Advanced International Journal of Multidisciplinary Research
E-ISSN: 2584-0487
editor@aijmr.com
Volume 2, Issue 6, November-December 2024
CrossRef DOI: 10.62127/aijmr.2024.v02i06.1160

Cybermania among Higher Secondary Students: A Normative Survey across Selected Demographic Variables

Thananjayan V[1], Dheivamani A[2]

[1]Ph.D., Research Scholar, Department of Education, Annamalai University, Annamalainagar
[2]Assistant Professor, Government College of Education, Vellore

Abstract:
The present study aimed to examine the level of Cybermania among Higher Secondary students and to analyse differences in Cybermania with respect to selected demographic variables such as gender, locality, type of residence, family type, and group of study. Employing the normative survey method, data were collected from a sample of 751 Higher Secondary students using a standardized Cybermania Scale. Descriptive statistics and t-tests were used for data analysis. The findings revealed that students exhibit a moderate level of Cybermania overall. Significant differences were found across all selected demographic variables, with female students, rural students, hostel-stayed students, joint-family students, and science group students showing higher levels of Cybermania. The study highlights the need for targeted educational and counselling interventions to promote healthy digital behaviour among adolescents.

Keywords: Cybermania, problematic internet use, higher secondary students, demographic variables, digital behaviour.

Introduction

The pervasive influence of digital technologies has transformed contemporary education and adolescent lifestyles. Internet-enabled devices such as smartphones, tablets, and laptops have become indispensable tools for learning, communication, and entertainment. While digital technologies facilitate access to information and collaborative learning, excessive and unregulated use can result in maladaptive behavioural patterns collectively termed Cybermania or Problematic Internet Use (PIU) (Young, 1998).
Cybermania is characterised by compulsive internet usage, loss of control, withdrawal symptoms, and negative consequences in academic, psychological, and social domains. Adolescents, particularly higher secondary students, are highly vulnerable to such behaviours due to academic pressure, developmental changes, and increased autonomy in technology use (Király et al., 2020). Understanding the extent of Cybermania and its variation across demographic groups is therefore essential for developing effective preventive strategies.

Review of Related Studies

A substantial body of research indicates that Cybermania is a growing concern among adolescents worldwide. Studies conducted across different cultural contexts report moderate to high prevalence of problematic internet use among secondary and higher secondary students (Kuss & Lopez-Fernandez, 2016; Chaudhari et al., 2018).

Advanced International Journal of Multidisciplinary Research
E-ISSN: 2584-0487
editor@aijmr.com
Volume 2, Issue 6, November-December 2024
CrossRef DOI: 10.62127/aijmr.2024.v02i06.1160

Gender differences in Cybermania have been widely examined, with several studies reporting higher internet addiction among male students, particularly related to gaming behaviour (Şaşmaz et al., 2014). However, recent studies indicate increasing levels of social-media-related cyber engagement among female adolescents, leading to comparable or higher Cybermania scores (Brailovskaia et al., 2021).

Research on locality reveals mixed findings. While earlier studies suggested higher cyber engagement among urban students, recent evidence indicates a narrowing digital divide, with rural students demonstrating comparable or higher levels of internet use due to improved connectivity (Tripathi & Mishra, 2022).
Family environment and type of residence have also been identified as significant correlates of Cybermania. Hostel-stayed students and those from joint families may experience reduced supervision or increased peer influence, contributing to higher cyber engagement (Kumar & Singh, 2021). Furthermore, science students often report higher digital usage due to academic requirements and greater exposure to online learning resources (Paul et al., 2023).
Despite extensive research, there remains a need for district-level empirical studies that systematically examine demographic differences in Cybermania among higher secondary students.

3. Methodology

Method of Study

A normative survey was the methodology

Location of the Study

The area where the current investigation was done was Vellore District of Tamil Nadu, India.

Sample of the Study

The present study consists of 751 Higher secondary Students (11th Standard) Higher secondary schools in Vellore District of Tami Nadu, India.

Tool used for the present study

Cybermania- Internet Addiction Test -developed and validated by Rahul (2010), was used for the present study.

Analysis of Mean and SD of Higher Secondary students' Cybermania Scores

The Cybermania scale has been administered to the selected sample of 751 Higher Secondary students. For both the total sample and its sub-sample, the mean and SD were determined and are given in Table No. 1.

Advanced International Journal of Multidisciplinary Research
E-ISSN: 2584-0487
editor@aijmr.com
Volume 2, Issue 6, November-December 2024
CrossRef DOI: 10.62127/aijmr.2024.v02i06.1160

Table No. 1
The Mean and SD of Cybermania scores of Higher Secondary students

Demographic Variables	Sub sample	N	Mean	SD
Gender	Male	344	41.11	8.840
	Female	407	46.52	9.174
Locality	Rural	401	46.19	9.488
	Urban	350	41.58	8.706
Type of Residence	Day scholar	531	43.33	9.198
	Hostel stayed	220	45.75	9.718
Family Type	Nuclear	521	43.46	9.065
	Joint	230	45.36	10.047
Group of Study	Arts	580	42.66	8.825
	Science	171	48.72	9.847

The entire sample of Higher Secondary students (N = 751) has a mean Cybermania score of 44.04 with a standard deviation of 9.41. This indicates that the students, on the whole, exhibit a moderate level of cyber engagement, with a reasonable degree of variability among individuals.

Gender

Female students (Mean = 46.52, SD = 9.17) show higher Cybermania compared to male students (Mean = 41.11, SD = 8.84). This suggests that female students are relatively more engaged in cyber-related activities.

Locality

Rural students (Mean = 46.19, SD = 9.49) exhibit higher Cybermania scores than urban students (Mean = 41.58, SD = 8.71). This finding may reflect increasing access to digital technologies and online platforms in rural areas, leading to enhanced cyber engagement among rural students.

Type of Residence

Hostel-stayed students (Mean = 45.75, SD = 9.72) demonstrate greater Cybermania than day scholars (Mean = 43.33, SD = 9.20).

Family Type

Students belonging to joint families (Mean = 45.36, SD = 10.05) record slightly higher Cybermania than those from nuclear families (Mean = 43.46, SD = 9.07). The higher standard deviation among joint family students indicates greater diversity in cyber usage patterns within this group.

Group of Study

Science group students (Mean = 48.72, SD = 9.85) show substantially higher Cybermania compared to Arts group students (Mean = 42.66, SD = 8.83).

Null Hypothesis

There is no significant dissimilarity in Cybermania between male and female Higher Secondary students**.** For the purpose of testing the hypothesis‘ t’ value is calculated

Advanced International Journal of Multidisciplinary Research
E-ISSN: 2584-0487
editor@aijmr.com
Volume 2, Issue 6, November-December 2024
CrossRef DOI: 10.62127/aijmr.2024.v02i06.1160

Table No.
The significance of dissimilarity in Cybermania between male and female Higher Secondary students

Gender	N	Mean	SD	t-value	State of significance
Male	344	41.11	8.840	8.209	Significant
Female	407	46.52	9.174		

Table 2 presents the results of the t-test conducted to examine whether there is a significant difference in Cybermania between male and female Higher Secondary students.
The mean Cybermania score of female students (Mean = 46.52, SD = 9.174) is considerably higher than that of male students (Mean = 41.11, SD = 8.840). The calculated t-value is 8.209, which is found to be significant at the prescribed level.
Since the obtained t-value is significant, the null hypothesis is rejected. This indicates that there exists a statistically significant difference in Cybermania between male and female Higher Secondary students.
The result reveals that female students exhibit significantly higher levels of Cybermania compared to male students. Hence, gender plays a significant role in influencing Cybermania among Higher Secondary students

Null Hypothesis
There is no significant dissimilarity in Cybermania between rural and urban Higher Secondary students.
For the purpose of testing the hypothesis ‘t’ value is calculated.

Table No 3
The significance of dissimilarity in Cybermania between Rural and Urban Higher Secondary students

Locality	N	Mean	SD	t-value	State of significance
Rural	401	46.19	9.488	6.93	Significant
Urban	350	41.58	8.706		

Table 3 presents the results of the t-test conducted to examine whether there is a significant difference in Cybermania between rural and urban Higher Secondary students.
The mean Cybermania score of rural students (Mean = 46.19, SD = 9.488) is higher than that of urban students (Mean = 41.58, SD = 8.706). The calculated t-value is 6.93, which is found to be significant at the prescribed level.
Since the obtained t-value is significant, the null hypothesis is rejected. This indicates that there exists a statistically significant difference in Cybermania between rural and urban Higher Secondary students.
The findings reveal that rural students exhibit significantly higher levels of Cybermania compared to urban students. Hence, locality plays a significant role in influencing Cybermania among Higher Secondary students

Advanced International Journal of Multidisciplinary Research
E-ISSN: 2584-0487
editor@aijmr.com
Volume 2, Issue 6, November-December 2024
CrossRef DOI: 10.62127/aijmr.2024.v02i06.1160

Null Hypothesis
There is no significant dissimilarity in Cybermania between day scholar and hostel stayed Higher Secondary students.

For the purpose of testing the hypothesis 't' value is calculated.

Table No. 4.
The significance of dissimilarity in Cybermania between Day scholar and Hostel stayed Higher Secondary students

Type of Residence	N	Mean	SD	t-value	State of significance
Day scholar	531	43.33	9.198	3.144	Significant
Hostel stayed	220	45.75	9.718		

Table 4 presents the results of the t-test conducted to examine whether there is a significant difference in Cybermania between day scholar and hostel-stayed Higher Secondary students.
The mean Cybermania score of hostel-stayed students (Mean = 45.75, SD = 9.718) is higher than that of day scholar students (Mean = 43.33, SD = 9.198). The calculated t-value is 3.144, which is found to be significant at the prescribed level.
Since the obtained t-value is significant, the null hypothesis is rejected. This indicates that there exists a statistically significant difference in Cybermania between day scholar and hostel-stayed Higher Secondary students.
The result reveals that hostel-stayed students exhibit significantly higher levels of Cybermania compared to day scholars. Hence, the type of residence has a significant influence on Cybermania among Higher Secondary students

Null Hypothesis
There is no significant dissimilarity in Cybermania between Nuclear and Joint family Higher Secondary students.

For the purpose of testing the hypothesis 't' value is calculated.

Table No. 5
The significance of dissimilarity in Cybermania between Nuclear and Joint Family Higher Secondary students

Family Type	N	Mean	SD	t-value	State of significance
Nuclear	521	43.46	9.065	2.465	Significant
Joint	230	45.36	10.047		

Advanced International Journal of Multidisciplinary Research
E-ISSN: 2584-0487
editor@aijmr.com
Volume 2, Issue 6, November-December 2024
CrossRef DOI: 10.62127/aijmr.2024.v02i06.1160

Table 5 presents the results of the t-test conducted to examine whether there is a significant difference in Cybermania between Higher Secondary students belonging to nuclear families and joint families.
The mean Cybermania score of students from joint families (Mean = 45.36, SD = 10.047) is higher than that of students from nuclear families (Mean = 43.46, SD = 9.065). The calculated t-value is 2.465, which is found to be significant at the prescribed level.
Since the obtained t-value is significant, the null hypothesis is rejected. This indicates that there exists a statistically significant difference in Cybermania between students from nuclear and joint families.
The result reveals that students belonging to joint families exhibit significantly higher levels of Cybermania compared to those from nuclear families. Hence, family type has a significant influence on Cybermania among Higher Secondary students

Null Hypothesis
There is no significant dissimilarity in Cybermania between Higher Secondary students of Science group and Arts group.

For the purpose of testing the hypothesis 't' value is calculated.

Table No.6
The significance of dissimilarity in Cybermania between Higher Secondary students of Science group and Arts group

Group of Study	N	Mean	SD	t-value	State of significance
Arts	580	42.66	8.825	7.325	Significant
Science	171	48.72	9.847		

The mean Cybermania score of Science group students (Mean = 48.72, SD = 9.847) is substantially higher than that of Arts group students (Mean = 42.66, SD = 8.825). The calculated t-value is 7.325, which is found to be significant at the prescribed level.
Since the obtained t-value is significant, the null hypothesis is rejected. This indicates that there exists a statistically significant difference in Cybermania between Higher Secondary students of the Science and Arts groups.
The result reveals that Science group students exhibit significantly higher levels of Cybermania compared to Arts group students. Hence, the group of study has a significant influence on Cybermania among Higher Secondary students

Conclusion
The findings of the study corroborate recent research highlighting the growing prevalence of Cybermania among adolescents. The higher Cybermania levels among female students align with emerging evidence on increased social media engagement among female adolescents (Brailovskaia et al., 2021). The higher cyber engagement observed among rural students reflects improved internet accessibility and digital penetration in rural regions. The significantly higher Cybermania among hostel-stayed and joint-family students suggests the influence of reduced supervision and increased peer interaction. The elevated Cybermania among science students supports earlier findings that academic demands and digital

Advanced International Journal of Multidisciplinary Research
E-ISSN: 2584-0487
editor@aijmr.com
Volume 2, Issue 6, November-December 2024
CrossRef DOI: 10.62127/aijmr.2024.v02i06.1160

dependence may increase cyber exposure. The study concludes that Higher Secondary students exhibit a moderate level of Cybermania, with significant differences across gender, locality, type of residence, family type, and group of study. These findings emphasise the need for context-specific digital awareness programmes, parental guidance, and school-based interventions to promote healthy and responsible internet use among adolescents.

REFERENCES:

1. Brailovskaia, J., Margraf, J., & Köllner, V. (2021). Addicted to Facebook? Relationship between Facebook addiction disorder and personality traits. *Computers in Human Behavior, 116*, 106654. https://doi.org/10.1016/j.chb.2020.106654
2. Chaudhari, B., Menon, P., Saldanha, D., Tewari, A., & Bhattacharya, L. (2018). Internet addiction and its determinants among medical students. *Industrial Psychiatry Journal, 27*(1), 1–7.
3. Király, O., Potenza, M. N., Stein, D. J., King, D. L., Hodgins, D. C., Saunders, J. B., & Demetrovics, Z. (2020). Preventing problematic internet use during the COVID-19 pandemic. *Journal of Behavioral Addictions, 9*(2), 100–107.
4. Kumar, A., & Singh, R. (2021). Family environment and internet addiction among adolescents. *Indian Journal of Psychological Studies, 18*(2), 45–58.
5. Kuss, D. J., & Lopez-Fernandez, O. (2016). Internet addiction and problematic Internet use. *Current Addiction Reports, 3*(2), 156–165. https://doi.org/10.1007/s40429-016-0106-4
6. Paul, D., Sharma, S., & Mehta, R. (2023). Academic pressure and problematic internet use among science students. *International Journal of Adolescence and Youth, 28*(1), 1–14.
7. Şaşmaz, T., Öner, S., Kurt, A. Ö., Yapıcı, G., Yazıcı, A. E., & Buğdaycı, R. (2014). Prevalence and risk factors of internet addiction in high school students. *European Journal of Public Health, 24*(1), 15–20.
8. Young, K. S. (1998). Internet addiction: The emergence of a new clinical disorder. *CyberPsychology & Behavior, 1*(3), 237–244.