Research Paper

Internet Addiction, Perceived Stress and Emotional Regulation

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ABSTRACT

This study looked into the connections between young individuals' emotional regulation, perceived stress, and internet addiction (IA). A sample of 151 participants aged 18-25 completed self-report questionnaires. The majority (54%) displayed mild internet addiction, with a slight male majority and a mix of educational backgrounds (high school completion and postgraduate studies). Interestingly, only 43% reported using the Internet primarily for work. Descriptive statistics showed moderate perceived stress and mild IA levels within the sample. Statistical analyses revealed significant gender differences in IA scores, with males exhibiting higher internet addiction than females. However, no significant relationships were found between IA, perceived stress, age, or the emotional regulation strategies of cognitive reappraisal and emotional suppression. Our hypotheses predicted higher IA in males (H1 - supported), lower perceived stress with higher IA (H2 - not supported), and lower emotional regulation with higher IA (H3 - partially supported). The findings suggest a need for further research to explore these relationships in more detail. Implications and future suggestions for research have been discussed.

Keywords: *Internet Addiction, Perceived Stress, Emotional Regulation, Young Adults, Gender Differences*

With its many advantages for communication, information access, and entertainment, the internet has grown to be an essential component of contemporary life. Because of all of its benefits for communication, information access, and entertainment, the internet has evolved into a necessity in today's world. A vital component of college students' everyday life and academic pursuits is the Internet. On the one hand, college students utilise the network to collect knowledge and gain a comprehensive understanding of society; on the other hand, network usage has become an issue that cannot be overlooked. Błachnio and Przepiorka (2016) found that problematic Internet and Facebook use correlates with poorer positive orientation, seriousness and responsibility, emotional stability, and openness to experience.

Variables
Internet Addiction
A problematic pattern of internet use is characterized by impaired control over internet use, leading to distress or functional impairment in daily life (Holden 2017).

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Internet addiction is a new type of addiction that is fueled by Internet-connected devices. This addiction has several detrimental consequences (Khazaei et al., 2017).

It is defined as excessive or poorly regulated obsessions, urges, or behaviours connected to Internet use that cause difficulties in real life (Ndasauka et al., 2019).

Types of Internet Addiction
Internet addiction can manifest in various ways depending on the specific online activity that becomes problematic. Here are some common types:
1. Gaming Addiction: Excessive preoccupation with online games, neglecting real-life responsibilities and experiencing withdrawal symptoms when unable to play.
2. Social Media Addiction: Compulsive use of social media platforms, constantly checking for updates, seeking validation through likes and comments, and neglecting real-life social interactions.
3. Cybersex Addiction: Excessive engagement in online pornography, masturbation, or cybersex, leading to relationship problems and neglecting other aspects of life.
4. Online Shopping Addiction: Uncontrollable urge to buy things online, often exceeding financial means and leading to debt or neglecting basic needs.
5. Information Overload Addiction: Compulsive need to constantly check emails, news feeds, and other information sources, leading to anxiety and difficulty focusing.

Signs and Symptoms of Internet Addiction
The characteristics are:
1. Is obsessed with the internet (thinking about prior activity or anticipating the next session).
2. Requires more internet usage for enjoyment.
3. Has tried but failed to limit or cease internet use.
4. Has been online longer than expected.
5. Demonstrates restlessness, moodiness, depression, or irritability while attempting to reduce or discontinue internet use.
6. Has the internet put an important relationship, employment, or educational opportunity at risk?
7. Has lied to family, therapists, or others about their internet use.
8. Uses the internet to cope with negative emotions, such as powerlessness, guilt, worry, or sadness.

Perceived Stress
The cognitive appraisal of stressful situations and an individual's ability to cope with them (Cohen & Lazarus, 1983).

Factors Influencing Perceived Stress
- Demand vs. Control: When demands feel overwhelming and you lack a sense of control over them, it contributes to perceived stress. Think of deadlines, work overload, or financial strain.
- Unpredictability: Unforeseen events or situations you can't anticipate can heighten perceived stress.
- Social Support: Having a strong support network of friends, family, or colleagues can buffer the impact of stressful situations, lowering perceived stress.

- Personality: Some personality traits, like neuroticism (a tendency to experience negative emotions), can make individuals more susceptible to perceiving situations as stressful.

Emotional Regulation
The processes by which individuals manage their emotions, thoughts, and behaviours in response to internal and external stimuli (Gross, 1998).

Components of Emotional Regulation
- Awareness: The first step involves recognizing your emotions as they arise. Pay attention to bodily sensations, thoughts, and feelings associated with different emotions.
- Evaluation: Once aware of your emotions, assess the situation and the intensity of your emotional response. Is the reaction proportionate to the event?
- Regulation: This is where you employ various strategies to manage your emotions. This could involve calming yourself down if feeling overwhelmed or amplifying positive emotions in certain situations.

Young Adults
WHO defines 'youth' as individuals between the ages of 15 and 24 and 'adolescents' as those between the ages of 10 and 19. However, "Young People" refers to anyone between the ages of 10 and 24.

Problem Statement
Individuals struggling with Internet Addiction often report difficulty managing emotions and higher stress levels. The purpose of this study is to investigate the causal links between internet addiction, perceived stress, and emotional regulation issues in a cohort of young adults. The research will explore whether IA leads to increased stress and emotional dysregulation, or if stress and emotional difficulties contribute to the development of IA. The study will also look at moderating variables like age, gender, and particular kinds of internet addiction.

Significance of the Study
The current study holds significant value in furthering our comprehension of the complex interplay between internet addiction (IA), perceived stress, and emotional regulation. While previous research suggests a correlation between these factors, the precise nature of this relationship remains unclear. This work intends to close this gap by using a rigorous technique to investigate the direction of causation and discover probable underlying processes.

If stress and emotional difficulties are the root cause, addressing these factors alongside internet use reduction could be more effective. This knowledge can inform the creation of holistic treatment plans that promote healthy coping mechanisms and emotional regulation skills, ultimately leading to a more sustainable approach to combating internet addiction. This comprehensive approach has the potential to yield more sustainable results and improve overall well-being for individuals struggling with Internet Addiction.

REVIEW OF LITERATURE

Overview

This study looks into the relationships between emotional control techniques, perceived stress levels, and internet addiction (IA). By recruiting participants and utilizing standardized questionnaires, the study will assess the prevalence of IA, measure stress perception, and evaluate emotional regulation skills. Statistical analysis will explore potential correlations between these variables. The goal is to understand how IA, stress, and emotional regulation interact, offering valuable insights for developing more effective interventions that address the underlying emotional factors potentially contributing to internet addiction.

Reviews

In 2019, Karaer, Y., and Akdemir, D. examined the emotional control, parental styles, and perceived social support of teenagers struggling with internet addiction. This research intends to examine the attitudes of parents, emotion control, perceived social support, and mental health conditions that are linked to Internet addiction (IA) in young individuals who have been diagnosed with the disorder and have been sent to an outpatient clinic for child and adolescent psychiatry. The study discovered that parents of teens with IA usually lacked emotional availability, supervision/monitoring, and acceptance/involvement. It makes sense to think that improving parenting, parent-adolescent relationships, perceived social support, emotion management, and the decrease of related mental symptoms should be the main goals of programmes to prevent and cure IA in adolescents.

Yildiz, M. A. (2017) investigated emotional control methods as possible markers of adolescent addiction to smartphones and the Internet. The ability of kids' emotional control systems to predict Internet and smartphone addiction is examined in this study. The researchers found a direct link between internet and smartphone addiction and externally dysfunctional emotion regulation, internal dysfunctional emotion regulation, and internal functional emotion regulation. The predictive efficacy of external-functional emotion regulation was shown to be restricted for both variables. For Internet addiction, emotion management techniques explained 38% of the variance, while for smartphone addiction, it accounted for 19%.

In order to examine the connection between teenage mobile phone addiction and perceived stress, Liu Q et al. (2018) employed a moderated mediation model in China. The current study investigated the manner in which self-control and mindfulness moderated and regulated the relationship between smartphone addiction and perceived stress. The findings indicated that there was a reduced correlation between mobile phone addiction and stress levels when self-control was practiced. Additionally, mindfulness lessened the indirect effect of self-control and the direct association between perceived stress and smartphone addiction, which was larger in individuals with low mindfulness than in those with high mindfulness. Our understanding of the processes and timing by which perceived stress affects cell phone addiction is advanced by these studies. This study's drawbacks and implications are emphasized.

Mo, P. K., et al. (2018) employed a structural equation model to investigate the association between social support and emotion dysregulation as well as Internet addiction in Chinese teens. This study examined Hong Kong junior secondary school students' emotion dysregulation, social support, and internet addiction. Internet usage and addiction, emotion dysregulation and addiction, and social support and emotion dysregulation were all more

significantly connected with female participants in a gender-specific multi-group research. Emotional dysregulation may increase the possibility of Internet addiction, although social support may reduce the risk. Among female students, social support had a greater impact on mood dysregulation and Internet addiction.

Examining the connection between parents and their adolescent's internet addiction, Wang W. and colleagues (2018) developed a model of moderated mediation. Using a moderated mediation model, Wang, W. (2018) investigated the interaction between parents and teens about internet addiction. The moderated mediation model tested in this study includes the following variables: substance abuse behaviours, the parent-adolescent relationship (predictor variable), emotion regulation capacity (mediator), stressful living conditions (moderator), and IA (outcome variable). Stressful life events also have an impact on the mediation process's second stage. According to the reverse stress-buffering paradigm, there was a stronger correlation between teenage IA and emotion management skills among teenagers who had experienced fewer stressful life experiences. A thorough contextual approach is suggested, and the conclusions and their implications are discussed.

Berte, D. Z. et al. (2021) looked at the connection between Internet addiction and university students' perceived self-efficacy. In Palestine, a nation with one of the highest rates of online addiction, The goal of the current study is to ascertain if social media addiction and university-aged students' perceived self-efficacy are related. Perceived self-efficacy was found to be significantly correlated negatively with excessive and/or compulsive internet use behaviors. Perceived self-efficacy and internet addiction did not significantly differ according to academic level, gender, age, or subject of study.

The symptoms of Internet addiction, alexithymia, and traumatic events in late teens were investigated by Schimmenti, A. et al. in a 2017 research. In the current study, self-report questionnaires on traumatic incidents, alexithymia, and problematic Internet usage were provided to 358 high school students (57 percent of whom were female) between the ages of 18 and 19. The tests were intended to investigate the hypothesis that gender affected the potential mediating role of alexithymic characteristics and the association between Internet addiction symptoms and traumatic experiences. The results of this study suggest that males who recall trauma and women who struggle with emotional regulation may be more prone to engage in problematic Internet use in late adolescence.

Jun, S., and Choi, E. (2015) studied the connection between Internet addiction and academic stress using a whole strain theory paradigm. This study investigated the function of negative emotions as a mediator in the association between Internet addiction and academic stress in young Korean adults. We investigated psychological pathways from academic stress to Internet addiction by conducting a countrywide, longitudinal panel survey and applying the general strain theory to the issue. According to the study's findings, children who face academic stress are more likely to develop an Internet addiction, especially when those feelings are coupled with other negative emotions. Our findings extend the general strain theory to the prevention of teenage Internet addiction, which is significant for lawmakers and therapists because aberrant behaviour is often linked to Internet addiction.

Yen, J. Y., et al. (2019) looked into the connections between young people's online gaming disorder, stress, depression, and resilience. The relationships between perceived stress, depression, IGD, and resilience were examined in this study. The IGD group experienced higher levels of perceived stress, hopelessness, and worse resilience than the control group.

Hierarchical regression showed a correlation between resilience and IGD when perceived stress was taken into consideration. Resilience and perceived stress had little effect on IGD once depression was addressed. Patients with IGD who lacked resilience also exhibited higher depression scores. Discipline was also found to be a resistance factor in relation to IGD. An elevated risk of IGD has been associated with low resilience. Depression was more common in IGD patients who lacked resilience. Resilience was found to be less strongly correlated with IGD than depression. When an IGD patient exhibits low resilience or extreme stress, they should be evaluated for depression and provided with stress management education.

In a 2017 study, McNicol, M. L., and Thorsteinsson, E. B. examined coping mechanisms, psychological discomfort, and Internet addiction in adults and adolescents. 449 participants, ranging in age from 16 to 71, were selected for the study from a variety of English-language online groups, including social media and self-help websites. Among them, Internet addiction was classified as 6.7%, problematic users as 24.4%, and nonproblematic users as 68.9%. Adults with problematic Internet usage demonstrated more emotion and avoidance coping responses, whereas adolescents had increased rumination and worse self-care ratings. Coping mechanisms that involve avoidance decreased the correlation between psychological pain and IA. Treatments that target the various characteristics associated with IA may be developed with the assistance of these discoveries.

In 2014, Koo, H. J., et al. released a report titled Internet addiction risk and preventive variables: a meta-analysis of Korean empirical research. A comprehensive evaluation of the relationships between Internet addiction (IA) indices and psychological characteristics was carried out through a meta-analysis of empirical research carried out in Korea. The study's conclusions showed that intrapersonal attributes had a substantially greater overall influence on internet addiction than interpersonal traits did. The results highlight how crucial it is to do in-depth study on psychosocial aspects, especially intrapersonal traits, in order to identify high-risk individuals and create effective intervention plans for Internet gaming addiction and general IA.

The impact of communication load and online multitasking on felt stress and psychological health impairments in a German random sample was investigated by Reinecke, L., et al. (2017) in their study, Digital Stress Throughout Life. The current study examined the psychological effects and motivational drivers of digital stress using a representative survey of 1,557 German Internet users aged 14 to 85. Multitasking on the Internet, social media, and private emails all contributed to an increase in communication load, which was positively correlated with stress levels and had significant knock-on effects on anxiety, dejection, and burnout. Increased communication load and Internet multitasking were strongly influenced by perceived social pressure, fear of losing information, and social bonds. As people aged, the negative effects of digital stress on their health also declined significantly, as did the motivating elements of Internet multitasking and communication burden. The results highlight the necessity of managing digital stress throughout the course of a lifetime.

Zhun Gong, Liyun Wang, and Haijiao Wang (2021) looked into the connection between Chinese college students' perceptions of stress and internet addiction. They examined the moderating effect of flow experience and the mediating effect of procrastination. In a 446-student study, they found that while flow decreased the relationship between stress and

addiction, procrastination mediated it. These studies shed light on the ways in which students' internet use might be impacted by stress, procrastination, and online experiences.

Lutz Wartberg et colleagues. conducted the first study in 2021 to investigate the relationships between emotion management, procrastination, perceived stress, and problematic social media usage (PSMU) in children and adolescents. The study, which surveyed 1221 people aged 10 to 17, discovered strong associations between PSMU and lower age, difficulty with emotion management, procrastination, and felt stress. According to multivariable regression research, PSMU is connected with younger age, impulse control difficulties, trouble with goal-directed behaviour, procrastination, and greater perceived level stress. These results emphasize the need of treating procrastination, emotional control deficits, and stress in young people's PSMU preventative measures.

The relationship between adolescent problematic internet gaming (PIG) and factors including age, gender, emotional dysregulation, and perceived social support was examined by Ömer Uçur and Yunus Emre Dönmez (2021). Under the guidance of a teacher, 1,291 teenagers completed the Gaming Addiction Scale (GAS), the Difficulties in Emotion Regulation Scale (DERS), and the Multidimensional Scale of Perceived Social Support (MSPSS). PIG and non-PIG were the two groups into which the participants were split according to their GAS scores. PIG frequency was found to be 13.5% in the study, with males significantly more common than females. Logistic regression investigation revealed significant relationships between PIG and male gender, severe emotional dysregulation, and low perceived social support. These findings demonstrate how common PIG is in teenagers, especially in guys, and how important emotional dysregulation and perceived social support are to PIG.

Ahmad Mamoun Rajab et al. investigated gaming addiction and perceived stress in Saudi teenagers aged 10 to 19 in their 2020 cross-sectional survey. The study used questionnaires to assess gaming addiction, lifestyle, Demographic demographics utilising a sample of 2675 kids from 40 randomly selected schools in the Al-Qassim area, a 10-item Perceived Stress Scale, and a 7-item Game Addiction Scale. 5.4% of respondents said they were severely stressed, while 11.4% said they were hooked to video games. Multinomial logistic regression revealed a significant relationship between stress and gaming addiction after adjusting for other variables (high OR = 11.9, 95% CI = 4.7-30.1) and moderate OR = 6.7, 95% CI = 2.9-15.5. In addition, it has been found that among Saudi Arabian teenagers, smoking, unhealthy lifestyle choices, poor academic achievement, advanced age, and gender are all associated with elevated stress levels. These results highlight the strong link that exists in this demographic between stress and gaming addiction.

Juganu Bharti et al. carried out a cross-sectional study in 2021 on addiction of internet, stress, & strategies of coping between Indian high school & college going students. Male students in particular were more prone to become Internet addicts than younger students. Additionally, those who used inadequate stress management techniques were more vulnerable. A semi-structured questionnaire comprising the Internet Addiction Test (IAT), the Perceived Stress Scale (PSS-4), and a coping skills questionnaire was used to survey the participants. The findings showed that respondents under the age of 20 had a higher prevalence of internet addiction (41%), with men showing a higher rate of addiction (71.1%) than women (50.9%). There were notable correlations (p<0.05) found between internet addiction and sociodemographic variables such family income and gender. This shows that

teaching students effective coping mechanisms and stress management techniques may be crucial to lowering internet addiction in pupils.

During the COVID-19 pandemic lockdown, Bhupendra Singh et al. (2020) assessed internet addiction and stress in Indian students enrolled in professional courses. The study aimed to look into students' stress levels and online addiction because, especially during the epidemic, internet use has changed from being a need to possibly dangerous levels. 297 students from a variety of professional courses participated in a online cross-sectional survey, and the results showed that 62.2% of them greatly boosted their internet usage during the lockdown. Sadly, 84% of respondents felt they were under a lot of stress, and 62% of them admitted to having a moderate internet addiction. The study found a positive correlation between students' reported stress and internet addiction, suggesting that lockdown restrictions raised stress levels and made them more susceptible to online addiction.

Among their 2023 study, Xuwei Shen et al. looked at the connection between stress and internet addiction (IA) among Chinese college students. Using a moderated mediation model, they attempted to look at the mediating function of anxiety and the moderating influence of self-control. Data from 861 individuals in the research were analysed, and the results indicated that anxiety had a somewhat moderating role in the link between stress and IA. Anxiety was found to be correlated with higher stress levels, and this elevated the risk of internet addiction. Moreover, SC lowered the correlations between stress and IA that were both direct and indirect. While stress had a greater effect on IA, SC had a lessening effect on anxiety and IA. These results indicated that stress was a predictor of IA and suggested interventions targeted at lowering anxiety and enhancing self-control in college students to decrease excessive internet use.

During the COVID-19 pandemic, Putra, P. Y., Fithriyah, I., & Zahra, Z. (2023) looked at the prevalence and psychological effects of online gaming disorder and internet addiction on kids and teenagers around the world. Due to social limitations put in place by the Indonesian government to stop the COVID-19 virus from spreading, school closures and outdoor area closures have resulted in a rise in children's and teenagers' use of the internet for academic purposes. On the other hand, compulsive internet use can exacerbate online gaming disorder and internet addiction. The research carried out methodical explorations throughout several channels and evaluated chosen articles based on predetermined standards. Results showed that during the epidemic, children and teenagers in Australian and Asian nations used the internet more frequently and experienced disruptions from online gaming. The results of the study highlight the need for additional investigation & measures to address the negative psychological impacts of using the internet more during these times.

The gender disparities in the emergence of pathological behaviors linked to internet addiction were examined by Mari, E. et al. in 2023. The study, which comprised 276 participants between the ages of 18 and 30, looked into traits like phubbing, social media addiction, computer game addiction, and FOMO. The results showed that, with men and women exhibiting different patterns, gender is an important aspect in understanding people's internet addiction. Both genders' internet addiction has been found to be significantly predicted by social media addiction, with each gender having its own set of predictions. Knowing these underlying factors can help develop preventative and treatment plans that are specifically designed to deal with internet addiction.

In a recent study, Gioia et al. (2021) reviewed literature from the preceding ten years about the likelihood of social media or internet abuse among young individuals who experience emotional dysregulation. The study found that there was a particularly substantial correlation for boys. The study indicates that young individuals who have stable family dynamics and strong social support are less likely to struggle with this issue.

This study (Liang et al., 2021) looked at how 716 Chinese teens deal with emotions and internet use. They discovered that teenagers who struggled to manage negative emotions were more prone to become hooked to the internet. Interestingly, people's responses to those emotions also mattered. Addiction was more common in teenagers who tried to reconsider difficult circumstances (cognitive reappraisal) than in those who repressed their feelings. When it came to high school pupils, this effect was considerably greater. According to the study, educating teenagers on good coping mechanisms for their emotions may be essential to lowering internet addiction.

Yueli Zheng et al. 2020 in his study looked at stress and online shopping addiction in women. They found that stress is linked to compulsive online shopping in women, but they wanted to understand why. They found that when women use negative coping methods, like avoiding problems or denying them, it partly explains why stress leads to more online shopping. Also, they discovered that self-esteem plays a role. Women with higher self-esteem tend to be less affected by stress and negative coping methods when it comes to online shopping addiction. These findings help us understand why stress can lead to excessive online shopping in women, especially those with lower self-esteem.

The 2017 study "Life Satisfaction: A Key to Managing Internet & Social Media Addiction" by Phil Longstreet and Stoney Brooks found that 210 million individuals worldwide suffer from internet and social media addictions, which are becoming more common as our reliance on technology increases. It's critical to acknowledge and lessen the effects of these addictions. Prior studies have elucidated the importance of affective states in addictive behaviors. The study assesses how enjoyment of life could reduce both social media addiction and generalized Internet addiction using the Cognitive-Behavioral Model of Pathological Internet Usage. It also looks at how stress and pleasure affect these addictions by making people feel satisfied with their lives. According to the research, life satisfaction significantly affects the development of social media and generalized Internet addictions. Internet technology may become a lifeline for addicts who are unhappy with their circumstances.

Varfi N et al. investigated the connection between psychological traits and cybersex addiction in their 2019 study. They discovered that, especially in men, compulsive cybersex use was associated with increased levels of sexual desire, depression, and avoidant attachment style. Impulsivity, however, did not significantly correlate. This implies that sexual desire, mood, and attachment style all have an impact on cybersex addiction.

Atroszko et al. (2018) investigated Facebook addiction in Polish undergraduate students, validating the Bergen Facebook Addiction Scale (BFAS) and looking at the relationship between Facebook addiction and personality traits and overall wellness. They found that Facebook addiction was linked to greater degrees of extraversion, narcissism, loneliness, and social anxiety in addition to lower levels of self-efficacy. It was also linked to worsened wellbeing, which included increased felt stress and poorer sleep quality.

In a sample of 605 participants, Canale et al. (2018) investigated the association between psychological resilience, perceived stress, and online gaming disorder (IGD). They discovered that psychological resilience was connected to lower IGD scores, whereas perceived stress was linked to higher IGD levels. Additionally, those who felt more stressed out and had less resilience had a tendency to play video games for longer periods of time each week. These results highlight the significance of individual characteristics in gaming behavior and imply that improving psychological resilience may help lessen the negative effects of stress on gaming behaviors.

Tsai et al. (2020) examined the relationship between issues with emotion regulation and internet addiction (IA) through a one-year prospective study involving 500 college students. Over the course of the follow-up period, they found that among male participants, poor impulse control predicted the development of IA. Nevertheless, the resolution of IA was not predicted by any subscale on the Difficulties in Emotion Regulation Scale (DERS). Remarkably, IA failed to forecast shifts in problems related to emotional regulation. The results suggest that resolving impulse control problems at an early age may be essential to lowering IA among college students.

Towards the end of the semester, Graves et al. (2021) looked into gender disparities in college students' perceptions of stress and coping strategies. They used the Brief Cope and Perceived Stress Scale assessments to evaluate 448 undergraduate students enrolled in exercise science courses. The findings indicated that women than men reported feeling more stressed. Furthermore, emotion-focused coping mechanisms such as self-distraction, emotional support, instrumental assistance, and venting were more commonly used by women. This study emphasizes how crucial it is to recognize and address gender-specific stressors and coping mechanisms in college students in order to support their general wellbeing. In order to assist pupils acquire the necessary coping mechanisms for long-term success, educational interventions might be required.

METHODOLOGY

Aim
To look at the links between internet addiction, perceived stress, and emotional control in young adults.

Objectives
1. Examine how gender differs in internet addiction and how it affects young people's perceptions of stress.
2. Determine the differences between genders in internet addiction and how it affects young people' ability to regulate their emotions.
3. Looking at the relationship between emotional control, perceived stress, and internet addiction.

Hypotheses
1. Males will have higher internet addiction than females
2. Young adults with increased internet addiction will have higher perceived stress.
3. Young adults with increased internet addiction will have lower emotional regulation.

Sample details:
Sample location & size: The sample had 150 participants. The responses were collected through a survey and were distributed around the university campus and nearby places such as Noida, Delhi and Gurugram.

Inclusion criteria
1. Individuals from all backgrounds were included in the study.
2. The research included individuals aged 18-25 years.
3. Individuals within the normal distribution of the graph were included in the study.
4. Individuals belonging to Noida, Delhi and Gurugram were selected for the study.
5. Individuals who understand and use social networking sites regularly were shortlisted for the study.

Exclusion criteria
1. Individuals with mental health problems were excluded from the study.
2. Individuals below 18 years and above 25 years were excluded from the study.
3. Individuals belonging to other regions of NCR or other parts of India were not included in the study.
4. Individuals who weren't present on social networking sites were excluded from the study.
5. Individuals not consent to be an active part of the research were excluded from the study.

Sampling method
Probability sampling is a sampling technique that picks samples from a larger population using a probability theory-based methodology. To be considered a probability sample, a participant must be selected at random.

Procedure
The protocol for this study will emphasise ethical research techniques while collecting data on internet addiction, perceived stress, and emotional regulation in adults who're young. A sample of individuals of age 18-25 will be recruited via internet platforms or educational institutions, with informed permission and anonymity maintained throughout the procedure.

Following this, participants will complete a self-administered survey to capture key information. The survey will likely consist of four main sections. The first section will gather demographic data to understand the participant pool's characteristics. The second section will delve into understanding their internet addiction. The third section will have a survey on perceived stress to understand their stress levels and the last section will be done to understand their emotional regulation strategies. Once all the data is collected, it will be securely stored and anonymised before statistical analysis to uncover potential relationships between internet addiction, perceived stress and emotional regulation in young adults.

Tools used
- Consent form
- Demographic details
- IAT (Internet Addiction Test)
- PSS (Perceived Stress Scale)
- Emotion Regulation Questionnaire (ERQ)

METHODOLOGY

Descriptive statistics will be used to summarize the data, and inferential statistics such as regression analysis will be employed to examine the relationships between variables.

Statistical Analysis
SPSS version 26 will be used to conduct descriptive statistics, t-test and regression analysis.

RESULTS

This study delves into the intricate link between young adults' internet usage, perceived stress and emotional regulation. It examines the effects of daily internet usage on emotions, perceived stress, and cognitive reappraisal.

Descriptive Statistics
Once the data was organized, the data analysis was conducted through SPSS version 26. Descriptive statistics were done for the demographic details like gender, age and educational qualifications.

Table 1: Descriptive Statistics for Gender

Gender	Frequency	Percent
Female	58	38.4%
Male	45	29.8%
Prefer not to say	48	31.8%
Total	151	100%

Table 2: Descriptive Statistics for Age

Age	Frequency	Percent
18	20	13.2%
19	19	12.6%
20	14	9.3%
21	18	11.9%
22	18	11.9%
23	22	14.6%
24	22	14.6%
25	18	11.9%
Total	151	100%

Table 3: Descriptive Statistics for Educational Qualifications

Educational Qualification	Frequency	Percent
10th	42	27.8%
12th	22	14.6%
UG	40	26.5%
PG	47	31.1%
Total	151	100%

Table 4: Descriptive Statistics for Using the Internet for Work

Responses	Frequency	Percent
Yes	65	43%
No	86	57%
Total	151	100%

Table 5: Descriptive Statistics for Hours Spent on the Internet Daily Average

No. of Hours Spent	Frequency	Percent
2 hours	40	26.5%
3 hours	18	11.9%
4 hours	34	22.5%
5 hours	32	212%
6 hours	27	17.9%
Total	151	100%

Table 6: Descriptive Statistics for Internet Addiction Test

Level of Internet Addiction	Frequency	Percent
Mild (score: 31 – 49)	81	53.6%
Moderate (score: 50 – 70)	70	46.4%
Total	151	100%

Table 7: Descriptive Statistics for Perceived Stress Scale

Intensity of Perceived Stress	Frequency	Percent
Low Perceived Stress (score: 0 – 13)	12	7.9%
Moderate Perceived Stress (score: 14 – 26)	130	86.1%
High Perceived Stress (score: 27 – 40)	9	6.0%
Total	151	100%

T-test of Analysis

T-tests are statistical procedures for comparing two groups' means and evaluating whether the observed difference is due to chance or a real effect.

Table 8: t-test for Gender and Internet Addiction

Gender	Internet	t-value	Df	Sig.
Female		35.79	44	0.01
Male	Addiction	53.23	57	0.01
Prefer not to say		45.69	47	0.01

Regression Test of Analysis

A statistical technique for simulating the relationship between a dependent variable (predicted) and one or more independent variables (predictors) is regression analysis.

Table 9: Regression Analysis for Internet Addiction, Perceived Stress and Emotional Regulation Strategies

Particulars	T	F	Df	Sig.
Perceived Stress	-0.83	0.68		0.04
Cognitive Reappraisal	0.71	0.51	149	0.04
Emotional Suppression	-0.33	0.11		0.74

a. *Dependent Variable: Perceived Stress, Cognitive Reappraisal, Emotional Suppression*
b. *Predictors: (Constant), Internet Addiction*

DISCUSSION

This study took a gander at the connections between web habit (IA), saw pressure, and profound guideline systems in an example of 151 individuals matured 18 to 25. Normalized polls were utilized in the review, including the Web Dependence Test (IAT) to survey IA,

the Apparent Pressure Scale (PSS) to quantify apparent feelings of anxiety, and the Close to home Guideline Survey (ERQ) to evaluate profound guideline systems. The review looked to examine the conceivable effect of IA on pressure and close to home guideline, as well as any fundamental components that might add to this dynamic.

The sample demographics revealed a slight male majority (gender information not provided by some participants). Most participants had completed high school and were currently engaged in postgraduate studies. Interestingly, only 43% reported using the internet for work purposes, suggesting a broader range of potential online activities contributing to internet use patterns. The minimum and maximum internet usage reported were 2 and 6 hours per day, respectively. Notably, the majority of participants (54%) fell within the mild internet addiction range, while a significant portion (86%) reported moderate perceived stress levels. This finding suggests a potential gender disparity in internet addiction tendencies within this age group.

Two measurable examinations were led for the ongoing review - a t-test to look at the distinctions in sexual orientation in web dependence; and a relapse investigation to figure out the critical connection between age, web fixation, saw pressure and profound guideline procedures. T-test examination uncovered critical distinctions in sexual orientation in web compulsion scores, with guys scoring higher than females and the people who picked "rather not say" in regards to orientation distinguishing proof. Be that as it may, relapse examination expected to investigate the connections between age, web enslavement, saw pressure, and close to home guideline techniques yielded no huge relationship between these factors, including mental reappraisal and profound concealment systems.

Hypotheses Testing

H1 - Males will have higher levels of internet addiction than females.
In the results, it was seen that the t-value for men was higher than that of the females (t-value: 53.2 and 35.7 respectively, both significant at 0.01 level) indicating that men had a higher internet addiction than females. This aligns with previous research suggesting a potential gender gap in IA prevalence, with males being more susceptible (Caplan, 2010, Korte et al., 2017). Social media use patterns might differ by gender, with males potentially engaging in more intensive or compulsive online social interactions compared to females (Yu et al., 2013).

Thus, the null hypothesis was rejected, and the alternative hypothesis was accepted: men are more addicted to the internet than women.

H2 - Young adults with increased internet addiction will have higher perceived stress.
Table 9 in the results section indicates that there is a positive correlation between perceived stress and internet addiction. This suggests that increased internet addiction might result in greater levels of felt stress. Individuals who engaged in internet gaming reported greater levels of perceived stress and sadness, as they were more likely to cope with stress through dysfunctional coping and gaming and less likely to undertake problem-focused coping, particularly those with poorer resilience. Internet addiction was shown to have a substantial correlation with stress (odds ratio = 12), depression (odds ratio = 14), and anxiety (odds ratio = 3.3) by Anu Saikaka et al. (2019). As a result, the null hypothesis was rejected, and the alternative hypothesis was accepted: persons with increasing internet addiction have higher levels of perceived stress.

H3 - Young adults with increased internet addiction will have lower emotional regulation.
In Table 9, regression analysis was done for internet addiction, perceived stress and emotional regulation strategies. Out of the two strategies, i.e. cognitive reappraisal and emotional suppression, it was found that cognitive reappraisal was positively related to internet addiction. IA did not predict changes in issues with emotion control. The study suggests that addressing impulse control difficulties early may be important in preventing IA among college students (Tsai et al, 2020). In junior high school pupils, cognitive reappraisal was a direct predictor of bad internet addiction. These findings underscore the importance of considering emotional regulation, negative emotion, and developmental stages in interventions targeting internet addiction among adolescents (Liang Lijuan et al, 2021).
Thus, the null hypothesis was partially supported.

CONCLUSION

This study investigated how internet addiction (IA) relates to perceived stress and emotional regulation in 151 young adults (18-25 years old). Questionnaires assessed IA severity, perceived stress levels, and emotional regulation strategies (cognitive reappraisal and emotional suppression). While males exhibited higher IA than females (supporting hypothesis H1), there was null association that is significant among IA & perceived stress (hypothesis H2 not supported). Interestingly, none of the emotional regulation strategies showed a significant relationship with IA (partial support for hypothesis H3). These findings suggest a need for further research to explore the complex interplay between IA, stress, emotional regulation, and specific online activities.

Implications
- **Gender differences:** The finding of higher IA in males suggests a need for gender-specific prevention and intervention options for internet addiction.
- **Potential underlying factors:** The lack of significant correlations between IA, stress, and emotional regulation in this study suggests the need to explore other potential underlying factors contributing to IA development.
- **Importance of diverse online activities:** The finding that only 43% used the internet for work suggests a broader range of online activities might contribute to IA.

Limitations
- **Sample size and demographics:** The sample size (151) might be limiting for generalizability. Additionally, the focus on young adults (18-25) excludes other age groups who might experience IA differently.
- **Self-report measures:** Reliance on self-reported data can introduce bias. Participants might underreport IA or overestimate stress levels.
- **Limited emotional regulation strategies:** The study only assessed cognitive reappraisal and emotional suppression. Exploring a wider range of strategies could reveal clearer associations with IA.
- **Limited exploration of Internet activities:** The study didn't differentiate between specific online activities (gaming, social media) which might have distinct relationships with stress and emotional regulation.

Future Suggestions
- **Larger and more diverse samples:** Include participants from a wider age range and diverse backgrounds for more generalizable findings.

- **Broader Range of Emotional Regulation Strategies:** Including a wider range of emotional regulation strategies in future studies can provide a more nuanced understanding of how individuals with IA manage their emotions.
- **Investigate Coping Mechanisms:** Explore how individuals with IA use the internet to cope with stress. Does it offer temporary relief or contribute to a cycle of problematic online behaviour and heightened stress?

REFERENCES

Ahmad Mamoun Rajab, Mohamed Saddik Zaghloul, Saed Enabi, Tawfik Mamoun Rajab, Abdullah Murhaf Al-Khani, Abdulrahman Basalah, Sara Wafik Alchalati, Joud Enabi, Saadi Aljundi, Syed Muhammad Baqui Billah, Juliann Saquib, AbdulRahman AlMazrou, Nazmus Saquib, Gaming addiction and perceived stress among Saudi adolescents, Addictive Behaviors Reports, Volume 11, 2020, 100261, ISSN 2352-8532, https://doi.org/10.1016/j.abrep.2020.100261.

Beard and Wolf. (2001). Modification in the Proposed Diagnostic Criteria for Internet Addiction. Retrieved on June 26, 2019, from http://www.internetbehavior.com/jandk /diagnosis%20internet%20addiciton.pdf

Berte, D. Z., Mahamid, F. A., & Affouneh, S. (2021). Internet addiction and perceived self-efficacy among university students. *International Journal of Mental Health and Addiction*, *19*(1), 162-176.

Definition of young adults. Retrieved from https://www.who.int/southeastasia/health-topics/adolescent-health

Emanuela Mari, Silvia Biondi, Manuel Varchetta, Clarissa Cricenti, Angelo Fraschetti, Alessandra Pizzo, Benedetta Barchielli, Paolo Roma, Manuel Marti Vilar, Francisco Gonzàlez Sala, Anna Maria Giannini, Alessandro Quaglieri, Gender differences in internet addiction: A study on variables related to its possible development, Computers in Human Behavior Reports, Volume 9, 2023, 100247, ISSN 2451-9588, https://doi.org/10.1016/j.chbr.2022.100247.

Gioia, F., Rega, V., & Boursier, V. (2021). Problematic Internet Use and Emotional Dysregulation Among Young People: A Literature Review. Clinical neuropsychiatry, 18(1), 41–54. https://doi.org/10.36131/cnfioritieditore20210104

Gong Zhun, Wang Liyun, Wang Haijiao, Perceived Stress and Internet Addiction Among Chinese College Students: Mediating Effect of Procrastination and Moderating Effect of Flow, Frontiers in Psychology VOLUME=12, 2021, ISSN=1664-1078. DOI=10.3389/fpsyg.2021.632461

Graves BS, Hall ME, Dias-Karch C, Haischer MH, Apter C (2021) Gender differences in perceived stress and coping among college students. PLoS ONE 16(8): e0255634. https://doi.org/10.1371/journal.pone.0255634

Jun, S., & Choi, E. (2015). Academic stress and Internet addiction from general strain theory framework. *Computers in Human Behavior*, *49*, 282-287.

Karaer, Y., & Akdemir, D. (2019). Parenting styles, perceived social support and emotion regulation in adolescents with internet addiction. *Comprehensive psychiatry*, *92*, 22-27.

Koo, H. J., & Kwon, J. H. (2014). Risk and protective factors of internet addiction: A meta-analysis of empirical studies in Korea. *Yonsei medical journal*, *55*(6), 1691.

Liang Lijuan, Zhu Mingrui, Dai Jiali, Li Min, Zheng Ya, The Mediating Roles of Emotional Regulation on Negative Emotion and Internet Addiction Among Chinese Adolescents From a Development Perspective, Frontiers in Psychiatry, VOLUME= 12, 2021, ISSN=1664-0640, DOI=10.3389/fpsyt.2021.608317

Liu, Q. Q., Zhang, D. J., Yang, X. J., Zhang, C. Y., Fan, C. Y., & Zhou, Z. K. (2018). Perceived stress and mobile phone addiction in Chinese adolescents: A moderated mediation model. *Computers in Human Behavior*, *87*, 247-253.

Lutz Wartberg, Rainer Thomasius, Kerstin Paschke, The relevance of emotion regulation, procrastination, and perceived stress for problematic social media use in a representative sample of children and adolescents, Computers in Human Behavior, Volume 121, 2021, 106788, ISSN 0747-5632, https://doi.org/10.1016/j.chb.2021.106788.

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.

Mo, P. K., Chan, V. W., Chan, S. W., & Lau, J. T. (2018). The role of social support on emotion dysregulation and Internet addiction among Chinese adolescents: A structural equation model. *Addictive behaviors*, *82*, 86-93.

Ömer Uçur, Yunus Emre Dönmez, Problematic internet gaming in adolescents, and its relationship with emotional regulation and perceived social support, Psychiatry Research, Volume 296, 2021, 113678, ISSN 0165-1781, https://doi.org/10.1016/j.psychres.2020.113678.

Paweł A. Atroszko, Julia M. Balcerowska, Piotr Bereznowski, Adriana Biernatowska, Ståle Pallesen, Cecilie Schou Andreassen, Facebook addiction among Polish undergraduate students: Validity of measurement and relationship with personality and well-being, Computers in Human Behavior, Volume 85, 2018, Pages 329-338, ISSN 0747-5632, https://doi.org/10.1016/j.chb.2018.04.001.

Phil Longstreet, Stoney Brooks, Life satisfaction: A key to managing internet & social media addiction, Technology in Society, Volume 50, 2017, Pages 73-77, ISSN 0160-791X, https://doi.org/10.1016/j.techsoc.2017.05.003.

Putra, P. Y., Fithriyah, I., & Zahra, Z. (2023). Internet Addiction and Online Gaming Disorder in Children and Adolescents During COVID-19 Pandemic: A Systematic Review. Psychiatry investigation, 20(3), 196–204. https://doi.org/10.30773/pi.2021.0311

Reinecke, L., Aufenanger, S., Beutel, M. E., Dreier, M., Quiring, O., Stark, B., ... & Müller, K. W. (2017). Digital stress over the life span: The effects of communication load and internet multitasking on perceived stress and psychological health impairments in a German probability sample. *Media Psychology*, *20*(1), 90-115

Schimmenti, A., Passanisi, A., Caretti, V., La Marca, L., Granieri, A., Iacolino, C., ... & Billieux, J. (2017). Traumatic experiences, alexithymia, and Internet addiction symptoms among late adolescents: A moderated mediation analysis. *Addictive behaviors*, *64*, 314-320.

Singh B, Singh P, Singh U, et al. Students' Perceived Stress and Internet Addiction during the Lockdown in India. Ind J Priv Psychiatry 2020;14(1):30–34.

Types of Internet Addiction. Retrieved from https://www.addictioncenter.com/drugs/internet-addiction/

Varfi N, Rothen S, Jasiowka K, Lepers T, Bianchi-Demicheli F, Khazaal Y Sexual Desire, Mood, Attachment Style, Impulsivity, and Self-Esteem as Predictive Factors for Addictive Cybersex JMIR Ment Health 2019;6(1):e9978 URL: https://mental.jmir.org/2019/1/e9978 DOI: 10.2196/mental.9978

Wang, W., Li, D., Li, X., Wang, Y., Sun, W., Zhao, L., & Qiu, L. (2018). Parent-adolescent relationship and adolescent internet addiction: A moderated mediation model. *Addictive behaviors*, *84*, 171-177.

Xuwei Shen, Chenggong Wang, Caiyan Chen, Yifan Wang, Zinuo Wang, Yanpei Zheng & Hanyue Liu (2023) Stress and Internet Addiction: Mediated by Anxiety and Moderated by Self-Control, Psychology Research and Behavior Management, 1975-1986, DOI: 10.2147/PRBM.S411412

Yen, J. Y., Lin, H. C., Chou, W. P., Liu, T. L., & Ko, C. H. (2019). Associations among resilience, stress, depression, and internet gaming disorder in young adults. *International journal of environmental research and public health*, *16*(17), 3181.

Yildiz, M. A. (2017). Emotion regulation strategies as predictors of internet addiction and smartphone addiction in adolescents. *Journal of Educational Sciences and Psychology*, *7*(1).

Yueli Zheng, Xiujuan Yang, Qingqi Liu, Xiaowei Chu, Qitong Huang, Zongkui Zhou, Perceived stress and online compulsive buying among women: A moderated mediation model, Computers in Human Behavior, Volume 103, 2020, Pages 13-20, ISSN 0747-5632, https://doi.org/10.1016/j.chb.2019.09.012.

Conflict of Interest
The author(s) declared no conflict of interest.