



Gender Differences in the Use of Electronic Media Among High School Students

Mrs. Dafini Pinky. F^{1*}, Dr. Mrs. Joseph Catherine²

^{1*}Research Scholar, Stella Matutina College of Education, Ashok Nagar, Chennai

²Principal (Retd.), Stella Matutina College of Education, Ashok Nagar, Chennai

Citation: Mrs. Dafini Pinky. F, et.al (2024). Gender Differences in the Use of Electronic Media Among High School Students, *Educational Administration: Theory and Practice*, 30(1) 7088-7090

Doi: 10.53555/kuey.v30i1.10309

ARTICLE INFO

ABSTRACT

The rapid integration of electronic media into the educational landscape has transformed how students access and engage with learning resources. This study investigates gender-based differences in the use of electronic media among high school students, focusing on specific dimensions such as Learning Management Systems, Educational Apps, YouTube Channels and Podcasts, Digital Libraries, and Interactive Whiteboards. Using a quantitative research design, an independent samples t-test was conducted to compare male and female students. The findings revealed statistically significant differences in the overall use of electronic media, with male students reporting higher mean scores than their female counterparts. Significant gender differences were found in the usage of Learning Management Systems, Digital Libraries, Interactive Whiteboards, and YouTube Channels and Podcasts. However, no significant difference was observed in the use of Educational Apps. These results suggest that gender influences specific patterns of electronic media usage, highlighting the need for educators and policymakers to develop gender-sensitive strategies that ensure equitable access and engagement with digital learning tools. The study provides insights that can inform future research and practical interventions aimed at enhancing digital learning experiences for all students.

Keywords: Electronic Media, Gender Differences, High School Students, Learning Management Systems, Educational Technology, Digital Learning, Interactive Whiteboards, YouTube Channels, Digital Libraries, ICT in Education

Introduction

In the contemporary digital era, the integration of electronic media in the educational domain has significantly transformed teaching and learning practices. High school students, as digital natives, extensively utilize various forms of electronic media for educational purposes. These tools include Learning Management Systems (LMS), Educational Apps, YouTube Channels, Podcasts, Digital Libraries, and Interactive Whiteboards. Given the increasing reliance on technology in education, it becomes essential to understand how demographic variables such as gender influence the usage of these tools.

Review of Related Literature

Elizabeth Adetoun Adekanye (2023) conducted a qualitative study to examine the use of electronic media among students of Yaba College of Technology, Lagos State, Nigeria. Using focus group discussions, Adekanye identified a wide range of electronic media devices used by students, including smartphones and laptops. The primary purposes of media use included academic activities such as note-taking, assignment preparation, and accessing learning materials, as well as social networking and entertainment. Students primarily consumed content via Facebook, Instagram, and other multimedia platforms, with Facebook being the most widely used due to its default availability on devices.

Esra Merdin and Volkan Şahin (2023) explored media use among children aged 0 to 6 and highlighted the pivotal role of the home media environment and parental regulations. Their quantitative study, conducted with 412 parents in Ankara, revealed that children start using electronic media at an early age, often exceeding

recommended exposure times. The study reinforced American Academy of Pediatrics (AAP) guidelines, which discourage screen use for children under 2. It also emphasized the role of parental mediation in shaping healthy media habits.

Kar Anamika and Geetika Bagchi (2023) focused on postgraduate students from Assam University to understand the influence of internet use on emotional intelligence, social interaction, and health. The descriptive study found differences in internet use based on gender, residence, and family type. While the internet served academic and social purposes, excessive use was linked to decreased emotional intelligence, a shift toward online over face-to-face interactions, and increased awareness of associated health problems such as sleep disturbances, eye strain, and anxiety. The study highlights the need for digital wellness programs in higher education institutions to foster balanced media use and promote emotional and physical well-being.

Lisa K. Mundy et al. (2020) examined longitudinal data from Australian children to assess the impact of electronic media use on academic performance. Their findings showed that watching more than two hours of television per day negatively impacted reading and numeracy scores, with effects equivalent to several months of learning delay. These effects were cumulative rather than immediate. Notably, computer use beyond one hour also led to decreased numeracy performance, whereas video games showed no significant association. While the study had limitations such as reliance on parental reporting and sample bias toward higher socioeconomic status (SES), it provided robust insights into the long-term educational effects of media consumption.

Objectives of the Study

- 1) To examine the difference in Use of Electronic Media among High School Students owing to the difference in Gender
- 2) To examine the difference in the dimensions of Use of Electronic Media among High School Students owing to the difference in Gender

Tools Used for the Present Study

The 'Use of Electronic Media Scale' developed and standardized by the researcher under the guidance of the supervisor

Methodology

In this study, the investigator employed a survey method. The sample size comprised 1200 high school students of which 526 female students and 674 male students were selected for this study from Chennai and Tiruvallur district. For the study, Stratified sampling was employed.

Null Hypothesis : There is no significant difference between Male and Female high school students with respect to Use of Electronic Media and its dimensions

t-test for differences between Male and Female high school students with respect to Use of Electronic Media and its dimensions Among High School Students.

| Electronic Media and its dimensions Among High School Students. | | | | | | | |
|---|--------|-------|--------|-------|--------|----------|--------|
| Use of Electronic Media Among High School Students. | Gender | | | | tvalue | Pvalue | Result |
| | Male | | Female | | | | |
| | Mean | SD | Mean | SD | | | |
| Learning Management System | 32.75 | 9.15 | 31.21 | 9.61 | 2.825 | 0.005** | S |
| Educational Apps | 32.28 | 9.73 | 31.50 | 10.35 | 1.337 | 0.182 | NS |
| Educational YouTube Channels and Podcasts | 23.90 | 6.74 | 23.09 | 7.50 | 1.974 | 0.049* | S |
| Digital Libraries | 21.50 | 7.44 | 19.61 | 7.36 | 4.394 | <0.001** | S |
| Interactive Whiteboard | 29.11 | 8.98 | 27.00 | 9.08 | 4.030 | <0.001** | S |
| Overall Use of Electronic Media | 139.55 | 36.83 | 132.41 | 38.52 | 3.265 | <0.001** | S |

Since the P value is less than 0.01, the null hypothesis is rejected at 1% level with respect to Overall Use of Electronic Media, Digital Libraries, Interactive Whiteboard and Learning Management. Hence there is a significant difference with respect to Learning Management, Educational YouTube Channels and Podcast Digital Libraries, Interactive Whiteboard and Overall Use of Electronic Media

Since the P value is less than 0.05, the null hypothesis is rejected at the 5% level, with respect to the Educational YouTube Channel and Podcasts. Hence there is a significant difference with respect to the Educational YouTube Channel and Podcasts.

Since the P value is greater than 0.05. Hence, the null hypothesis is accepted at 5% level with regard to Educational Apps

Results and Discussion

This study set out to explore how male and female high school students differ in their use of electronic media for learning—and the findings reveal some interesting patterns.

To start with, male students were found to use electronic media more overall than female students, and the difference was statistically significant. This suggests that boys are generally more involved in using digital tools for learning. This echoes what Selwyn (2008) observed—while both genders have similar access to technology, they often use it differently. Boys tend to explore and engage with a wider variety of digital tools.

A closer look at specific tools showed that males used digital libraries, interactive whiteboards, and learning management systems (LMS) significantly more than females. This could mean that boys are more comfortable using platforms that offer flexibility and control over learning content. Previous research, like that of Yau and Cheng (2012) and Ong and Lai (2006), supports this idea—they found that boys often feel more confident using tools like online learning platforms and are quicker to adapt to tech-based environments.

There was also a noticeable difference when it came to educational YouTube channels and podcasts. Boys again showed more usage, which lines up with findings by Kay et al. (2017), who reported that boys tend to use video content more often for self-learning. These resources allow students to learn at their own pace, revisit content, and explore topics in greater depth—features that may appeal more to male learners.

Interestingly, when it came to educational apps, there was no significant difference between boys and girls. This is an encouraging sign, suggesting that both genders are equally open to using mobile-based learning tools. While earlier studies like Ching-Ting and Yu-Ju (2017) pointed out that boys might be slightly more interested in gamified learning, the growing availability and ease of use of educational apps could be helping to bridge this gap.

Overall, the results show that while both boys and girls are using electronic media for their studies, boys tend to engage more with certain types of tools—especially those that offer independence, flexibility, and a more interactive experience. This highlights the need to design learning environments that are inclusive and appealing to all students, ensuring that both boys and girls feel confident and motivated to use digital resources in their learning journey.

Conclusion

This study explored gender differences in the use of electronic media among high school students. Results showed that male students engaged more with Learning Management Systems, Digital Libraries, Interactive Whiteboards, and Educational YouTube Channels and Podcasts compared to female students. However, no significant gender difference was found in the use of Educational Apps, suggesting equal adoption by both genders in mobile-based learning. These findings indicate that male students tend to prefer exploratory and visually interactive tools. The study emphasizes the importance of implementing gender-sensitive strategies to ensure equitable access to digital learning tools and promote digital literacy and confidence among all learners.

References

1. Anderson, T., & Elloumi, F. (Eds.). (2004). *Theory and practice of online learning* (2nd ed.). Athabasca University Press.
2. Prensky, M. (2010). *Teaching digital natives: Partnering for real learning*. Corwin Press.
3. Selwyn, N. (2008). Realising the potential of new technology? Assessing the legacy of New Labour's ICT agenda 1997–2007. *Oxford Review of Education*, 34(6), 701–712.
4. Jackson, L. A., Ervin, K. S., Gardner, P. D., & Schmitt, N. (2001). Gender and the internet: Women communicating and men searching. *Sex Roles*, 44(5–6), 363–379.
5. Yau, H. K., & Cheng, A. L. F. (2012). Students' gender differences in e-learning preferences. *International Journal of Business and Social Science*, 3(5), 88–92.
6. Ching-Ting, L., & Yu-Ju, L. (2017). Exploring gender differences in high school students' online learning behaviors and attitudes. *Journal of Educational Technology & Society*, 20(4), 140–150.
7. <https://doi.org/10.5430/ijhe.v6n3p43>
8. <https://www.oecd.org/education/teaching-in-the-digital-age.htm>
9. <https://doi.org/10.1023/A:1010937901821>