

**PREVALENCE OF INTERNET ADDICTION,
ITS ASSOCIATION WITH PSYCHOLOGICAL DISTRESS,
COPING STRATEGIES AMONG UNDERGRADUATE
STUDENTS**



**SYNOPSIS
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CERTIFICATE

This is to certify that Ms. Naman Mansotra student of B.A. Honours Psychology Semester V, Session 2021-2024, bearing Roll No - 2108021 has worked under supervision of Dr. Priya Chaudhary on Project entitled “A Study Prevalence of Internet addiction, its association with psychological distress, coping strategies among undergraduate students.” Her mini project is fit for submission, in partial fulfillment of their requirements for the award of the Degree in B.A. Honours psychology.

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CHAPTER - 1

INTRODUCTION

New technologies are restructuring the mental and the relational constructs of contemporary human beings (De Kerckhove, 1995). Technology has made tremendous progress and a great impact on our day-to-day life. With an advancement of technology, the internet has intruded into the life of every human being in some or other (Devi and Patra, 2020). According to Global digital reports 2021, the internet users among world population accounts to 59.5 percent which means more than half of the world is encircled by internet and again it's Asia which has half of the world internet users with 51.8 percent. As per report by telecom regulatory authority of India (TRAI), India has 749 million internet users by 2021 which is around 55% of its population and is the second largest Internet user base in the world after China surpassing U.S. Internet penetration rate in India is 53.8 percent as per TRAI report 2021. The World Health Organization discourages the use of the term addiction and has substituted it with dependence. A study by Kumar and Sharma (2017) refers to dependence as the repeated use of a psychoactive substance or substances, to the extent that the user (referred to as an addict) is periodically or chronically intoxicated, shows a compulsion to take the preferred substance (or substances), has great difficulty in voluntarily ceasing or modifying substance use, and exhibits determination to obtain psychoactive substances by almost any means. In line with drug dependence, behavioral addiction, also called process addiction or “non-substance-related addiction” may be defined as a repeated tendency by an individual to engage in some specific activity, despite harmful consequences, as deemed by the user himself to his individual health, mental state, or social life. It includes usages of internet, mobile, social networking sites, pornography, gambling etc. The rationale for the existence of this category is that compulsive behaviors follow the same clinical pattern and may even derive from the same neural network as compulsive substance use.

Overview of the variables of study

This section introduces the key concepts and variables involved in the study and enables a better understanding of the objectives of the research.

Internet Addiction

Shaw and Black (2015) defined Internet Addiction (IA) as excessive or poorly controlled preoccupations, urges or behaviors regarding computer use and Internet access that

led to impairment or distress. Like any other substance addiction, internet addiction also has negative impacts on an individual's life. Work and performance issues, relationship problems, social problems, personal and emotional issues, self-harm and harm to and from others, physical health issues alongside mental health issues which effect the well-being of the individual are few of the negative consequences linked with internet addiction (Cham et al.,2019). According to Sharma and Kumar (2017) In the last two decades, the internet has rapidly become a way of life. One of its effects has been excessive use of internet to the extent of neglect of all other interests and responsibilities. Internet addiction is a technological addiction that has arisen because of digital technology advancement. It is a non-chemical behavioral addiction that includes human machine interaction (Griffiths M. (2000)) and has gained scientific prominence as 21st century epidemic (Kuss, D., Griffiths, M. (2014); Christakis DA. (2010)). With the rapid development of digital technologies and the increasing number of people using the internet, new types of addiction related behaviors have emerged. Internet addiction (IA), also described as pathological or problematic internet use, has been defined as a pattern of excessive or compulsive use of the internet that generates distress or impairment Internet addiction (IA) may constitute a widespread and serious mental problem. IA is a growing problem, in both the general population and university students. It can affect many aspects of student's lives and performance (Hasan, A. A. H. 2019). Functional abnormalities like behavioral and substance addictions were observed during neuroimaging studies on brain of individuals with problematic and compulsive internet use (Yuan K et al., 2011). It has been detected that problematic Internet users present a significantly lower age with respect to normal users. Reverse relationships have also been found between age and Internet addiction, especially in the studies conducted in South Korea and Norway, which highlight the difference between adolescents and adults (i.e., from 30 years of age). Moreover, some studies have reported that young adults are the most active Internet users, and it is considered that they spend approximately 3 h per day connected to the Internet, which causes more probabilities of addiction (Blasco et al., 2022).

IA has been associated with multiple health concerns (Kuss et al., 2014) including physical concerns such as poor sleep, fatigue, unhealthy eating habits, and lack of physical activity (Alimoradi et al., 2019; Bener et al., 2018). Individuals may also experience poor academic and work performance, poor time management and interpersonal skills (Young, 2007) due to spending too much time online. Emotionally, they often experience symptoms of depression and anxiety (Xu et al., 2021).

Certain sub-types of internet addiction have been given by Young.

CLASSIFICATION OF THE SUBTYPES OF INTERNET ADDICTION

Distinct subtypes of "Internet addiction" were identified by Young (1999).

1. Cyber sexual addiction: Compulsive use of adult websites for cybersex and cyber porn.
2. Cyber relationship addiction: Over involvement in online relationships.
3. Net compulsions: Obsessive online shopping, gambling and digital trading.
4. Information overload: Database searches and compulsive web surfing etc.
5. Computer or gaming addiction: Obsessive computer game playing.

GRIFFITH also gave a different criteria for internet addiction which is as follows.

1. Salience: When an individual is preoccupied with internet and thinking when they will be back online while offline and when this dominates the cognitions (distortions in thought), emotions (feelings and cravings) and behavior (decline in socialized behaviors)
2. Mood modification: Tranquilizing and feeling "high" and other positive subjective experiences as they stay engaged in internet which possibly is a way of coping by escape or numbing.
3. Tolerance: The process by which users keep elevating the level of Internet use, to achieve its mood modification effects. There is a tendency to gradually increase the online time in order to either expand or extend those effects.
4. Withdrawal symptoms: Feelings of unpleasantness and/or also physical effects which occur as a result of decreased or discontinued internet use which when might include shakiness, moodiness, or irritability.
5. Conflict: Different kinds of conflicts that happens because of excessive Internet use. Inter personal conflicts, conflicts with other activities (e.g., job, social life, other interests) or conflicts within the individual (intra psychic conflict and/or feelings of loss of control).
6. Relapse: The tendency for recurrence of prior behavioral patterns. Even the most extreme patterns of excessive Internet addiction can be quickly reinstated by the user even after periods of abstinence.

PSYCHOLOGICAL DISTRESS

Psychological distress (PD) is broadly defined as a state of emotional suffering characterized by symptoms of depression (e.g., loss of interest; unhappiness; desperateness)

and anxiety (e.g., restlessness; feeling tense). It is also characterized by other somatic symptoms like insomnia, headaches, and lack of energy that are likely to vary across different areas (Belay et al., 2020). According to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), psychological distress defines as “undifferentiated group of symptoms ranging from anxiety and depression symptoms to functional impairment, personality traits (confusing, troubling), and behavioral problems (Belay et al., 2021). The American Psychological Association defines **psychological distress** as “a set of painful mental and physical symptoms that are associated with normal fluctuations of mood in most people.” Various definitions of psychological distress by multiple authors include the following symptoms describing it as a state of emotional suffering characterized by symptoms of depression (e.g., lost interest; sadness; hopelessness), anxiety (e.g., restlessness; feeling tense), fear of being alone, anger, loneliness, isolation, problematic interpersonal relationships and can manifest along with other types of somatic discomfort like insomnia, nightmares, dysphoria and difficulty concentrating (Islam, 2019; Leveto, 2018; Mabitsela, 2003; Mirowsky & Ross, 2002). However, in some cases, this distress can be the start of a mental health disorder, such as major depressive disorder, anxiety disorder, or some other mental health condition (Harrison, J. 2023). While most people experience stress from time to time, psychological distress can have a more profound effect on an individual. Psychological distress can even be a precursor to a mental illness. However, experiencing psychological distress does not always indicate the presence of a mental health disorder (Harrison, J. 2023). Experiencing psychological distress can feel overwhelming, and many people may want to manage their way through it discreetly. However, people who seek help during times of psychological distress may learn effective coping mechanisms to shorten its duration and mitigate any long-term effects (Harrison, J. 2023). Psychology itself is a contested and wide-ranging discipline, touching physiology and neurology at one end of the range and sociology at the other, it contains within its rank's bio-determinists (Pilgrim, 2007). When an individual experience distress, they are out of balance; body and mind cry out for some kind of help, taking many forms such as moodiness, irritability, depression, anxiety, insomnia, or physical symptoms such as stomach upset or headache. Stress is generally a response to an external cause which goes away once situation is resolved, whereas anxiety is generally internal and is reaction to stress, also persists even if no immediate threat. Both stress and anxiety can affect mind and body (Shaheen, Jahan and Shaheen 2014).

Theoretical models of psychological distress

a) Stress-distress model: posits that the defining features of psychological distress are the exposure to a stressful event that threatens the physical or mental health, the inability to cope effectively with this stressor and the emotional turmoil that results from this ineffective coping (Drapeau et al., 2014).

b) Cognitive model: states that negatively biased cognition is a core process in psychological distress; reflected when distressed patients typically have a negative view of themselves, their environment and the future and view themselves as worthless, inadequate, unlovable and deficient. According to cognitive theorists, excessive affect and dysfunctional behaviour is due to inappropriate ways of interpreting their experiences and the essence of the model is that emotional difficulties begin when the way one view events gets exaggerated beyond the available evidence and this tends to have a negative influence on feelings and behaviour in a vicious cycle (Shaheen, 2012).

c) Biopsychosocial model: states that physiological, psychological and social makeup determines the attitude associated with stress or pain. Social support can be a central interpersonal dynamic for health and can reduce social isolation among young adults while experiencing distress.

Indian Perspective on psychological distress

Weaver in a study observed that Since the word "tension" is English, he concentrated on the South Asian expression "tension," which is pronounced "tens-an." Indian ethnopsychology has long maintained that somatization is a crucial component of experiences of discomfort transliterated into South Asian languages); it also stated that speakers of the following languages, among others, use this expression: Hindi, Malayalam, Marathi, Bengali, and Konkani. It was discovered that people who report experiencing more "tension" symptoms also consistently score higher on anxiety and depressive measures. Several ancient concepts developed by Indian scholars relate to or appear like the phenomenon of stress; for example, dukha (pain, misery or suffering), klesa (afflictions), adhi (mental aberrations) and prajnaparadha (failure or lapse of consciousness). It is interesting to note that the body- mind relationship, characteristic of modern stress, is emphasized in the Ayurvedic (Indian) system of medicine (Pestonjee, 1992, p.27). The concepts of distress covering anxiety symptoms such as dhat syndrome are culture-specific to the Indian subcontinent (Khambaty & Parikh, 2017).

COPING

Lazarus (1993) defined coping as a response to “ongoing cognitive and behavioral demands that are taxing or exceeding the resources of the person” (p. 237). The Transactional Theory of Coping (TTC) proposes that a multitude of factors play a role in the coping process, making it highly complex. Contributing to its complex nature, coping is constantly changing over time, and is both situation and person specific (Lazarus & Folkman, 1984). Young people struggle to seek help when experiencing mental health difficulties (Collinson, 2017; Naughton et al., 2018). Lack of confidence about how to cope due to low mental health literacy (Hart et al., 2018; Mason et al., 2015) and social pressures (e.g., stigma) (Lannin et al., 2016; Schnyder et al., 2017) have been highlighted as negatively impacting how young people deal with these issues. The word coping has two connotations in stress literature, firstly it denotes the way of dealing with stress and secondly the effort to master conditions of harm, threats or challenge when a routine or automatic response is not readily available (Shaheen 2009). Research with young people has associated negative appraisals (i.e., threat or harm), with negative life events (Cole et al., 2019; Fosco & Lydon-Staley, 2019). One appraisal that can influence the coping process is self-efficacy (Bandura, 1997). Other psychologists defined coping as “the minimization of emotional distress” (Pinkerton et al. 1985); “an individuals attempted response to reduce feeling of discomfort” (Dewe et al. 1979), “as a response or responses whose purpose is to reduce or to avoid psychological distress” (Houston, 1986). If a young person believes that they are well equipped to deal with their symptoms then they are less likely to ask for help and more likely to try to cope independently. Girls are reported to be more likely than boys to report a situation as threatening (Cole et al., 2019) and more likely to perceive a situation as stressful (Rose & Rudolph, 2006) and severe (Velasco et al., 2020). Coping acts as stabilizing factor that may help an individual maintain bio-psycho-social adaptation during a stressful period. People are expected to vary in their manner of coping during stressful times, like the current pandemic. Broadly, coping can be divided into adaptive or maladaptive styles, where adaptive coping strategies generally involve: Confronting problems directly, making reasonably realistic appraisals of problems, recognizing and changing unhealthy emotional outbursts. In contrast, maladaptive strategies involve an excessive emotional response and avoidance-based behaviours. Individuals who actively delay or evade responses to stress may merely offer momentary diversion from the stress but do not provide long-term relief.

Types of Coping Strategy: Although there are many ways to classify the coping responses (Moos and Billings, 1982), the most approaches distinguish between strategies that are active

in nature and oriented toward confronting the problem, and strategies that entail effort to reduce tension by avoiding or dealing with problem.

Moos and Billings (1982) categorized dimensions of appraisal and coping into three domains:

1. Appraisal Focused Coping: It involves attempts to define the meaning of the situation and includes such strategies as logical analysis and cognitive` redefinition.
2. Problem Focused Coping: This seeks to modify or eliminate the source of stress to deal with the tangible consequences of the problem or actively change the self and develop a more satisfying situation.
3. Emotion Focused Coping: Emotion focused coping includes responses whose primary function is to manage the emotions aroused by stressors and thereby maintain effective equilibrium.

Lazarus (1975) suggested two categories of coping: direct action and palliative approach.

1. Direct Action: In direct action coping an individual tries to alter his behavioral interactions with the environment by demolishing, avoiding, or fleeing the threatening person or event. In addition an individual may take action to meet the threat.
2. Palliative Approach or Coping: Palliative coping result when direct action is too costly or difficult. Here potential stress reactions are reduced.

Relationship Between Internet Addiction, Psychological Distress and Coping

The last decade has seen a proliferation of people using the Internet worldwide, with almost 47% predicted to be using the Internet by the end of 2016. While people could possibly be using the Internet to facilitate and improve their everyday lives and activities, a growing number of people report negative consequences due to excessive Internet use. This may include a loss of control over Internet use, social problems caused by a preference for being online, poor school or work performance due to neglecting activities, and negative health consequences such as disrupted sleep from spending too much time online (McNicol and Thorsteinsson 2017).

According to an article by McNicol and Thorsteinsson (2017) Affective and anxiety disorders have been linked to IA. IA appears to be associated with mental disorders in adolescents and adults, and with developmental traits. Comorbid symptoms of anxiety and IA have been found in adolescents and adults. Additionally, increased stress levels in adults and stressful life events in adolescents have been associated with IA. A study of college students found strong positive correlations between stress, anxiety, and depression and IA. Thus, IA

may be associated with increased levels of psychological distress covering a range of psychological conditions. However, the effects of these factors may be mitigated or augmented by individuals' coping behaviors. The coexistence of depression and internet addiction is commonly observed among young individuals. Kraut *et al.* found that excessive internet usage presents a negative effect on face-to-face interactions by reducing time spent with friends and family members, which leads to increased loneliness and depression, thus decreasing psychological well-being (PWB).

SIGNIFICANCE OF THE STUDY

Present study is descriptive in nature as it attempts to identify internet addiction, psychological distress and coping strategies. As per DSM-V, Internet addiction is not so far recognized as a disorder but is considered as an area in need of further research. The increasing prevalence of internet addiction has emerged as a contemporary concern with profound implications for mental health and coping strategies. In today's digitally connected world, individuals are grappling with the challenges posed by excessive internet use. The constant connectivity and pervasive online presence contribute to feelings of isolation, anxiety, and depression. The prevalence of internet addiction and its association with psychological distress and coping strategies are significant topics with implications for individual well-being and societal health. Internet addiction has been linked to various mental health issues, including anxiety, depression, and stress. Excessive use of the internet, particularly social media and online gaming, can contribute to feelings of isolation and loneliness. Internet addiction may interfere with daily activities, such as work, school, and interpersonal relationships. Individuals may prioritize online activities over real-world responsibilities, leading to a decline in academic or occupational performance. The present study is very important because it take into consideration all the above mentioned variables for undergraduate's students.

STATEMENT OF THE PROBLEM

To study prevalence of internet addiction, it's association with psychological distress and coping among undergraduate students.

OPERATIONAL DEFINITION

Internet addiction

The term 'Internet addiction' is been used as an umbrella term that covers all online activities together and compulsive use of the internet beyond the accepted threshold that it interferes with individuals' functionality, health and relations.

Psychological distress

Psychological distress (PD) is broadly defined as a state of emotional suffering characterized by symptoms of depression (e.g., loss of interest; unhappiness; desperateness) and anxiety (e.g., restlessness; feeling tense).

Coping strategies

Coping strategies are the thoughts and behaviors used to manage the internal and external demands of a stressful situation. Coping mechanisms are the patterns and behaviors people use to deal with unusually stressful situations.

HYPOTHESIS OF THE STUDY

1. There will be significant correlation between internet addiction and psychological distress among male and female undergraduate students.
2. There will be significant correlation between internet addiction and coping among male and female undergraduate students.
3. There will be significant relationship between psychological distress and coping among male and female undergraduate students.
4. There will be significant mediating effect of internet addiction on psychological distress and coping. among male and female undergraduate students.

OBJECTIVES OF THE STUDY

The objective of research project summarizes what is to be achieved by the study. In view of the available literature & importance of the topic, the following objectives were set :-

1. To find out relationship between internet addiction and psychological distress among male and female undergraduate students.
2. To find out relationship between internet addiction and coping among male and female undergraduate students.
3. To find out relationship between psychological distress and coping among male and under-graduate female college students.
4. To find out the mediating effect of internet addiction on psychological distress and coping.

DELIMITATION OF STUDY

- The study has been delimited to 120 students at the undergraduate level only.
- The study is quantitative in nature.

CHAPTER - 2

REVIEW OF LITERATURE

A literature review is an overview of the previously published works on a topic. The term can refer to a full scholarly paper or a section of a scholarly work such as a book, or an article. Either way, a literature review is supposed to provide the researcher/author and the audiences with a general image of the existing knowledge on the topic under question. Hence, the various studies conducted by scholars on prevalence of internet addiction, its association with psychological distress, coping strategies among undergraduate students have been discussed on basis of the following dimensions:

- i) Studies related to internet addiction
- ii) Studies related to psychological distress
- iii) Studies related to coping strategies
- iv) Studies related to internet addiction, psychological distress, and coping strategies

Studies Related to Internet addiction

Diotaiuti et al. (2022) conducted a study to check Internet addiction in young adults: The role of impulsivity and codependency. The results confirmed that both impulsivity and codependency play a role in problems related to Internet use, moreover they showed the relative importance of gender and age. The study demonstrated that maladaptive and addicted use of the Internet is a critical issue also among young adults, and it suggests that preventive and restraint measures are needed.

Zenebe et al. (2021) conducted a study with the Main objective to study the prevalence and associated factors of internet addiction among University Students in Ethiopia. The results showed that the prevalence of internet addiction (IA) among the current internet users was. Spending more time on the internet, having mental distress, playing online games, current khat chewing and current alcohol use were associated with internet addiction.

Jain et al. (2020) conducted a study with an objective to investigate the pattern and prevalence of internet addiction in university students. The study also explored the association of internet addiction with depression and insomnia. They concluded that Internet addiction is a rising concern among youth. Several parameters including gender, time spent online, alcohol,

smoking etc., predict higher risk of internet addiction. Depression and insomnia are more common in internet addicts and over users.

Baturay and Toker (2019) conducted a study on Internet addiction among college students: Some causes and effects. Their study investigated Internet addiction with respect to its implications for social behavioral, and psychological phenomenon but not in a clinical sense. The results showed that variables like game addiction, bad relationships with friends, neglecting daily chores, hindrance of sleep pattern, bad relationships with professors, weekly Internet use hours to increase Internet addiction, whereas bad relationships with family members, use of the Internet for researching, reading and playing computer games for leisure time activities were revealed to decreases Internet addiction.

Kumar and Mondal (2018) conducted a study with the objective of to explore the Internet use and its relation to psychopathology and self-esteem among college students. The results clearly stated that Depression, anxiety, and interpersonal sensitivity were found to be correlated with Internet addiction. Along with that, low self-esteem has been found in students to be associated with possible users of Internet.

Prem Singh and Prajina (2015) conducted A Study on the Impact of Internet Addiction Among Adolescents. The objectives were to study the extend of using internet, impact of internet addiction on the academic performance, impact of internet addiction on social life, impact of internet addiction on psychological well being, and the economic aspect of using internet. The study results shows fortunately severe cases are rarer than that of moderate cases. But there are further chances to fall down the moderate cases to severe cases. The boys are more addicted to internet than girls because they are getting more opportunity to mingle with friends and different people in the community.

Goel et al. (2013) aimed to study the prevalence of internet addiction and associated existing psychopathology in adolescent age group. Of the 987 adolescents who took part in the study, 681 were female and 306 were males. Of the total, about 74.5% were moderate (average) users. 0.7% were found to be addicts. Those with excessive use of internet had high scores on anxiety, depression, and anxiety depression.

Studies related to psychological distress

Hill et al. (2022) examined experiences of work-related psychosocial stressors, psychological distress, and mental health diagnoses among mental health researchers. The results concluded that Overall, 13.4% of respondents met the threshold for severe psychological distress, which

was significantly higher in students compared to participants from other career stages. Among the subgroup of participants who responded to the question on mental health diagnoses and suicidal ideation, 54% reported a life-time mental health diagnosis and 23.7% reported suicidal ideation since their academic career commencement. This further concluded that despite working in the same environment, research support staff report experiencing significantly less psychosocial stressors compared to postgraduate students, early-middle career researchers and senior researchers.

Viertio et al. (2021) conducted research on Factors contributing to psychological distress in the working population, with a special reference to gender difference. Women reported more psychological distress than men. Loneliness, job dissatisfaction and family-work conflict were associated with the largest risk of psychological distress. A significant interaction with gender was found in only two variables: ignoring family due to being absorbed in one's work was associated with distress in women, and mental strain of work in men.

Esteban et al. (2022) conducted a study with the objective to determine if psychological distress, anxiety, and academic self-efficacy predict satisfaction with studies in Peruvian university students during the COVID-19 pandemic. Based on the results of this study, an increase in academic self-efficacy would translate into a decrease in psychological distress and anxiety.

Lathabhavan and Sudhevan (2022) conducted a study which aimed to understand the impact of psychological distress caused by the COVID-19 pandemic on life satisfaction and wellbeing, in the Indian context. The study concluded that Both waves of the COVID-19 pandemic have been associated with psychological distress in India. This study showed that depression, anxiety, and stress negatively were related to wellbeing and satisfaction during both waves of the pandemic.

McLachlan and Gale (2018) studied the relationship between psychological distress and risk of developing arthritis, cardiovascular disease, chronic obstructive pulmonary disease and diabetes across the range of distress severity, investigate the mediating roles of health behaviors and explore whether the associations vary with socioeconomic position. The results showed that distress significantly predicted incident diabetes in manual socioeconomic groups only. Effect sizes did not vary with socioeconomic position for arthritis, cardiovascular disease and chronic obstructive pulmonary disease.

Kumar et al. (2020) conducted a study among undergraduate medical students with an objective To estimate the prevalence of psychological distress among undergraduate medical students and its association with some demographic factors. Anxiety was the most prevalent psychological distress among medical students, with 63% of them having anxiety symptoms. Depression was found to be the second most common psychological distress. A considerable number of students studying medicine are suffering from psychological distress. Intervention programs to address the mental health problems of such students should be initiated.

Barry et al. (2019) conducted a study on the effect of psychological distress on health outcomes. The study concluded that distress had a detrimental effect on health regardless of the population studied, distress tool used, and health outcome examined. There was an increased mortality risk among those reporting high versus low distress.

Studies related to coping strategies

Omari et al. (2023) aimed to explore university students' levels of stress, stressors, and their coping style. The results revealed that most students have a moderate level of stress followed by those with a severe level of stress and a mild level of stress. The study found that the most widely employed coping mechanisms were problem-solving and social support. These findings were consistent with a past experimental study that indicated that it is strongly advised to encourage the students' use of social support as coping mechanisms.

Yano et al. (2021) conducted a study which aimed to explore effective coping strategies in the three sensitivity groups. The results indicated that more participants belonged to the low-SPS group with better MH or to the high-SPS group with poorer MH. On the other hand, fewer participants belonged to the low-SPS group with poorer MH or the high-SPS group with better MH.

Shpakou et al. (2023) aimed to investigate anxiety levels, stress perception, and coping strategies in relation to the presence of illness. All analyses were adjusted for age, gender, as these were considered to be potential limiting factors. A large percentage of young adults in the community demonstrated anxiety and stress symptoms during the COVID-19 pandemic. There was a reciprocal correlation between exposure to COVID-19 among students and anxiety, levels of perceived stress, and coping activities. For the most part, students were characterized by a clear level of active coping activities. However, they postponed important decisions in the context of coping and were characterized by a preponderance of activities oriented toward seeking social support.

Freire et al. (2020) conducted a study on Coping Strategies and Self-Efficacy in University Students: A Person-Centered Approach. This study had two objectives: to examine the existence of different profiles of university students based on how they combined different approach coping strategies and to determine the existence of differences in general expectations of self-efficacy between those coping profiles. From this person-centered focus, it was assumed that coping strategies are not mutually exclusive categories but instead operate, together such that their functionality depends on the individuals having a repertoire of strategies available that would allow them to respond specifically to the challenge they have to deal with.

Heffer and Willoughby (2017) researched on *A count of coping strategies: A longitudinal study* investigating an alternative method to understanding coping and adjustment. It concluded that using a greater number of positive coping strategies is associated with less use of negative coping strategies, less suicide ideation, as well as higher self-esteem, emotion regulation, and academic achievement over time. Further, decreasing the ways in which individuals use negative coping strategies (average and count), can help to decrease depressive symptoms as well as increase emotion regulation over time.

Dubai et al. (2011) conducted a study on Stress and Coping Strategies of Students in a Medical Faculty in Malaysia. The research concluded that stressors reported by the students were mainly financial and academic issues. Students adopted active coping strategies rather than avoidance. Students should receive consultation on how to manage and cope with stress. Students used active coping, religious coping reframing, planning, and acceptance to cope with stress.

Ding et al. (2021) aimed to understand the impact of different coping methods endorsed by Chinese college students during COVID-19 through the examination of the mediating role of perceived stress. The results indicated a full mediation model in which problem-focused coping and adaptive emotion-focused coping affected psychological distress entirely through the mediation of perceived stress. Maladaptive emotion-focused coping positively predicted perceived stress, which in turn positively predicted psychological distress through a partial mediation model.

Dewe et al. (2007) conducted a research on Individual strategies for coping with stress at work and focusing on individual coping with work and work-related problems and adopts a transactional framework for the definition of the key concepts of stress, appraisal and coping. It draws out of this review largely concerns issues of measurement, and four issues are flagged

as important for future research. It concludes that there is a need for more and more adequate studies, particularly in relation to the classification and modelling of coping, and that the adequacy of those future studies should be partly judged in terms of how well they deal with the issues raised here.

Chou et al. (2015) conducted a study which examined the association between stress-related coping strategies and Internet addiction and the moderating effect of depression in a sample of Taiwanese college students. Results indicated that use of restraint coping was negatively associated with Internet addiction, whereas denial and mental disengagement were positively associated with Internet addiction. Depression had a moderating effect on the association between denial and Internet addiction.

Islam et al. (2020) A 2019 U.S study by Maria A. et al., reveals that symptoms of depression are high among young adults aged 18 to 29. Symptoms of anxiety or depression are found among one in five young adults (Jurewicz I, 2015). A Bangladesh study reveals that among university students, severe anxiety levels were found in 18.1% of the sample and severe depression levels were found in 15% of the students.

Studies related to internet addiction, psychological distress, and coping strategies

Koktas et al. (2024) conducted a study that aimed to determine the relationship between internet addiction and personality traits, stress, and obsessive-compulsive symptoms among nursing students during the pandemic. This study includes 528 nursing students. The Young's Internet Addiction Test (YIAT), the Vancouver Obsessive-Compulsive Inventory (VOCI), the Eysenck Personality Inventory (EPI), and the Perceived Stress Scale (PSS) were used for data collection. It was found that there was a statistically significant and positive correlation between the students' YIAT mean scores and the EPI neuroticism sub-dimension, VOCI all sub-dimensions, and PSS mean scores. In addition, the mean scores of the PSS and EPI were predictors of the YIAT total score. Considering these results, it is necessary to prevent the negative effects of the COVID-19 pandemic on the psychosocial health of individuals. Psychological counseling can be offered to provide protective factors during the pandemic period.

Mohammad et al. (2023) conducted a study among medical students at National University. This study aimed to measure the prevalence of internet addiction, the risk factors associated with it, and its impact on psychological distress among undergraduate medical students. A total number of 307 medical students participated in this study. The study revealed that the

prevalence rates of internet addiction among medical students are very high, with addiction affecting psychological health. Therefore, effective intervention strategies are required to enlighten students on how to restrict excessive internet usage and minimize its impact on psychological status.

Salarvand et al. (2022) conducted a systematic review and meta-analysis which aimed to estimate the overall prevalence of Internet addiction among Iranian university students. As a result, about one-third of Iranian students had Internet addiction and it was concluded that, it was necessary to provide training workshops on learning about the consequences of Internet addiction and its management.

Ibrahim et al. (2022) conducted a study which concluded that Internet Addiction is an important psychological problem affecting about 9 % of university medical students during their undergraduate stage, which may interfere with their lives and studies. Students with lower internet addiction rates were female students whose mothers were employed, lived in a low affluence family, had fewer depressive symptoms, and had unmonitored internet privacy.

Surwade et al (2021) conducted their study with an objective to assess the extent of internet addiction among undergraduate students of three medical colleges and to estimate the association of internet addiction with Psychological Distress among study participants. This study concluded that Internet addiction was present in significant number of medical undergraduate students. It is seen that other psychological problems coexist with internet addiction. Therefore, interventions should be planned to manage internet addiction as well as associated psychological stressors such as anxiety and depression.

Singh et al. (2021) conducted a study to compare the stress, internet use, substance use, and coping among adolescents, young adults, and middle-aged adults amid India's 'new normal' era. Results showed moderate stress among all participants across all ages. Adolescent females perceived the highest stress. Maladaptive coping was used more by Young Adult Males. Internet use was positively correlated with perceived stress and maladaptive coping.

Hasan and Jaber (2019) studied the prevalence of internet addiction (IA) among undergraduate students, and its impact on psychological distress and coping strategies. The results showed that there was high prevalence rate of IA among students. In addition, the use of avoidance and problem-solving coping mechanism was statistically significant among the IA group compared with the non-IA group. This was associated with a more negative impact on psychological distress and self-efficacy.

Piri et al. (2019) conducted a research which intended to assess the mediating role of coping strategies in relation with psychological needs and internet addiction. This results indicate that high level of satisfaction of psychological needs are associated with low level of internet addiction and unsatisfied of psychological needs has positive impact in maladaptive coping strategy, subsequently maladaptive coping increases internet addiction.

Gupta et al. (2019) concluded that IA was significantly associated with higher family income, greater screen time, always online status, and greater duration of internet use per week. The independent predictors of IA were greater duration of internet use per week and always online status, depression, anxiety, and stress.

Anand et al. (2018) conducted study on 2776 university students. The study showed that 29.9% of met criterion on IAT (internet addiction test) for mild addictive internet use, 16.4% for moderate addictive internet use, and 0.5% for SRQ (self-report questionnaire) was nearly equal among female and male university students. University students who experienced psychological distress were staying away from home in rented accommodations.

Al-Gamal et al. (2016) showed that among university students in Jordan that prevalence of IA was 40%, and that IA was associated with a high level of mental distress. The study concluded that coping strategies, specifically the use of problem solving, resulted in students being more likely to experience a lower level of IA. The high prevalence of IA in this study, compared to previous studies, may be explained first by the fact that it was done with a specific age group (university students), and second by the overall growth in Internet use.

CHAPTER – 3

RESEARCH METHODOLOGY

INTRODUCTION

Research is a scientific enquiry, definite and systematic procedure to collect data. It helps to find out more information about study in detailed and careful manner. According to Creswell (2008) research is a process of steps used to collect and analyze information to increase our understanding of a topic or issue. It consists of three steps: pose a question, collect data to answer the question, and present an answer to the question. The research methodology is a systematic way to resolve a problem. Methodology helps to contribution towards the success or failure of any research work. After selection of the problem, the researcher has to decide suitable procedure and techniques that to be used for investigation according to the nature of research problem.

METHOD

There are several methods of collecting data but the selection of method of research is determined by the nature of the problem. The descriptive survey method is used in the study after considering nature, need and purpose of present research. Descriptive survey studies are conducted to collect the data of existing phenomena with the view to employ data to justify current condition and practices or make intelligent plans description of the tools and the sample is given under.

POPULATION

This research focuses on adolescents, aged 18-25 college student studying in graduation of different stream.

SAMPLE

Sampling is the soul of scientific study. A good sample minimizes the error of estimation, is less time consuming, and economical in terms of time and money. The size of sample varies from study to study, methods and nature of population. In the present study, keeping in view the limitation of time the researcher has to be contented within the limited samples. The investigator randomly selected 120 undergraduate's students from different colleges of Jammu District.

SAMPLING TECHNIQUE

In the present study the investigator used 'Random Sampling Technique' for data Collection.

TABLE 3.1

Distribution Of sample of adolescents

S.NO.	NAME OF THE COLLEGE	NO. of PARTICIPANTS
1.	MIER College	30
2.	M.A.M College	30
3.	Law School, University of Jammu	30
4.	Science College	30

VARIABLES

On the basis of above illuminations and nature of problem following variables were selected in present study.

A) INDEPENDENT VARIABLES

Internet addiction, psychological distress, coping

B) DEPENDENT VARIABLE

Undergraduate students

RESEARCH TOOLS USED AND ITS DESCRIPTION

The selection of suitable tools is of vital importance for successful research. Different tools are suitable for collecting different kinds of information for various purposes. Selection of tools for data collection depends upon the nature of problem undertaken. For the present investigation the investigator has used the following tools of research: -

Internet Addiction Test (IAT) Developed by Dr. Kimberley S. Young in 1998, the Internet Addiction Test (IAT) is a 5-point scale designed to assess the severity of internet addiction. The maximum score on the test is 100 points, with higher scores indicating more severe addiction problems. The IAT demonstrates good reliability, with a reliability coefficient of 0.80.

Brief – Coping Orientation to Problems Experienced Inventory (Brief-COPE) The Brief-COPE is a 28-item self-report questionnaire designed to assess coping strategies. It includes three subscales: Problem-Focused Coping, Emotion-Focused Coping, and Avoidant Coping. The questionnaire uses a 4-point rating scale and has demonstrated good reliability, with a reliability coefficient of 0.80.

Kessler Psychological Distress Scale (K10) The Kessler Psychological Distress Scale is a 10-item questionnaire intended to provide a global measure of psychological distress. It focuses on assessing symptoms of anxiety and depression, offering insights into the overall level of distress experienced by individuals.

DATA COLLECTION

The data collection for the study was quantitative in nature. standardized measurement tools were used to gather information on loneliness and problematic mobile phone usage among adolescents in the Jammu District. This approach allowed for systematic data collection, facilitating the analysis of trends, patterns, and associations between variables of interest All collected data were anonymized and securely stored to prevent unauthorized access or disclosure. Additionally, participants were informed about the purpose of the study, their voluntary participation, and their right to withdraw consent at any time without facing repercussions.

STATISTICAL TECHNIQUE EMPLOYED

The collected data was scored according to directions given in the list manuals. Then SPSS or Statistical Package for Social Sciences software was used to conduct the analysis.

Descriptive statistics such as Mean and Standard Deviation were calculated to test significance of means of different variables in the study. Correlational Analysis and Mediation Analysis was performed to derive the relationship between the variables and to see one variable's effect on other variables.

CHAPTER 4

RESULTS AND DISCUSSION

The purpose of the study is mainly to know the prevalence of internet addiction in young adult college students and investigate the relationship between Internet addiction, psychological distress, and coping in young adult college students in Jammu city, Jammu & Kashmir. It also dealt with differences in Internet addiction, psychological distress and coping via the demographic variable of gender of the respondents.

A total of 120 students completed the questionnaires. Of these, 59 were male (49.16%) and 61 (50.83%) were female. The mean age of the students was 20.58 years with a range of 17–26 years. The following table shows the prevalence of IA, PD and CP (mean and S.D) separately among the male and female students from the sample taken. The given table 4.1 and the figure 4.1 summarize the above mentioned data.

Table 4.1

Summary of the sample (descriptive analysis)

Gender		M	SD	N
MALE	Internet addiction	39.98	13.88	59
	Psychological Distress	23.24	7.81	59
	Coping	56.64	12.07	59
FEMALE	Internet Addiction	37.07	15.81	61
	Psychological Distress	27.03	9.39	61
	Coping	61.15	10.78	61

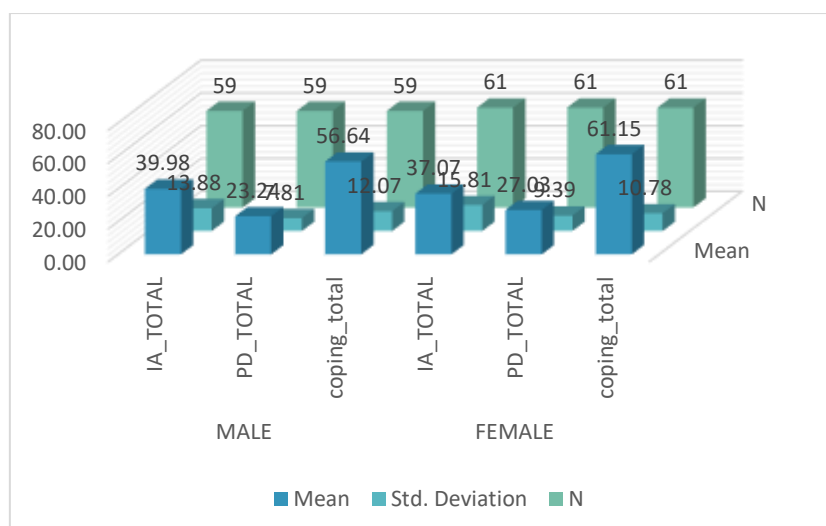


Figure 4.1

Bar graph of the Summary of the sample (descriptive analysis)

Table 4.2

Prevalence of internet addiction among the population

GENDER		FREQUENCY	PERCENTAGE
MALE	Normal	18	30.5
	Mild	27	45.8
	Moderate	14	23.7
	Severe	0	00.0
	Total	59	100.0
FEMALE	Normal	22	36.1
	Mild	28	45.9
	Moderate	9	14.8
	Severe	2	3.3
	TOTAL	61	100.0

The above mentioned data in table 4.2, shows that among the male sample (59), 18(30.5%) use the internet within a normal range. 27 (45.8%) are mildly addicted to the internet, while 14

(23.7%) are moderately addicted to the internet. Among the male sample, no one is severely addicted to the internet.

Among the female sample (61), 22 (36.1%) use the internet within a normal range, 28 (45.9%) are mildly addicted to the internet, 9 (14.8%) are moderately addicted, while 2 (3.3%) are severely addicted to the internet.

The following pie charts (figure 4.2 and 4.3) represent the above mentioned data.

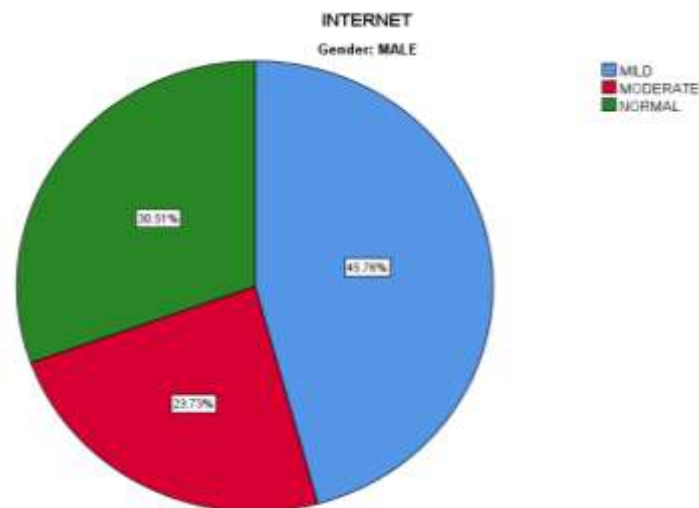


Figure 4.2

Level of Internet addiction among the male sample

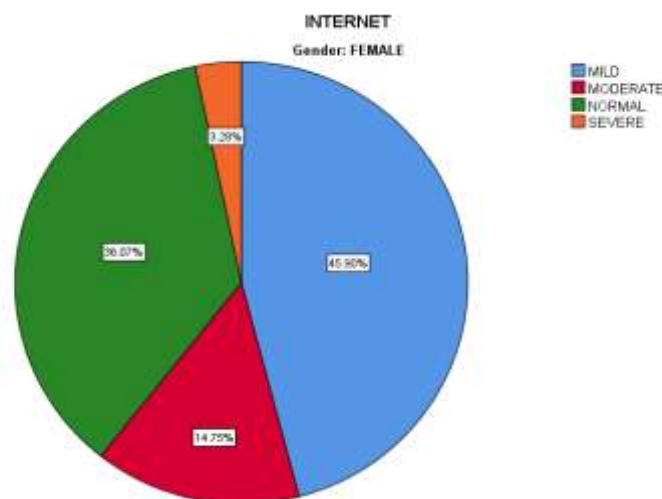


Figure 4.3

Level of Internet addiction among female sample

Table 4.3***Psychological distress levels among the sample population***

Gender		Frequency	Percent
MALE	Likely	21	35.6
	Mild	10	16.9
	Moderate	11	18.6
	Severe	17	28.8
	Total	59	100.0
FEMALE	Likely	18	29.5
	Mild	10	16.4
	Moderate	6	9.8
	Severe	27	44.3
	Total	61	100.0

Above analysis given in table 4.3, is done to determine the existence of psychological distress among young adult college students.

Levels of distress among the male sample include: 21 (35.6%) who are likely to be well, 10 (16.9%) with a mild disorder, 11 (18.6%) are likely to have moderate disorder and 17 (28.8%) are likely to have a severe disorder.

Levels of distress among the female sample include: 18 (29.5%) who are likely to be well, 10 (16.4%) with a mild disorder, 6 (9.8%) are likely to have moderate disorder and 27 (44.3%) are likely to have a severe disorder.

The follow pie chart in figure 4.4, represents the above mentioned data.

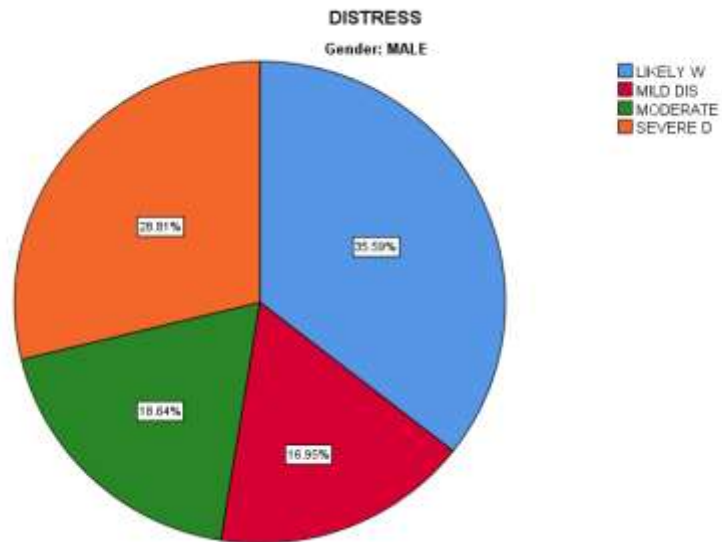


Figure 4.4

Levels of Psychological distress among the male sample

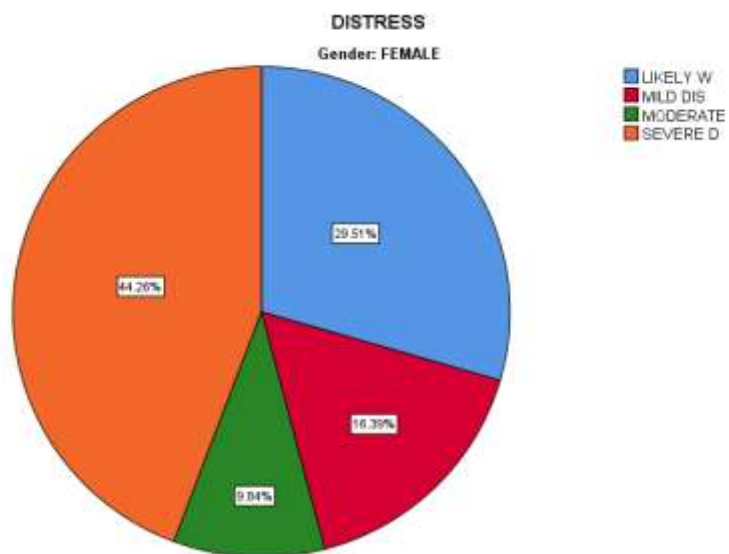


Figure 4.5

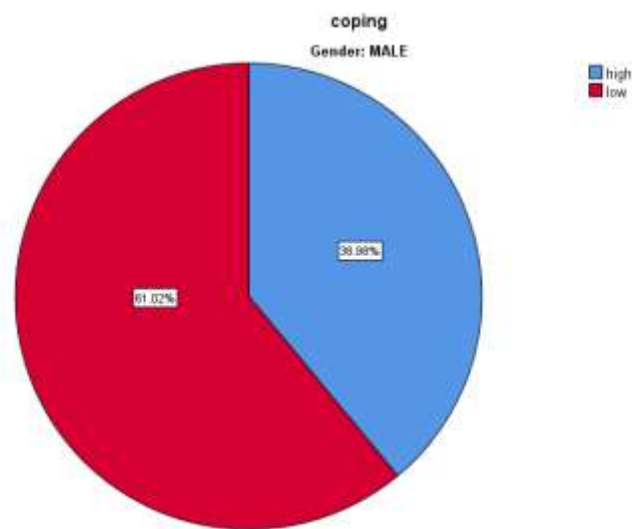
Levels of Psychological distress among the female sample

Table 4.4***Coping levels among the sample population***

Gender		Frequency	Percent
Male	High	23	39.0
	Low	36	61.0
	Total	59	100.0
Female	High	30	49.2
	Low	31	50.8
	Total	61	100.0

Above analysis in table 4.4, is done to determine the existence of psychological distress among young adult college students.

Levels of coping among the male sample include: 23 (39.0%) who show high levels of coping, and 36 (61.0%) who show low levels of coping. The above data has been summarized figure 4.6.

**Figure 4.6*****Coping among the male sample***

Levels of coping among the female sample include: 30 (49.2%) who show high levels of coping, and 31 (50.8%) who show low levels of coping. Above mentioned data has also been summarized in figure 4.7.

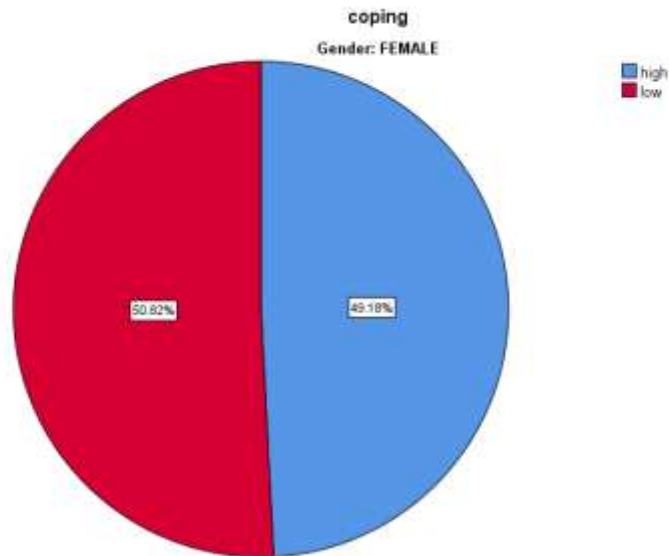


Figure 4.7

Coping among the female sample

Table 4.5

Correlation between internet addiction and psychological distress

Variable	Mean	SD	r value
Internet addiction	38.50	14.90	.372
Psychological distress	25.16	8.820	

*, $p < 0.05$ level

**, $p < .001$

The correlation conducted to fulfill objective 1 based on which the given hypothesis –

H1 - ‘There will be significant correlation between internet addiction and psychological distress among the male and female undergraduate students’ has been framed.

Pearson product-moment correlation coefficient was computed to assess the relationship between the internet addiction and psychological distress which is represented in table 4.5. There was a positive correlation between the two variables, $r = 0.372$, $n = 120$, $p = 0$. There was a strong, positive correlation between Internet addiction and psychological distress. Increase in internet addiction scores is correlated with increase in psychological distress scores. In the light of empirical evidence shown in table 4.5, above mentioned hypothesis H1 was accepted.

This is further depicted in the form of figure 4.8.

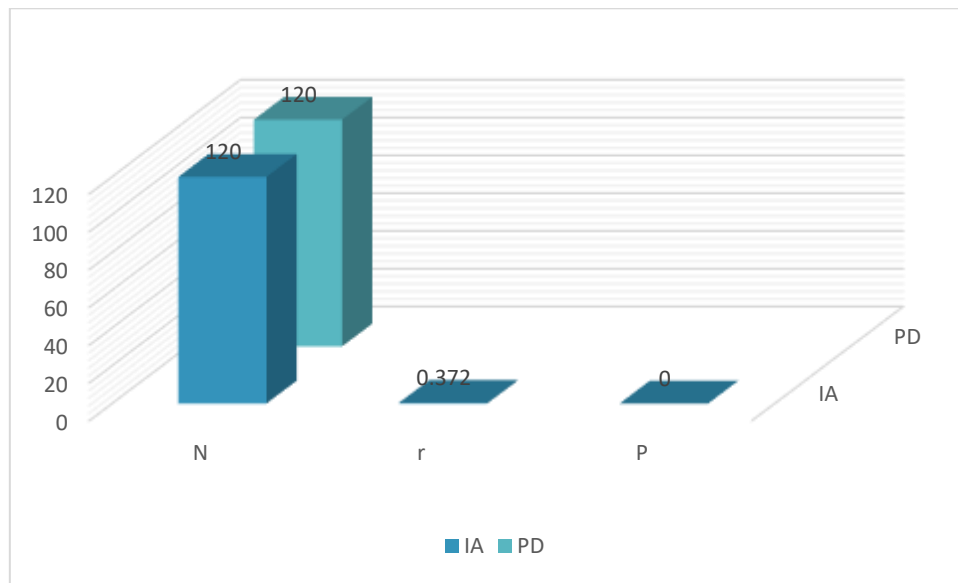


Figure 4.8

Correlation between internet addiction and psychological distress

Table 4.6

Correlation between internet addiction and coping

Variable	Mean	S.D	r value
Internet addiction	38.5000	14.90530	.296
Coping	63.3750	12.42258	

*, $p < 0.05$ level

**, $p < .001$

The correlation conducted to fulfil objective 2 based on which the given hypothesis –

H2 - ‘There will be significant correlation between internet addiction and coping among the male and female undergraduate students’ has been framed.

Pearson product-moment correlation coefficient was computed to assess the relationship between the internet addiction and coping which is represented in table 4.6. There was a positive correlation between the two variables, $r = 0.296$, $n = 120$, $p = 0.001$. There was a strong, positive correlation between Internet addiction and psychological distress. Increase in

internet addiction scores is correlated with increase in coping scores. In the light of empirical evidence shown in table 4.6, above mentioned hypothesis H2 was accepted.

This is further depicted in the form of a graph shown in figure 4.9.

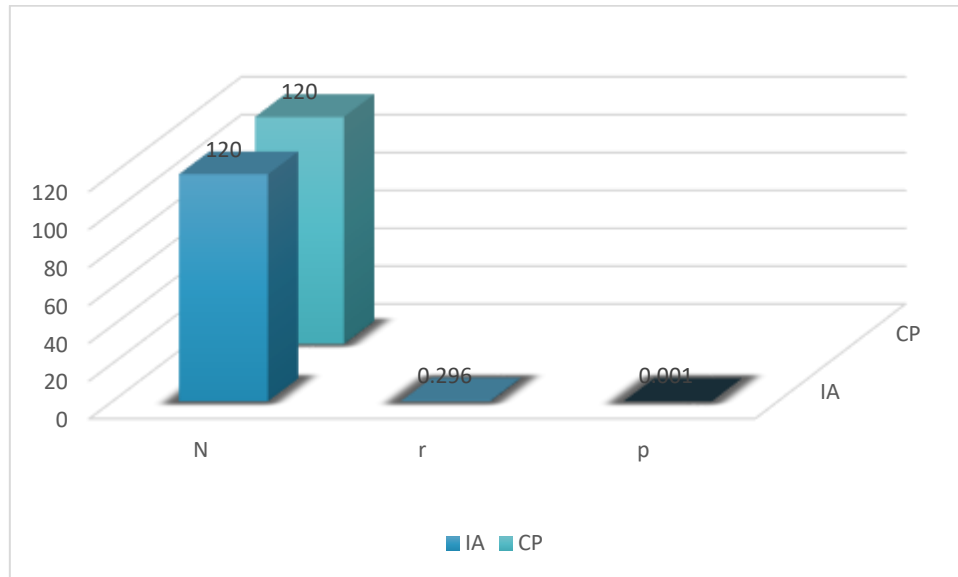


Figure 4.9

Correlation between internet addiction and coping

Table 4.7

Correlation between psychological distress and coping

Variables	Mean	S.D	r value
Psychological Distress	25.1667	8.82065	.516
Coping	63.3750	12.42258	

*, $p < 0.05$ level

**, $p < .01$

The correlation conducted to fulfil objective 3 based on which the given hypothesis –

H3 - ‘There will be significant correlation between psychological distress and coping among the male and female undergraduate students’ has been framed.

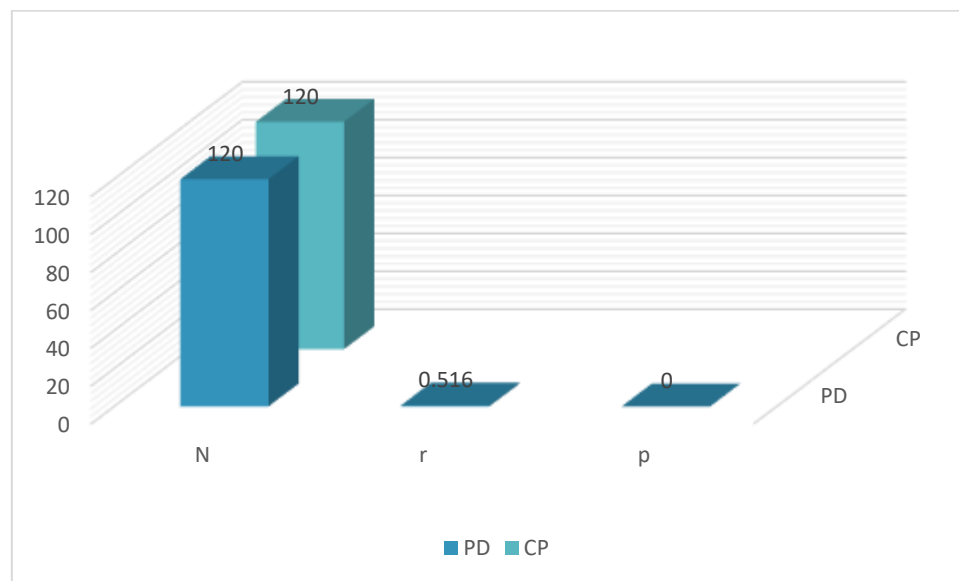
Pearson product-moment correlation coefficient was computed to assess the relationship between the internet addiction and coping which is represented in table 4.7. There was a

positive correlation between the two variables, $r = 0.516$, $n = 120$, $p = 0$. There was a strong, positive correlation between psychological distress and coping. Increase in psychological distress scores is correlated with increase in coping scores. In the light of empirical evidence shown in table 4.7, above mentioned hypothesis H3 was accepted.

This is further depicted in the form of a graph in figure 4.10.

Figure 4.10

Correlation between psychological distress and coping



THE MEDIATING EFFECT OF INTERNET ADDICTION ON PSYCHOLOGICAL DISTRESS AND COPING

Internet addiction

Model Summary

R	R-sq	MSE	F	df1	df2	p
.3723	.1386	192.9937	18.9889	1.0000	118.0000	.0000

Model

coeff	se	t	p	LLCI	ULCI
constant	22.6666	3.8484	5.8898	.0000	15.0457 30.2876
PSYCHOLOGICAL DISTRESS	.6291	.1444	4.3576	.0000	.3432 .9150

Standardized coefficients

coeff

PSYCHOLOGICAL DISTRESS .3723

Covariance matrix of regression parameter estimates:

constant PSYCHOLOGICAL DISTRESS

constant 14.8105 -.5246

PSYCHOLOGICAL DISTRESS -.5246 .0208

OUTCOME VARIABLE:

COPING

Model Summary

R	R-sq	MSE	F	df1	df2	p
.5280	.2788	113.1943	22.6177	2.0000	117.0000	.0000

Model

coeff	se	t	p	LLCI	ULCI
constant	42.8003	3.3527	12.7661	.0000	36.1605 49.4401
PSYCHOLOGICAL DISTRESS	.6631	.1191	5.5660	.0000	.4272 .8990
INTERNET ADDICTION	.1009	.0705	1.4319	.1548	-.0387 .2406

Standardized coefficients

coeff

PSYCHOLOGICAL DISTRESS .4708

INTERNET ADDICTION .1211

Covariance matrix of regression parameter estimates:

constant PSYCHOLOGICAL DISTRESS INTERNET ADDICTION

constant 11.2403 -.2368 -.1127

PSYCHOLOGICAL DISTRESS -.2368 .0142 -.0031

INTERNET ADDICTION -.1127 -.0031 .0050

Test(s) of X by M interaction:

F	df1	df2	p
.0401	1.0000	116.0000	.8416

TOTAL EFFECT MODEL

OUTCOME VARIABLE:

COPING

Model Summary

R	R-sq	MSE	F	df1	df2	p
.5159	.2662	114.2018	42.8042	1.0000	118.0000	.0000

Model

coeff	se	t	p	LLCI	ULCI
constant	45.0885	2.9604	15.2306	.0000	39.2261 50.9509
PSYCHOLOGICAL DISTRESS	.7266	.1111	6.5425	.0000	.5067 .9465

Standardized coefficients

coeff

PSYCHOLOGICAL DISTRESS .5159

Covariance matrix of regression parameter estimates:

constant PSYCHOLOGICAL DISTRESS

constant 8.7639 -.3104

PSYCHOLOGICAL DISTRESS -.3104 .0123

TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y

Total effect of X on Y

Effect	se	t	p	LLCI	ULCI	c_ps	c_cs
.7266	.1111	6.5425	.0000	.5067	.9465	.0585	.5159

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI	c'_ps	c'_cs
	.6631	.1191	5.5660	.0000	.4272	.8990	.0534 .4708

Indirect effect(s) of X on Y:

Effect	BootSE	BootLLCI	BootULCI
INTERNET ADDICTION	.0635	.0418	-.0194 .1477

Partially standardized indirect effect(s) of X on Y:

Effect	BootSE	BootLLCI	BootULCI
INTERNET ADDICTION	.0051	.0034	-.0016 .0120

Completely standardized indirect effect(s) of X on Y:

Effect	BootSE	BootLLCI	BootULCI
INTERNET ADDICTION	.0451	.0290	-.0141 .1017

OUTCOME VARIABLE:

INTERNET ADDICTION

Coeff	BootMean	BootSE	BootLLCI	BootULCI
constant	22.6666	22.6704	3.8742	14.9938 30.3125
PSYCHOLOGICAL DISTRESS	.6291	.6304	.1529	.3409 .9414

OUTCOME VARIABLE:

COPING

Coeff	BootMean	BootSE	BootLLCI	BootULCI
constant	42.8003	42.7654	3.6846	35.4205 50.0319
PSYCHOLOGICAL DISTRESS	.6631	.6631	.1221	.4248 .8992
INTERNET ADDICTION	.1009	.1012	.0663	-.0309 .2312

The statistical analysis investigates the mediating role of internet addiction (IA) on the relationship between psychological distress (PD) and coping (CP). The direct effect of psychological distress on coping is significant, with a standardized coefficient of 0.4708 and a p-value of 0.0000, indicating a strong positive association. The analysis also examines the indirect effect of psychological distress on coping through internet addiction. However, the

mediation effect of internet addiction is not statistically significant, as the 95% confidence interval (BootLLCI to BootULCI) for the indirect effect ranges from -0.0194 to 0.1477, crossing zero. This suggests that while psychological distress has a substantial direct impact on coping, internet addiction does not significantly mediate this relationship. The total effect of psychological distress on coping remains significant, with a standardized coefficient of 0.5159 and a p-value of 0.0000. Overall, these findings indicate that psychological distress directly influences coping mechanisms, and the presence of internet addiction does not significantly alter this effect.

CHAPTER 5

SUMMARY, DISCUSSION, AND CONCLUSION

Internet addiction (IA) is an emerging phenomenon among the youth of India. It has been found to be associated with mental health problems. This study was therefore conducted to find out the burden of IA among college students in Jammu, its risk factors and association with psychological distress and the coping strategies used by undergraduate students. The sample consisted of 120 college going students with 59 male and 61 female participants. They were given three separate questionnaires each to evaluate them on the basis of: their daily internet usage using Young's internet addiction scale; their psychological distress level using Kessler's psychological distress scale; and their coping strategy and level using the brief-COPE.

The study "Prevalence of Internet Addiction, Its Association with Psychological Distress, Coping Strategies Among Undergraduate Students" investigates the extent of internet addiction among undergraduate students and explores its relationship with psychological distress and coping mechanisms. Conducted on a sample of 120 undergraduate students of the colleges of Jammu, the research aims to understand the prevalence of internet addiction and its potential impact on mental health and coping behaviors.

Key findings of the study indicate a significant prevalence of internet addiction among the student population. The analysis reveals that 66.6% (80) of the students' exhibit signs of internet addiction, characterized by excessive time spent online, while 33.4% are not addicted. Of the 66.6 percent, 45.8% had mild addiction and 19.16 percent had moderate addiction and 2.5 percent had severe addiction. A recent study done by Anjani (2021) to know the internet addiction among young adults in Vishakhapatnam city using the Youngs' internet addiction scale also yielded similar results with 60.6 percent under the category of internet addiction and 39.4 percent with no addiction.

The study also uncovers a strong association between internet addiction and psychological distress. 81 out of 120 or 67.5% students reported signs of psychological distress. This suggests that excessive internet use may contribute to or exacerbate mental health issues, potentially creating a vicious cycle of increased distress and further internet use as a maladaptive coping strategy.

Coping strategies employed by students were also examined in the study. It was found that 67 (55.8%) students have lower levels of coping. This may hinder effective stress management and exacerbate psychological distress.

The study highlights the need for targeted interventions to address internet addiction among students. Recommendations include the implementation of educational programs to raise awareness about the risks of excessive internet use, the promotion of healthy coping strategies, and the provision of mental health support services to help students manage psychological distress. The findings underscore the importance of a balanced approach to internet use and mental health among undergraduate students to promote overall well-being and academic success.

CONCLUSION

From the research it can be concluded that:

There is a significant correlation between internet addiction and psychological distress among male and female undergraduate students. Accepted

There is a significant correlation between internet addiction and coping among male and female undergraduate students. Accepted

There is a significant relationship between psychological distress and coping among male and female undergraduate students. Accepted

There is a significant mediating effect of internet addiction on psychological distress and coping among male and female undergraduate students. Accepted

The research study hence concludes that the undergraduate students who have access to the internet and use the internet for maximum of their tasks are dependent on it. They face internet addiction which can be a causal factor of psychological distress. However, since the sample includes young college students therefore their coping abilities are also at par and hence, looking at the results of the research we can conclude that Internet addiction can cause psychological distress and also plays a mediating role coping and psychological distress. These results align with the studies of Mohammad et al. (2023) and Ibrahim et al. (2022) who concluded that prevalence rates of internet addiction among students are very high, with addiction affecting psychological health and that Internet Addiction is an important psychological problem affecting about 9 % of university medical students during their undergraduate stage, which may interfere with their lives and studies respectively. The

investigator study also aligns with the study conducted by Dubai et al. (2011) concluded that stressors reported by the students were mainly financial and academic issues. Students adopted active coping strategies rather than avoidance.

SUGGESTIONS FOR FUTURE RESEARCH

The suggestions of the future research are as under:

1. **Longitudinal Studies:** Conduct longitudinal studies to track changes in internet addiction and its psychological effects over time. Understanding the long-term impact and progression of internet addiction can provide insights into its development and potential recovery processes.
2. **Cross-Cultural Comparisons:** Investigate internet addiction across different cultural and socio-economic backgrounds. Cultural factors can influence the prevalence of internet addiction and the effectiveness of coping strategies, highlighting the need for culturally sensitive interventions.
3. **Specific Subpopulations:** Focus on specific subpopulations such as international students, students from different academic disciplines, or those with pre-existing mental health conditions. Different groups may exhibit unique patterns of internet use and face varying levels of psychological distress, requiring tailored interventions.
4. **Intervention Studies:** Develop and evaluate interventions aimed at reducing internet addiction and associated psychological distress. Testing the efficacy of different therapeutic approaches, such as cognitive-behavioral therapy, mindfulness, or digital detox programs, can identify effective strategies for managing internet addiction.
5. **Role of Personality Traits:** Examine the role of personality traits, such as introversion/extroversion, impulsivity, and resilience, in internet addiction and coping strategies. Personality traits can significantly influence both the susceptibility to internet addiction and the choice of coping mechanisms.
6. **Technology Use Patterns:** Analyze specific patterns of technology use (e.g., social media, gaming, streaming) and their distinct impacts on psychological well-being. Different types of internet use may have varied effects on mental health, necessitating a nuanced understanding of these relationships.
7. **Psychosocial Factors:** Investigate the role of psychosocial factors, such as social support, academic pressure, and life satisfaction, in internet addiction and psychological distress. Identifying key psychosocial factors can help in developing comprehensive prevention and intervention strategies.

8. **Coping Strategies and Effectiveness:** Explore the range of coping strategies used by students and assess their effectiveness in mitigating internet addiction and distress. Understanding which coping strategies are most effective can guide the creation of support programs and educational campaigns.
9. **Digital Literacy and Education:** Assess the impact of digital literacy programs on reducing internet addiction and promoting healthy internet use habits. Educating students about responsible internet use and digital hygiene can be a proactive approach to preventing addiction.
10. **Impact of COVID-19 Pandemic:** Study the impact of the COVID-19 pandemic on internet addiction and psychological distress among students. The pandemic has likely altered internet use patterns and stress levels, providing a unique context for understanding these dynamics.

Implication for future research:

1. **Effectiveness of Coping Strategies:** Future studies should assess the effectiveness of various coping strategies used by students to manage internet addiction and psychological distress. This can help in developing targeted interventions.
 2. **Development of New Coping Strategies:** Research should focus on developing and testing new coping strategies tailored to the unique challenges faced by undergraduate students. This includes digital literacy programs, time management training, and stress reduction techniques.
 3. **Role of Support Systems:** Examine the role of peer support, family involvement, and institutional support in helping students cope with internet addiction and psychological distress. Understanding these dynamics can inform policy and program development in educational institution.
-
1. **Policy and Educational Programs:** Future research should inform the development of policies and educational programs aimed at reducing internet addiction and its associated psychological distress. This includes integrating internet use education into the undergraduate curriculum.
 2. **Technological Interventions:** Explore the potential of technological interventions such as apps and online platforms designed to monitor and regulate internet use among students. Research should evaluate their effectiveness and user acceptance.

3. Holistic Approach: Encourage a holistic approach in future research that considers the interplay between internet addiction, psychological distress, and coping strategies. This can lead to more comprehensive and effective intervention programs.

By addressing these areas, future research can provide deeper insights into the complex relationships between internet addiction, psychological distress, and coping strategies, ultimately contributing to better support systems for undergraduate students.

REFERENCES

- Aguirre Velasco, A., Cruz, I. S. S., Billings, J., Jimenez, M., & Rowe, S. (2020). What are the barriers, facilitators and interventions targeting help-seeking behaviours for common mental health problems in adolescents? A systematic review. *BMC psychiatry*, 20(1), 1-22. <https://doi.org/10.1186/s12888-020-02659-0>
- Al-Dubai, S. A., Al-Naggar, R. A., Alshagga, M. A., & Rampal, K. G. (2011). Stress and coping strategies of students in a medical faculty in malaysia. *The Malaysian journal of medical sciences : MJMS*, 18(3), 57–64.
- Al-Gamal E, Alzayyat A, Ahmad MM. Prevalence of Internet Addiction and Its Association With Psychological Distress and Coping Strategies Among University Students in Jordan. *Perspect Psychiatr Care*. 2016 Jan;52(1):49-61. doi: 10.1111/ppc.12102. Epub 2015 Jan 30. PMID: 25639746. <https://doi.org/10.1111/ppc.12102>
- Alimoradi, Z., Lin, C. Y., Broström, A., Bülow, P. H., Bajalan, Z., Griffiths, M. D., ... & Pakpour, A. H. (2019). Internet addiction and sleep problems: A systematic review and meta-analysis. *Sleep medicine reviews*, 47, 51-61. <https://doi.org/10.1016/j.smr.2019.06.004>
- Alkhawaldeh, Abdullah, Omar Al Omari, Samir Al Aldawi, Iman Al Hashmi, Cherry Ann Ballad, Amal Ibrahim, Sulaiman Al Sabei, Arwa Alsaraireh, Mohammad Al Qadire, and Mohammed ALBashtawy. ‘Stress Factors, Stress Levels, and Coping Mechanisms among University Students’. Edited by Alberto Raggi. *The Scientific World Journal* 2023 (29 June 2023): 2026971. <https://doi.org/10.1155/2023/2026971>.
- American psychological association (2018).<https://dictionary.apa.org/psychological-distress>
- Anand, Nitin; Jain, Praveen A¹; Prabhu, Santosh²; Thomas, Christofer³; Bhat, Aneesh⁴; Prathyusha, P V⁵; Bhat, Shrinivasa U.⁶; Young, Kimberly⁷; Cherian, Anish V⁸. Prevalence of excessive internet use and its association with psychological distress among university students in South India. *Industrial Psychiatry Journal* 27(1):p 131-140, Jan–Jun 2018. | DOI: 10.4103/ipj.ipj_28_18
- Bandura, A., Freeman, W. H., & Lightsey, R. (1999). Self-efficacy: The exercise of control.
- Barry V, Stout ME, Lynch ME, et al. The effect of psychological distress on health outcomes: A systematic review and meta-analysis of prospective studies. *Journal of Health Psychology*. 2020;25(2):227-239. doi:[10.1177/1359105319842931](https://doi.org/10.1177/1359105319842931)

- Baturay, M.H., Toker, S. Internet addiction among college students: Some causes and effects. *Educ Inf Technol* 24, 2863–2885 (2019). <https://doi.org/10.1007/s10639-019-09894-3>
- Bavaskar Y.G., Lokhande G.S., Surwade J.B., Malkar V.R., Ramanand J., Gosavi S., Pawar R.D. (2021). Internet addiction and its association with psychological distress among undergraduate medical students of northern Maharashtra. *Med Pulse International Journal of Community Medicine*. <https://doi.org/10.26611/10111923>
- Belay, A. S., Guangul, M. M., Asmare, W. N., & Mesafint, G. (2021). Prevalence and associated factors of psychological distress among nurses in public hospitals, Southwest, Ethiopia: A cross-sectional study. *Ethiopian Journal of Health Sciences*, 31(6) <https://www.ajol.info/index.php/ejhs/article/view/219291>
- Bener, A., Yildirim, E., Torun, P., Çatan, F., Bolat, E., Alıç, S., ... & Griffiths, M. D. (2019). Internet addiction, fatigue, and sleep problems among adolescent students: A large-scale study. *International Journal of Mental Health and Addiction*, 17, 959-969. <https://link.springer.com/article/10.1007/s11469-018-9937-1>
- Carranza Esteban RF, Mamani-Benito O, Caycho-Rodriguez T, Lingán-Huamán SK and Ruiz Mamani PG (2022) Psychological Distress, Anxiety, and Academic Self-Efficacy as Predictors of Study Satisfaction Among Peruvian University Students During the COVID-19 Pandemic. *Front. Psychol.* 13:809230. doi: 10.3389/fpsyg.2022.809230
- Cham, S.; Algashami, A.; Aldhayan, M.; McAlaney, J.; Phalp, K.; Almourad, M.B.; Ali, R. (2019). Digital addiction: Negative life experiences and potential for technology-assisted solutions. *Adv. Intell. Syst. Comput*, 931, 921–931.
- Chou, W. P., Ko, C. H., Kaufman, E. A., Crowell, S. E., Hsiao, R. C., Wang, P. W., ... & Yen, C. F. (2015). Association of stress coping strategies with Internet addiction in college students: The moderating effect of depression. *Comprehensive psychiatry*, 62, 27-33. Clinical Aspects. New York: Free Press.
- Cole, D. A., Zelkowitz, R. L., Nick, E. A., Lubarsky, S. R., & Rights, J. D. (2019). Simultaneously examining negative appraisals, emotion reactivity, and cognitive reactivity in relation to depressive symptoms in children. *Development and Psychopathology*, 31(4), 1527-1540. <https://doi.org/10.1017/S0954579418001207>
- Collinson, D. (2017). Mental health bulletin: 2016-2017 annual report. <https://doi.org/10.1177/07435584211062115>

- Creswell, J. W. (2008). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). SAGE Publications.
- Devi, S., & Patra, S. (2020). Mental health problems, ways of coping and internet addiction among adolescents. *International Journal of Indian Psychology*, 8(3). <https://doi.org/10.25215/0803.166>
- Dewe, P., Cox, T., & Ferguson, E. (1993). Individual strategies for coping with stress at work: A review. *Work & Stress*, 7(1), 5-15. <https://doi.org/10.1080/02678379308257046>
- Dewe, P., Guesr, D., & Williams, R. (1979). Methods of coping with work related stress. In C. Mackey and T. Cox (Eds.), *Response to stress: Occupational aspects*. Guilford: IPC Science and Technology Press.
- Ding, Y., Fu, X., Liu, R., Hwang, J., Hong, W., & Wang, J. (2021). The Impact of Different Coping Styles on Psychological Distress during the COVID-19: The Mediating Role of Perceived Stress. *International journal of environmental research and public health*, 18(20), 10947. <https://doi.org/10.3390/ijerph182010947>
- Diotaiuti P, Mancone S, Corrado S, De Risio A, Cavicchiolo E, Girelli L and Chirico A (2022) Internet addiction in young adults: The role of impulsivity and codependency. *Front. Psychiatry* 13:893861. doi: 10.3389/fpsy.2022.893861
DOI: 10.1891/0889-8391.13.2.158
- Fareeda Shaheen A Study of Parental Expectations Attributional Styles and Coping Strategies of Students Experiencing Psychological Distress <http://hdl.handle.net/10603/71874>
- Fischer, R., Scheunemann, J. & Moritz, S. Coping Strategies and Subjective Well-being: Context Matters. *J Happiness Stud* 22, 3413–3434 (2021). <https://doi.org/10.1007/s10902-021-00372-7>
- Fosco, G. M., & Lydon-Staley, D. M. (2019). A within-family examination of interparental conflict, cognitive appraisals, and adolescent mood and well-being. *Child development*, 90(4), e421-e436. <https://doi.org/10.1111/cdev.12997>
- Freire C, Ferradás MdM, Regueiro B, Rodríguez S, Valle A and Núñez JC (2020) Coping Strategies and Self-Efficacy in University Students: A Person-Centered Approach. *Front. Psychol.* 11:841. doi: 10.3389/fpsyg.2020.00841

- Goel, D., Subramanyam, A., & Kamath, R. (2013). A study on the prevalence of internet addiction and its association with psychopathology in Indian adolescents. *Indian journal of psychiatry*, 55(2), 140–143. <https://doi.org/10.4103/0019-5545.111451>
- Griffiths M. (1999). Internet addiction: Fact or fiction? *Psychologist*. 12:246–250. doi: 10.1176/ajp.154.6.890.
- Gupta, A., Khan, A. M., Rajoura, O. P., & Srivastava, S. (2018). Internet addiction and its mental health correlates among undergraduate college students of a university in North India. *Journal of family medicine and primary care*, 7(4), 721.
- Hart, L. M., Morgan, A. J., Rossetto, A., Kelly, C. M., Mackinnon, A., & Jorm, A. F. (2018). Helping adolescents to better support their peers with a mental health problem: A cluster-randomised crossover trial of teen Mental Health First Aid. *Australian & New Zealand Journal of Psychiatry*, 52(7), 638-651.
- Hasan, A. A. H. (2019). Prevalence of internet addiction, its association with psychological distress, coping strategies among undergraduate students. *Nurse Education Today*, 81, 78-82. <https://doi.org/10.1016/j.nedt.2019.07.004>
- Hasan, A. A. H. (2019). Prevalence of internet addiction, its association with psychological distress, coping strategies among undergraduate students. *Nurse Education Today*, 81, 78-82.
- Heffer, T., & Willoughby, T. (2017). A count of coping strategies: A longitudinal study investigating an alternative method to understanding coping and adjustment. *PloS one*, 12(10), e0186057. <https://doi.org/10.1371/journal.pone.0186057>
- Hill, N.T.M., Bailey, E., Benson, R. *et al.* Researching the researchers: psychological distress and psychosocial stressors according to career stage in mental health researchers. *BMC Psychol* 10, 19 (2022). <https://doi.org/10.1186/s40359-022-00728-5>
- Houstan, K. (1986). Stress and Coping.
- Ibrahim, A. K., Fouad, I., Kelly, S. J., El Fawal, B., & Ahmed, G. K. (2022). Prevalence and determinants of Internet Addiction among medical students and its association with depression. *Journal of Affective Disorders*, 314, 94-102. <https://doi.org/10.1016/j.jad.2022.07.007>

- Islam, F. M. A. (2019). Psychological distress and its association with sociodemographic factors in a rural district in Bangladesh: A cross-sectional study. *PLOS ONE*, 14(3), 1–18. <https://doi.org/10.1371/journal.pone.0212765>
- Islam, M. A., Barna, S. D., Raihan, H., Khan, M., & Hossain, M. T. (2020). Depression and anxiety among university students during the COVID-19 pandemic in Bangladesh: A webbased cross-sectional survey. *PloS one*, 15(8), e0238162. <https://doi.org/10.1371/journal.pone.0238162>
- Jain, A., Sharma, R., Gaur, K. L., Yadav, N., Sharma, P., Sharma, N., ... & Yadav, K. S. (2020). Study of internet addiction and its association with depression and insomnia in university students. *Journal of Family Medicine and Primary Care*, 9(3), 1700. DOI: 10.4103/jfmprc.jfmprc_1178_19
- Kessler RC, Barker PR, Colpe LJ, Epstein JF, Gfroerer JC, Hiripi E, et al. Screening for serious mental illness in the general population. *Arch Gen Psychiatry*. 2003 Feb;60(2):184-9.
- Khambaty, M., & Parikh, R. M. (2017). Cultural aspects of anxiety disorders in India. *Dialogues in clinical neuroscience*, 19(2), 117126.
- Kosuke Yano, Shintaro Endo, Shunsuke Kimura & Kazuo Oishi | Daryl O'Connor (Reviewing editor) (2021) Effective coping strategies employed by university students in three sensitivity groups: a quantitative text analysis, *Cogent Psychology*, 8:1, DOI: [10.1080/23311908.2021.1988193](https://doi.org/10.1080/23311908.2021.1988193)
- Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukophadhyay, T., & Scherlis, W. (1998). Internet paradox: A social technology that reduces social involvement and psychological well-being?. *American psychologist*, 53(9), 1017.
- Kumar, M & Sharma (2017) <http://egyankosh.ac.in/handle/123456789/40009> (2017)
- Kumar, M., & Mondal, A. (2018). A study on Internet addiction and its relation to psychopathology and self-esteem among college students. *Industrial psychiatry journal*, 27(1), 61–66. https://doi.org/10.4103/ipj.ipj_61_17
- Kuss, D., Griffiths, M. (2014). *Internet Addiction in Psychotherapy*. United Kingdom: Palgrave Macmillan.
- Lannin, D. G., Vogel, D. L., Brenner, R. E., Abraham, W. T., & Heath, P. J. (2016). Does self-stigma reduce the probability of seeking mental health information. *Journal of counseling psychology*, 63(3), 351. <https://psycnet.apa.org/doi/10.1037/cou0000108>

- Lathabhavan, R., Sudevan, S. The Impacts of Psychological Distress on Life Satisfaction and Wellbeing of the Indian General Population During the First and Second Waves of COVID-19: A Comparative Study. *Int J Ment Health Addiction* 21, 2526–2537 (2023). <https://doi.org/10.1007/s11469-021-00735-4>
- Lazarus, R. S. (1975). The self regulation of emotion. In L. Levi (Ed.), *Emotions Their parameters and measurement*. New York : Raven Press
- Leveto, J. A. (2018). Exploring the Relationships between Discrepancies in Perceptions of Emotional Performance among College Students on SelfEsteem and Psychological Distress. *Current Psychology*, 1–13. <https://doi.org/10.1007/s12144-018-9857-z>
- Lozano-Blasco, R., Robres, A. Q., & Sánchez, A. S. (2022). Internet addiction in young adults: A meta-analysis and systematic review. *Computers in Human Behavior*, 130, 107201. <https://doi.org/10.1016/j.chb.2022.107201>
- Mabitsela, L. (2003). Exploratory study of psychological distress as understood by Pentecostal pastors (Doctoral dissertation, University of Pretoria).
- Mason, R. J., Hart, L. M., Rossetto, A., & Jorm, A. F. (2015). Quality and predictors of adolescents' first aid intentions and actions towards a peer with a mental health problem. *Psychiatry Research*, 228(1), 31-38. <https://doi.org/10.1016/j.psychres.2015.03.036>
- McLachlan, K. J. J., & Gale, C. R. (2018). The effects of psychological distress and its interaction with socioeconomic position on risk of developing four chronic diseases. *Journal of psychosomatic research*, 109, 79–85. <https://doi.org/10.1016/j.jpsychores.2018.04.004>
- McNicol, M. L., & Thorsteinsson, E. B. (2017). Internet Addiction, Psychological Distress, and Coping Responses Among Adolescents and Adults. *Cyberpsychology, behavior and social networking*, 20(5), 296–304. <https://doi.org/10.1089/cyber.2016.0669>
- Mohamed, K. O., Soumit, S. M., Elseed, A. A., Allam, W. A., Soomit, A. M., & Humeda, H. S. (2023). Prevalence of internet addiction among medical students and its impact on psychological distress: A cross-sectional study. <https://doi.org/10.21203/rs.3.rs-3173993/v2>
- Moos, R.A., & Billings, A. G. (1982). Conceptualizing and measuring coping resources and processes. In L. Goldberger and S. Breznitz. (Eds.), *Handbook of stress: Theoretical*

- and Naughton, M. F., Maybery, D. J., & Goodyear, M. (2018). Prevalence of mental illness within families in a regional child-focussed mental health service. *International journal of mental health nursing*, 27(2), 901-910. <https://doi.org/10.1111/inm.12386>
- Pasala Venkata Varha Anjani (2021) Internet Addiction and its Association with Depression Anxiety Stress and Well Being Among Young Adult College Students Department of Psychology and Parapsychology. Andhra University <http://hdl.handle.net/10603/453980>
- Pestonjee, D. M. (1992). Stress and coping: The Indian experience. Sage Publications Ltd.
- Pilgrim, D. (2007). The survival of psychiatric diagnosis. *Social Science & Medicine*, 65(3), 536–547. <https://doi.org/10.1016/j.socscimed.2007.03.054>
- Pimenta, S. M., Hunter, S. C., Rasmussen, S., Cogan, N., & Martin, B. (2021). Young People's Coping Strategies When Dealing With Their Own and a Friend's Symptoms of Poor Mental Health: A Qualitative Study. *Journal of Adolescent Research*, 0(0). <https://doi.org/10.1177/07435584211062115>
- Pimenta, S. M., Hunter, S. C., Rasmussen, S., Cogan, N., & Martin, B. (2021). Young People's Coping Strategies When Dealing With Their Own and a Friend's Symptoms of Poor Mental Health: A Qualitative Study. *Journal of Adolescent Research*, 0(0). <https://doi.org/10.1177/07435584211062115>
- Pinkerton, P., Trauer, T., Duncan, F., Hodson, M. E., & Batteon, J. C. (1985). Cystic Fibrosis in adult life: A Study of Coping Patterns. *The Lancet*, 2, 761-763.
- Piri, Z., Majd, M. A., Bazzazian, S., & Ghamari, M. (2019). The mediating role of coping strategies in relation with psychological needs and internet addiction among college student. *International Journal of Applied Behavioral Sciences*, 5(3), 9-17.
- Prem Singh JG, Prajina PV. A study on the impact of internet addiction among adolescents. *Int J Scientific Res.* (2013) 2:499–501. doi: 10.15373/22778179/AUG2013/164
- Rose, A. J., & Rudolph, K. D. (2006). A review of sex differences in peer relationship processes: potential trade-offs for the emotional and behavioral development of girls and boys. *Psychological bulletin*, 132(1), 98. <https://psycnet.apa.org/doi/10.1037/0033-2909.132.1.98>

- Rowe, S. L., French, R. S., Henderson, C., Ougrin, D., Slade, M., & Moran, P. (2014). Help-seeking behaviour and adolescent self-harm: a systematic review. *Australian & New Zealand Journal of Psychiatry*, 48(12), 1083-1095.
- Sahu, Pradeep Kumar; Nayak, Bijoor Shivananda¹; Rodrigues, Vincent¹; Umakanthan, Srikanth². Prevalence of Psychological Distress among Undergraduate Medical Students: A Cross-Sectional Study. *International Journal of Applied and Basic Medical Research* 10(4):p 270-275, Oct–Dec 2020. | DOI: 10.4103/ijabmr.IJABMR_100_19
- Salarvand, S., N. Albatineh, A., Dalvand, S., Baghban Karimi, E., & Ghanei Gheshlagh, R. (2022). Prevalence of internet addiction among Iranian university students: a systematic review and meta-analysis. *Cyberpsychology, Behavior, and Social Networking*, 25(4), 213-222. <https://doi.org/10.1089/cyber.2021.0120>
- Schnyder, N., Panczak, R., Groth, N., & Schultze-Lutter, F. (2017). Association between mental health-related stigma and active help-seeking: systematic review and meta-analysis. *The British Journal of Psychiatry*, 210(4), 261-268. <https://doi.org/10.1192/bjp.bp.116.189464>
- Shaheen, F., Jahan, M., & Shaheen, S. (2014). Role of personality factors in experiencing psychological distress among adolescents. *International Journal of Education and Psychological Research*, 3(1), 14-20.
- Shaw, M. Ve Black DW (2008). Internet Addiction. *CNS drugs*, 22(5), 353-365.
- Shpakou, A.; Krajewska-Kułak, E.; Cybulski, M.; Sokołowska, D.; Andryszczyk, M.; Kleszczewska, E.; Loginovich, Y.; Owoc, J.; Tarasov, A.; Skoblina, N.; et al. Anxiety, Stress Perception, and Coping Strategies among Students with COVID-19 Exposure. *J. Clin. Med.* 2023, 12, 4404. <https://doi.org/10.3390/jcm12134404>
- Singh, S., Pandey, N. M., Datta, M., & Batra, S. (2021). Stress, internet use, substance use and coping among adolescents, young-adults and middle-age adults amid the ‘new normal’ pandemic era. *Clinical Epidemiology and Global Health*, 12, 100885. <https://doi.org/10.1016/j.cegh.2021.100885>
- Victorian Population Health Survey. Melbourne: Department of Human Services, Victoria; 2001.

- Viertiö, S., Kiviruusu, O., Piirtola, M. *et al.* Factors contributing to psychological distress in the working population, with a special reference to gender difference. *BMC Public Health* 21, 611 (2021). <https://doi.org/10.1186/s12889-021-10560-y>
- Weaver, L. J. (2017). Tension Among Women in North India: An Idiom of Distress and a Cultural Syndrome. *Culture, Medicine, and Psychiatry*, 41(1), 35–55. <https://doi.org/10.1007/s11013-016-9516-5>
- Xu, L. X., Wu, L. L., Geng, X. M., Wang, Z. L., Guo, X. Y., Song, K. R., ... & Potenza, M. N. (2021). A review of psychological interventions for internet addiction. *Psychiatry Research*, 302, 114016. <https://doi.org/10.1016/j.psychres.2021.114016>
- Young KS. (1998). Internet addiction: The emergence of a new clinical disorder. *Cyberpsychol Behav* ;1(3):237- 44
- Yuan K, Qin W, Liu Y, Tian J (2011). "Internet addiction: Neuroimaging findings". *Communicative & Integrative Biology*. 4 (6): 637–9.
- Zenebe, Y., Kunno, K., Mekonnen, M. *et al.* Prevalence and associated factors of internet addiction among undergraduate university students in Ethiopia: a community university-based cross-sectional study. *BMC Psychol* 9, 4 (2021). <https://doi.org/10.1186/s40359-020-00508-z>

APPENDIX

DEMOGRAPHIC DETAILS:

1. Name
2. Age
3. Gender
4. Locality

CONSENT FORM FOR RESEARCH STUDY

You are invited to participate in a research study titled "Prevalence of Internet Addiction, its Effect on Psychological Distress, and Coping Among Undergraduate Students" conducted by Naman Mansotra. The purpose of this study is to investigate the prevalence of internet addiction and its impact on psychological distress and coping mechanisms among undergraduate students. If you agree to participate, you will be asked to complete a survey about your internet usage, psychological distress, and coping strategies, which will take approximately 15-20 minutes. You may skip any questions or withdraw from the survey at any time without penalty. Although there are no direct benefits to you, your participation will contribute to a better understanding of internet addiction and its effects on mental health. Your responses will be anonymized and kept confidential, with data securely stored and reported in aggregate form. Participation is completely voluntary.

Participant's Name:

Participant's Signature:

Date:

INTERNET ADDICTION TEST

Name _____

Male Female

Age Years Online Do you use the Internet for work? Yes No

This questionnaire consists of 20 statements. After reading each statement carefully, based upon 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

1. How often do you find that you stay online longer than you intended?
2. How often do you neglect household chores to spend more time online?
3. How often do you prefer the excitement of the Internet to intimacy with your partner?
4. How often do you form new relationships with fellow online users?
5. How often do others in your life complain to you about the amount of time you spend online?
6. How often do your grades or school work suffer because of the amount of time you spend online?
7. How often do you check your email before something else that you need to do?
8. How often does your job performance or productivity suffer because of the Internet?
9. How often do you become defensive or secretive when anyone asks you what you do online?

10. How often do you block out disturbing thoughts about your life with soothing thoughts of the Internet?
11. How often do you find yourself anticipating when you will go online again?
12. How often do you fear that life without the Internet would be boring, empty, and joyless?
13. How often do you snap, yell, or act annoyed if someone bothers you while you are online?
14. How often do you lose sleep due to being online?
15. How often do you feel preoccupied with the Internet when off-line, or fantasize about being online?
16. How often do you find yourself saying "just a few more minutes" when online?
17. How often do you try to cut down the amount of time you spend online and fail?
18. How often do you try to hide how long you've been online?
19. How often do you choose to spend more time online over going out with others?
20. How often do you feel depressed, moody, or nervous when you are off-line, which goes away once you are back online?

SCORING

The IAT total score is the sum of the ratings given by the examinee for the 20 item responses. Each item is rated on a 5-point scale ranging from 0 to 5. The maximum score is 100 points. The higher the score is, the higher is the severity of your problem. Total scores that range from 0 to 30 points are considered to reflect a normal level of Internet usage; scores of 31 to 49 indicate the presence of a mild level of Internet addiction; 50 to 79 reflect the presence of a moderate level; and scores of 80 to 100 indicate a severe dependence upon the Internet.

If you have any queries or doubts related to this scale or your responses, you can email us on counselor@iitk.ac.in

Kessler Psychological Distress Scale (K10)

The Kessler Psychological Distress Scale (K10) ^[1] is a simple measure of psychological distress. The K10 scale involves 10 questions about emotional states each with a five-level response scale. The measure can be used as a brief screen to identify levels of distress. The tool can be given to patients to complete, or alternatively the questions can be read to the patient by the practitioner. In the context of injury management, the measure can be provided to the patient where recovery is not proceeding as anticipated (for instance, between weeks four and six), and may highlight the need for more regular review, or referral to a specialist health provider such as a psychologist. Questions three and six do not need to be asked if the response to the preceding question was 'none of the time'. In such cases questions three and six should receive an automatic score of one.

Scoring instructions

Each item is scored from one 'none of the time' to five 'all of the time'. Scores of the 10 items are then summed, yielding a minimum score of 10 and a maximum score of 50. Low scores indicate low levels of psychological distress and high scores indicate high levels of psychological distress.

Interpretation of scores

The 2001 Victorian Population Health Survey ^[2] adopted a set of cut-off scores that may be used as a guide for screening for psychological distress. These are outlined below:

K10 Score: Likelihood of having a mental disorder (psychological distress)

- ③ 10 - 19 Likely to be well
- ③ 20 - 24 Likely to have a mild disorder
- ③ 25 - 29 Likely to have a moderate disorder
- ③ 30 - 50 Likely to have a severe disorder

Kessler Psychological Distress Scale (K10)

Please tick the answer that is correct for you:	All of the time (score 5)	Most of the time (score 4)	Some of the time (score 3)	A little of the time (score 2)	None of the time (score 1)
1. In the past 4 weeks, about how often did you feel tired out for no good reason?					
2. In the past 4 weeks, about how often did you feel nervous?					
3. In the past 4 weeks, about how often did you feel so nervous that nothing could calm you down?					
4. In the past 4 weeks, about how often did you					

feel hopeless?					
5. In the past 4 weeks, about how often did you feel restless or fidgety?					
6. In the past 4 weeks, about how often did you feel so restless you could not sit still?					
7. In the past 4 weeks, about how often did you feel depressed?					
8. In the past 4 weeks, about how often did you feel that everything was an effort?					
9. In the past 4 weeks, about how often did you feel so sad that					

nothing could cheer you up?					
10. In the past 4 weeks, about how often did you feel worthless?					

Brief - Coping Orientation to Problems Experienced Inventory (Brief-COPE)

Instructions: The following questions ask how you have sought to cope with a hardship in your life. Read the statements and indicate how much you have been using each coping style.

		I haven't been doing this at all	A little bit	A medium amount	I've been doing this a lot
1	I've been turning to work or other activities to take my mind off things.	1	2	3	4
2	I've been concentrating my efforts on doing something about the situation I'm in.	1	2	3	4
3	I've been saying to myself "this isn't real".	1	2	3	4
4	I've been using alcohol or other drugs to make myself feel better.	1	2	3	4
5	I've been getting emotional support from others.	1	2	3	4
6	I've been giving up trying to deal with it.	1	2	3	4
7	I've been taking action to try to make the situation better.	1	2	3	4
8	I've been refusing to believe that it has happened.	1	2	3	4
9	I've been saying things to let my unpleasant feelings escape.	1	2	3	4
10	I've been getting help and advice from other people.	1	2	3	4
11	I've been using alcohol or other drugs to help me get through it.	1	2	3	4
12	I've been trying to see it in a different light, to make it seem more positive.	1	2	3	4
13	I've been criticizing myself.	1	2	3	4
14	I've been trying to come up with a strategy about what to do.	1	2	3	4
15	I've been getting comfort and understanding from someone.	1	2	3	4
16	I've been giving up the attempt to cope.	1	2	3	4

		I haven't been doing this at all	A little bit	A medium amount	I've been doing this a lot
17	I've been looking for something good in what is happening.	1	2	3	4
18	I've been making jokes about it.	1	2	3	4
19	I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.	1	2	3	4
20	I've been accepting the reality of the fact that it has happened.	1	2	3	4
21	I've been expressing my negative feelings.	1	2	3	4
22	I've been trying to find comfort in my religion or spiritual beliefs.	1	2	3	4
23	I've been trying to get advice or help from other people about what to do.	1	2	3	4
24	I've been learning to live with it.	1	2	3	4
25	I've been thinking hard about what steps to take.	1	2	3	4
26	I've been blaming myself for things that happened.	1	2	3	4
27	I've been praying or meditating.	1	2	3	4
28	I've been making fun of the situation.	1	2	3	4

