*
Moderately severe depression	21	47	4.25(2.45-7.38)*	0.46(0.19-1.11)
Severe depression	12	67	10.61(5.56-20.23)*	0.58(0.39-1.23)
Presence of resistance to peer pressure				
No	148	190	1.22(0.93-1.61)	
Yes	264	277	1	

1=reference category

*=statistically significant with p-values of <0.05

6.8 Discussion

6.8.1 Prevalence of Internet addiction

This study assessed the prevalence and associated factors of internet addiction among high school students in Addis Ababa, Ethiopia, showing a notably high prevalence of 53.1%, with varying degrees of severity (29.7% mild, 21.8% moderate, and 1.6% severe), significantly higher than pooled estimates from prior studies in Ethiopia (43.42% among university students)(88) and Africa (34.53%)(33). This figure is also notably higher than prevalence rates reported from Asian countries, such as Iran (19.5%) (89)(Alavi et al., 2012) and India (24.6%) (90). The higher prevalence found in our study could be attributed to methodological differences, such as the use of younger participants (high school vs. university students) or variations in assessment tools, distinct coping mechanisms for stressors like academic pressure, differences in sampling strategies, socio-cultural contexts, and increased accessibility to smartphones, internet access, and digital platforms in recent years, particularly in urban areas like Addis Ababa.

6.8.2 Factors associated with Internet Addiction

In terms of sociodemographic factors, age and sex were not significantly associated with internet addiction after adjustment, aligning with findings by Durkee et al. (2012)(26), who found no consistent age or gender trends across European countries, arguing that gender differences are narrowing as both boys and girls engage in different but equally immersive forms of internet use (e.g., social media vs. online gaming). The present study's neutral findings may reflect this evolving parity in internet usage patterns among adolescents in Addis Ababa. However, this contradicts research from South Korea and China where males and older adolescents were more at risk(91, 92). The lack of association in this study may stem from a more uniform exposure to internet use among adolescents regardless of age and gender in Addis Ababa's high schools.

Grade level showed a significant association, particularly among Grade 10 students, who were more likely to be, addicted than their Grade 9 counterparts. This could be due to academic stress or peer dynamics prevalent at that stage, as documented in similar settings(93, 94). Surprisingly, Grade 11 students did not show significant differences, perhaps due to increased academic responsibilities limiting their internet usage.

Internet usage patterns emerged as strong predictors of addiction. Students spending more time online during both weekdays and weekends had significantly higher odds of internet addiction. Notably, nighttime and mealtime internet use were strong indicators, corroborating studies from Turkey and Taiwan, which found nocturnal use and disruption of daily routines as critical behavioral markers of internet dependency (95, 96).

Parental involvement was another critical factor. Students without parental content control were nearly twice as likely to be addicted. This supports previous findings emphasizing the protective role of parental monitoring and guidance in mitigating risky online behavior (97). Interestingly, time supervision and general monitoring were less impactful than specific content control, which may indicate that qualitative engagement by parents (e.g., discussing appropriate content) is more effective than simply limiting time.

One of the most striking findings was the strong association between depression and internet addiction. Students with any level of depressive symptoms, especially mild depression, had significantly increased odds of internet addiction. This is consistent with prior research across various cultural contexts suggesting that adolescents may turn to excessive internet use as a form of escapism or coping strategy(98, 99). The paradoxical result showing moderate depression associated with lower odds compared to mild depression might be due to reduced functional capacity in more severely depressed individuals, leading to less engagement in any activity, including internet use (100).

Interestingly, low self-esteem, though significant in bivariate analysis, lost significance in the adjusted model. This contradicts prior findings that have linked low self-worth with higher susceptibility to internet overuse(50). One potential explanation is that depression might mediate the relationship between self-esteem and internet addiction, overshadowing the direct effect of self-esteem.

Notably, academic performance, parental occupation, and educational status did not show a significant relationship with internet addiction. This aligns with recent findings suggesting that digital behaviors in youth may cut across socio-economic lines due to the widespread availability of mobile devices and free internet access points (101).

6.8.3 Explanation based on theoretical frame work

Several factors are identified to have association with internet addiction, which can be understood within the Bio-ecological framework. At the individual level, key factors included being in Grade 10, using the internet for more than four hours per day, and internet use during sleep and meal times. At the microsystem level, lack of parental control over the content accessed by adolescents was found have significance. These immediate factors may also reflect broader systemic influences. For instance, unrestricted access to digital technology, inadequate digital literacy, and limited regulatory oversight may contribute to excessive use. Furthermore, poor communication between parents and schools may exacerbate the problem by reducing opportunities for coordinated supervision and guidance. Therefore, interventions should address not only the direct findings but also the broader structural and contextual issues that underlie internet addiction among teen agers.

6.9 The strengths and limitations of the study

The current study on internet addiction among high school adolescents in Addis Ababa demonstrates several notable strengths. First, it benefits from a large and diverse sample of 879 students, encompassing varied age groups, grade levels, school type and socio-economic backgrounds, which enhances its statistical power and generalizability within the urban adolescent population in Ethiopia. The use of standardized, psychometrically validated tools, such as the Internet Addiction Test and other psychological assessments, enhances measurement validity and enables comparisons with international findings. The application of multivariable logistic regression allows for adjustment of confounding variables, providing clearer insight into the independent relationships between internet addiction and potential predictors. Additionally, the study's broad consideration of socio-demographic, psychological, and behavioral factors presents a comprehensive view of the issue. Importantly, as one of the few investigations into internet addiction among Ethiopian adolescents, it fills a significant gap in regional research and offers culturally relevant data for future policies and interventions.

However, the study has several limitations. Its cross-sectional design prevents conclusions about causality, making it unclear whether certain context or psychological conditions cause or result from internet addiction. All data were self-reported, introducing potential biases such as recall

bias and social desirability effects, especially in sensitive areas like mental health and internet usage. The study focused exclusively on students in Addis Ababa, an urban area with greater internet access, limiting its relevance to rural populations who may have different experiences and risk factors. It further focused in only one sub=city and doesn't represent the whole of Addis Ababa and as the subcity was purposively selected ot may lead to bias The exclusive use of quantitative methods overlooks the personal and contextual nuances of students' internet use; incorporating qualitative approaches could have enriched the findings. Additionally, certain influential variables, such as sleep quality, academic pressure, and personality traits, were not assessed. Parental monitoring was only evaluated through students' perspectives, which may not accurately reflect actual parental behavior. Finally, while the study was conducted in Ethiopia, it did not deeply explore cultural dynamics that may shape internet use and adolescent behavior, limiting the cultural depth of its conclusions.

6.10 Conclusions

This study found a high prevalence of internet addiction among high school students in Addis Ababa, with over half (53.1%) showing signs of internet addiction, mostly mild to moderate. Key contributing factors included excessive internet use, especially during meals and sleep, limited parental control, and symptoms of depression. Grade 10 students were particularly at risk, while demographic factors like sex or parental education showed no significant impact. The results reflect a growing concern linked to increased internet access and limited digital oversight in urban Ethiopia. These findings call for targeted public health efforts, school-based mental health support, and improved parental guidance. Future longitudinal studies are needed to understand the long-term effects of adolescent internet addiction.

6.11 Recommendations

6.11.1 for mental health professionals

- Incorporate internet use assessments into routine adolescent mental health assessment: Given the strong link between depression and internet addiction, clinicians should evaluate internet use patterns as part of broader psychosocial assessments in schools and outpatient settings.

- Initiate school-based intervention programs in collaboration with education system to address both internet addiction and comorbid conditions such as depression and anxiety. Cognitive-behavioral therapy (CBT) and psychoeducation targeting emotional regulation, healthy coping strategies, and time management should be incorporated.
- Work on building capacity for early identification and referral: Train school counselors and health extension workers to recognize early signs of internet addiction and related psychological distress, and to facilitate timely interventions.

6.11.2. For parents and guardians

- Strengthen parental monitoring and digital supervision: As the study found that lack of parental control over online content significantly increased addiction risk, parents should be encouraged and trained to set clear boundaries on content, screen time, and device use during sleep and meals.
- Model healthy digital behavior: Parental internet use patterns influence adolescent habits. Parents should exemplify balanced and mindful internet use to set appropriate behavioral norms at home.
- Engage in open communication: Parents should create a supportive environment where adolescents feel safe discussing online experiences, stress, and emotional challenges, thereby decreasing the risk of unhealthy coping through excessive internet use.

6.11.3. For Researchers

- Conduct longitudinal studies: To understand causal relationship between internet addiction and mental health variables such as depression, future research should adopt longitudinal designs.
- Explore qualitative perspectives: Qualitative research could uncover the underlying motivations, social contexts, and subjective experiences of adolescents with internet addiction, particularly within the Ethiopian cultural setting.
- Expand to rural and peri-urban settings: Since this study was urban-focused, future research should assess prevalence and associated factors in rural areas to understand geographic and infrastructural influences on adolescent internet use.

- Assess intervention effectiveness: It is necessary to look at the impact of school- or community-based intervention programs on reducing internet addiction and improving adolescent well-being.

6.11.4. For policymakers

- Incorporate digital wellness education into the national school curriculum: Adolescents should be taught about responsible internet use, digital citizenship, and the risks of overuse through formal educational modules.
- Support community-based mental health initiatives: Governmental support for school mental health programs and youth-focused outreach campaigns can play a crucial role in prevention and timely management.
- Develop national guidelines for screen time and electronic media utilization in adolescents, particularly in the context of Ethiopia's growing internet penetration.
- Strengthen legal and policy frameworks for online safety: Regulating the type of content accessible to minors, enforcing child-safe search protocols, and promoting age-appropriate digital platforms should be national priorities.
- Facilitate public-private partnerships: Collaborate with telecom providers, tech companies, and NGOs to develop culturally appropriate digital literacy resources and parental control tools for families.

CHAPTER SEVEN

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Annex-1: Participants' Information Sheet

Department REC Reference Number:

You will be given a copy of this information sheet.

Title of the project: Internet Addiction Among High School Students: Prevalence and Associated Factors

Principal Investigator: Rehana Abdurahman, MD, Psychiatrist

Supervisor: Dr. Yonas, Dr. Wubalem

Coordinating Office: Addis Ababa University, School of Medicine, Department of Psychiatry

We would like to invite you to participate in this research project. You should only participate if you want to; choosing not to take part will not disadvantage you in any way. Before deciding whether you would like to take part, it is important to understand why the research is being conducted and what your participation will involve. Please take time to read the following information carefully. You may also discuss it with others if you wish. If anything is unclear or if you would like more information, please ask us.

This study is being conducted by Addis Ababa University.

Aims of the Research

The purpose of the study is to assess the prevalence of internet addiction among adolescents in Addis Ababa and explore the factors associated with it.

Who Are We Recruiting?

We are recruiting high school students in grades 9 to 11, aged between 15 and 19 years.

What Will Happen If You Agree to Take Part?

If you agree to participate, you will be asked to complete a questionnaire. The questionnaire will take approximately 20 to 30 minutes to complete and will be self-administered during school hours. The questionnaire consists of 6 sections with a total of 76 questions.

Purpose of the Study

The main goal of this study is to assess the prevalence of internet addiction in adolescents and to examine the factors associated with it.

Procedure

You will be asked to complete a questionnaire that will take about 20-30 minutes. It will be self-administered during school hours.

Risks

There are no known risks associated with participating in this study. There will be no negative consequences if you choose not to participate or decide to withdraw at any time.

Benefits

The purpose of this study is to gain a better understanding of how prevalent internet addiction is among adolescents and to identify the factors associated with it. This information may help to improve mental health services and support strategies for managing internet addiction in Ethiopia and similar countries.

After the study is completed, you will be informed of the findings through a meeting, a leaflet, or announcements in the school. Additionally, if it is found that you have internet addiction, you will be given the option to access health care services.

Incentives

There is no monetary incentive or payment for participating in this study.

Confidentiality

The information you provide will remain confidential. Only the research team will have access to your personal data.

Voluntary Participation

Participation in this study is entirely voluntary. If you agree to participate, you will sign a consent form. You can withdraw from the study at any time before or after the data collection without any consequences. If you withdraw, your data will not be used.

Support for Participants

If you experience any distress or issues related to internet addiction, you can consult a local psychiatric clinic for help. Contact details and clinic locations will be provided.

Ethics Committee Office

For any ethical concerns or questions, you can contact the Ethics Committee office at: +251 115 538734

Questions and Concerns

If you have any questions about the study or concerns about your participation, feel free to contact the principal investigator:

Rehana Abdurahman, MD
Principal Investigator
Phone: 0911423921 (Monday to Friday during working hours)
Email: kedddos@gmail.com

If You Experience Any Harm

If you experience any harm as a result of participating in this study, you can contact the Department of Psychiatry at Addis Ababa University for advice and assistance:

Department of Psychiatry, School of Medicine, Addis Ababa University
Telephone number: [Insert Number]

Annex II: Informed Consent Form

Please complete this form after reading the Information Sheet and/or listening to an explanation about the research.

Title of Study: *Internet Addiction Among High School Students: Prevalence and Associated Factors*

REC Ref number: [Insert Number]

Thank you for considering participating in this research. The researcher has explained the project to you before asking for your consent. If you have any questions, please ask the researcher before making a decision. You will be given a copy of this consent form to keep for your records.

Consent Details:

I understand that this research is being conducted as part of the postgraduate degree requirements for a specialty certificate in Psychiatry (Master's degree in Clinical Psychology).

I understand that I can withdraw from the study at any time without giving any reason, and I can request that my data be withdrawn until it is published.

I consent to the processing of my personal data for the purposes described. I understand that my personal data will be handled in accordance with national data protection rules.

If I am selected for a more detailed interview, I consent to the interview being audio-recorded.

I understand that the information I provide will be used in a report, and my identity will remain confidential in any publication.

I agree that the anonymized data from this study may be used for future research.

Participant's Statement:

I, _____, agree that the research project named above has been explained to me and that I understand what the study involves. I agree to participate in the study.

Signature: _____

Date: _____

Witness Statement (If the participant is not literate):

I, _____, confirm that I have explained the research project to the participant, _____, to their satisfaction, and they have agreed to participate in the study. The Information Sheet has been read to them, and they understand what the study involves.

Witness Signature: _____

Date: _____

Investigator's Statement

I, _____, confirm that I have thoroughly explained the nature, objectives, demands, and any foreseeable risks (where applicable) associated with the proposed research to the participant.

ቅጥያ 1፤ የተሳታፊዎች የመረጃ ቅጽ

Department REC Reference Number: _____

የዚህ የመረጃ ቅፅ አንድ ኮፒ ይሰጥዎታል

የፕሮጀክቱ ርእስ: _ የኢንተርኔት ሱሰኝነት በሁለተኛ ደረጃት ምህርት ቤት ተማሪዎች፤ የስርጭት መጠን እና ተያያዥ ምክንያቶች

ዋናተመራማሪ: _ሪሃና አብዱራህማን (ዶ/ር፤ሳይካትሪስት)

ሱፐርቫይዘር: ዶ/ር ዮናስ እና ዶ/ር ዉብዓለም

ማስተባበሪያ ቢሮ: አዲስ አበባ ዩኒቨርሲቲ፤ የሕክምና ትምህርት ቤት፤የሥነ አእምሮ ትምህርት ክፍል

በዚህ የምርምር ፕሮጀክት ላይ እንዲካፈሉልን ጋብዝዎት እንፈልጋለን። መሳተፍ ያለብዎት ከፈለጉ ብቻ ነው፡፡ በዚህ ነገር ላለመካፈል በመምረጣችሁ በምንም መንገድ አይጎዱም። በዚህ ምርምር ለመካፈል ከመወሰንዎ በፊት ምርምሩ ለምን እየተደረገ እንደሆነና ተሳትፎ ማድረግዎ ምን ነገሮችን እንደሚያካትት መረዳት አስፈላጊ ነው። እባክዎ ጊዜ ወስደው የሚከተሉትን መረጃዎች በጥንቃቄ ያንብቡ፤ ከፈለጉ ከሌሎች ጋር ተወያዩበት። ግልጽ ያልሆነ ነገር ካለ ወይስ ተጨማሪ መረጃ ማግኘት ከፈለጉ እኛን ይጠይቁን፡፡

ይህ ጥናት የሚካሀድዉ በአዲስ አበባ ዩኒቨርስቲ ነው።

የጥናቱ ዓላማ

የጥናቱ ዓላማ በጉርምስና ዕድሜ ላይ የሚገኙ የአዲስ አበባ የሁለተኛ ደረጃ ትምህርት ቤት ተማሪዎች ላይ የኢንተርኔት ሱሰኝነት ስርጭትን እና ከዚህ ጋር ተያያዥነት ያላቸው ነገሮች መመልከትነው።

የምንመለምለው ማንን ነው?

ከ9 እስከ 11 ክፍል የሚገኙና ዕድሜያቸው ከ15 እስከ 19 የሆነ የሁለተኛ ደረጃ ትምህርት ቤት ተማሪዎች ይመልማሉ

በዚህ ጉዳይ ለመካፈል ከተስማሙ ምን ይሆናሉ?

ጥያቄዎቹን በራስዎ ለመመለስ በአማካይ 30 ደቂቃ ይፈጃል

የዚህ የመረጃ ቅጽ ዓላማ እንዲሳተፉ የጠየቅንዎትን የምርምር ፕሮጀክት ለመግለጽ ነው።የጥናቱን ዓላማና በዚህ ጥናት ውስጥ ምን ተሳትፎ እንደሚያደርጉ ይዘረዝራሉ።

ዓላማ: የጥናቱ ዓላማ በጉርምስና ዕድሜ ላይ በሚገኙ ወጣቶች ላይ የኢንተርኔት ሱሰኝነት ስርጭትን መገምገም እና ተያያዥነት ያላቸው ነገሮች መመልከት ነው።

ቅደም ተከተል፡- በትምህርት ሰዓት መጠይቁ በራስዎ የሚሞላ ይሆናል።ጥያቄው በድምሩ 76 ጥያቄዎች ያሉት 6 ከፍሎች አሉት።ከ20-30 ደቂቃ ይወስድብዎታል።

አደጋዎች፡- በዚህ ጥናት ከመሳተፍ ጋር ተያይዘው የሚመጡ አደጋዎች የሉም። በዚህ ጥናት ለመሳተፍ ፈቃደኛ ካልሆናችሁ ምንም ጉዳት አይደርስባችሁም።

ጥቅሞች፡- ዓላማው በጉርምስና ዕድሜ ላይ የሚገኙ ወጣቶች የኢንተርኔት ሱስ ምን ያህል እየተስፋፋ እንዳለና ከዚህ ሱስ ጋር ተያይዘው የሚመጡ ነገሮች ምን እንደሆኑ ይበልጥ ማወቅ እና ይህ ሁኔታ ያለባቸውን ሰዎች እንዴት መርዳት እንደሚቻል ለማወቅ ነው።

ሊገኙ የሚችሉ ጥቅሞች

የተገኘው መረጃ በኢትዮጵያም ሆነ በሌሎች ተመሳሳይ ሀገራት የአዕምሮ ጤና አገልግሎትን ለማሻሻል እንደሚረዳ ተስፋ እናደርጋለን። አጠቃላይ ጥናቱ ከተጠናቀቀ በኋላ ያገኘናቸውን ነገሮች ስብሰባ ላይ እንድትገኙ በመጋበዝ፣ በራሪወረቀቶችን በመስጠት አሊያም በትምህርት ቤቱ ውስጥ ያገኘነውን ውጤት በማሳወቅ እናሳውቃችኋለን። በተጨማሪም የኢንተርኔት ሱስ እንዳለብህ ከታወቀ የጤና እንክብካቤ የማግኘት ምርጫ ይሰጥሃል፡፡

ማበረታቻዎች፡- በዚህ ጥናት ብመካፈል የሚሰጥ ጥቅማ ጥቅምም ሆነ ክፍያ የለም።

ምስጢራዊነት - ይህ የጥናቱ መረጃ በሚስጥር ይያዛል። የግል መረጃዎን ማግኘት የሚችሉት የምርምር ቡድኑ አባላት ብቻ ናቸው።

የፈቃድኝነት ተሳትፎ -

ተሳትፎ በፈቃደኝነት ላይ የተመሰረተ ነው። በምርምሩ ለመካፈልፈ ቃደኛ ከሆኑ የፈቃደኝነት ስምምነት ላይ ይፈርማሉ። ጥናቱ ከመጀመሩ በፊት ወይም መረጃዎችን ማሰባሰብ ከተጀመረ በኋላ የማቋረጥ አማራጭ አለዎት፡፡ ከጥናቱ ተሳትፎዎን ማቋረጥዎ በእርስዎ ላይ ምንም አይነት ተጽእኖ አይኖረዉም፡፡

በኢንተርኔት ሱስ ምክንያት ችግር ወይም ጭንቀት ካለብህ በአካባቢህ የሚገኝ የሥነ አእምሮ ሕክምና ክሊኒክ ማማከር ትችላለህ (ከዚህ በታች ሊንኮች ይሰጣሉ)።

የሥነ ምግባር ኮሚቴ ጽሕፈት ቤት: +251 115 538734

ጥያቄዎች እናስጋቶች

……

ዋና ተመራማሪ:

•ሪሃና አብዱራህማን፤ በስራ ሰዓት ከሰኞ እስከ አርብ በስልክ ቁጥር 0911423921 በአዲስ አበባ ዩኒቨርሲቲ ማነጋገር ትችላላችሁ።

ዋና ተመራማሪ:ዶ/ር ሪሃናአብዱራህማን

የኢሜይልአድራሻ: kedddos@gmail.com

በዚህ ለመካፈል ወይም ላለመሳተፍ የመወሰን መብት የእርስዎ ነው። በዚህ ለመካፈል ከወሰኑ በማንኛውም ጊዜም ሆነ ምንም ምክንያት ሳይሰጡ የመውጣት ነፃነት አለዎት።

ይህ ጥናት በማንኛውም መንገድ ጉዳት ካደረሰባችሁ ከዚህ በታች ያሉትን አድራሻ በመጠቀም ዝርዝር ምክሮችና መረጃዎች ማግኘት ይችላሉ፤አዲስአበባ ዩኒቨርስቲ የስነ-አእምሮ ት/ትክፍል፣የጤናሳይንስኮሌጅ

ስልክቁጥር: ……

ቅጥያ 2፡የፈቃደኝነት መጠየቂያ ቅጽ

ውድ የጥናቱ ተሳታፊዎች፤

ከላይ የተሰጠዉን ማብራሪያ እና የዚህን ጥናት ዓላማ ከተረዱ በሁዋላ በዚህ ጥናት ለመሳተፍ የእርስዎን ፈቃደኝነት ለመጠየቅ እወዳለሁ፡፡

በዚህ ጥናት ለመሳተፍ ወይም ላለመሳተፍ ሙሉ በሙሉ የእርስዎ ውሳኔ ነው፡፡ ለመሳተፍ ከወሰኑ በማንኛውም ጊዜ ምንም አይነት ምክንያት መስጠት ሳያስፈልግዎ ተሳትፎዎን ማቋረጥ፤መረጃዉን መከልከል ወይም ለመመለስ ፈቃደኛ አለመሆን ይችላሉ፡፡ ከጥናቱ ተሳትፎዎን ማቋረጥዎ በእርስዎ ላይ ምንም አይነት ተጽእኖ አይኖረዉም፡፡

በጥናቱ ወቅት የምትሰጣቸው መረጃዎች በሙሉ በምሥጢር ይያዛሉ። ለእነዚህ ጥያቄዎች የምታደርጉት መልስ በጉርምስና ዕድሜ ላይ የሚገኙ ወጣቶች የኢንተርኔት ሱስ ምን ያህል ስፋት እንዳለው እንድንገነዘብ ይረዳናል። በማንኛውም ጊዜ የመጠየቅ እናማብራሪያ የማግኘት መብት አለዎት። ጥርጣሬ ወይም ጥያቄ ካላችሁ ከላይ ያለውን አድራሻ ተጠቅመዉ ከምርምር ቡድኑ ጋር መገናኘት ይችላሉ።

በዚህ ጥናት ለመሳተፍ ከተስማሙ እባክዎ ስምምነትዎን በፊርማዎ ያረጋግጡ።

የተሳታፊ ፊርማ_____ ቀን_____

የመረጃ ሰብሳቢ ፊርማ_____ ቀን_____

የመንግስት		የግል	
ቅዱስ አማኑኤል ስፔሻላይዝድ ሆስፒታል	0112 75 76 99	ለቤዛ የአዕምሮ ህክምና ማዕከል 0116 66 29 66/ 0966 11 11 11	
ቅዱስ ጴጥሮስ ሆስፒታል 0112 75 37 05/ 75 20 13		ስጦታ የአዕምሮ ህክምና ማዕከል 0113 69 27 74/ 0911 91 27 49	
ኤካ ኮተቤ አጠቃላይ ሆስፒታል		አቢቹ የአዕምሮ ህክምና ክሊኒክ	0941 76 76 76
ቅዱስ ጳውሎስ ሆስፒታል	0112 75 01 25	ሪዳ የአዕምሮ ጤናማማክር አገልግሎት	0966 13 73 69
ዘውዲቱሆስፒታል	0115 51 80 85	ሃሌ ሉያ ሆስፒታል	0114 70 42 42
ጦርሃይሎችሆስፒታል	0113 71 20 20	ተክለሃይማኖት አጠቃላይ ሆስፒታል	0111 56 11 14
ፖሊስሆስፒታል	0115 15 50 17	አሚንአጠቃላይሆስፒታል 0116 18 03 69/ 0947 10 10 10	
ጥቁርአንበሳሆስፒታል 0115 51 12 11/ 50 59 80		ቅዱስ ገብርኤልሆስፒታል	0116 18 73 45
የካቲት 12 ሆስፒታል	0116 62 34 39	ቅዱስያሬድሆስፒታል	0116 45 46 97
ራስደስታሆስፒታል	0115 55 33 99	ኢትዮጠቢብሆስፒታል 0112 13 93 00/ 0935 40 20 78	
ዳግማዊምኒልክሆስፒታል	0111 55 04 44	አዲስህይወትሆስፒታል	0116 18 04 49
ጥሩነሽቤጂንግሆስፒታል	0114 34 23 30	ላንድማርክሆስፒታል	0115 52 57 19
አለርትሆስፒታል	0115 52 71 00/ 0947 81 81 81	ግሩምሆስፒታል	0112 75 76 76
		ዘንባባጀነራልሆስፒታል	0114 43 19 92
		አብርሆትየአዕምሮጤናማማክርአገልግሎት	0989 73 73 72

ቅጥያ 2፤ የፈቃደኝነት መጠየቂያ ቅጽ

እባክዎ መረጃ ወረቀቱን ካነበቡ እና/ወይም ስለምርምሩ ማብራሪያ ካዳመጣችሁ በኋላ ይህንን ፎርም ይሙሉ።

የጥናቱርእስ: _ <u>የኢንተርኔትሱሰኝነትበሁለተኛደረጃትምህርትቤትተማሪዎች፤የስርጭትመጠንእናተያያዥምክንያቶች</u>

REC Ref number:

በዚህ ጥናት ለመካፈል ስላሰባችሁ አመሰግናችኋለሁ ። የጥናቱአስተባባሪ በዚህ ሥራ ለመካፈል ከመስማማትዎ በፊት ስለ ፕሮጀክቱ ለእርስዎ ማስረዳት ይኖርበታል። ከመረጃ ወረቀትወይምቀደምሲልከተሰጠዎት ማብራሪያ የሚነሱ ጥያቄዎች ካሉዎት፤ ለመሳተፍ ወይም ላለመሳተፍ ከመወሰንዎ በፊት እባክዎ ተመራማሪውን ይጠይቁ። በማንኛውም ጊዜ ለመመልከት እንዲችሉ የዚህን ስምምነት ፎርም ቅጂ ይሰጥዎታል።

ይህ የምርምር ስራ በሳይክያትሪ የድህረ ምረቃ ዲግሪ (በክሊኒካል ሳይኮሎጂ የማስተርስ ዲግሪ) ከፊል ማማያ የሚሰራ እንደሆነ ተረድቻለሁ፡፡

ከዚህ በኋላ ተሳትፎ ማድረግ ካልፈልኩ ወይም ልጄ በዚህ ፕሮጀክት ላይ እንዲሳተፍ ካልፈልኩ ጉዳዩ ለሚመለከታቸው ተመራማሪዎች ማሳወቅና ምንም ምክንያት ሳይሰጥ ወዲያውኑ ከጥናቱ መዉጣት እንደምችል ተረድቻለሁ። ከዚህም በተጨማሪ፤ መረጃዎቼ እስኪታተሙ ድረስ ከጥናቱ ማውጣት እንደምችል ተረድቻለሁ ።

ለተገለፁልኝ ዓላማዎች የግል መረጃዎቼን ለመስጠት እስማማለሁ። እንዲህ ዓይነቱ መረጃ በሀገሪቱ የመረጃ ጥበቃ ደንብ መሰረት እንደሚስተናገድ ገብቶኛል።

ለዝርዝር ቃለ መጠይቅ እንድጠየቅ ከተመረጥኩ፤ ያንን ቃለ መጠይቅ በመቅረጽድምጽ እንዲቀረጽ ፍቃድኝነትን ሰጥቻለሁ።

የሰጡን መረጃ እንደ ሪፖርት ይታተማል። እባክዎን ምስጢራዊነቱ እና ማንነትዎ በማይታወቅ መልኩ እንደሚዘጋጅና እና ከማንኛውም ጽሑፍ የእርስዎን ማንነት ለይቶ ማወቅ እንደማይቻል ልብ ይበሉ፡፡

የምርምር ቡድኑ ወደፊት ለሚደረጉ ምርምሮች ስምሳይገለጽ መረጃዎችን ሊጠቀም ይችላል በሚለው ሐሳብ እስማማለሁ።

የተሳታፊ ስምምነት መግለጫ

እኔ_____

ከላይ የተጠቀሰው የምርምር ፕሮጀክት በሚገባ ስለተብራራልኝ በጥናቱ ለመካፈል ተስማምቻለሁ። ከላይ የተጻፉትን ማስታወሻዎችም ሆነ ስለ ፕሮጀክቱ መረጃ ቅጽ አንብቤ፣የምርምር ጥናቱ ምን እንደሚያካትት ተረድቼአለሁ።

ፊርማ_____

ቀን_____

የምስክር ቃል (ተሳታፊው ማንበብና መፃፍ የማይችል ከሆነ)

እኔ_____

ከላይ የተጠቀሰው የምርምር ፕሮጀክት በሚገባለ_____ (ተሳታፊ) እንደተብራራላትና በጥናቱ ላይ ለመሳተፍ መስማማቷን ተመልክቻለሁ። ከላይ የተፃፉት ማስታወሻዎችም ሆኑ ስለ ፕሮጀክቱ የኢንፎርሜሽን ወረቀት ለተሳታፊዋ ተነበዉላታል። የምርምር ጥናቱምን እንደሚያካትትም ተረድታለች።

ፊርማ_____

ቀን_____

የተመራማሪዉ ስምምነት መግለጫ

እኔ_____ ለተሳታፊው ስለጥናቱ ምንነት፣ ጥናቱ ምን እንደሚፈልግ እና ማንኛውም ሊደርስ የሚችለው አደጋ በጥንቃቄ እንዳብራራሁ አረጋግጣለሁ።

ፊርማ_____

ቀን_____

Annex III: socio-demographic questionnaire

1 Respondents' Gender

Male Female

2 Respondents' Age

15 to 17 18 to 19

3 Respondents' grade

9^{th}grade 10^{th}grade 11^{th}grade

4 Respondents Religious Affiliation

Catholics Anglican Pentecostal Adventist Muslim Others

5 Father's age

6 Father's educational level

Illiterate not completed elementary school elementary school completed secondary school completed college and above

7 Occupation of Respondents' father

Not employed parents Casuals or menial jobs Farmer or Agri. Activities

Self-employed or Business Professionals (office) jobs Others

8 Mother's age

9 Mother's educational level

Illiterate not completed elementary school elementary school completed secondary school completed college and above

10 Occupation of Respondents' Mother

Not employed parents Casuals or menial jobs Farmer/Agri. activities Self –employed/ Business Professionals (office) jobs Housewife others

11 Respondents' school

12 Respondents' Academic Performance

Above average Average below Average

13 Whom respondent is living with

Both Biological Parents Adopted Parents Single Parents Guardian/Foster Parents Grandparents Others relatives others

14 Does the responded has sibling

Yes No

ቅጥያ3፡ የሶሺዮ- ዴሞግራፊ ጥያቄዎች

1 የምላሽ ሰጪዉ ፆታ

ወንድ ሴት

2 የምላሽ ሰጪዉ ዕድሜ

15 to 17 18 to 19

3 የምላሽ ሰጪዉ የትምህርት ደረጃ

9thgrade 10thgrade 11thgrade

4 የምላሽ ሰጪዉ ሀይማኖት

ካቶሊክ የአንግሊካን የጰንጠቆስጤ/ፕሮተስታንት አድቬንቲስት ሙስሊም ሌላ

5 የምላሽ ሰጪዉ አባት ዕድሜ

6 የምላሽ ሰጪዉ አባት የትምህርት ደረጃ

መደበኛት/ትያልተማረ የአንደኛ ደረጃ ትምህርት ያላጠናቀቀ የአንደኛ ደረጃ ትምህርት ያጠናቀቀ የሁለተኛ ደረጃ ትምህርትያጠናቀቀ ኮሌጅና ከዚያ በላይ

7 የምላሽ ሰጪዉ አባት ስራ

ወላጆቹ የቅጥር ስራ ዉስጥ አይደሉም የተለመዱ ወይም ዝቅተኛ የሥራ መስኮች ግብርና የራስ ስራ ወይም ቢዝነስ የቢሮ ስራዎች ሌላ

8 የምላሽ ሰጪዉ እናት ዕድሜ

9 የምላሽ ሰጪዉ እናት የትምህርት ደረጃ

መደበኛት/ትያልተማረ የአንደኛ ደረጃ ትምህርት ያላጠናቀቀ የአንደኛ ደረጃ ትምህርት ያጠናቀቀ የሁለተኛ ደረጃ ትምህርት ያጠናቀቀ ኮሌጅና ከዚያ በላይ

10 የምላሽ ሰጪዉ እናት ስራ

ወላጆቹ የቅጥር ስራ ዉስጥ አይደሉም የተለመዱ ወይም ዝቅተኛ የሥራ መስኮች ግብርና የራስ ስራ ወይም ቢዝነስ የቢሮስራዎች የቤት እመቤት
ሌላ

11 የምላሽ ሰጪዉ ት/ት ቤት

12 የምላሽ ሰጪዉ የት/ትአፈጻጸም

ከአማካይ በላይ አማካይ ከአማካይ በታች

13 መልስ ሰጪው ከማን ጋር ነው የሚኖረው

ከሁለቱም ወላጆችጋር ከአሳዳጊ ወላጆች ጋር ከእናት ወይም አባት ጋር ብቻ ጠባቂ/አሳዳጊ ወላጆችጋር ከአያቶችጋር ሌሎች ዘመድ አዝማድሌላ

14 ምላሽ ሰጪዉ ወንድም ወይም እህትአለው?

አዎ የለዉም

Annex IV: Internet- Related questions

1 Do you have access to internet?

Yes No

5 If yes where?

Home School Other

2 If you answer yes to the above question what device do you use?

TV Mobile phone Smart phone Computer Tablet Other

3 Do you own the device or share with others?

Own Share

4 What application do you use (Tic all that applies)

Face book game TikTok Twitter YouTube Telegram Film Other

5 What is the purpose of your use?

Information Education Entertainment No purpose

6 Do your parents use internet

Yes No

7 How many hours do you spend using electronics during week days?

8 How many hours do you spend using electronics during weekends?

9 Do you use internet use at bedtime?

Yes No

10 Do you use internet use during mealtimes?

Yes No

11 Do your parent control over your internet use?

Yes No

12 Do your parent control over your time spent online?

Yes No

13 Do your Parent control over your online-viewed content?

Yes No

ቅጥያ 4፡ ከኢንተርኔት ጋር ተዛማጅ ጥያቄዎች

1 የኢንተርኔት አገልግሎት ማግኘት ይችላሉ?

አዎ ማግኘት አልችልም

2 መልሱ አዎ ከሆነ፤ከየትነዉ የሚያገኙት?

ከቤት ከት/ቤት ከሌላ

3 ከላይ ለተገለጸው ጥያቄ አዎ የሚል መልስ ከሰጡ፤የትኛውን መሣሪያ ነው የሚጠቀሙት?

ቲቪ ሞባይል ስልክ ስማርት ስልክ ኮምፒዩተር ታብልትሌላ

4 ከላይ የተመረጠዉ መሣሪያው ባለቤት ነህ ወይስ ከሌሎች ጋር የምትጋራዉ መሣሪያ ነው?

የራስነዉ ከሌሎች ጋር የምጋራዉ መሣሪያነው

5እርስዎ ምን መተግበሪያ ይጠቀማሉ (የሚጠቀሙት ላይ ሁሉ ምልክት ያድርጉ)

ፌስቡክ ገምቲክቶክትዊተር ዩቲዩብ ቴሌግራም ፊልም ሌላ

6የምትጠቀምበት ዓላማ ምንድን ነው?

መረጃ ለማግኘት ለትምህርት ለመዝናናት (መዝናኛ) ዓላማ የለዉም

7ወላጆችህኢንተርኔትይጠቀማሉ?

አዎ አይ

8 መልሱ አዎ ከሆነ፤ማን ነዉ የሚጠቀምዉ?

አባትእናት ሁለቱም

8በሳምንትቀናትውስጥየኤሌክትሮኒክመሣሪያዎችንበመጠቀምምንያህልሰዓትታሳልፋለህ?

9ቅዳሜና እሁድየኤሌክትሮኒክመሣሪያዎችንበመጠቀምምንያህልሰዓትታሳልፋለህ?

10በመኝታሰዓትኢንተርኔትትጠቀማለህ?

አዎ አይ

11በምግብሰዓትኢንተርኔትትጠቀማለህ?

አዎ አይ

12ወላጆችህየኢንተርኔትአጠቃቀምህንይቆጣጠራሉ?

አዎ አይ

13ወላጆችህ በኢንተርኔት የምታሳልፈውን ጊዜ ይቆጣጠራሉ?

አዎ አይ

14ወላጆችህ በኢንተርኔት አማካኝነት የምታየውን ይዘት ይቆጣጠራሉ?

አዎ አይ

Annex-V Internet Addiction test

This questionnaire consists of 20 statements. After reading each statement carefully, based up on the 5-point Likert scale, please select the response (0, 1, 2, 3, 4 or 5) which best describes you. If two choices seem to apply equally well, circle the choice that best represents how you are most of the time during the past month. Be sure to read all the statements carefully before making your choice. The statements refer to offline situations or actions unless otherwise specified.

0= Not Applicable; 1 = Rarely; 2 = Occasionally; 3 = Frequently; 4 = Often; 5 = Always

___How often do you find that you stay online longer than you intended?

___How often do you neglect household chores to spend more time online?

___How often do you prefer the excitement of the Internet to intimacy with your partner?

___How often do you form new relationships with fellow online users?

___How often do others in your life complain to you about the amount of time you spend online?

___How often do your grades or school work suffers because of the amount of time you spend online?

___How often do you check your email before something else that you need to do?

___How often does your job performance or productivity suffers because of the Internet?

___How often do you become defensive or secretive when anyone asks you what you do online?

___How often do you block out disturbing thoughts about your life with soothing thoughts of the Internet?

___How often do you find yourself anticipating when you will go online again?

___How often do you fear that life without the Internet would be boring, empty, and joyless?

___How often do you snap, yell, or act annoyed if someone bothers you while you are online?

___How often do you lose sleep due to being online?

___How often do you feel preoccupied with the Internet when off-line, or fantasize about being online?

___How often do you find yourself saying "just a few more minutes" when online?

___ How often do you try to cut down the amount of time you spend online and fail?

___How often do you try to hide how long you've been online?

___How often do you choose to spend more time online over going out with others?

___How often do you feel depressed, moody or nervous when you are off-line, which goes away once you are back online?

ቅጥያ 5 የበይነመረብ (የኢንተርኔት) አጠቃቀምልማድ መጠየቂያ ቅፅ

መጠይቁ 20 አረፍተ ነገሮች ይዟል፤በጥንቃቄ ካነበባችሁ በኋላ በተሰጠው ልኬት መሰረት በትክክል የሚገልጣችሁን ላይ የ "√" ምልክት አድርግ/ጊ። ምናልባት እኩል መስለው ከተሰማህ/ሽ፤ ባለፈው አንድ ወር በደምብ የሚገልጥህን/ሽን ምረጥ/ጭ። ከመምረጥህ/ሽ በፊት ሁሉንም ዓረፍተ ነገር በጥሞና አንብብ/ቢ።

<u>ልኬት</u>

አልጠቀምም = 0 በጣም አልፎ አልፎ = 1 አልፎ አልፎ = 2

በተደጋጋሚ =3 አብዛኛውን ጊዜ = 4 ሁልጊዜ = 5

ተ.ቁ	ጥያቄዎች	የመልስ አማራጮች					
		0	1	2	3	4	5
201	ምንያህልጊዜበየነመረብ/ኢንተርኔት ላይካቀድኸው/ሽውበላይትቆያለህ/ሽ?						
202	ኢንተርኔትላይበምታሳልፈው/ፊውሰዓትምክንያትምንያህልጊዜየቀንተቀን ተግባርህንችላትላልህ/ሽ?						
203	ከሰዎችጋርከሚኖርከግንኙነትይልቅኢንተርኔትመጠቀምንምንያህልጊዜት መርጣለህ?						
204	ምንያህልጊዜአዳዲስየኢንተርኔትተጠቃሚጓደኞችታፈራለህ/ሽ?						
205	በኢንተርኔትአጠቃቀምህ/ሽላይሰዎችምንያህልጊዜቅሬታያቀርባለህ/ሽ?						
206	በኢንተርኔትአጠቃቀምህምክንያትምንያህልጊዜበትምህርትዉጤትህላይጉዳትእየደረሰነው?						
207	መስራትየሚገባህን/ሽንስራሳትሰራ/ሪቀድመህ/ሽ ምንያህልጊዜኢንተርኔት (ምሳሌማህበራዊድህረ ገጽ) ታያለህ/ሽ?						
208	ከኢንተርኔትአጠቃቀምህጋርተያይዞአጠቃላይዉጤታማነትህምንያህልጊዜእየተጎዳ ነው?						

209	ኢንተርኔትላይምንእንደምትሰራስትጠየቅህምንያህልጊዜትበሳጫለህ/ሽወ ይምሚስጥራዊትሆናልህ/ኛለሽ?						
210	ስለኢንተርኔትበማሰብከሚረብሹህ/ሽሀሳቦችምንያህልጊዜትረጋጋለህ/ጊያ ለሽ?						
211	እራስህንመልሰህመላልሰህስለኢንተርኔትመጠቀምስታስብምንያህልጊዜታ ገኘዋለህ?						
212	ህይወቴከኢንተርኔትውጭአሰልች፣ባዶእናደስታየሌለውነውብለህ/ሽምንያ ህልጊዜትፈራለህ/ሪያለሽ?						
213	ኢንተርኔትበምትጠቀምበት/ሚበትሰዓትሰውቢያስቸግርህ/ሽምንያህልጊዜ ትበሳጫለህ/ሽወይምትናደዳለህ/ሽ?						
214	በኢንተርኔትምክንያትምንያህልጊዜእንቅልፍህን/ሽንታጣለህ/ታጫለሽ?						
215	ኢንተርኔትበማትጠቀምበትሰዓትስለኢንተርኔትበማሰብ ምንያህልጊዜ ላእምሮህ/ሽይጠመዳል? /ይወጠራል						
216	ኢንተርኔትበምትጠቀምበት/ሚበትጊዜ ምንያህልጊዜከዕቅድዉጭ‘‘ትንሽትንሽ’’ እያልክ/ሽታራዝማ ለህ/ሽ?						
217	ኢንተርኔትላይየምታሳልፈውን/ፊውንጊዜለመቀነስምንያህልጊዜሞክረህ/ሽ ሳይሳካልህ/ሽቀርቷል?						
218	ኢንተርኔትላይያሳላፍከውንሰዓት‹ዛትምንያህልጊዜትደብቃለህ/ቂያለሽ?						
219	ጊዜህንከሌሎችሰዎችጋርከማሳለፍይልቅኢንተርኔትላይማሳለፍንምንያህል ጊዜትመርጣለህ?						
220	ወደኢንተርኔትበመመለስህየሚሻሻልድብርት፣ብስጭትወይምውጥረትም ንያህልጊዜኢንተርኔትበማትጠቀምበትጊዜያጋጥሞሃል/ሻል?						

Annex VI Patient Health questionnaire – 9 (PHQ-9)

No	Over the last 2 weeks, how often have you been bothered by any of the following problems?	Not at all	Several days	More than half the days	Nearly everyday	Code
	Little interest or pleasure in doing things	0	1	2	3	SPHQ4.1
	Feeling down, depressed, or hopeless	0	1	2	3	SPHQ4.2
	Trouble falling or staying asleep, or sleeping too much	0	1	2	3	SPHQ4.3
	Feeling tired or having little energy	0	1	2	3	SPHQ4.4
	Poor appetite or overeating	0	1	2	3	SPHQ4.5
	Feeling bad about yourself or that you are a failure or have let yourself or your family down	0	1	2	3	SPHQ4.6
	Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3	SPHQ4.7
	Moving or speaking so slowly that other people could have noticed or the opposite – being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3	SPHQ4.8
	Thought that you would be better off dead or of hurting yourself in some way	0	1	2	3	SPHQ4.9

10. If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all Somewhat difficult Very difficult Extremely difficult

ቅጥያ 6 PHQ-9 ማስታወሻ፡አልፎአልፎብቻ (2-6 ቀናት)፣በዛ ላለጊዜ (7-11ቀናት)&ከሞላጎደልበየቀኑ(12-14ቀናት) መሆኑንይግለፁ፡፡				Code
	ላለፉትሁለትሳምንታትከምዘረዝራቸዉችግሮችዉስጥየትኞቹደርስዉብዎት (በየትኞቹትቸግረው) እንደነበርእጠይቅዎታለሁ			
1	የእለትተእለትተግባርዎንለማከናወን(ለመስራት) ያለዎትተነሳሽነትወይምፍላጎትበጣምቀንሶነበር?	አዎ	1	
		የለም	0	
	መልሱአዎከሆነበሁለቱሳምንታትዉስጥለምንያህልጊዜተሰማዎት;	አልፎአልፎብቻ	1	
		በዛላለጊዜ	2	
		ከሞላጎደልበየቀኑ	3	
2	የመከፋትየመደበትወይምተስፋየመቁረጥስሜትይሰማዎትነበር?	አዎ	1	
		የለም	0	
	መልሱአዎከሆነበሁለቱሳምንታትዉስጥለምንያህልጊዜተሰማዎት;	አልፎአልፎብቻ	1	
		በዛላለጊዜ	2	
		ከሞላጎደልበየቀኑ	3	
3.1	እንቅልፍአልዎስድብሎዎትወይምበድንብመተኛትአቅቶዎትይቸገሩነበር?	አዎ	1	
		የለም	0	
	መልሱአዎከሆነበሁለቱሳምንታትዉስጥለምንያህልጊዜተቸገሩ;	አልፎአልፎብቻ	1	
		በዛላለጊዜ	2	
		ከሞላጎደልበየቀኑ	3	
3.2	እንቅልግዎበዝቶብዎትይቸገሩነበር?	አዎ	1	
		የለም	0	

	መልሱአዎከሆነበሁለቱሳምንታትዉስጥለምንያህልጊዜተቸገሩ;	አልፎአልፎብቻ	1	
		በዛላለጊዜ	2	
		ከሞላጎደልበየቀኑ	3	
4.	የደካምወይምያቅምማነስስሜትይሰማዎትነበር?	አዎ	1	
		የለም	0	
	መልሱአዎከሆነበሁለቱሳምንታትዉስጥለምንያህልጊዜተሰማዎት;	አልፎአልፎብቻ	1	
		በዛላለጊዜ	2	
		ከሞላጎደልበየቀኑ	3	
5.1	የምግብፍላጎትዎቀንሶነበር?	አዎ	1	
		የለም	0	
	መልሱአዎከሆነበሁለቱሳምንታትዉስጥለምንያህልጊዜቀንሶነበር;	አልፎአልፎብቻ	1	
		በዛላለጊዜ	2	
		ከሞላጎደልበየቀኑ	3	
5.2	የምግብፍላጎትዎከተለመደዉበላይጨምሮነበር?	አዎ	1	
		የለም	0	
	መልሱአዎከሆነበሁለቱሳምንታትዉስጥለምንያህልጊዜጨምሮነበር	አልፎአልፎብቻ	1	
		በዛላለጊዜ	2	
		ከሞላጎደልበየቀኑ	3	
6	ራስዎንየመጥላትወይምዋጋየለኝምየማለትወይምራሴንምሆነቤተሰቤንአሳዝኖለ ሁየሚልስሜትተሰምቶዎትነበር	አዎ	1	
		የለም	0	

	?			
	መልሱአዎከሆነበሁለቱሳምንታትዉስጥለምንያህልጊዜተሰማዎት;	አልፎአልፎብቻ	1	
		በዛላለጊዜ	2	
		ከሞላጎደልበየቀኑ	3	
7	በሚሰሩትስራላይሃሳብዎንለመሰብሰብ/ትኩረትመስጠትአስቸግሮዎትነበር?	አዎ	1	
		የለም	0	
	መልሱአዎከሆነበሁለቱሳምንታትዉስጥለምንያህልጊዜተቸግረውነበር;	አልፎአልፎብቻ	1	
		በዛላለጊዜ	2	
		ከሞላጎደልበየቀኑ	3	
8.1	ለሌሎችሰዎችእስከሚታዎቅድረስበእንቅስቃሴዎወይምበንግግርዎበጣምቀስበ ለውነበር?	አዎ	1	
		የለም	0	
	መልሱአዎከሆነበሁለቱሳምንታትዉስጥለምንያህልጊዜተቸግረውነበር;	አልፎአልፎብቻ	1	
		በዛላለጊዜ	2	
		ከሞላጎደልበየቀኑ	3	
8.2	ለሌሎችሰዎችእስከሚታዎቅድረስመረጋጋትአቅቶዎትአንድቦታአርፎመቅመጥወ ይምመቆምእስከማይችሉሆነውነበር?	አዎ	1	
		የለም	0	
	መልሱአዎከሆነበሁለቱሳምንታትዉስጥለምንያህልጊዜተቸግረውነበር;	አልፎአልፎብቻ	1	
		በዛላለጊዜ	2	
		ከሞላጎደልበየቀኑ	3	
9	ከምኖርብሞትይሻለኛልብለዉአስበውወይምራስዎንበሆነመንገድሊጎዱአስበው	አዎ	1	

	ነበር?	የለም	0	
	መልሱአዎከሆነበሁለቱሳምንታትዉስጥለምንያህልጊዜተሰምቶዎትነበር;	አልፎአልፎብቻ	1	
		በዛላለጊዜ	2	
		ከሞላጎደልበየቀኑ	3	
10	ከተዘረዘሩትችግሮግለአንዳቸዉምኣዎየሚልመልስከተሰጠየሚከተለዉንይጠይቁ።በእነዚህችግሮችምክንትስራዎንለመስራትየቤትሃላፊነትዎንለመዎጣትወይም ከሰዎችጋርተስማምተውለመኖርምንያህልአስቸጋሪሆኖብዎትነበር?	በጭራሽአልተቸገርኩም	0	
		በመጠኑተቸግሬነበር	1	
		በጣምተቸግሬነበር	2	
		እጅግበጣምተቸግሬነበር	3	

Annex-VII Rosenberg self-esteem scale

Scale: Instructions Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement.

On the whole, I am satisfied with myself.

Strongly Agree Agree Disagree Strongly Disagree

At times I think I am no good at all.

Strongly Agree Agree Disagree Strongly Disagree

I feel that I have a number of good qualities.

Strongly Agree Agree Disagree Strongly Disagree

I am able to do things as well as most other people.

Strongly Agree Agree Disagree Strongly Disagree

I feel I do not have much to be proud of.

Strongly Agree Agree Disagree Strongly Disagree

I certainly feel useless at times.

Strongly Agree Agree Disagree Strongly Disagree

I feel that I'm a person of worth, at least on an equal plane with others.

Strongly Agree Agree Disagree Strongly Disagree

I wish I could have more respect for myself.

Strongly Agree Agree Disagree Strongly Disagree

All in all, I am inclined to feel that I am a failure.

Strongly Agree Agree Disagree Strongly Disagree

I take a positive attitude toward myself.

Strongly Agree Agree Disagree Strongly Disagree

Scoring: Items 2, 5, 6, 8, 9 are reverse scored. Give “Strongly Disagree” 1 point, “Disagree” 2 points, “Agree” 3 points, and “Strongly Agree” 4 points. Sum scores for all ten items. Keep scores on a continuous scale. Higher scores indicate higher self-esteem.

ቅጥያ7፡የሮዘንበርግ በራስ የመተማመን መለኪያ

መመሪያ፡ከዚህበታችስለራስዎያለዎትን አጠቃላይስሜትየሚገልጹሐሳቦችተዘርዝረዋል ።እባክዎበእያንዳንዱአባባልምንያህልእንደሚስማሙወይምእንደማይስማሙያሳውቁ።

በአጠቃላይ፤በራሴ(በማንነቴ) ረክቻለሁ።

በጣምእስማማለሁ እስማማለሁ አልስማማም በጣም አልስማማም

አንዳንድጊዜጥሩሰውእንዳልሆንኩይሰማኛል።

በጣምእስማማለሁ እስማማለሁ አልስማማም በጣም አልስማማም

በርካታጥሩነገሮችእንዳሉኝይሰማኛል።

በጣምእስማማለሁ እስማማለሁ አልስማማም በጣም አልስማማም

እኔምእንደአብዛኛዎቹሰዎችነገሮችንማድረግእችላለሁ።

በጣምእስማማለሁ እስማማለሁ አልስማማም በጣም አልስማማም

የምኮራበትብዙነገርእንደሌለኝይሰማኛል።

በጣምእስማማለሁ እስማማለሁ አልስማማም በጣምአልስማማም

አንዳንድጊዜዋጋቢስእንደሆንኩእርግጠኝነትይሰማኛል።

በጣምእስማማለሁ እስማማለሁ አልስማማም በጣምአልስማማም

እኔከሌሎችጋርቢያንስበእኩልደረጃዋጋያለውሰውእንደሆንኩይሰማኛል።

በጣምእስማማለሁ እስማማለሁ አልስማማም በጣምአልስማማም

ለራሴየበለጠአክብሮትቢኖረኝብየእመኛለሁ።

በጣምእስማማለሁ እስማማለሁ አልስማማም በጣምአልስማማም

በአጠቃላይ፤ረብየለሽእንደሆንኩየመሰማትዝንባሌአለኝ።

በጣምእስማማለሁ እስማማለሁ አልስማማም በጣምአልስማማም

ለራሴአዎንታዊአመለካከትአለኝ።

በጣምእስማማለሁ እስማማለሁ አልስማማም በጣምአልስማማም

የውጤትአሰጣጥ: በተራ ቁጥር 2, 5, 6, 8, 9 ላይየቀረቡትጥያቄዎች ውጤቶችተገልብጠዉየሚታሰቡናቸዉ።ለ“በጣምአልስማማም” 1 ነጥብ፤ ለ “አልስማማም” 2 ነጥብ፤ ለ “እስማማለሁ” 3 ነጥብ፤ እና ለ“በጣምእስማማለሁ” 4 ነጥብ ስጡ። ውጤቶቹን ቀጣይነት ባለዉ መለኪያ ያስቀምጡ። ከፍተኛ ውጤት ለራስ ጥሩ ግምት መስጠትን ያመለክታል።

Annex-VIII Résistance to Peer Influence Scale

For each question, decide which sort of person you are most like - the one described on the right or the one described on the left. Then decide if that is 'sort of true' or 'really true' for you and mark that choice. For each link mark only ONE of the four choice

Really True for Me	Sort of True for Me				Really True for Me	Sort of True for Me
		Some people go along with their friends just to keep their friends happy	BUT	Other people refuse to go along with what their friends want to do, even though they know it will make their friends unhappy		
		2 Some people think it's more important to be an individual than to fit in with the crowd	But	Other people think it is more important to fit in with the crowd than to stand out as an individual		
		For some people it's prety easy for their friends to get them to change their mind	But	For other people, it's preety hard for their friends to get them to change their mind		
		Some people would do something that they knew was wrong just to stay on their friends good side	But	Other people would not do something they knew was wrong just to stay on their friends good side		
		Some people hide their true opinion from their friends if they think their friends will make fun of them because of it	But	Other people will say their true opinion in front of their friends, even if they know their friends will make fun of them because of		

				it		
		Some people will not break the law just because their friends say that they would	But	Other people would break the lawif their friends say that they would break it		
		Some people change the way they act so much when they are with their friends that they wonder who they 'really are.'	But	Other people act the same way when they are alone as they do when they are with their friends		
		Some people take more risks when they are with their friends than they do when they are alone	But	Other people act just as risky when they are alone as when they are with their friends		
		Some people say things they don't really believe because they think it will make their friends respect them more	But	Other people would not say things they didn't really believe just to get their friends to respect them more		
		Some people think it's better to be an indvidual even if people will be angry at you for going against the crowd	But	Other people think it's better to go along with the crowd than to make people angry at you		

ቅጥያ 8፡ የእኩዮች ተፅዕኖን የመቋቋም መጠን መለኪያ

ለእያንዳንዱጥያቄ፡ በስተቀኝ ወይም በስተግራ በኩል ከተገለጸው ዉስጥ በአመዛኙ እርስዎን የሚገልጸዉን ማንነት ይወስኑ። ከዚያም ይህ ለእርስዎ 'እውነተኛ' ወይም 'በጣምእውነተኛ' መሆን አለመሆኑን ይወስኑ፤ ከዚያምምርጫዎላይምልክትያድርጉ።

ለእኔ በጣም እዉነት ነዉ	ለእኔእውነትነው				ለእኔ በጣም እዉነት ነዉ	ለእኔእውነትነው
		አንዳንድሰዎችጓደኞቻቸውንደስተኛለማድረግሲሉብቻከጓደኞቻቸውጋርይስማማሉ (ጓደኞቻቸውየሚላቸዉንያደርጋሉ)	ነገርግን	ሌሎችሰዎችምንምእንኳጓደኞቻቸውን እንደሚያስከፋቸዉ ቢያውቁምጓደኞቻቸውሊያደርጉትየሚፈልጉትንነገርለመፈጸምፈቃደኞችአይደሉም		
		አንዳንድሰዎችከብዙሃኑጋርከመመሳሰልይልቅእንደ አንድ ግለሰብመሆንይበልጥአስፈላጊእንደሆነያስባሉ	ነገርግን	ሌሎችሰዎችደግሞእንደግለሰብተለይቶ ከመታየትይልቅከብዙኃኑጋርመመሳሰል ይበልጥአስፈላጊእንደሆነያስባሉ		
		ለአንዳንድሰዎች፣ጓደኞቻቸውሀሳባቸውንእንዲቀይሩማድረግቀላልነው	ነገርግን	ለሌሎችሰዎች፣ጓደኞቻቸውሀሳባቸውን እንዲቀይሩማድረግእጅግ ከባድ ነው		
		አንዳንድሰዎችከጓደኞቻቸውጎንለመቆየትሲሉብቻአንድንነገርስህተትእንደሆነእያውቁያደርጋሉ	ነገርግን	ሌሎችሰዎችከጓደኞቻቸውጎንለመቆየትሲሉብቻስህተትእንደሆነየሚያውቁትን ነገርአያደርጉም		
		አንዳንድሰዎችበአመለካከታቸውምክንያትጓደኞቻቸውያሾፉብኛልብለውካሰቡ፤እውነተኛአመለካከታቸውንከጓደኞቻቸውይደብቃሉ።	ነገርግን	ሌሎችሰዎችጓደኞቻቸውበአመለካከታቸውምክንያትእንደሚያሾፉባቸውቢያውቁምእውነተኛአመለካከታቸውንበጓደኞቻቸውፊትይናገራሉ።		
		አንዳንድሰዎችጓደኞቻቸውህግእንጥሳለንስላሉብቻእነሱህጉንአይጥሱም	ነገርግን	ሌሎችሰዎችደግሞጓደኞቻቸውህግእንጥሳለንካሉ፤እነሱምህጉንይጥሳሉ		

		አንዳንድሰዎችከጓደኞቻቸውጋርበሚሆኑበትጊዜ ድርጊታቸውበጣምስለሚቀየርእራሳቸዉን ስለ'ትክክለኛማንነታቸዉ' ይጠይቃሉ።	ነገርግን	ሌሎችሰዎችከጓደኞቻቸውጋርበሚሆኑ በትጊዜምሆነብቻቸውንበሚሆኑበትጊዜተመሳሳይድርጊትይፈጽማሉ		
		አንዳንድሰዎችከጓደኞቻቸውጋርበሚሆኑበትጊዜ ብቻቸውንከሚሆኑበትጊዜበበለጠ እራሳቸዉን ለአደጋያጋልጣሉ።	ነገርግን	ሌሎችሰዎችደግሞብቻቸውንበሚሆኑበ ትጊዜእናከጓደኞቻቸውጋርበሚሆኑበት ጊዜየአደጋተጋላጭነታቸዉ ተመሳሳይ ነዉ		
		አንዳንድሰዎችበእዉነትየማያምኑባቸውንነገሮች ይናገራሉ፣ምክንያቱምጓደኞቻቸውይበልጥእንዲ ያከብሯቸውያደርጋልብለውስለሚያስቡ።	ነገርግን	ሌሎችሰዎችደግሞጓደኞቻቸውየበለጠ እንዲያከብሯቸውለማድረግሲሉበቻያ ላመኑትበትንነገርአይናገሩም።		
		አንዳንድሰዎች፣ምንምእንኳከብዙሃኑተቃራኒበ መቆማቸዉሰዎችቢናደዱባቸዉም፤እንደግለሰብ መሆንይሻላልብለውያስባሉ	ነገርግን	ሌሎችሰዎች፤ሰዎችበእነርሱላይከሚበሳ ጩይልቅከብዙሃኑጋርአብሮመቆምየተ ሻለነዉብለዉያስባሉ።		