KeAi CHINESE ROOTS GLOBAL IMPACT

International Journal of Innovation Studies

PERCEIVED STRESS AND MOBILE PHONE ADDICTION AMONG HIGHER SECONDARY STUDENTS

Dr P.Barani Kumari
Research Guide, Head & Associate Professor, Department of Commerce (Honours)
Sri Kanyaka Parameswari Arts & Science College for Women,
No: 1, Audiappa Naicken Street, Chennai – 600 001.
ORCID ID: https://orcid.org/0000-0001-6327-762X.
Email: baranibalaji@gmail.com,

R.Kavitha
Research Scholar, Sri Kanyaka Parameswari Arts & Science College for Women,
No: 1, Audiappa Naicken Street, Chennai – 600 001.
ORCID ID : http://www.orcid.org/0009-0007-1545-7483
Email: kavi89ranganathan@gmail.com,

ABSTRACT
Stress has become a crucial part of human existence. Higher secondary schooling is an age where students are under tremendous pressure to keep up with academic conditions. Extracurricular activities might also cause stress. Rapid technical advancements have led to the introduction of several gadgets, including the mobile phone. Exposure to mobile phones is essential for communication. The researcher has concentrated on perceived stress and mobile phone addiction among higher secondary school students from the various factors. The researcher has collected primary data through questionnaires from 150 higher secondary students aged 16-18 years in Chennai city. This study aims to create a framework based on the relationship between perceived stress and mobile phone addiction, comparing it with gender differences among higher secondary school students trend and the stress managing techniques.
Keywords: Perceived stress, Mobile Phone addiction, Higher secondary students, Chennai city

I. INTRODUCTION

Today, the entire worldwide is experiencing stress and its effects. Stress is the unpleasant emotional, cognitive, behavioral and physiological response. Students often suffer considerable academic stress during test preparation, class ranking competitiveness and memorizing a large curriculum in short period of time. The pressure of students to perform well in the examination or test and time allocated makes academic environment very stressful. One of the major impact of stress is psychological function in turn mental health of the individual. Obtaining a mobile phone may appear to be a simple instrument for communication, but has it become a need in everyday life? Does consistent usage alter behaviour? Does it result in addiction? The goal of this study is to discover if high-school students have become addicted to mobile phone and if this addiction varies by gender.

II. LITERATURE REVIEW

Dr P. Barani Kumari & Kavitha (2025) researched communicating everyday activities to parents and discussing college activities would considerably reduce strain. Plan to spend Saturday and Sunday with your family and friends in a new location. Never spend the entire day concentrating on academic duties instead have fun. Education also helps students make better judgments for themselves and be self-disciplined.

Liu et al., (2018) emphasized stress is linked to cell phone addiction. It has substantial practical consequences. Increasing self-control may reduce cravings for mobile phones, as perceived stress is linked to low self-control. The strength model of self-control suggests that frequent practice may improve self-control similar to how regular exercise can develop muscles.

Maria & Jose (2018) highlighted to Provide brief workshops to teach students how to manage stress and anxiety before exams and courses on exam preparation, including study skills and memory strategies to improve academic performance in difficult subjects. To evaluate vocational guidance and career advice to reduce stress associated with exams.

Subramani & Kadhiravan (2017) analysed school students and parents might benefit from regular instruction on academic stress and effective coping strategies. Students might benefit from relaxation practices like meditation and yoga to manage stress and promote mental wellness.

White (2014) underlined the Perceived Stress Scale for Children may aid in the early identification of children at risk for persistent anxiety/stress. Chronic stress can negatively impact school and home performance, as well as overall health, mental health, and weight. Early detection of anxiety and stress in youngsters can lead to appropriate reactions.

Shahmohammadi (2011) verified 11th and 12th grade kids handled challenging situations maturely, they preferred to withdraw from life's issues.

Garcia & Ester (2001) stated students may develop an addiction to social networks, as well as the internet and mobile phones.

Anda et al (2000) demonstrated adaptive coping mechanisms differed by gender and ethnic group. Students reporting high levels of stress were compared to those reporting moderate to low levels of stress, including their stressors and coping techniques.

III. RESEARCH METHODOLOGY

The study included both primary and secondary data. The current investigation was conducted using a quantitative technique. The respondents were higher secondary school students with reference to Chennai. Sample size denotes the number of sample selected for the study. The sample size for the study is fixed at 150 respondents. Based on simple random sampling method and convenience sampling method 150 respondents were chosen from the schools. The other relevant information and data were collected from secondary sources such as books,websites, journals and publications. A systematic questionnaire with 25 questions were created including 5 multiple choice questions and 20 five-point scale questions.

IV. SCOPE OF THE STUDY

The Indian constitution states that school education is a fundamental right for every child in the country. Education has become a service-oriented economic sector managed by private firms as a result of globalization and deregulation. Educational institutions sometimes pressure students to get higher grades to boost their market worth. Parents face pressure to improve their children's education to prepare them for worldwide career opportunities. As a result, students

face high academic stress levels. Students at private and government schools have different levels of educational awareness, leading to increased stress. Students were required to attend additional lessons and receive special coaching to thrive in competition and earn places in higher education, particularly for professional courses. Parents often put extreme pressure on their children due to comparison and competitiveness. High school is a vital time for students to pick different topics in higher secondary. The results are the only criterion to distribute various streams of study putting them under immense stress to secure marks in public exams. It is crucial to investigate the link between perceived stress and mobile phone addiction among higher secondary students

V. OBJECTIVES OF THE STUDY

To figure out the extent of perceived stress from the board of study and to ascertain the utmost stress factor on the basis of gender and the stress managing techniques.

VI. LIMITATIONS OF THE STUDY

1. The study may only be applicable to higher secondary students in Chennai.
2. The study was only performed among 150 higher secondary students.
3. Due to the study's short time frame, it may not address all relevant topics.
4. Data acquired from current higher secondary students in 2024-2025 may not be representative of future trends.

VII. DATA ANALYSIS AND INTERPRETATION

In this chapter an indepth study has been made to identify the various stress level of higher secondary students and to understand the perceived towards stress and mobile phone addiction. For this purpose, primary data was collected from 150 respondents by way of convenience sampling. The data were evaluated using statistical methods such as percentages, mean, T-test and one-way ANOVA test.

A. Cronbach's Alpha Reliability Statistics

Table 1: Reliability Statistics

Cronbach's Alpha	N of items
.811	25

The primary data from the respondents were tested for reliability using SPSS. The Cronbachs Alpha test revealed a reliability score of 0 .811 and hence the questionnaire was found to be reliable.

B. Demographics

It is vital to categorize the respondents demographic profile because it gives a broad picture and helps to analyze the demographic factors which may influence their perceived stress and mobile phone addiction.

Table – 2: Demographics

Gender

		Frequency	Percent
Valid	Boy	48	31.5
	Girl	102	68.5
	Total	150	100.0

Age

		Frequency	Percent
Valid	16	108	72.5
	18	42	27.5
	Total	150	100.0

Nature of Family

		Frequency	Percent
Valid	Nuclear	150	100.0

Board of Study

		Frequency	Percent
Valid	State	77	51.7
	Matric	23	15.4
	CBSE	50	32.9
	Total	150	100.0

Stream of Study

		Frequency	Percent
Valid	Pure Science	41	27.5
	Science+Maths	39	26.2
	Commerce	9	5.4
	Business Maths	61	40.9
	Total	150	100.0

Interpretation: The demographic factors like gender, age, nature of family, board of study and stream of study are to be studied to understand the sample better. The respondents included boy and girl. The respondents belonged to higher secondary students with the age groups 16, 17, 18 years but majority being 16 years (72%). The sample included board of study as state (51%), matric (15%) and cbse (33%). Majority of the respondents based on stream of study were business maths (41%), Pure Science (27%), Science and maths (26%) and Commerce (5%).

Table – 3: Gender wise Perception towards Stress level of Higher Secondary Students – Mean test

Gender * PSL 1

Gender

PSL 1	Mean	N	Std. Deviation
D	1.00	31	.000
N	2.00	61	.000
A	1.80	41	.401
SA	1.50	17	.516
Total	1.68	150	.466

Gender * PSL 2

Gender

PSL 2	Mean	N	Std. Deviation
A	1.92	102	.270
SA	1.17	48	.380
Total	1.68	150	.466

Gender * PSL 3

Gender

PSL 3	Mean	N	Std. Deviation
SD	1.00	31	.000
D	1.00	8	.000
A	2.00	61	.000
SA	1.84	50	.373
Total	1.68	150	.466

Gender * PSL 4

Gender

PSL 4	Mean	N	Std. Deviation
SD	1.41	80	.495
N	2.00	61	.000
SA	2.00	9	.000
Total	1.68	150	.466

Gender * PSL 5

Gender

PSL 5	Mean	N	Std. Deviation
SD	1.41	80	.495
N	2.00	61	.000
SA	2.00	9	.000

Gender * PSL 6

Gender

PSL 6	Mean	N	Std. Deviation
SD	1.72	141	.449
D	1.00	9	.000

Gender * PSL 7

Gender

PSL 7	Mean	N	Std. Deviation
D	2.00	61	.000
N	2.00	33	.000
A	1.00	8	.000
SA	1.17	48	.380
Total	1.68	150	.466

Gender * PSL 8

Gender

PSL 8	Mean	N	Std. Deviation
SD	1.00	31	.000
N	2.00	61	.000
A	2.00	33	.000
SA	1.33	25	.482
	1.68	150	.466

Gender * PSL 9

Gender

PSL 9	Mean	N	Std. Deviation
SD	1.21	39	.409
N	2.00	61	.000
A	1.00	8	.000
SA	1.80	42	.401
Total	1.68	150	.466

Gender * PSL 10

Gender

PSL 10	Mean	N	Std. Deviation
SD	1.21	39	.409
N	2.00	61	.000
A	1.00	8	.000
SA	1.80	42	.401
Total	1.68	150	.466

Interpretation: From the above table, since the P values are greater than 0.05 it reveals that there is no significant mean difference between gender and perceived stress level of higher secondary students. There is no significant difference between perceived stress level on higher secondary students with the gender.

Table – 4: Perception towards Stress level of Higher Secondary Students based on Board of Study – T test

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Board of Study	150	1.81	.903	.074
PSL 1	150	3.28	.916	.075
PSL 2	150	4.32	.466	.038
PSL 3	150	3.60	1.506	.123
PSL 4	150	2.03	1.199	.098
PSL 5	150	1.90	.860	.070
PSL 6	150	1.05	.226	.019
PSL 7	149	3.28	1.289	.106
PSL 8	149	3.13	1.301	.107
PSL 9	149	3.08	1.487	.122
PSL 10	149	1.87	1.237	.101

Interpretation: From the above table, since the P values are greater than 0.05 it reveals that there is no significant mean difference between board of study and stress level of higher secondary students. There is no significant difference between perceived stress level of higher secondary students with the board of study.

Table – 5: Perception towards Stress Managing Techniques of Higher Secondary Students based on Gender – ANOVA

ANOVA

		Sum of Squares	Df	Mean Square	F	P
SMT 1	Between Groups	363.831	1	363.831	447.264	.000
	Within Groups	119.578	147	.813		
	Total	483.409	148			
SMT 2	Between Groups	327.931	1	327.931	381.929	.000
	Within Groups	126.217	147	.859		
	Total	454.148	148			
SMT 3	Between Groups	165.933	1	165.933	305.722	.000
	Within Groups	79.785	147	.543		
	Total	245.718	148			
SMT 4	Between Groups	96.699	1	96.699	97.461	.000
	Within Groups	145.851	147	.992		
	Total	242.550	148			
SMT 5	Between Groups	82.079	1	82.079	42.551	.000
	Within Groups	283.558	147	1.929		
	Total	365.638	148			
SMT 6	Between Groups	28.614	1	28.614	13.037	.000
	Within Groups	322.634	147	2.195		
	Total	351.248	148			
SMT 7	Between Groups	.119	1	.119	.085	.772
	Within Groups	206.163	147	1.402		
	Total	206.282	148			
SMT 8	Between Groups	171.713	1	171.713	524.788	.000
	Within Groups	48.099	147	.327		
	Total	219.812	148			
SMT 9	Between Groups	33.860	1	33.860	47.533	.000
	Within Groups	104.717	147	.712		

	Total	138.577	148			
SMT 10	Between Groups	47.763	1	47.763	83.884	.000
	Within Groups	83.700	147	.569		
	Total	131.463	148			

Interpretation : The above table reveals that there is no significant association between respondent's gender and their perception towards Stress managing techniques of higher secondary students. Since the P value of stress managing techniques is less than 0.05 there is significant association between gender and their perception towards Stress managing techniques of higher secondary students.

VII. CONCLUSION

The study has put forth and analysed the various stress level of higher secondary students which are being currently used from various board of study in Chennai. The study analysed the perceived stress level of higher secondary students. The study demonstrated that the state board students are totally having higher stress level with the online class and feel discomfort in the wrist or back of the neck due to mobile phone usage, students look on the mobile repeatedly and for long hours of usage. The study has strongly stressed the importance of boy students education gets affected with mobile phone addiction and to attain the efficient stress managing techniques. The research has also listed out the various factors which are holding back the stress managing techniques like playing games and spend time with friends. In conclusion, it is evident from the research that the higher secondary students are totally assertive about the stress level in all possible ways. Teachers can offer measures to alleviate stress among higher secondary students. The study has also revealed that schools should be consistently concentrating on higher secondary students education and the efficient managing techniques. Students might benefit from relaxation practices like meditation and yoga to manage stress and promote mental wellness.

REFERENCES

Anda, D. de, Baroni, S., Boskin, L., Buchwald, L., Morgan, J., Ow, J., … Weiss, R. (2000). Stress, stressors and coping among high school students. *Children and Youth Services Review*, *22*(6), 441–463. https://doi.org/10.1016/s0190-7409(00)00096-7

Dr P.Barani Kumari, & R.Kavitha. (2025). Impact Of Academic Stress And Performance Among Undergraduate Students From Self-Financing Colleges In Chennai City. *SEEJPH*, *XXVI*(S2, 2025), 133–142. https://doi.org/10.70135/seejph.vi.4260

García-Santillán, A., & Espinosa-Ramos, E. (2021). Addiction to the Smartphone in High School Students: How It's in Daily Life? *Contemporary Educational Technology*, *13*(2), ep296. https://doi.org/10.30935/cedtech/9609

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. https://doi.org/10.1016/j.chb.2018.06.006

María Guadalupe Acosta-Gómez, & José María De la Roca-Chiapas. (2018, March 1). Stress in High School Students: A Descriptive Study.

Shahmohammadi, N. (2011). Students' coping with Stress at high school level particularly at 11 th & 12 th grade. *Procedia - Social and Behavioral Sciences*, *30*(30), 395–401. https://doi.org/10.1016/j.sbspro.2011.10.078

Subramani, C., & S. Kadhiravan. (2017). ACADEMIC STRESS AND MENTAL HEALTH AMONG HIGH SCHOOL STUDENTS. *IJAR - Indian Journal of Applied Research*, *7*(5).

White, B. P. (2014). The Perceived Stress Scale for Children: A Pilot Study in a Sample of 153 Children. *International Journal of Pediatrics and Child Health*, *2*(2), 45–52. https://doi.org/10.12974/2311-8687.2014.02.02.4