Study on Perceived Stress, Coping, & Social Media Addiction Among College Students

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ABSTRACT

Each semester, a large number of college students enrol in courses, paving the way for successful jobs and contented lives. During this time, the students should manage many stressors stemming from academic, personal, and, once in a while, work lives which need proper stress control via their coping mechanisms. Besides this, the amount of time they spend on social media and its excessive usage has been thought to increase students' stress levels & affecting their mental health. This study, therefore, pursues to decide whether or not there is a considerable association between perceived stress, coping & usage in addition to time spent on social networking in those young adults' lives. Using the Perceived Stress Scale (1983), Coping Scale (2013) & Bergen Social Media Addiction Scale (2022), data were collected from 227 participants (woman=116, male= 111) aged between 18 to 21 years, studying numerous undergraduate degree colleges affiliated to Calcutta university. The findings suggest a significant positive correlation between college students' perceived stress & social media dependency.

Keywords: Perceived Stress, Coping, Social media Addiction, College students.

INTRODUCTION

Stress occurs when the threat of homeostatic failure is perceived. [1] Stress can occur for many physical reasons, but it can also occur for emotional reasons. The cause of stress is different for each person. Stress responses have complex physiological and behavioural effects on organisms. The stress of everyday life cannot be completely eliminated. However, some environmental factors and emotional situations influence the effects of stress and our ability to cope with stress. Whereas, college students must keep up with the high demands that are required to succeed in a university environment. This high-pressure lifestyle can often lead to higher stress levels. In addition, college students are undergoing a developmental transition from adolescence to adulthood, which can be challenging and leave them more vulnerable to mental health problems. [2]

Coping is the thoughts and actions mobilized to deal with internal and external stressful situations. Coping is simply a conscious strategy to reduce unpleasant feelings. Coping strategies can be cognitive or behavioural and can be personal or social. In this way, we adapt to the difficulties and disappointments that come our way. A "coping strategy" is a tool or method you use to feel better or respond when you experience an emotional challenge or difficult situation.

Social media refers to interactive technologies that enable individuals to create and share information, ideas, hobbies, interests, activities, and other expressions

using virtual communities and networks.[3] It broadly encompasses web and mobile platforms that help people create connections within virtual networks (Facebook, WhatsApp, Twitter, LinkedIn, Instagram, YouTube, etc.) to co-create and exchange digital content in various formats, or can be shared in terms of news, photos and videos.[4]

Our use of social networking sites has become an important and integral part of our daily lives, contributing positively or negatively to many aspects of our mental health and well-being. For example, the long-term positive effects of social media use on stress could mean that social media is causing stress. At the same time, such positive effects may suggest that individuals are using social media to manage stress, but the methods are ineffective and may even increase stress. [5] Looking at the different functions of social media helps clarify these different processes and derive definitive recommendations for action. Social media use can therefore serve three functions in the stress-coping process: stressor, resource and coping tool.

In recent years, the development and active use of the Internet and mobile phones have led to the spread of social media, which is one of the communication tools. Creating the effect of face-to-face communication in a virtual environment, social networks have become one of the Internet's most important forks. The many features of social media, such as connecting with friends, making new friends, and sharing photos, videos, and blog content, encourage young people to use social media extensively. The Internet in general, and social media platforms in particular, not only support personal development, but uncontrolled use can also lead to addiction. [6]

As with each technology dependency, college students inevitably spend excessive amounts of time on social media, resulting in problems in fulfilling their personal, social, educational, and professional responsibilities. Limited research has examined the associations between online social media use, technology addiction, stress and social support. For this reason, it is important to examine the relationship between student stress levels, social support status, and social media dependence.

LITERATURE REVIEW

Perceived stress, internet addiction, and procrastination are common problems among college students. [7] A study of students at Assam Don Bosco University found no significant differences in gender and stress level). [8] Men and women probably share more similarities in how they perceive stress. Examining gender differences in perception and coping skills, we found that male college students were more likely to have superior stress-related coping skills. Apply as female students. [9] Alnjadat and colleagues reported that men are more dependent on social media than women (49.6%) and (32%). [10]

Internet addiction is a new form that relies on Internet-connected devices. This addiction has many negative impacts. [11] It is characterized by excessive or poorly controlled obsessions, cravings, or behaviours related to internet use that lead to real-life conflicts. [12] Most researchers believe that Internet addiction should be referred to as excessive use, abuse, or pathological use of the Internet as a broader category. For this reason, more and more scientists and clinicians are investing in Internet addiction research. [13] Under the influence of society, family and school, today's college students face various pressures in many ways, which are often overlooked and lead to a certain degree of negative emotional state. There is a significant positive correlation between stressful life events and Internet addiction. [14, 15]

College students' psychological pressure, heart rate and coping style are significantly correlated, among which psychological pressure coping style is significantly negatively correlated; heart rate and coping style are significantly positively correlated; psychological pressure and cardiac output

are significantly negatively correlated. [16] Previously, related studies have shown that the experience of network flow is an important factor in predicting Internet addiction. [17]

Social media can act as a stressor due to the various functions it provides to users. This hypothesis that social media use is called the stress hypothesis. First, social media can create a fear of approval. They offer many options for (idealized) self-expression. Photos and updates are typically viewed by a large and diverse audience (friends, family, colleagues, etc.), which can lead to uncertainty about how others will react to your presence on social media. Young people in particular are under tremendous pressure to appear attractive and popular on social media, which can lead to stress. Cognitive anxiety can be even more frustrating because likes can help determine popularity. Second, social media can trigger fear of missing out (FoMO). This is the fear that "someone else might have a rewarding experience in my absence". [18]

With the increasing use of social media, many researchers have found that the degree of social media use and overall participation in various social networking sites (SNS) influence a person's mental health and well-being. [19] One such study, conducted in 2019 showed that a person's mental health conditions, such as stress, can be predicted by language and social media use.[20] Another study conducted in 2014 found that Facebook, among other major social networks, was positively associated with acculturation stress among East Asian college students in the United States is suggested. [21]

When stress increases, students may turn to social media. Research findings led to the fact that the length of time students stayed at home, cleanliness, distance, and restrictions increased, especially during the COVID-19 epidemic. Almost all students in the study reported spending more time at home, with the pandemic changing computer and phone usage and spending more time online. Çiftçi reports in his study that gender; age,

education level and duration of his internet users play a significant role in social media addiction and duration of use. [22]

When people are stressed, they can develop negative emotions and have negative reactions that tend to procrastinate. College students, as a large group exposed to the internet, can easily use the internet as a procrastination tool. Therefore, this negative style of dealing with negative emotions leads to negative behaviour, namely the consequences of internet addiction. [23] Problems that can occur when college students use the Internet have caused widespread concern.

In view of the above, the present study aimed to investigate the nature of the relationship between perceived stress, coping, and dependence on social media in undergraduate college lives.

Hypotheses:

I. Male undergraduate college students living in Kolkata will significantly differ from their female counterparts in respect of perceived stress, coping & social media addiction.

II. There will be a significant difference in mean scores among three academic years in honours undergraduate degree course (i.e.; 1st year, 2nd year & final year) on the basis of- perceived stress, coping & social media addiction.

III. The psychological variables of the study, viz. perceived stress, coping & social media addiction would correlate significantly with each other for the student sample (male & female as a whole).

MATERIALS & METHODS

Participants: A Web-based survey composed of a group of 227 Undergraduate college students (111 males and 116 females) studying in several undergraduate degree colleges affiliated with Calcutta University had been done. Participants belonging to 18 to 21 years old are considered for the present study. All are undergraduate college students and their

family structures are nuclear or semi-nuclear type and they belong to middle socio-economic status. Subjects, with a chronic physical and mental disorder, were excluded by suitable screening through questions asked in the general information schedule.

Survey Instruments: General Information Schedule: It elicits information about socio-demographic variables like age, sex, education, domicile, family structure and family income etc.

Perceived Stress Scale: This tool, originally developed by Sheldon Cohen in 1983, [24] helps understand how different situations affect our feelings and perceived stress. The questions in this scale ask about one's feelings and thoughts during the last month. In each case, one will be asked to indicate how often he/she felt or thought a certain way. Although some of the questions are similar, there are differences between them and should be treated each one as a separate question. The best approach is to answer fairly quickly. For each question, one most suitable alternative has to be chosen among the five. For direct scoring: Never=0; Almost Never=1; Sometimes=2; Fairly Often=3; Very Often=4; & for question no. 4, 5, 7 & 8 the reverse scoring would be like this- 0 = 4, 1 = 3, 2 = 2, 3 = 1, 4 = 0. Increased scores on the PSS indicate higher perceived stress, with individual scores on the scale ranging from 0 to 40. Scores between 0 and 13 are regarded as low stress. Scores between 14 and 26 would be regarded as moderate stress. Scores between 27 and 40 would be regarded as moderate perceived stress.

Coping Scale: This coping questionnaire developed by Hamby, Grych & Banyard (2013), [25] assesses cognitive, emotional, and behavioural methods of dealing with problems. Items 2, 3, and 4 below, which focus on cognitive and emotional techniques, were modified from Holahan and Moos's (1987) [26] widely-used Coping

Strategies Scale whereas other cognitive and emotional items were original (1, 5, 6, and 8). The remaining questions were modified using the framework developed by Spitzberg and Copach (2008) [27] to evaluate how well people cope with stalking. Items that were modified were reworded to emphasize broad coping tendencies (as opposed to a response to a specific scenario) and simplified to fit a community sample where some members have low literacy and educational levels. Internal consistencies (coefficient alphas) for the pilot and main samples are 0.88 and 0.91, respectively. Strong correlations with additional regulatory strength measures allowed for the main sample's validity to be demonstrated. A value between 4 and 1 was assigned to each category of answers. The sum or mean of all the components can be used to calculate the final score. Stronger scores reflect higher coping capacities.

Bergen Social Media Addiction Scale (2016): The Bergen Social Media Addiction Scale was created from the Bergen Facebook Addiction Scale, [28] with the name "Facebook" being changed to "Social media." The six key characteristics of addiction identified by Griffiths (2005) [29] were the basis for the development of the scale: salience, mood modulation, tolerance, withdrawal, conflict, and relapse. The psychology community has generally approved this brief survey, which is utilised in psychological research. You can self-administer it, and it is quick. It is a six-item scale that is intended to reveal the challenges someone encounters as a result of using social media excessively and to rate the severity accordingly. The five standard responses of "very rarely," "rarely," "occasionally," "often," and "very often" are used to compare the six questions of the BSMAS. With a precise social media addiction evaluation, the Bergen Social Media Addiction Scale is simple and condensed. On a Likert scale of 1 to 5, with 5 being "very often," the six items are scored. In order to determine the final

BSMAS score, the scores for each item are then totalled. The BSMAS's runs from 6 to 30 in the total score. Researchers claim that a person is clearly showing signs of addiction if they score higher than 3 on 4 of the 6 items.

Collection of Data:

Data were collected through a web-based survey method from the undergraduate college students of Calcutta University. Both male and female college students were approached online through the mail and social networking sites. All the interested participants were provided online questionnaires through emails in terms of Google forms shared through links.

RESULT & DISCUSSION

The raw scores were calculated after collecting and scrutinizing the data of the students from different colleges. The Means (M) and standard deviations (SD) of male & female students' groups on the Perceived Stress Scale (PSS), Coping Scale (CS) & Bergen Social Media Addiction Scale (BSMAS) were calculated and the results are presented in Table I.

Table I: Descriptive results of male & female students as well as three academic years for the whole students' group on three different variables under study:

Variables	Gender (N=227)				Academic Year of college students (N=227)					
	Male (N = 111)		Female (N = 116)		1st year (N= 91)		2nd year (N=59)		3rd year (N=77)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Perceived Stress	20.85	6.654	22.18	6.110	21.31	5.977	21.64	8.017	21.70	5.518
Coping	36.98	6.116	34.98	6.289	35.64	6.668	36.85	5.904	35.66	6.073
Social Media Addiction	16.15	5.309	15.37	4.481	15.92	5.001	15.22	4.767	15.96	4.938

In order to find out gender differences, independent samples z- test has been conducted and the results are given below.

TABLE II: Z-test values & results for testing the significance of the mean difference between male & female undergraduate college students according to the variables under study.

Variables	Z-test value	Sig.(2-tailed) [p Value]
Perceived Stress	-1.575	.117
Coping	2.427	.016*
Social Media Addiction	1.202	.231

*significant at 0.05 level.

From the above tables, it is seen that male undergraduate college students scored higher than females in coping (from table-1: Male Mean = 36.98; Female Mean = 34.98), which was significant at 0.05 level of significance. But on the other hand, there revealed no significant gender differences in the other two variables (perceived stress & social media addiction) under study as p>0.05 in each case. Thus, Hypothesis I was partially accepted & it might be said that male undergraduate college students living in Kolkata significantly differed from their female counterparts in respect of coping, although there had found no gender difference in terms of perceived stress & social media addiction. This finding supported the previous findings of Ptacek et al. (1992) [30] & Graves et al. (2021) [31] which stated that male students tend to use problem-focused coping strategies more than females. Furthermore, several studies, there found no significant gender difference among college students in perceived stress. [8] On the contrary, the present finding contradicted Alnjadat & others' study result in 2019 stating males had more addiction to social media than female students. [10]

Table III: Results of One-way ANOVA tests for testing the significance of mean difference among three academic years in terms of the psychological variables under study:

Variables	F [2,224]	Sig.
Perceived Stress	.091	.913
Coping	.796	.452
Social Media Addiction	.469	.626

One-way ANOVA was conducted to see the effect of three academic years on perceived stress, coping & social media addiction, respectively. Since the "Sig" level was greater than alpha in each case, the results were not significant (p>0.05) considering no effects were said to be discovered. Therefore, Hypothesis II was fully rejected. The easy access and availability of

resources in an urban setting could be a reason for this finding.

Table IV: Inter-correlations between variables under study: (N=227)

Variables	Perceived Stress	Coping	Social Media Addiction
Perceived Stress	1	-.057	.159*
Coping	-.057	1	-.032
Social Media Addiction	.159*	-.032	1

* Correlation is significant at the 0.05 level (2-tailed).

Table IV has shown that the students' group living in Kolkata had a statistically significant ($p<0.05$) positive correlation between perceived stress & social media addiction; that means, as perceived stress increased students' addiction to social media also increased significantly. Thus, Hypothesis III had been partially accepted here for the students' group indicating perceived stress & social media addiction were positively correlated with each other whereas there had been found no other correlation for these variables under study.
Several studies supporting the present findings indicated that the perceived stress of college students was significantly related to internet addiction. [7, 32]

CONCLUSION
The purpose of this study was to examine the relationship between perceived stress, coping & social media addiction among male & female undergraduates living in Kolkata. The results revealed that no variables under study other than coping had been found to be gender dependent. There also had no significant difference among the three academic years in under-graduation in respect of these psychological variables. A significant association had been found in terms of perceived stress with social media addiction as well.

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