CHAPTER 4

Social Media—The Emotional and Mental Roller-Coaster of Gen Z: An Empirical Study

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Introduction

Generation Z today is said to adapt to everything and anything rapidly and not only this they learn about new products and various other developments on social media quicker than anyone else does. They are also 59% more likely than older generations to connect socially with friends and families and build the network. Being socially connected to others can ease stress, anxiety, and depression, boost self-worth, provide comfort and joy, and prevent loneliness. On the other side, lacking strong social connections can pose a serious risk to the mental and emotional health and feel completely left out and aloof, which is where the harm begins.

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Everyone is different and there is no specific amount of time spent on social media and no one can control the time one spends over social sites or the frequency one checks for updates, or the number of posts one makes and likes but these don't indicate by any means that the user is being unhealthy, but if this excess use causes one to neglect face-to-face relationships and the society, causes distractions at work school, or is developing feelings of envy, hatred, or one is posting pictures to show others or make others jealous, its time one thinks and relooks into their social behavior and social media habits. For this current generation using social media has become a substitute for a lot of offline social interactions. Even if one is out with friends, one still feels the need to constantly check social media. Post regular content about oneself, get comments, or likes on the posts, or respond quickly and enthusiastically to friends' posts. These days' people check social media last thing at night, first thing in the morning, or even when they wake up in the night?, and the light from phones and other devices can disrupt one's sleep and cause sleepless nights and does affect mental health. All of our understanding is that Millennials were excited about social media, but Gen Z brings this to an entirely different level.

The generation replacing the Millennials is Generation Z or Gen Z for brief. The mid-to-late-1990s are widely used by demographers and researchers as beginning birth years, though at the end of the years a consensus has not been reached. Generation Z has used technological generation from a younger age for its inspiration and is comfortable with the Internet. Gen Z has started to collect awareness and insights on buying power and social media, and they are generating attention that has been put on Millennials for a long period. This makes Gen Z and their use of social media very accurate. In parenting and adulthood, millennials develop equally, so Gen Z can emerge. They will be the number one age to be raised within the mobile and social media globe without a doubt. Generation Z is passionate about social media users and has emerged as an efficient force for social change. Technological developments (i.e., smartphones and social media) have changed how Gen Z was relative to previous generations in communicating, socializes, and gets statistics. Because dwelling through these events and seeing their impact affects how they could perceive and take the attitude of others, precise reports and characteristics encouraged generation Z's empathy. In addition to testing its effect on them as an individual, business enterprise, and society, the paper seeks to highlight how the current generation Z

uses social media. The paper describes the emotional equilibrium of the distinction of generation Z in their attitudes, norms, and choices that may change continuously over time. It explains their use of social media and their intra-generational differentiation that stems from environmental and private influences. The paper reveals how the use of social media impacts on their emotional attitudes in the Gen Z. It aims to pick out some questions about Gen Z's and their social media usability, as well as sketches rational insights into emotional behavior that causes the younger generation's different choices, choices, and emotional choices. The Research questions stood in the present study is: What is the role of social media in the emotional and mental health of Gen Z during pre- and current pandemic situation? More specifically we ask two research questions as stated below:

RQ_1: Would Gen Z usage pattern (fixed and varied period) and addiction toward social media affect their emotional and mental health?

RQ_2: How the mental and emotional health of Gen Z varies between pre- and current pandemic situations.

To answer these questions, we conducted a literature review, from which hypotheses were formulated. Social media addiction, mental well-being, and emotional behavior questionnaires were then taken, based on contributions from the literature, to test these hypotheses. The questionnaire was given to Gen Z in Bangalore city. Descriptive analysis, paired sample *t*-test and ANOVA (randomized block experiment), and partial least-square were used to obtain the results. This research paper is categorized as follows: first, grounded on the research question the review of literature is discussed second, the study objectives identified, next the model and hypothesis are developed. Then, the study methodology is described. Finally, analysis is carried out and results are obtained and discussed.

Theoretical Background

Gratification Theory

Katz et al. (1973) pointed out that the gratification theory (U&G) is based on the social and psychological roots of needs that create perceptions from mass media or other outlets that contribute to unequal patterns

of media visibility, resulting in the need for gratification and other consequences. U&G is linked to the use of mass media by people. U&G was also concerned with how individuals fulfilled or satisfied their needs in terms of content when using the media. The U&G theory suggests that the social and psychosocial consequences of the use of the Internet depend largely on the user's motivations and objectives for using the technology (Weiser, 2001). Shao (2009) reported that individuals use user-generated media for a variety of purposes: consuming content to meet their knowledge, entertainment, and mood management needs; engaging through engagement with content and other users to improve social connections and virtual communities and creating their content for self-expression and self-actualization. Colás et al.'s (2013) study findings indicate that for young people, online social networks are a source of resources used to meet both psychological and social needs There are common reasons for people to use social networks. Omar et al. (2014) described the following motivations: finding information, seeking entertainment, social contact, personal identification, and self-disclosure. As McQuail (1987) said, "seeking information" is a basic need for people to understand the relevant events and conditions in the world. "Seek entertainment" is seen to get rid of the tension of daily life and relax as well as to fill your spare time.

Social interaction and incorporation provide an insight into the circumstances of others or social sympathy. Personal identity involves enhancing personal beliefs, discovering behavioral trends, connecting with other values (in the media), and gaining insight into one's self (Omar et al., 2014). Jourard (1964) listed self-disclosure, made the individual visible to others, and enabled others to see the person as a special or common human being. Several studies have explored the motives of the Internet and SNS (Stafford & Gillenson, 2004), socialization and entertainment (Curras-Perez et al., 2014), alienation (Petrocchi et al., 2015), social integration (Weiser, 2001), self-expression and self-actualization (Shao, 2009), work-life balance, etc. (Kim et al., 2014). Scheepers et al. (2014) applied more motivational aspects to the usage of social networks. These behaviors are the quest for knowledge, hedonistic habits, the preservation of strong connections, and the extension of weak ties. Another research conducted in Turkey by Calisir et al. (2013) found that 155 participants had a behavioral intention to use, perceived pleasure, perceived ease of use, perceived utility, and social impact, either directly or indirectly, on the use of social networks on smartphones among students.

Social Displacement Theory

The Social Displacement Theory, as originally suggested, claimed that when individuals were affected, they spend more time on the Internet and spend less time on personal relationships with near family and friends. This argument claimed that while the contact was increased Internet opportunities decreased social interaction and psychological wellness (Kraut et al., 1998; Nie, 2001). Subsequent empiric investigations have stopped these complaints (Kraut et al., 2002; Nie & Hillygus, 2002), and only a meta-analysis was found poor evidence of a cross-sectional correlation between Internet usage and well-being (Huang, 2010). As of its initial wording, the displacement hypothesis new life has been identified in the study of online discussion groups (Cummings et al., 2002). There are four forms of indirect evidence of social displacement as related to the use of social media. First, a recent meta-analysis, involving 9000 Facebook users, reported a poor positive correlation between use and loneliness but challenged the causal relationship (Song et al., 2014). This establishes a connection between the Usage of social media and depression as stated by the displacement hypothesis. Second, to the association, the face-to-face relationships and positive psychosocial results are better than the relationship between online-only relationships and psychosocial result (Ahn & Shin, 2013; Dunbar, 2014; Pollet et al., 2011; Shakya & Christakis, 2017). Short-term longitudinal methods (e.g., Hinsch & Sheldon, 2013; Sheldon et al., 2011) and experience sampling methods (ESMs) have been utilized to explore the association between social media use and well-being (Kross et al., 2013; Verduyn et al., 2015). Although Shakya and Christakis (2017) explored the positive association with the number and quality of close relationships, they did not explore whether social media use predicted change in interactions with close others.

Effect on Social Media on Well-Being

Aparicio (2020) analyzes the effects of communication with cell phones and web-based media stages that influence the psychological wellness and prosperity of teenagers as they progress from existence with guardians to life on their own. Convenience test of no under 50 and close to 100 people between the ages of 18–25 reacting to a poll using a Qualtrics online survey. Findings show that although web-based media is not the main pointer of sadness, web-based media has a factually huge relationship with expanded CES-D scores. Xu et al. (2020) research investigates

the utilization of multimodal prompts present in online media presents on foresee clients' psychological well-being status. Few characterization tests expecting to separate between (1) sound clients and clients influenced by a psychological wellness ailment; and (2) solid clients and clients inclined to mental illness. The exploratory outcomes show that utilizing different modalities can improve the exhibition of this grouping task when contrasted with the utilization of each methodology in turn and can give significant signals into a client's psychological status. Zhang et al. states that such examination means to analyze research subjects, the part of web-based media, and exploration techniques in web-based media-based general well-being research distributed from 2000 to 2018. A dataset of 3419 legitimate investigations was created by looking through the top-notch of applicable catchphrases in the Web of Science and PubMed information bases. Furthermore, this investigation utilizes an unaided book mining method and subject displaying to remove research topics of the distributed studies. Social media empowers researchers to concentrate on new wonders and propose new examination inquiries in general well-being research. Zhang and Ma (2020) analyze the prompt effect of the COVID-19 pandemic on psychological wellness and personal satisfaction among nearby Chinese inhabitants matured ≥18 years in Liaoning Province territory, China. An online overview was disseminated through a web-based media stage between January and February 2020. Members finished an altered approved poll that surveyed the Impact of Event Scale (IES), pointers of negative emotional wellness effects, social and family uphold, and psychological well-being connected way of life changes. In the end, the COVID-19 pandemic was related with a gentle upsetting effect in the example, although the COVID-19 pandemic is as yet continuous. Twenge and Farley (2021) try to look at the relationship between changed kinds of screen exercises (online media, web, gaming, and TV) and mental health indicators independently for young men and girls. It drew from a broadly delegate test of 13–15-year-old teenagers in the UK (n = 11,427) getting some information about hours of the day spent on explicit screen media activities. It has been observed that time spent via web-based media and Internet use were all the more unequivocally connected with self-hurt practices, burdensome manifestations, loser fulfillment, and low confidence than hours spent on electronic gaming and TV viewing. Young women generally demonstrated a more grounded relationship between screen media time and emotional well-being pointers than young men. Nop (2020) investigates the breaks down of what the

impacts are and how correspondence is affected by these youngsters. It doubts how youngsters can use web-based media and abatement harm. The study will be directed through a writing audit and analysis. Its objective is to orchestrate the current information via online media prosperity and how it identifies with youngsters, explicitly Millennials and Generation Z, to at last prescribe methodologies to streamline prosperity in the advanced age. Cooks (2020) connects essential points to analyze these pathways between online media use and discouragement and to decide if such connections equal what is perceived about the relationship between burdensome manifestations and up close and personal relational working. Keles et al. (2020) discuss audit blended proof as online media use to overcome gloom, nervousness, and mental trouble in adolescents. A search of PsycINFO, Medline, Embase, CINAHL, and SSCI information bases procured 13 qualified investigations, of which 12 were cross-sectional. All spaces are related to discouragement, uneasiness, and mental misery. Rasmussen et al. (2020) explored the relationship between social media use and mental well-being through difficulties with emotion regulation and perceived stress among a sample of US college-student emerging adults. Findings suggest that social media use may be a risk factor for mental health among adults and that social media use may be an activity to which adults resort when dealing with difficult emotions.

Yadav and Rai attempt to investigate the consciousness of how the current Generation Z is utilizing the online media just as to survey its repercussion on them as an individual's association and society as a system. This research is significant for tending to the real importance for associations looking to comprehend and attempting to exploit Gen Z' web-based media collaborations. Çiçek et al. (2018) distinguish the impact of web-based media advertising on brand faithfulness of the shoppers, given that the idea is getting expanding consideration from promoting the scholarly community and professionals. The extent of the investigation comprise of clients who follow at any rate one brand on the online media in Turkey and the information were gathered through the organization of an organized survey with an example of 338 individuals and tried using stepwise different relapse analysis. The consequences of the examination indicated that brand dependability of the clients is emphatically influenced when the brand (1) offers invaluable missions, (2) offers pertinent substance, (3) offers famous substance, and (4) shows up on different stages and offers applications via web-based media.

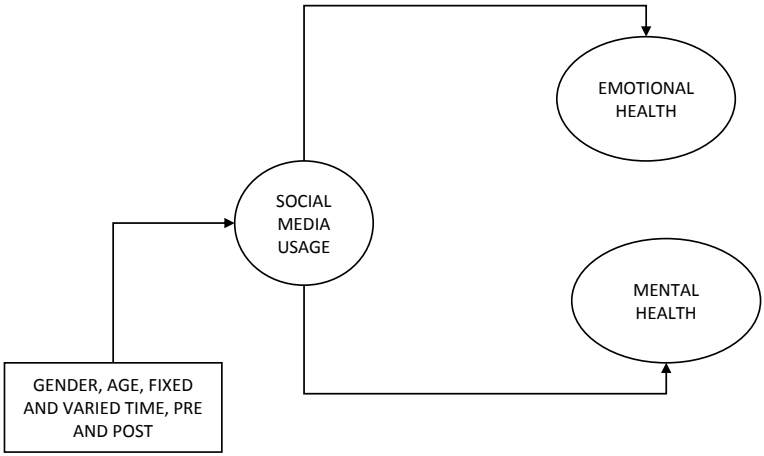

Fig. 4.1 Conceptual model (*Source* Authors)

Objectives of the Study

To observe the part played by social media in Gen Z emotional and mental well-being the empirical analysis is needed to:

1. measure the mental and emotional health of Gen Z in fixed and varied time usage of mobile phones.
2. measure the mental and emotional health of Gen Z in pre- and current pandemic situations.
3. investigate the impact of social media usage pattern on mental and emotional health among a section of Gen Z (Fig. 4.1).

Hypothesis Development

Homogeneity Test—Hypothesis

H1a: *There is no homogeneity across the different levels of time (Fixed and Varied) concerning the Pre- and Post-Pandemic on mental health and emotional health.*

H2a: *There is no homogeneity across the Pre- and Post-Pandemic situations and mobile phone usage on mental health and emotional health of Gen Z.*

SEM—Measurement Hypothesis

H0: Impact of social media usage pattern on emotional and mental health.

Methodology

Participants

The research design is the technique of finding answers to the research questions. This study encompasses investigating the impact of social media on the mental and emotional health of Gen Z in pre- and current pandemic situations. As it efforts to measure the phenomena as they exist. The researcher conducted a randomized controlled trial (RCT) in investigating the impact of social media on mental and emotional health among a section of Gen Z pre- and current pandemic situations. This study is carried out in Bangalore city, where a higher number of Gen Z studying in Higher educational institutions. Four educational institutions in Bangalore were chosen based upon the number of Gen Z categories studying in this institution. After obtaining consent from the educational intuition and voluntariness of participants, In February 2020 the Gen Z were included in the experiment. The inclusion criteria are participant must be frequent users of social media use, and at least have three or more different social media account. The reasons for selecting the criteria of social media usage in part because previous research has shown that there is a relationship between the use of social media and mental health (Fuller et al., 2017).

Procedure

Totally 420 Gen Z showed interested in participating in the experiment and received an information sheet explaining the study and an informed consent form. And this was signed by 350 people. So a total of 350 Gen Z participants were randomly assigned to the following two groups with two-time period: measuring mental health and emotional health condition on March 2020 with fixed time on social media usage ($n = 175$) and varied/increase time on social media usage ($n = 175$) (pre-first period—pre-pandemic with intervention) and August 2020 (Post—second period—current pandemic—with intervention) fixed time on social media usage ($n = 175$) and varied/increase time on social media

usage ($n = 175$). Block randomization was carried out for the two groups with stratification on gender, location, education level, and age using computer-generated random sequences of numbers.

Measures

All respondents finished measures on two occasions: at baseline (Pre-first period—March 2020 with pre-pandemic with intervention) and completed line (Post-second period—current pandemic—with intervention). Structured questionnaires were used to measure mental health, emotional health, and social media addiction, and questionnaires were administered online to collect data from the respondents. The outcome measures mental health measured through well-being (WHO-5 Well-Being Index), depression (Depression module of Health Questionnaire [PHQ-9]; Kroenke et al., 2001), anxiety (Generalized Anxiety Disorder 7 scale [GAD-7]; Löwe et al., 2008), stress (perceived stress scale [PSS-10]; Cohen & Williamson, 1991), and sleep quality (SQI). Another measure of emotional health measured through Emotional Behavioral Scales—Generalized Anxiety disorder (GAD), Separation anxiety disorder (SAD), Major Depressive disorder (MDD), social anxiety disorder (social phobia) (SP), Attention-deficit hyperactivity disorder (ADHD), oppositional-defiant disorder (ODD), and Conduct disorder (CD) (Laura Duncan et al., 2018). The social media addiction through Bergen Social Media Addiction Scale (BSMAS; Andreassen et al., 2012).

Results and Discussions

Demographic Analysis

The respondents were taken for the study concerning the gender with the same proportion in both pre- and post-pandemic situations concerning the fixed time and varied time. The total number of 350 samples was blocked based on the above proportion (50%) (Table 4.1).

Objective 1: To measure the mental and emotional health of Gen Z in fixed and varied time usage of mobile phones.

To test if these different levels of time (fixed and varied/ pre- and post-pandemic) concerning mobile phone usage had an impact on mental

Table 4.1 Demographic profile

			Pre-pandemic		*Post-pandemic*	
S. No	*Demographic Variable*		*Fixed time*	*Varied time*	*Fixed time*	*Varied time*
1	Gender	Male	87	87	87	87
2		Female	88	88	88	88
	Total		175	175	175	175

Source Primary Data

health (well-being, depression, anxiety, stress, and sleep quality) and emotional health (Separation anxiety disorder, Major Depressive disorder, Social phobia—social anxiety disorder, Attention-deficit hyperactivity disorder, Conduct disorder, and Generalized Anxiety disorder) of Gen Z, one-way analysis of variance was carried out. Since testing each measure of emotional and mental health of Gen Z will provide concrete results regarding the impact of different levels of time (fixed and varied/pre- and post-pandemic), the consolidated hypothesis formulated for the same is given below (Table 4.2):

> H1a: There is no homogeneity across the different levels of time (Fixed and Varied) concerning the Pre- and Post-Pandemic on mental health and emotional health

Testing of homogeneity across different levels of time concerning pre-pandemic:

The level of the study belongs to a fixed and varied level of time concerning mobile phone usage The hypothesis formulated is given below:

> H1a: There is no homogeneity across the different levels of time (Fixed and Varied) concerning the Pre-Pandemic on mental and emotional health.

The ANOVA results of mental health and emotional health measures across two levels of mobile phone usage time (fixed and varied) concerning pre-pandemic are presented in Table 4.2. The test results for all the measures in mental and emotional health were found to be insignificant as p values are higher than 0.05. Therefore, failed to reject the null

Table 4.2 Analysis of variance (ANOVA)—fixed time a varied time (pre- and post-pandemic)

Study variables	*Measurement*	*Levels*	*N*	*Mean*	*ANOVA*	
					F-value	*P-value*
Mental health	Well-being	Fixed Time—Pre	175	17.25	2.003	**0.158**
		Varied Time—Pre	175	17.82		
		Fixed Time—Post	175	15.22	3.025	**0.083**
		Varied Time—Post	175	14.61		
	Depression	Fixed Time—Pre	175	13.75	0.984	**0.322**
		Varied Time—Pre	175	14.37		
		Fixed Time—Post	175	13.59	0.026	**0.873**
		Varied Time—Post	175	13.53		
	Anxiety	Fixed Time—Pre	175	11.07	1.411	**0.236**
		Varied Time—Pre	175	11.68		
		Fixed Time—Post	175	10.51	1.021	**0.313**
		Varied Time—Post	175	10.19		
	Stress	Fixed Time—Pre	175	26.70	0.422	**0.516**
		Varied Time—Pre	175	26.03		
		Fixed Time—Post	175	20.11	0.064	**0.801**
		Varied Time—Post	175	20.24		
	Sleep quality	Fixed Time—Pre	175	9.91	1.595	**0.207**

(continued)

Table 4.2 (continued)

Study variables	*Measurement*	*Levels*	*N*	*Mean*	*ANOVA*	
					F-value	*P-value*
		Varied Time—Pre	175	10.71		
		Fixed Time—Post	175	10.55	0.087	**0.768**
		Varied Time—Post	175	10.64		
Emotional health	Separation anxiety disorder	Fixed Time—Pre	175	19.23	0.566	**0.452**
		Varied Time—Pre	175	19.85		
		Fixed Time—Post	175	14.07	1.653	**0.199**
		Varied Time—Post	175	13.55		
	Major Depressive disorder	Fixed Time—Pre	175	25.25	1.853	**0.173**
		Varied Time—Pre	175	26.67		
		Fixed Time—Post	175	17.33	0.429	**0.513**
		Varied Time—Post	175	17.67		
	Social phobia -social anxiety disorder	Fixed Time—Pre	175	13.14	1.826	**0.178**
		Varied Time—Pre	175	14.13		
		Fixed Time—Post	175	9.99	0.269	**0.604**
		Varied Time—Post	175	9.82		
	Attention-deficit hyperactivity disorder	Fixed Time—Pre	175	21.84	0.789	**0.375**
		Varied Time—Pre	175	22.70		
		Fixed Time—Post	175	16.20	0.183	**0.669**
		Varied Time—Post	175	16.37		
	Conduct disorder	Fixed Time—Pre	175	27.77	0.364	**0.547**

(continued)

Table 4.2 (continued)

Study variables	*Measurement*	*Levels*	*N*	*Mean*	*ANOVA*	
					F-value	*P-value*
		Varied Time—Pre	175	27.19		
		Fixed Time—Post	175	19.84	0.007	**0.935**
		Varied Time—Post	175	19.88		
	Generalized Anxiety disorder	Fixed Time—Pre	175	16.18	1.282	**0.258**
		Varied Time—Pre	175	17.07		
		Fixed Time—Post	175	11.98	0.408	**0.151**
		Varied Time—Post	175	12.22		
	Oppositional-defiant disorder	Fixed Time—Pre	175	14.56	0.648	**0.421**
		Varied Time—Pre	175	15.19		
		Fixed Time—Post	175	12.42	2.071	**0.524**
		Varied Time—Post	175	11.87		

hypothesis and rejected the alternate hypothesis. It means there is homogeneity across the different levels of time (fixed and varied) concerning the pre-pandemic on mental and emotional health.

Testing of homogeneity across different levels of time concerning post-pandemic effects:

The level of the study belongs to a fixed and varied level of time concerning mobile phone usage. The hypothesis formulated is given below:

> H1b: There is no homogeneity across the different levels of time (Fixed and Varied) concerning the Post-Pandemic on mental and emotional health.

The ANOVA results of mental health and emotional health measures across two levels of mobile phone usage time (fixed and varied) concerning post-pandemic are presented in Table 4.2. The test results for all the measures in mental and emotional health were found to be insignificant as p values are higher than 0.05. Therefore, failed to reject the null hypothesis and rejected the alternate hypothesis. It means there is homogeneity across the different levels of time (fixed and varied) concerning the post-pandemic on mental and emotional health. So, in general, there is a significant impact on mobile phone usage time on the mental and emotional health of Gen Z (Table 4.3).

Table 4.3 Analysis of variance (ANOVA)—pre- and post-pandemic

Study variables	*Measurement*	*Levels*	*N*	*Mean*	*ANOVA*	
					F-value	*P-value*
Mental health	Well-being	Pre-pandemic	175	17.53	97.289	**0.000**
		Post-Pandemic	175	14.91		
	Depression	Pre-pandemic	175	14.06	1.970	**0.161**
		Post-Pandemic	175	13.56		
	Anxiety	Pre-pandemic	175	11.38	11.555	**0.000**
		Post-Pandemic	175	10.35		
	Stress	Pre-pandemic	175	26.37	117.68	**0.000**
		Post-Pandemic	175	20.18		
	Sleep quality	Pre-pandemic	175	10.31	0.630	**0.428**
		Post-Pandemic	175	10.59		
Emotional health	Separation anxiety disorder	Pre-pandemic	175	19.54	157.10	**0.000**
		Post-Pandemic	175	13.81		
	Major depressive disorder	Pre-pandemic	175	25.96	201.88	**0.000**
		Post-Pandemic	175	17.83		
	Social phobia -social anxiety disorder	Pre-pandemic	175	13.63	87.66	**0.000**
		Post-Pandemic	175	9.91		
	Attention-deficit hyperactivity disorder	Pre-pandemic	175	22.27	129.840	**0.000**
		Post-Pandemic	175	16.29		
	Conduct disorder	Pre-pandemic	175	27.48	204.58	**0.000**
		Post-Pandemic	175	19.86		
	Generalized anxiety disorder	Pre-pandemic	175	16.63	108.66	**0.000**
		Post-Pandemic	175	12.10		
	Oppositional-defiant disorder	Pre-pandemic	175	14.87	39.357	**0.000**
		Post-Pandemic	175	12.15		

Objective 2: To measure the mental and emotional health of Gen Z in pre- and current pandemic situations.

The consolidated hypothesis formulated for the above objectives is given below:

> H2a: There is no homogeneity across the Pre- and Post-Pandemic situations and mobile phone usage on mental health and emotional health of Gen Z.

The ANOVA results of mental health and emotional health measures pre- and post-pandemic are presented in Table 4.3. The test results for all the measures in mental and emotional health were found to be significant as p values are lesser than 0.05. Except depression ($p = 0.161$) and sleep quality ($p = 0.428$). Therefore, reject the null hypothesis and accept the alternate hypothesis H2a for mental health (Well-Being, Anxiety, Stress) and emotional health (Separation anxiety disorder, Major Depressive disorder, Social phobia—social anxiety disorder, Attention-deficit hyperactivity disorder, Conduct disorder, Generalized Anxiety disorder). It means there is no homogeneity across the pre- and post-pandemic on mental health (Well-Being, Anxiety, Stress) and emotional health (Separation anxiety disorder, Major Depressive disorder, Social phobia—social anxiety disorder, Attention-deficit hyperactivity disorder, Conduct disorder, Generalized Anxiety disorder) and there is homogeneity across pre- and post-pandemic on sleep quality and depression. It means there is no significant mean difference in depression and sleep quality of Gen Z in pre- and post-pandemic situations.

Objective 3: To investigate the impact of social media usage pattern on mental and emotional health among a section of Gen Z.

Structural equation modeling (SEM), also known as path analysis, is now a regularly used method for representing dependency relations in multivariate data in the behavioral and social sciences. SEM refers to a diverse set of mathematical models, computer algorithms, and statistical methods that fit networks of constructs to data. SEM includes confirmatory factor analysis, path analysis, and partial least squares path analysis. We have done the SEM and taken the measurement model. SEM was tested using AMOS software. The measurement model defines relationships between the observed and unobserved variables. It provides the link between scores on a measuring instrument (i.e., the observed indicator variables) and the underlying constructs they are designed

Table 4.4 SEM—Hypothesis verification

Hypothesis	*Hypothesis*	*Standardized estimate*	*S.E*	*C.R*	*P*
H1	SMAA → WELL-BEING	0.016	0.136	0.413	0.679
H2	SMAA → DEPRESSION	0.597	0.336	4.312	***
H3	SMAA → ANXIETY	0.630	0.385	4.330	***
H4	SMAA → STRESS	0.707	0.608	4.363	***
H5	SMAA → SLEEP QUALITY	0.555	0.397	4.286	***
H8	SMAA → GAD	0.755	0.817	4.379	***
H7	SMAA → SAD	0.772	0.774	4.384	***
H8	SMAA → MDD	0.791	0.791	4.389	***
H9	SMAA → SOCIAL PHOBIA	0.770	0.901	4.383	***
H10	SMAA → ATTENTION DISORDER	0.791	0.784	4.389	***
H11	SMAA → OPPOSITIONALDEFIANT-DISORDER	0.738	0.764	4.374	***
H12	SMAA → CONDUCT DISORDER	0.537	0.558	4.343	***

to measure. The hypothesized framework was constructed with mental health, emotional health, social media addiction, pre- and post-pandemic, fixed and varied period level, and demographic variables. The hypothesis is formulated and tested, and verification values are given below (Table 4.4):

SEM—Measurement Model

The Hypotheses from H2 and H12 are accepted since all their Critical ratios (CR) are greater than 1.96 and *p*-values are lesser than 0.05. So therefore the factor covariance of those hypotheses is accepted. The hypothesis H1 is rejected because the Critical ratios (C.R) are 0.413 not greater than 1.96 and the *p*-value 0.679 is not less than 0.05. The above results were supported by Twenge and Farley's (2021) study results, which has shown that social media addiction impacting mental and emotional health. All variables were included with significant covariance's for error terms from the results of confirmatory factor analysis, and the model was tested for goodness of fit, and the results are as follows. CMIN/df = 3.567, CFI = 0.988, GFI = 0.967, NFI = 0.908, CLOSE = 0.549, RMSEA = 0.061. The values well abide by the prescribed limits thus ensuring that the SEM has a good fit acquired from this study are within the recommended values of Hair et al. (2009).

Discussions

Social media is considered a very important tool in dissemination of information among young adults and teens today. Due to its brevity, cost, and instant mass communication, it has been gaining momentum in the recent past. The information diffused through this can be a positive or a negative influence in the minds of the recipients. The positive impression can be used as a powerful instrument in marketing goods and services addressing the specific segments or even niche market (Urban Gen Z in this study). The study of the negative impression can help alleviate the stress and other related disorders among the said population. This study views social media and its influence from both the seller and buyer perspectives. It also gives scope to understand the psychosomatic disorders caused by extensive use of internet-based communication tools. Further analysis from more angles using different variables would take the research into the next level.

Implication and Future Directions

The impact on the mental and emotional health of Gen Z could be reduced if that generation is educated about the hazardous outcome of mobile phone usage. The adaptability of Gen Z to technology can be used positively to disseminate the negative effect of over usage of mobile phones. This could be done with self-regulated usage (in terms of time) by the users to mitigate the health outcome. The pandemic brought the world to a grinding halt. Even during such an extreme situation, Gen Z did not reduce the usage of social media which deteriorated the quality of sleep and enhanced depression. More facts and figures on the health issues could be highlighted to the current generation on social medial usage. This would help in consciously reducing the time and channelize the energy and efforts into something more constructive. Future research could focus on identifying which social media handle has a maximum impact on Gen Z and how could that be used positively in building the generation. It could also emphasize the role played by educational institutions to redefine responsibility in using social media.

Conclusion and Limitations

To conclude, it is evident that Gen Z popularly known as the Internet generation has both gained and lost due to the use of social media. The

gains, however, can be harnessed positively as a powerful marketing and communication tool. The concern here is the dark side of social media usage which has resulted in emotional and mental disorders. If these disorders are not mended at an early stage or prevented in its nascent stage, they can lead to threatening situations in the future. This will affect all the stakeholders of Gen Z, namely parents, teachers, society, educational institutions, and their peers. A deeper study could reveal finer reasons for this impact and help arrive at suggestions that would help resolve the volatility in the behavior of Gen Z.

Limitations

The scope of the study is limited only to four educational institutions in Bangalore city, which is very narrow and limits the universality of the entire population. The sample population has been considered only from the urban stratum which negates the usage and impact of social media among the rural Gen Z population. Only few variables have been considered that gives a skewed perspective of the study. Consideration of other variables could give a holistic and deeper outlook of the study. This opens up opportunities for future studies that would augment the cause and effect of social media on Gen Z.

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