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Original Research Paper

Psychiatry

A COMPREHENSIVE STUDY REGARDING CONTRIBUTION OF SOCIAL NETWORKING SITES (SNS) TO MENTAL STRESS, ANXIETY, AND DEPRESSION AMONG ADOLESCENT SCHOOL STUDENTS IN GUWAHATI: THE RESEARCH DESIGN

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ABSTRACT

Background: The study was designed to measure the degree of depression, anxiety, and stress amongst adolescent school children with respect to addiction to Social Networking Sites (SNS) as well as to study the various factors that could predispose to SNS addiction, and to study the habits and behaviour that places them at risk to SNS addiction.

Method: Adolescent school children who fall under the age group of 14-18 years studying in various schools of Guwahati will form the study population. Data would be collected through questionnaire.

Result: The analysis is planned by both descriptive as well as inferential statistics.

Conclusion: The impact of SNS to mental health can be ascertained. The underlying factors predisposing to addiction would be found out. Formulation of strategies to counter the problem could be arrived at. Thus, restoring the health and wellbeing of the students.

KEYWORDS : Habits. Behaviour. Mental Health.

INTRODUCTION

Social Networking Sites (SNS) are communities which are virtual where users can create profiles; connect and interact, exchange and/or share information, data, and experiences with other users from all over the world to form a social relationship based on common or uncommon interests, activity, or needs (Kuss and Griffiths 2011). SNS in the present time has established itself as an integral part on both the professional and leisure grounds. They are seen as a "global consumer phenomenon" with an exponential rise in the usage within the past few years (Kuss and Griffiths 2011). However, recent evidence suggests that individuals may feel compelled to maintain their online social networks in a way that may, in some way lead to using SNS excessively. While SNS has proven to be beneficial in many aspects, there has been a rising concern about its effect on mental health of the users (Baker and Algorta 2016).

Adolescence marks the period of psychosocial development which is greatly influenced by the parents, family environment, and peers (Pantic 2014). According to the World Health Organization (2019), depression is one of the leading causes of illness and disability among adolescent. With the rising trends of teenagers being invested on various social platforms, it is likely that addiction to SNS can potentially impact and influence their mental health.

NEED OF THE STUDY

Studies have been done on SNS addiction to understand its influence on mental health. However, the data present are very scarce. No significant studies have been carried out in similar lines on the adolescent population of North-Eastern India.

STATEMENT OF THE STUDY

Contribution of SNS to mental stress, anxiety, and depression among adolescent school children in Guwahati, the capital of the state of Assam that is the premier city of North-Eastern India.

OBJECTIVES

1. To assess and evaluate the degree of depression, anxiety, and stress among adolescent school children in relation to addiction to SNS.
2. To evaluate and find out the relation between SNS addiction and various variables like age, sex, family pattern, school type, and relationship status.
3. To study habits and behaviour of the individual in relation to SNS addiction.
4. To assess and find out the risk factors that can predispose to SNS addiction.

Hypothesis

H1. There is a substantial impact of SNS to mental stress, anxiety, and depression.

H2. There is a significant association between SNS addiction and the various factors taken into consideration.

H3. There is a significant alteration in habits and behaviour among the SNS addicts compared to non-addicts.

H4. Risk factors taken into consideration have a substantial impact on SNS addiction.

METHODOLOGY

Setting of the study

For phase-1 study, a single school in Guwahati would be selected.

For phase-2, that is the study proper, various governmental, private, and charity-funded schools would be taken for as setting of the study.

POPULATION

Adolescent school children falling under the age group of 14-18 years from the various governmental, private, and charity-funded schools in Guwahati.

SAMPLE

For the purpose of phase-1 of study, 127 number of children will be selected.

For the study proper (phase-2), a minimum of 1270 students will be selected.

When sampling for a qualitative characteristic is done (i.e. to estimate the proportion of individual with a certain characteristic in a population) one needs to state (Sharma 2011):

A rough approximation to the proportion (p). This 'p' value is taken from past experiences.

The sampling error that can be tolerated (d) is usually assumed that 'd' does not exceed 10% to 20% of 'p'.

The level of confidence or the accepted chance of an unlucky sample (conventionally 95% confidence limit or 5% chance).

The required sample size is:

Sample size, $n = \frac{4pq}{d^2}$

Where, q=1-p

As per the National Mental Health Survey 2015-16 (Gururaj *et al*. 2016), 7.3% of the population in the age group of 13-17 years was affected by depression.

Thus, p=7.3%

So, p=0.073

q=1-0.073=0.927

d=20% of p=0.0146

Sample size,

n=4×0.073×0.927/0.0146x0.0146=1269.86~1270

Sampling technique

For phase-1 study, a purposive sampling would be adopted that would be carried out in a single school.

For phase-2 of study, sampling will be cluster continuous.

Inclusion criteria

- Students who will be available during the data collection period.

Exclusion criteria

- Students who have not enrolled themselves in any SNS.

Description of tools

Sociodemographic proforma

It is prepared to gather the background information regarding the participants under study. It consists of four items. Variables on sociodemographic proforma include age, sex, family pattern, and school type.

Variables taken into account to study the habits and behaviour of SNS addicts and non-addicts

It consists of six items which are sleep duration, morning ritual, night ritual, nomophobia, 'paradoxical' stranger anxiety, and the average time spent on SNS.

After extensive literature search, authors found that Bergen Social Medial Addiction Scale (BSMAS) (Schou Andreassen *et al*. 2016) and Depression Anxiety and Stress Scale-21 (DASS-21) (Lovibond and Lovibond 1995, Psychology Foundation of Australia 2018) would be the appropriate tools to assess SNS addiction and degree of depression, anxiety, and stress respectively.

The study has been approved by the institutional ethics committee of Gauhati Medical College Hospital, Guwahati and informed consent will be taken from the participants.

RESULT

Data analysis will be done on the basis of objectives of the study using descriptive and inferential statistics (Figures 1 and 2).

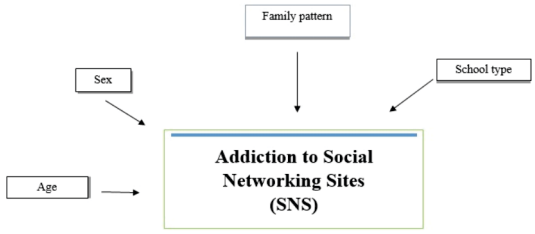

Figure 1: Schematic representation of various factors taken in the study that could predispose to addiction to Social Networking Sites (SNS).

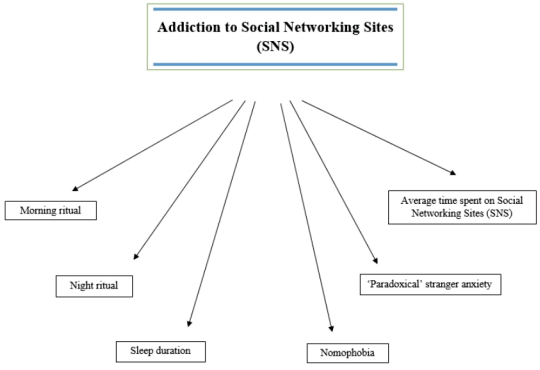

Figure 2: Study of habits and behaviour among the Social Networking Sites (SNS) addicts and non-addicts.

DISCUSSION

Results obtained will be discussed with reference to earlier studies.

Biolcati *et al*. (2018) conducted a study among 755 participants (mean age=25.17 years) and found that Facebook addiction appears to range between two and ten per cent. Griffiths (2013) noted that Facebook addiction is almost synonymous with social networking addiction where Facebook being just one site where social networking takes place.

A study conducted by Cheng and Li (2014) revealed that the prevalence of internet addiction in Asia was 7.1%. In a similar study conducted among urban adolescents in Assam, Saikia *et al*. (2019) found that the prevalence of internet addiction was 80.7% where the main purpose of internet use was social networking (71.4%). Significant association was observed between internet addiction and stress, depression, and anxiety (Saikia *et al*. 2019). Raj *et al*. (2018) conducted a study among school students to study SNS usage through a self-designed questionnaire and found that 70.7% of them were addicted.

CONCLUSION

The study would help to ascertain the impact of SNS to mental health and would help to find out the underlying factors that predisposes to addiction. Moreover, the study will guide us to evaluate the habits that places them at risk. Findings and knowledge gained can lead to formulation of strategies to counter the problem and thereby, restoration of health and wellbeing of the students.

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