

**THE ROLE OF SCHOOL TYPE AND
GENDER ON THE STUDY HABITS OF
SECONDARY SCHOOL CHEMISTRY
STUDENTS IN A PERIOD OF SOCIO-
POLITICAL AND ECONOMIC
UNCERTAINTY**

Dr Ifeoma G. Okonkwo¹, Dr Nkiru Naomi C. Samuel²

Department of Science Education, Nnamdi Azikiwe University Awka^{1,2}

Abstract

The study investigated the role of school type and gender on the study habit of secondary school Chemistry students in a period of socio-political and economic uncertainty. Specifically, the study sought to examine the difference in study habit of secondary school chemistry students in public and private schools in Anambra state and the difference in study habit among male and female secondary school Chemistry students in Anambra state. In pursuance of the aforementioned objectives, two research questions and two hypotheses were postulated. Descriptive survey design was employed. Simple random sampling technique was used to select the sample size of 124 Students (62males & 62females). Students' Study Habit Questionnaire (SSHQ) was used for data collection. Data was subjected to statistical analysis using the statistical package of social sciences (SPSS). Independent Sample t-test was used to test the null hypothesis at 0.05 level of significance. Findings indicate that there is a significant difference in the study habits of secondary school Chemistry students in public and private schools ($t = 2.46, p < .05$). Findings also indicate that there is no significant difference in the study habit of male and female secondary school Chemistry students in Anambra state ($t = -0.413, p > .05$). Based on findings, it was recommended that by recognizing the disparity in study habits, public schools can implement targeted programs and resources to help students develop better study habits. This could include study skills workshops, time management training and providing access to study materials and resources

Keywords: School-type, Gender, Study Habits.

Introduction

Education is an instrument for social transformation, cultural transmission as well as an instrument for scientific and technological development. Nwanna (2009), viewed education as a vital tool for all-round human development. In other words, education is a vital instrument for the development and continuity of every nation and society that embrace it. These views are in line with the Nigeria's philosophy of education as contained in the National Policy on Education (2013), which is based on the beliefs that education is an instrument for national development and social change, a vital tool for promotion of a progressive and united Nigeria, maximizes the creative potentials and skills and a compulsory and right of every Nigerian irrespective of gender, social class or ethnic background. Though education has faced significant challenges during periods of socio-political and economic uncertainty in this era of democracy, it is still the only means of development and national stability. Every society has its own way of educating the people as well as its own goals of education. In Nigeria, the goals of education are based on the development of the individual into a morally sound and effective citizen, full integration of the individual into the immediate community and provision of equal access to educational opportunities for all citizens within and outside the formal school system (NPE, 2013). The school is a social organization in which social message is transmitted to students. Not only is the school primarily responsible for their formal education and general intellectual growth, it is also responsible for proper social relations among students (Ogbodo, 2010). In school, the students learn and are exposed to situations through which active learning occurs. It is the student who does the studying and learning, utilizing all the available situations to achieve acceptable academic performance. The process is an active one and unless the child consciously and purposefully participates in the learning situation, the desired change in behavior will not occur. This active participation in learning strongly hinges on having a good study habit. Education during times of socio-political and economic uncertainty plays a crucial role in shaping the study habits of secondary school students. Socio-political and economic instability can create stress and anxiety for students. Public schools may be affected by budget cuts, overcrowded classrooms, and limited extracurricular activities, which can negatively impact students' ability to focus and develop effective study habits.

Study habit is referred to as an individual or a student behavioral action related to their studies. Okenezi and Braide (2018), defined study habit as the consistent ways a person studies with regards to gaining knowledge. According to Islam (2021), study habits are students' repeated actions to study from the beginning to the end of their educational programs. Study habits involve actions, activities and practices geared towards gaining knowledge for mastery both within and outside the school. These activities and practices involve the act of planning and time scheduling for reading, problem solving, note-taking, time management, organizing and holding of study groups and use of library which the students practice repeatedly in order to accomplish the task of learning (Jota et al., 2014). Study habits are intended to elicit and guide one's cognitive processes during learning as well as learning tendencies that enable students work privately or in group. In other words, study habit involves the totality of all the students' activities and practices relevant to their studies. Ebele and Olofu (2017), opined that development of good time management by the students is very important. According to them, students should realize that there is time to read and study, time to be with friends, time to be with family, time to be in class and time to be alone.

How students apply their individual study habit differ from students to students and from school to school. That is to say that students show uniqueness in the ways they study. These uniqueness account for the differences in their academic achievements in Chemistry and other related subjects. How students' study, greatly determine their level of academic achievements. The level of preparation and learning strategies developed and employed consciously by students, go a long way to influence their level of academic performance, generally. Study habit has been found to be influenced by so many factors of which school type (public/private) is part of (Chand, 2013). Other factors which have been linked to study habit include gender, parental education and family type (Promila, 2014). However, this study focuses on the role of school type and gender on the study habit of secondary school chemistry students in Anambra state.

In many countries around the globe, education is provided through public education system with all or most of the cost paid by the government but (Ogolla, 2010) reported that this task has not been easy for most governments due to a number of factors such as; growing population, increased cost, financial strains in other areas of governance, lack of political will power and corruption, and socio-political and economic uncertainty. These have obvious implications on the effectiveness of public schools in providing quality education. Private sector involvement in the provision of education appears to be a panacea to addressing part of these problems. Public and Private schools in Nigeria are institutions owned as their names denote. The Public schools in Nigeria, are owned and run by the government at the federal, state or local government levels, while private schools have individuals, organizations or associations as their proprietors and owners, established as profit oriented, business outlets, thus putting their efficacy and quality in doubts most of the times. The government oversees the public secondary schools while individuals, group of persons, Christian missions and organizations oversee the private secondary schools. In the context of this study, public secondary schools, refer to the secondary schools that are funded and managed by the government as service delivery to her citizens while the private secondary schools, are the secondary schools that are independent of government ownership but are funded and managed by individuals, group of persons, Christian missions and organizations as business and profit oriented ventures. A great deal of variance may exist between the types of schools in terms of, effectiveness or appropriateness with reference to the national perspective.

In the recent times, the rate of proliferation of private secondary schools is alarming and has continued to rise to the point of competing with the public secondary schools in terms of population of students. It is obvious that in the present days, Christian missions that started establishment of private secondary schools are no longer the only ones involved in the proliferation, the efforts of individuals, group of persons and organizations are seen. Their involvement has led to increase in the number of students studying with them in private schools. Kingdon, (2017) reported that unrecognized / unregistered private schools account for significant number of these private schools and that this unofficial, low-cost private schools are tremendously mushrooming in urban localities with informal settlements demonstrating high levels of patronage. The preference for private schools by parents and guardians may not be unconnected to the vulnerability of public schools to industrial actions ('strikes'), lack of access to educational support, which has varied negative implications on all stake holders. Despite the flaws in private school education delivery such as: not hiring certified teachers, not using up-to-date teaching method, highly expensive and some others

being ‘magic centers’ for examination malpractice, and many more, as reported by researchers; (Olatoye, 2009), the quest and surge for private school patronage remains on the increase. It is in the public domain that many of the schools indicted for various types of examination malpractice, by the West African Examination Council (WAEC) in the last Senior School Certificate Examination (SSCE) are mostly private schools. Could this be the reason for the unflinching patronage by parents and guardians? So far, reports on the study habits of students in private and public secondary schools in Chemistry has continued to be contradictory, and hence a worrisome issue of concern requiring further investigation. Islam (2021), reported that students in public and private schools do not vary significantly in their studying habits. Similarly, Olatoye (2009) also reports that school type has no significant effect in the studying habits of students. On the contrary, Ali et al. (2012) and Chand (2013) found that study habits of students in the private schools are better than study habits of students in the public schools. Study habits can vary from person to person, and it’s important to find what determines the difference among the students’ study habits. Gender can also be a factor that affects students’ study habits.

One way to conceptualize gender is as a collection of presumptions about the significance of biological distinctions between men and women that are woven throughout a variety of concepts, customs, and social behaviors that define an individual's identity and function. Social and cultural distinctions are the main source of the performance gap between male and female. Gender plays a role in the study habits of students. Scholarly articles have shown a link between gender and study habits of students. Aluja and Blanch (2004) reported that females have a better study habit than males. Similarly, Saleem et al. (2020) reported that a significant difference in study habit was observed between male and female students, in favour of the female students. Ossai (2012) reported that male students on average, have a better study habit than the female students. However, scholars like Awabil et al. (2013) and Mushoriwa (2009) reported no significance difference between study habits of male and female students. As the findings on the impact of gender remain inconclusive, this study intends to add to the existing literature, and on-going debate regarding the role of gender on study habit.

Without strong study habits, students are more likely to encounter obstacles and struggle to deal with challenging circumstances both inside and outside of the classroom. When students grow independent of their parents and teachers, they could find it difficult to handle complicated concerns and responsibilities at work, finishing a variety of duties. In addition, when students finish school and begin working, the bad study habits they had in school will also affect their work ethics. This will result in bad working habits, poor time management, disorganization, and the inability to finish tasks within the time. Regardless of how important having a good study habit have been proven to be, most students still find it difficult to study effectively, resulting in increased levels of school dropouts, lack of interest in school, amotivation and poor academic performance. An unhealthy study habit seems to be a primary factor in most students’ inability to perform well in their Universal Tertiary Matriculation Examination (UTME) and West African Secondary School Certificate Examination. To foster effective learning, it is vital that student cultivate a healthy study habit which facilitates an overall academic achievement. In relation to this, the study investigates the role of school type and gender in the study habits of secondary school chemistry students in Anambra state.

Purpose of the Study

The general purpose of the study is to investigate the role of school type (public/private) and gender on the study habits of secondary school chemistry students in Anambra. Specifically, the study sought to examine:

1. The difference in study habit of secondary school chemistry students in public and private schools in Anambra state.
2. The difference in study habit among male and female secondary school chemistry students in Anambra State

Research question

1. How different is the study habit of secondary school chemistry students in public and private schools in Anambra State?
2. How different is the study habit of male and female secondary school chemistry students in Anambra state?

Hypotheses

The following hypotheses were postulated by the researchers.

1. There is no significant difference in the study habits of secondary school chemistry students in public and private schools in Anambra State
2. There is no significant difference in the study habits of male and female secondary school chemistry students in Anambra State.

METHOD

The research design is a descriptive survey design. The present study was carried out in Idemili North Local Government Area, Anambra State. The population as at the time of the study consists of two thousand, seven hundred and eighty- six (2786) Senior Secondary School students (SS2) from sixteen (16) public schools and nineteen (19) private schools in the area. The public secondary schools SS2 population are made up of 1251 students (source: PPSSC) while the population of private schools are made up of 1535 students (source: authors compilation). Simple random sampling technique was used to select ten (10) secondary schools; five (5) public schools and five (5) private schools in Idemili North Local Government Area to ensure equal chance of being selected. A sample of one hundred and twenty-four (124) students which was selected randomly was used for the study. The one hundred and twenty-four (124) students selected comprised sixty-two (62) students from public secondary schools and sixty-two (62) students from private secondary schools. The Study Habit Questionnaire by Palsane and Sharma (1989) was given out to the participants of the study. Using the Cronbach's Alpha as a medium to test for scale reliability/Internal consistency, the researcher obtained an alpha coefficient of 0.91 on the Study habit scale. Data collected from respondents were subjected to data analysis using the Statistical package for social sciences (SPSS) version 25. Statistical method adopted for data analysis is an independent sample T-test. Research questions were answered using mean score.

Results

This subsection outlines the findings on the role of school type (public/private) and gender on the study habit of secondary school chemistry students in Anambra State.

Research Question 1: How different is the study habit of secondary school chemistry students in public and private schools in Anambra State?

Table 1: Descriptive statistics showing the mean and standard deviation in study habit among public and private school Chemistry students

	School type	N	Mean	Std. Deviation	Std. Error
Study Habit	Public school	62	190.18	35.218	4.473
	Private school	62	203.85	26.084	3.313

The above table shows the mean and standard deviation scores in study habit among students public and private school students in Anambra state. Students in public schools have a mean score of 190.18 (SD = 35.22) while students in private schools have a mean score of 203.85 (SD = 26.08). Findings show that private school students achieved a higher score on study habit, with a mean difference of 13.67.

Hypothesis 1: There is no significant difference in the study habits of secondary school chemistry students in public and private schools in Anambra State

Table 2: Independent samples t-test showing the mean difference in study habit of students in public and private schools.

			t-test for equality of means				
			t	df	Sig (2-tailed)	Mean difference	Std. error Difference
Study Habit	Equal variances assumed		2.457	122	.015	-13.677	5.566
	Equal variances not assumed		2.457	112.443	.016	-13.677	5.566

Findings in table 2 indicate that there is a significant difference in the study habits of secondary school chemistry students in public and private schools ($t = 2.46, p < .05$). Results indicate that students in private schools (mean = 203.85) have a better study habit than students in public schools (mean = 190.18). Based on this discovery, the research hypothesis which states that “there is no significant difference in the study habits of secondary school students in public and private schools in Anambra State” is hereby rejected.

Research Question 2: How different is the study habit of male and female secondary school chemistry students in Anambra state?

Table 3: Descriptive statistics showing the mean and standard deviation in study habit of male and female secondary school students.

	Gender	N	Mean	Std. Deviation	Std. Error
Study Habit	male	62	195.84	31.642	4.018
	female	62	198.19	31.807	4.040

Table 3 displays the descriptive statistics of male and female students' study habit. Based on findings, male students have a mean score of 195.84 (SD = 31.64) while female students have a mean score of 198.19 (SD = 31.80). Data indicate that female students scored higher on study habits than male Chemistry students with a mean difference of 2.35.

Hypothesis 2: There is no significant difference in the study habits of male and female secondary school chemistry students in Anambra State.

Table 4: Independent samples t-test showing the mean difference in study habit of male and female secondary school students

		t-test for equality of means					
			t	df	Sig (2-tailed)	Mean difference	Std. error Difference
Study Habit	Equal variances assumed		-.413	122	.680	-2.355	5.698
	Equal variances not assumed		-.413	121.997	.680	-2.355	5.698

From the findings in this study, table 4 indicate that there is no significant difference in the study habit of male and female secondary school chemistry students in Anambra state ($t = -0.413$, $p > .05$). This implies that gender is not a determining factor in the study habit of secondary school students in Anambra state. Based on this finding, the hypothesis which states that "There is no significant difference in the study habits of male and female secondary school chemistry students in Anambra State" is hereby not rejected.

Discussion of the findings

Different school types may follow distinct curricula and teaching approaches. Private schools might offer a more rigorous curriculum and personalized teaching, encouraging students to develop disciplined study habits. Public schools might have a more standardized approach. Findings from hypothesis one testing show that there is a significant difference in the study habit of secondary school chemistry students in public and private schools in Anambra state. This implies that school type plays a role in the study habit of students. The significant difference in study habit is in favour of private secondary school students. This result is at variance with the findings of Islam (2021) and Olatoye (2009), whose findings showed that school type has no impact on study habits of private and public secondary schools. However, the findings are in line with Ali et al. (2012) and Chand (2013), who reported that private school students have a better study habit than public school students. The mean scores in table 1 shows that students in private schools have a better study habit than students in public school. This could be as a result of strict supervision, scrutiny and monitoring by the authorities of private schools. It is logical to assume that parents who send their children to

private school would demand nothing short of excellence. This in-turn would influence the level of care and supervision of authorities on the academic activities of students so they don't lose patronage, being a profit-oriented venture unlike government owned secondary school. The type of school can also influence the peer group. Private schools may have more academically focused peers, which can positively affect students' study habits. In public schools, the diversity of peers can be both an advantage and a challenge, as it may impact the focus and study habits of students differently. In times of uncertainty, students in private schools may benefit from additional support services, including tutoring and counseling, which can enhance their study habits. Public school students might not have the same level of access to such resources. Additionally, in private schools, teachers are hired and fired easily in relation to their productivity and output in their subjects and as a result, they are very committed in the learning outcomes of students. While in the public schools, some teachers are hired based on their political affiliations and not necessarily due to competence which affects their productivity generally. Socio-political and economic instability can create stress and anxiety for students. Public schools may be affected by budget cuts, overcrowded classrooms, and limited extracurricular activities, which can negatively impact students' ability to focus and develop effective study habits.

In conclusion, the socio-political and economic context significantly influences the study habits of secondary school students. The type of school they attend can shape these habits through resource availability, stress levels, access to support, parental involvement, peer influence, and the curriculum. During uncertain times, it is important to consider these factors and provide support to students in both public and private schools to ensure they develop effective study habits and succeed academically.

Findings from hypothesis two testing show that there is no significant difference in the study habits of male and female secondary school chemistry students. This indicates that gender plays no role in the study habits of secondary school chemistry students. This finding is in agreement with Awabil et al. (2013) and Mushoriwa (2009) who reported no significant gender differences in the study habit of secondary school students.

Conclusion

The study investigated the role of school type and gender in study habits of chemistry students. Based on observation of findings, private school students appear to have healthier and better study habits compared to students in public schools. This suggests that school type plays a role in shaping the study habits of students. However findings disprove the influence of gender on study habits of secondary school chemistry students thereby challenging the stereotype that one gender may be inclined towards better study habit than the other. These findings adds valuable insights to the field of education and emphasizes the need for further exploration into the factors that influence study habits among secondary school students.

Recommendations

Based on the findings of this study, the following recommendations are made:

1. Chemistry teachers in both private and public secondary schools should assist the students in the developing good and effective study habits by ensuring the students are actively involved in the learning process as this will in turn improve their Chemistry achievement.

2. By recognizing the disparity in study habits, public schools can implement targeted programs and resources to help students develop better study habits. This could include study skills workshops, time management training and providing access to study materials and resources
3. Share best practices between public and private schools. Private schools seem to have an advantage in study habit, so it would be beneficial to foster collaboration and knowledge sharing between public and private schools. This could involve organizing workshops or conferences where educators from both sectors can exchange ideas and strategies for improving study habits
4. Implementation of study habit interventions early on. There is need to promote effective study at an early age, preferably in primary or middle school, by introducing study skills and time management techniques early on, students can develop good study habits that will benefit them throughout their academic journey.

References

- Aluja, A. & Blanch, A (2004). Socialised personality scholastic aptitudes, study habits and academic achievement; Exploring the link. *European Journal of Psychological Assessment*. 20(3), 137-147
- Ali, A., Ali, Z. & Naz, R. (2012). Study habits and education planning: a case study of comparison of private and public sector school. *Dialogue*, 7, 98.
- Awabil, G., Kolo, F. D., Bello, R. M., & Oliagba, D. A. (2013). Effect of study and self-reward skills counselling on study behaviour of university students in Ghana. *The Counsellor*, 32(1 &2), 39 – 46
- Chand, S (2013). Study habits of secondary school students in relation to type of school and type of family. *International Journal of Social Sciences and Interdisciplinary Research*, 2(7), 90 – 96.
- Ebele, U. F. & Olofu, P. A. (2017). Study habit and its impact on secondary school students' academic performance in biology in the Federal Capital Territory, Abuja. *Educational Research and Reviews*; 12(10):583-588. DOI: 10.5897/ERR2016.3117.
- Federal Republic of Nigeria (2013) National Policy on Education. NERDC Press.
- Islam, M. N. (2021). Study habits, self-esteem, and academic achievement among public and private secondary school students in Bangladesh. *International Journal of Psychology and Educational Studies*, 8(3), 39-50. <https://dx.doi.org/10.52380/ijpes.2021.8.3.214>
- Jota, M., Ogunniyi, S. O, & Olubiyo, P. (2014). Study habits, use of school libraries and students' academic performance in selected secondary schools in Ondo West Local Government Area of Ondo State. *International Journal of Library and Information Science*. 6(4):57-64 DOI:10.5897/IJLIS2012.0412
- Kingdon, G.G. (2017), The Private Schooling Phenomenon in India: A Review, No 10612, IZA Discussion Papers, Institute of Labor Economics (IZA)
- Mushoriwa, T. (2009). The study strategy – performance function among students in three teachers colleges in Masvingo and Harare, Zimbabwe. *Journal of Education and Social Sciences*, 14(1), 153 – 166
- Nwanna, S.E. (2009). Educational technology in digital age. second edition. Kristopher publishers, Awka.

- Ogbodo, R.O. (2010). Effective Study Habits in Educational Sector: Counselling Implications. *Edo Journal of Counselling, Vol. 3, No.2. pp. 1-11.*
- Ogolla, F.O. (2010), "Free education in Kenya's public primary schools: addressing the challenges", Organization for Social Science Research in Eastern and Southern Africa (OSSREA) Report, Addis Ababa.
- Okenezi, B. & Braide, D.M. (2018). Study habits and academic performance of secondary school Students in rivers-west senatorial district of rivers state, Nigeria. *European Journal of Training and Development Studies Vol.5 No.3, pp.8-18.*
- Olatoye, R.A (2009). Study Habit, Self-Concept and Science Achievement of Public and Private Junior Secondary School Students in Ogun State, Nigeria. *An International Multi-Disciplinary Journal, Ethiopia, 3 (4), 492-506.*
- Ossai, M. C., (2012). Age and gender differences in study habits: a framework for proactive counselling against low academic achievement. *Journal of Educational and Social Sciences, 2(3), 67 – 73*
- Palsane, M. N. & Sharma, S. (1989). Study Habit Inventory, Agra: National Psychological Corporation.
- Promila (2014). Study habits of senior secondary school students in relation to gender and academic stream. *Global International Research Thoughts, 1, 1-6.*
- Saleem, N., Shah, M. A., & Ali, A. (2020). Gender based differences of study habits among university students. *Journal of Research Society of Pakistan. 57(1) 586 – 592*