



Adolescent habits among senior secondary school students of Gangtok, Sikkim

Sanyim Lepcha

Research Scholar, Loyola College of Education, Namchi, Sikkim, India

DOI: <https://doi.org/10.5281/zenodo.13757316>

Corresponding Author: Sanyim Lepcha

Abstract

This study investigates the adolescent habits of senior secondary school students in Gangtok, East Sikkim, focusing on their study habits, extracurricular engagement, technology use, and experimentation behavior. Utilizing a descriptive survey research design, the research involved a sample of 120 students selected through simple random sampling from three schools. The Adolescent's Habit Scale, developed by Lakshmi and Narain (2014), was employed to assess the various dimensions of adolescent habits. The findings reveal that students exhibit a high level of study habits, while their engagement in extracurricular activities and technology use is average. Additionally, experimentation behavior among students is also at an average level. Importantly, the study found no significant differences in adolescent habits based on gender, school management (government vs. private), or locale (rural vs. urban).

Keywords: Adolescent habits, study habits, extracurricular habits, technology use, experimentation behaviour, senior secondary school students, Gangtok, Sikkim

Introduction

Adolescence is a critical period of development that marks the transition from childhood to adulthood, encompassing significant physical, cognitive, emotional, and social changes. This transformative stage typically begins around the age of 10-12 years with the onset of puberty and extends into the late teens or early twenties (Steinberg, 2014) [4]. During this time, adolescents experience rapid changes in their bodies and brains, which profoundly influence their habits, behaviors, and identities (Sawyer *et al.*, 2012) [13]. The concept of habits during adolescence is particularly significant, as this period lays the groundwork for future lifestyle choices. Adolescents are increasingly influenced by their social environments, which can either promote or hinder the development of healthy habits. For instance, physical activity habits are crucial for both physical and mental well-being, and studies indicate that support from parents, peers, and teachers plays a vital role in fostering these habits (Patton *et al.*, 2016) [2]. Adolescents who engage in regular physical activity are more likely to maintain a healthy weight and experience positive mental health outcomes, while sedentary behaviors and negative

emotional states can lead to poorer health and lifestyle choices (Patton *et al.*, 2016) [2].

Moreover, the formation of habits during adolescence is influenced by various factors, including social interactions, self-efficacy, and environmental conditions. As adolescents navigate their identities and peer relationships, they often seek autonomy, which can lead to both positive and negative behaviours (Erikson, 1968) [1]. Understanding these dynamics is essential for promoting healthy habits that can support adolescents in their transition to adulthood and enhance their overall well-being (Sivagurunathan, 2015) [5].

Objective of the study

1. To find out the level of the adolescent habits of senior secondary school students of Gangtok.
2. To study difference in adolescent habits of senior secondary school students of Gangtok in relation to the gender.
3. To study difference in adolescent habits of senior secondary school students of Gangtok in relation to the management.
4. To study difference in adolescent habits of senior

secondary school students of Gangtok in relation to the locale.

Hypotheses

- H₀₁:** There is no significant difference in adolescent habits between boys and girls of senior secondary schools.
- H₀₂:** There is no significant difference in adolescent habits between senior secondary school students from rural and urban areas.
- H₀₃:** There is no significant difference in adolescent habits between senior secondary school students of private and government institutions.

Research Method

The present study utilized a descriptive survey research design to explore the adolescent habits of senior secondary school students in Gangtok, Sikkim, employing the Adolescent's Habit Scale developed by Lakshmi and Narain (2014) [6]. The analysis incorporated both descriptive and inferential statistics. Descriptive statistics involved calculating the mean and standard deviation of the adolescent habits data, which summarized the central tendency and variability of the habit scores among the students. For inferential statistics, t-tests were conducted to identify any significant differences in mean scores of adolescent habits across various subgroups, including gender, locale, and school management. These t-tests enabled the researcher to determine whether the observed differences in mean habit scores were statistically significant or likely due to chance. The study's population consisted of senior secondary school students in the Gangtok district, with a sample of 120 students selected through simple random sampling from three purposively chosen schools. The population of the study comprises all senior secondary school students enrolled in schools located within the Gangtok district of Sikkim. The sample of the study was chosen from the population of the all secondary school students of Gangtok, East Sikkim. Three colleges were chosen purposively from the list of all higher education institutions in the Gangtok district. Then, simple random sampling method was used to select 120 senior secondary students from the chosen schools.

Table 1: Sample of Senior Secondary School Students Based on Management, Gender and Locale

Management	Gender	Locale	Total
Government	Male	Urban	17
		Rural	18
	Female	Urban	37
		Rural	22
Private	Male	Urban	06
		Rural	06
	Female	Urban	11
		Rural	03
Total			120

Table 1 presents the distribution of male and female students from urban and rural areas attending government and private schools. The total sample size is 120 students. In government schools, there is a higher proportion of female students (59) compared to male students (35). Specifically, 37 female students are from urban areas, while 22 are from rural areas. Among male students in government schools, 17 are from urban areas and 18 are from rural areas. In private schools, the total number of female students (14) is slightly higher than the number of male students (12). Among the female students in private schools, 11 are from urban areas and 3 are from rural areas. Male students in private schools are evenly distributed, with 6 from urban areas and 6 from rural areas.

Findings of the study

Objective 1: The study intended to find out whether the senior secondary school students differ in the level of adolescents' habit, therefore the following objective was stated:

To find out the level of adolescent habits of senior secondary school students in Gangtok

Table 2: Interpretation of levels of senior secondary school students' Study Habits

Dimension	Level	Raw Scores	F	Percentage
Study Habits	High	45 and above	61	50%
	Average	30 to 44	54	45%
	Poor	Below 30	05	5%

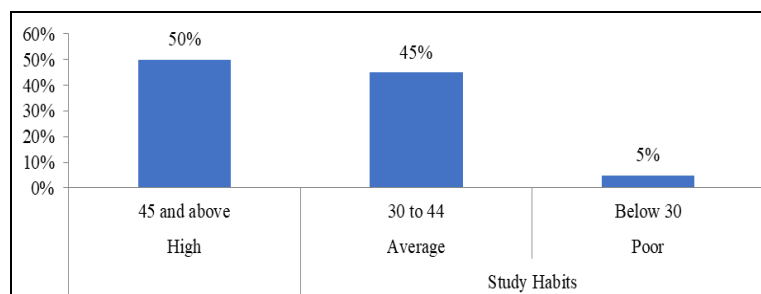


Fig 1: Levels of secondary school students' Study habits

Table 2 and figure 1 categorizes senior secondary school students' study habits scores into three levels: High, Average, and Poor. The majority of students, 61 participants (50%), demonstrated a high level of study habits. Additionally, 54 participants (45%) exhibited an Average level, while only 5 participants (5%) demonstrated a poor level.

Table 3: Interpretation of levels of senior secondary school students' Extracurricular Habits

Dimension	Level	Raw Scores	F	Percentage
Extracurricular Habits	High	22 and above	50	41.6%
	Average	15 to 21	60	50%
	Poor	Below 15	05	8.4%

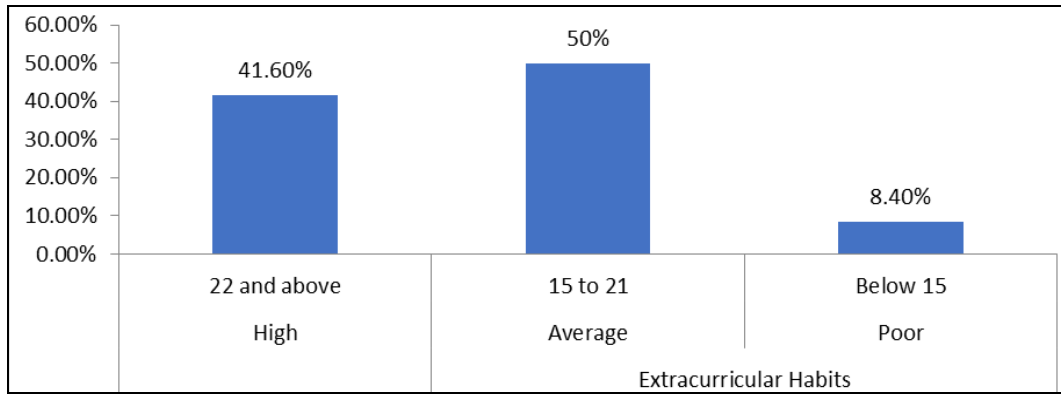


Fig 2: Levels of secondary school students' Extracurricular Habits

Table 3 and figure 2 categorizes senior secondary school students 'Extracurricular Habits scores into three levels: High, Average, and Poor. The majority of students, 50 participants (41.6%), demonstrated a high level of study habits. Additionally, 60 participants (50%) exhibited an Average level, while only 5 participants (8.4%) demonstrated a poor level.

Table 4: Interpretation of levels of senior secondary school students' Technology use

Dimension	Level	Raw Scores	f	Percentage
Technology Use	High	23 and above	46	38.33%
	Average	16 to 22	60	50%
	Poor	Below 16	14	11.67%

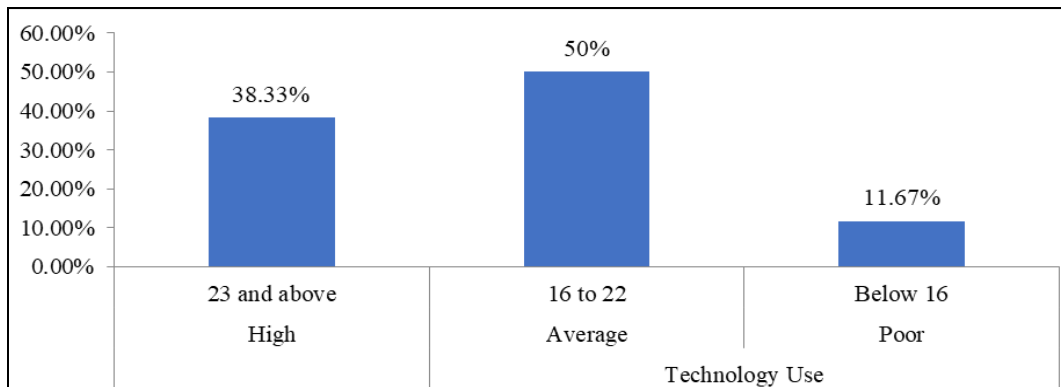


Fig 3: Levels of secondary school students' Technology Use

Table 4 and figure 3 categorizes senior secondary school students 'Technology use scores into three levels: High, Average, and Poor. The majority of students, 46 participants (38.33%), demonstrated a high level of study habits. Additionally, 60 participants (50%) exhibited an Average level, while only 14 participants (11.67%) demonstrated a poor level.

Table 5: Interpretation of levels of senior secondary school students' Experimentation behavior

Dimension	Level	Raw Scores	f	Percentage
Experimentation Behavior	High	42 and above	14	11.66%
	Average	30 to 41	73	60.83%
	Poor	Below 30	33	27.6%

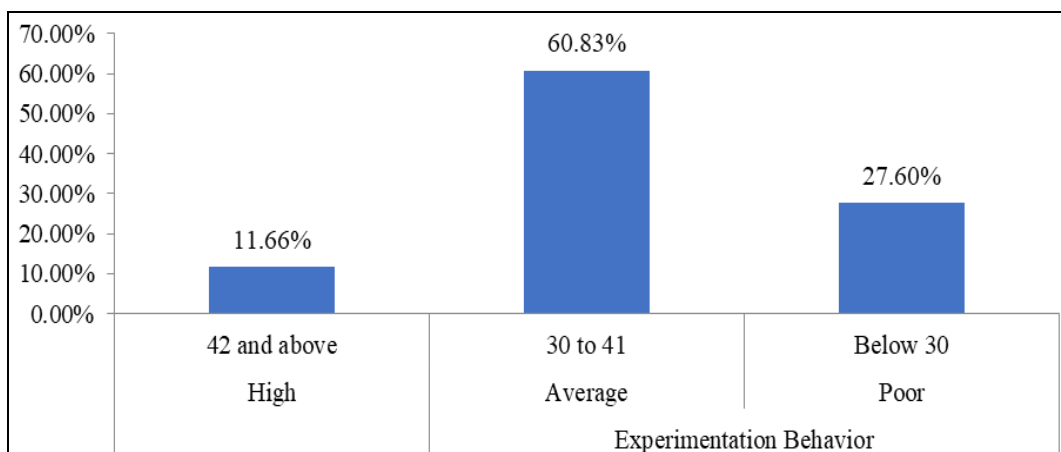


Fig 4: Levels of secondary school students' Experimentation behavior

Table 5 and figure 4 categorizes senior secondary school students' Experimentation Behavior scores into three levels: High, Average, and Poor. The majority of students, 14 participants (11.66%), demonstrated a high level of study habits. Additionally, 73 participants (60.83%) exhibited an Average level, while only 33 participants (27.6%) demonstrated a poor level.

Table 6: Mean and Standard Deviation of senior secondary school students' adolescent habits and it's dimensions

Dimensions	M	SD
Study Habits	44.9	8.01
Extracurricular Habits	20.7	4.57
Technology use	20.7	4.39
Experimentation Behavior	33.5	6.28
Adolescent Habits	119.8	12.80

Fig 5: Mean and Standard Deviation of senior secondary school students' adolescent habits and it's dimension

Table 6 and figure 5 represents the mean and standard deviation for all the dimensions of adolescent habits is shown in the table 4.5. Participants' mean score for study habit is 44.9, with a standard deviation of 8.01 (M=44.9, SD=8.01). The mean for extracurricular habit is 20.07 and standard deviation is 4.57 (M=20.7, SD=4.57). The mean of technology use is 20.7 and standard deviation is 4.39 (M=20.7, SD=4.39), the mean for experimentation behavior is 33.5 and standard deviation is 6.28 (M=33.5, SD=6.28) and the mean for overall adolescent habits is 119.8 and standard deviation is 12.80 (119.8, SD=12.80).

Objective 2

The study intended to find out whether the senior secondary students differ in adolescent habits, therefore the following objective was stated:

To study the difference in adolescent habits among senior secondary students in relation to gender

Table 7: Results of t-test examining the difference in the adolescent habits between boys and girls of senior secondary schools

Dimension of Adolescent Habits	Boys (47)		Girls (73)		t (118)	p
	M	SD	M	SD		
Study Habits	43.8	7.36	45.6	8.38	-1.172	0.243
Extracurricular Habits	21.7	4.55	20.1	4.51	1.897	0.060
Technology use	20.3	3.96	21.0	4.65	-0.871	0.386
Experimentation Behaviour	33.1	5.74	33.7	6.63	0.562	0.575
Adolescent Habits	118.8	11.10	120.4	13.82	-0.636	0.526

An independent sample t-test was conducted to compare the adolescent habits and its dimensions between boys and girls of senior secondary schools. The analysis showed revealed that there is no significant difference between boys and girls in study habits ($t(118)=1.172, p=0.243$), extracurricular habits ($t(118)= 1.897, p=0.060$), technology use ($t(118)= 0.871, p=0.386$), experimentation behavior ($t(118)= 0.562, p=0.575$) and adolescent behavior ($t(118)= 0.636, p=0.526$). Therefore, the null hypothesis stating no significant difference in adolescent habits between boys and girls failed to be rejected.

Objective 3: The study intended to find out whether the senior secondary students differ in adolescent habits, therefore the following objective was stated:

To study the difference in adolescent habits among senior secondary students in relation to management.

Table 8: Results of t-test examining the difference in the adolescent habits between senior secondary students of government and private schools

Dimension of Adolescent Habits	Government (92)		Private (29)		t (118)	p
	M	SD	M	SD		
Study Habits	45.3	8.25	43.6	7.17	0.929	0.355
Extracurricular Habits	20.7	4.56	20.7	4.71	-0.040	0.968
Technology use	20.4	4.58	21.9	3.55	-1.606	0.111
Experimentation Behaviour	33.6	6.43	32.9	5.84	0.516	0.607
Adolescent Habits	119.9	13.31	119.2	11.18	0.272	0.786

An independent sample t-test was conducted to compare the adolescent habits and its dimensions between Government and private of senior secondary schools. The analysis showed revealed that there is no significant difference between Government and private in study habits ($t(118)= 0.929, p=0.355$), extracurricular habits ($t(118)= -0.040, p=0.968$), technology use ($t(118)= -1.606, p=0.111$), experimentation behavior ($t(118)= 0.516, p=0.607$) and adolescent behavior ($t(118)= 0.272, p=0.786$). Therefore, the null hypothesis stating no significant difference in adolescent habits between Government and private failed to be rejected.

Objective 4: The study intended to find out whether the senior secondary students differ in adolescent habits, therefore the following objective was stated:

To study the difference in adolescent habits among senior secondary students in relation to locale

Table 9: Results of t-test examining the difference in the adolescent habits between senior secondary students of rural and urban locale

Dimension of Adolescent Habits	Rural (53)		Urban (67)		t (118)	p
	M	SD	M	SD		
Study Habits	44.9	8.65	44.8	7.53	-0.0600	0.952
Extracurricular Habits	20.8	4.62	20.6	4.57	-0.2316	0.817
Technology use	21.2	3.79	20.4	4.81	-1.0524	0.295
Experimentation Behaviour	33.1	6.82	33.8	5.86	0.6050	0.546
Adolescent Habits	120.0	120.6	119.6	13.45	-0.1832	0.855

An independent sample t-test was conducted to compare the adolescent habits and its dimensions between Rural and Urban of senior secondary schools. The analysis showed revealed that there is no significant difference between Rural and Urban in study habits ($t(118)=-0.0600, p=0.952$), extracurricular habits ($t(118)=-0.2316, p=0.817$), technology use ($t(118)=-1.0524, p=0.295$), experimentation behavior ($t(118)=0.6050, p=0.546$) and adolescent behavior ($t(118)=-0.1832, p=0.855$). Therefore, the null hypothesis stating no significant difference in adolescent habits between Rural and Urban failed to be rejected.

Discussion

- The students demonstrated a strong commitment to their academic studies, indicating effective study practices that are likely to contribute positively to their academic performance. This aligns with existing literature that emphasizes the importance of good study habits for achieving educational success.
- While students participated in extracurricular activities, their engagement was found to be average. This suggests a potential area for improvement, as involvement in such activities is crucial for holistic development, fostering skills beyond academics, and enhancing social interactions.
- The students' use of technology was also at an average level. This finding may reflect a balanced approach to technology, where students utilize digital tools for learning but may not fully leverage them for enhancing their educational experiences. Given the increasing role of technology in education, further encouragement and training in effective technology use could be beneficial.
- The study found that students exhibited an average level of experimentation behavior, indicating a moderate willingness to explore new ideas and experiences. Encouraging more experimentation could foster creativity and critical thinking, essential skills for personal and academic growth.
- The lack of significant differences in adolescent habits between boys and girls suggests that both genders are similarly influenced by their educational environments.
- The study found no significant differences in habits between students from government and private schools. This indicates that the type of school may not play a crucial role in shaping students' habits, suggesting that other factors, such as home environment or peer influence, may be more impactful.
- The absence of significant differences in habits between students from rural and urban areas points to a uniformity in adolescent habits across different locales. This could imply that access to education and resources may be similar enough in this context to minimize disparities in habits.

Recommendations

- To sustain the strong study habits, it is important to continue providing academic support and guidance to students. Recognizing and rewarding academic excellence can serve as a motivating factor.
- To promote a more well-rounded development, schools can expand the range of extracurricular offerings and emphasize the importance of balancing academic and

extracurricular pursuits.

- Implementing digital literacy programs, establishing clear guidelines, and encouraging discussions on the impact of technology can help students develop healthy and responsible habits regarding technology usage.
- Designing structured programs or workshops that allow students to engage in guided experimentation and problem-solving activities can support appropriate risk-taking and exploration. Fostering a culture of innovation and creativity, while offering counseling and mentorship, can empower students to take calculated risks and learn from their experiences in a supportive environment.

Conclusion

The study aimed to investigate the adolescent habits of senior secondary school students in Gangtok, Sikkim, focusing on study habits, extracurricular activities, technology use, and experimentation behavior. The results indicated that students demonstrated strong study habits, average levels of extracurricular engagement, moderate technology use, and average experimentation behavior. Importantly, there were no significant differences in these habits based on gender, type of school management (government or private), or urban versus rural locale.

These findings hold substantial implications for various stakeholders. Educational institutions can utilize this data to enhance programs aimed at fostering positive habits among students, potentially through targeted courses and awareness initiatives. Students themselves can play a crucial role in promoting healthier lifestyles within their communities. Policymakers can leverage these insights to develop supportive policies that encourage habit education in schools, thereby creating an environment conducive to the adoption of positive behaviours.

Future research should consider comparative studies across different regions, employ mixed-methods approaches, increase sample sizes, explore additional influencing factors, and adopt longitudinal designs. Such efforts would deepen the understanding of adolescent habits in Gangtok and contribute to more effective educational strategies.

In conclusion, this study underscores the importance of a holistic approach to habit development among adolescents. By addressing the implications of these findings and implementing the recommended strategies, educational institutions, students, and policymakers can collaboratively foster an environment that nurtures positive habits, ultimately enhancing the well-being and development of adolescents in Gangtok.

References

1. Erikson EH. Identity: Youth and crisis. Norton; c1968.
2. Patton GC, Sawyer SM, Santelli JS, Ross DA, Afifi RA, Allen NB, *et al.* Our future: A Lancet commission on adolescent health and wellbeing. *The Lancet.* 2016;387(10036):2423-2478. [https://doi.org/10.1016/S0140-6736\(16\)00579-1](https://doi.org/10.1016/S0140-6736(16)00579-1).
3. Sawyer SM, Afifi RA, Bearinger LH, Blakemore SJ, Dick B, Ezech AC, *et al.* Adolescence: A foundation for future health. *The Lancet.* 2012;379(9826):1630-1640. [https://doi.org/10.1016/S0140-6736\(12\)60072-5](https://doi.org/10.1016/S0140-6736(12)60072-5).
4. Steinberg L. Age of opportunity: Lessons from the new

- science of adolescence. Houghton Mifflin Harcourt; c2014.
5. Sivagurunathan K. Understanding the dynamics of adolescent development; c2015.
 6. Lakshmi MV, Suneetha Y, Yugandhar G, Lakshmi NV. Correlation studies in rice (*Oryza sativa* L.). International Journal of Genetic Engineering and Biotechnology. 2014;5(2):121-126.

Creative Commons (CC) License

This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY 4.0) license. This license permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.