

Psychomotor Skills and Study Habits of Social Studies Students' in Secondary Schools in Akwa Ibom State, Nigeria

Dr. Nsinne A. Emmanuel

Department of Social Studies Education,
Federal College of Education, Ididep
Ibiono, Akwa Ibom State.
nsinneakan101@gmail.com

Abstract

The main purpose of the study was to determine the relationship between psychomotor skills and study habits of social studies students in secondary schools in Akwa Ibom State. The study adopted a correlational research design. The population of the study was 66,644 students. It comprised all JSS3 students in all the 270 public secondary schools in Akwa Ibom State during the 2023/2024 academic session. Krejcie and Morgan sampling table was used to determine the sample size which consisted of 382 respondents drawn from 28 selected secondary schools in the study area. A simple random sampling technique was used to select the sample from the population. A researcher-developed instrument, titled "Psychomotor Skills and Students' Study Habits Questionnaire (PSSSHQ) was developed and used for the study. A face validation was used to validate the instrument while Cronbach Alpha reliability method was used to determine the reliability co-efficient of the instrument which stood at 0.81. The data obtained from the study were analyzed using Pearson Product Moment Correlation (PPMC) statistic. The research questions and null hypotheses and were analyzed using PPMC. Each of the hypotheses of the study were tested at .05 level of significance. The findings of the study revealed that writing skill, speaking skill as well as listening skill, has a high and positive relationship with study habit of social studies students in secondary schools in Akwa Ibom State. Also, there was statistically significant relationship between writing skill, speaking skill and listening skill, and study habit of social studies students in secondary schools in Akwa Ibom State. It was recommended among other things that teachers should teach their students the value of psychomotor skills in promoting effective writing skills, encouraging them to create balanced study timetable that cater for learning needs.

Keywords: Psychomotor, Skills, Study Habit, Students

Introduction

Learning is the process of acquiring knowledge, skills, attitudes or behaviours through study, experience, or teaching. It involves processes such as perception, memory, and reasoning, and it can occur in formal settings like classrooms or through informal means such as personal experiences and observations. Learning can be intentional, such as studying for a test or incidental happening as a by-product of another activity. People can learn mental skills, develop attitude and acquire new physical skills as they perform the activities of daily living. Learning can generally be categorized into three domains namely: cognitive, affective and psychomotor, while the cognitive and affective domains were described in 1956 and 1964 respectively, the psychomotor (which is the focus of this study) was not fully described until the 1970s (Otote, 2018).

Study habit generally refers to students' repeated actions to study from the beginning of an academic program and is thought to be of paramount importance to learning and acquisition of knowledge. Study habit involves actions such as reading, taking notes, holding group discussion and performing academic task which the students perform regularly and habitually in order to accomplish the task of learning. Study habit can be effective or ineffective depending on whether or not they serve the students well. Ayodele and Adebisi (2013) described study habit as a consistent, systematic and conscious task aimed at acquiring specific knowledge. It is a consistent or constant pattern of study which an individual has adopted over a long period of time. Research has shown that good study habit enhances intellectual development, academic excellence and promotion to higher class as well as becoming responsible citizen of the country. Escobar (2019) stated that study habit refers to the overall patterns of studying adopted by students, which significantly affect not only their academic success and adjustment during their school years, but also their personal and social adaptation, influencing various aspects of life beyond the classroom.

As explained by Ardanaz (2019), the word "Psycho" determines psychical activities in two phases: socio-affective and cognitive. On the other hand, the word "motor" refers to movement. Therefore, the term "psychomotor" refers to the relationship that is established between the psychical activity of the human mind with the movement capacity of the body. Psychomotor skills have not always been understood as such since over the years many authors have been complementing its definition. It was Piaget (1982) who explained that intelligence is built from motor activity of children. In the first years of life up to approximately seven years, the child's education is psychomotor. All knowledge focuses on the child's action and experiences through her action and movement. As explained by Ardanaz (2019), psychomotor is one of the most important aspects in development of the child and therefore it is necessary to work on it in all areas to help the child acquire increasing autonomy in movements.

Pacheco (2015) defines psychomotor skills as an area of knowledge that deals with the study and understanding of phenomena related to body movement and its development. The author affirms that psychomotor skills is important because it contributes to the integral development of boys and girls since from an all-round perspective physical exercise accelerate vital functions and improve mood. From the foregoing therefore, it can be deduced that psychomotor refers to how conscious mental activity create physical movement. Psychomotor development is the transformation of a person's physical, cognitive (mental), emotional and social capacities from the beginning of their life into adulthood, psychomotor learning can be expressed as the relationship between cognitive functions and physical movement. As explained by Uzzeto (2016), psychomotor involves movement, coordination, manipulation, dexterity, strength and speed-action which demonstrate the gross motor skill behaviour examples include: throwing a ball, dancing, playing instrument, driving a car among others. The psychomotor domain refers to the physical aspect of learning. It addresses motion, reflexes and how muscles are engaged during physical activity. In psychomotor learning research, attention is given to the learning of coordinated activity involving the arm,

hands, fingers, feet, and mouth. According to Pacheco (2015) three stage model, when learning psychomotor skills, individual progress through the cognitive stage, the associative stage and the autonomic stage. The cognitive stage is marked by awkward slow and choppy movement that the learner tries to control. The learner has to think about each movement before attempting it. In the associative stage, the learner spends less time thinking about every detail. However, movements are still not a permanent part of the brain. In the autonomic stage, the learner can refine the skill through practice, but no longer needs to think about the movement.

The development of psychomotor skills enables students to organize the outside world through their bodies, contributing to intellectual, affective and social development. Psychomotor skills are skills specific to discrete physical functions, reflex actions and interpretative movement. They are concerned with the physical encoding of information, with movement and or with activities where the gross and fine muscles are used for expressing and interpreting information or concept. The psychomotor domain is comprised of utilizing motor skills and coordinating them. Posner (2016) explained the seven categories under this to include:

- i) **Perception:** the ability to apply sensory information to motor activity. Example; a cook adjusts the heat of the stove to achieve the right temperature of the dish.
- ii) **Set:** the readiness to act. Example: an obese student displays motivation in performing planned exercise.
- iii) **Guided Response:** the ability to imitate a displayed behaviour or to utilize trial and error. Example: a student follows the manual in operating a machine.
- iv) **Mechanism:** the ability to convert learned responses into habitual actions with proficiency and confidence. Example a child was able to cook delicious meal after practicing how to cook it.
- v) **Complex Overt Response:** the ability to skillfully perform complex patterns of actions. Example: a student typing a report on a computer without looking at the keyboard.
- vi) **Adaptation:** the ability to modify learned skills to meet special events. Example: a student who uses plastic bottles to create object of aesthetic appeal.
- vii) **Origination:** creating new movement pattern for a specific situation. Example: a student who learnt choreography crates a new dance routine.

When talking of psychomotor skill, one may tend to think of children progressing from a helpless infant with limited cognitive and gross motor skills to a full-fledged young adult who can fully fend for themselves. Children develop gross motor skills as they gain movement of their arms, legs, and trunk. They develop fine motor skills involving smaller muscle groups. However, psychomotor skills are not things reserved only for infants and children. These skills can be acquired throughout the life span. Psychomotor skills are essentially movement tasks that require both cognitive and motor processes. These processes in turn often lead individuals to learn about the environment around them and be able to manipulate that environment for instance, a child that is learning how to hit a baseball off a

tee is developing hand-eye coordination that allows the child to contact the ball with the bat. Through practice, the child evaluates how the bat and ball interact. If the child swings and miss, the child evaluates the swing path of the bat and adjust the height of the swing accordingly, such that there can be a contact with the ball (Krampeet *al*, 2013).

Meanwhile, Social Studies has been defined primarily as a subject that studies human beings and their environment. It is focused on man's interaction with the natural and man-made environment (Otote, 2018). Ola, (2023) defined Social Studies as "common learning of man's interaction within the social and physical environment". Social Studies is not just a study, but a way of life, of how man influences and is being influenced by the physical, social, political, economic, psychological and cultural environments; it is the totality of experiences and understanding a child gets having been exposed to a course of study based on man's problems in the environment, the factors that are normally responsible in man's interactions with his environment and the resulting ways of life of man (Ola, 2023). The ultimate goal of Social Studies as a discipline is the development of socio- civic and personal behaviour. This orientation and expectations have implications for the development and or acquisition of certain skills for an all-round formation of a desirable study habit. The psychomotor skills considered for this study include:

Writing skill encompasses the ability to express thoughts, ideas, and information clearly and effectively in written form. This includes grammar, spelling, punctuation, vocabulary, organization, coherence, and the ability to tailor content to the intended audience. Writing involves fine motor coordination of the fingers, hands, and wrist to form letters and words on a surface. According to Gentile (2020), psychomotor skills require motor execution and coordination, which are evident in handwriting or typing. Proper control of a writing instrument also involves muscle memory and hand-eye coordination.

Listening skills which enable students to absorb lesson more efficiently, participate in discussion and enhance the overall learning experience. Although listening primarily involves cognitive processing, it also has a psychomotor component, as it requires the orientation and movement of the head and ears to focus on auditory stimuli (Schmidt and Lee, 2021). Non-verbal responses such as nodding or making facial expressions in reaction to spoken words also involve motor activity.

Speaking skill is defined as the ability to express ideas clearly and effectively through spoken words. Students with strong speaking skills can actively participate in class discussions, present their ideas confidently, this in turn enhances their understanding and retention of the material. Speaking is a motor activity that involves the coordination of the respiratory system, vocal cords, tongue, and lips (Duoda, 2020). This skill requires precise motor control to articulate words clearly and fluently, making it a psychomotor skill. All these skills require a degree of dexterity, suppleness or strength as well as motor control. Theory of Situated Learning by Lave and Wenger (1991) posits that learning takes place in the same context in which it is applied. The idea is that knowledge is inherently linked to the social and physical environment where it is gained, and learners become part of a 'community of practice' by engaging in real-word activities. In this view, learning is not

abstract or de-contextualized but rather a social process involving participation, interaction and collaboration with others.

In the context of psychomotor skills of students, the theory applies directly to the development of psychomotor skills, as these skills are best learned through practice in real world contexts. For example, a student practicing how to draw the map of the world or fix a globe benefits from engaging in the actual activity rather than reading about it in a textbook. Through guided participation and repeated practice, learner develop fine motor skills and dexterity required in specific tasks. This hands-on learning aligns with the theory's emphasis on learning in authentic situations.

In this context, the theory reveals that effective study habits can be developed through content-based learning activities. Instead of relying solely on passive study method, like reading or memorizing, students are encouraged to engage in activities that simulate real-world problem-solving and critical thinking. For example, in social studies, students might participate in debates, simulations or group projects that mimic real-life scenarios, helping the students build deeper understanding and better retention. Additionally, working within a "community of practice" can enhance collaboration, peer-learning and the development of self-regulated learning habits.

Statement of the Problem

Good study habits include honing writing skills, organizing thoughts coherently, and communicating ideas effectively, which are essential for success in social studies assessments. Social studies encompass a wide range of topics, from ancient civilizations to modern geopolitics. Effective study habits involve managing time efficiently, prioritizing tasks, and maintaining a consistent study schedule to cover all required materials. The effectiveness of Social Studies education in secondary schools is often assessed based on cognitive achievements, neglecting the critical role of psychomotor skills in shaping students' study habits and overall academic success. Psychomotor skills, such as writing skills, speaking skills and listening skills, are essential for effective learning, yet their influence on students' study habits remains underexplored.

It may not be out of place to notice that many students struggle with essential tasks of taking notes, organizing study materials, articulating their thoughts clearly, and engaging in active listening during lessons. Poor writing skills may hinder students from effectively documenting key concepts, while weak speaking skills may reduce their participation in classroom discussions. Despite the recognized importance of psychomotor skills in education, there is limited empirical research on how these skills influence students' study habits in social studies. This gap in knowledge calls for an in-depth investigation into the relationship between psychomotor skills and study habits to provide evidence-based recommendations for improving teaching strategies and student learning outcomes. Addressing this problem is essential to fostering a more holistic approach to learning that integrates cognitive, psychomotor, and affective domains, ensuring that social studies students develop both academic competencies and practical skills for lifelong learning.

Purpose of the Study

The main purpose of this study was to determine the relationship between psychomotor skills and study habit of Social studies students in secondary schools in Akwa Ibom State. Specifically, the study sought to:

- i. examine the relationship between writing skill and study habit of social studies students in secondary schools in Akwa Ibom State.
- ii. determine the relationship between speaking skill and study habit of social studies students in secondary schools in Akwa Ibom State.
- iii. examine the relationship between listening skill and study habit of social studies students in secondary schools in Akwa Ibom State.

Research Questions

The following research questions were answered in the study:

- i. What is the relationship between writing skills and study habit of social studies students in secondary schools in Akwa Ibom State?
- ii. What is the relationship between speaking skills and study habit of social studies students in secondary schools in Akwa Ibom State?
- iii. What is the relationship between listening skills and study habit of social studies students in secondary schools in Akwa Ibom State?

Research Hypotheses

The following null hypotheses were stated to guide the study and were tested @ 0.05 level of significance:

- Ho1: There is no significant relationship between writing skills and study habit of social studies students in secondary schools in Akwa Ibom State.
- Ho2: There is no significant relationship between speaking skill and study habit of social studies students in secondary schools in Akwa Ibom State.
- Ho3: There is no significant relationship between listening skills and study habit of social studies students in secondary schools in Akwa Ibom State.

Methodology

The study adopted a co relational research design. The study was conducted in Akwa Ibom State. The population of the study was 66,644 JSS3 students in all the 270 public secondary schools across the three senatorial districts in Akwa Ibom State. The sample size for the study comprised 382 JSS3 students drawn from 28 selected public secondary schools in Akwa Ibom State. The instrument used for data collection was a Researcher Developed Questionnaire titled “Psychomotor Skills and Students’ Study Habit Questionnaire” (PSSSHQ) and the Study Habit Inventory developed by Palsane (1989) consisting of items which were in line with the three research questions earlier stated in this work. The validation of the instrument was carried out through a face validation. This was done by three experts in the Department of Psychological Foundations, Faculty of Education, University of Uyo. Cronbach Alpha reliability method was used to determine the reliability co-efficient of the instrument which stood at 0.81 indicating a high reliability. The Pearson Product Moment

Correlation (PPMC) statistics was used to answer the research questions and to test the null hypotheses at .05 level of significance.

Results

Research Question 1: What is the relationship between writing skill and study habit of social studies students in secondary schools in Akwa Ibom State?

Table 1: Summary of Pearson Product Moment Correlation (PPMC) between writing skills and study habit of social studies students in secondary schools

Variables	$\sum x$ $\sum y$	$\sum x^2$ $\sum y^2$	$\sum xy$	r_{cal}
Writing skill (x)	7252	643008	182716	.744
Study habit (y)	2457	51115		

(Source: Fieldwork, 2024)

Data in table1 shows that the r-calculated value in the relationship between writing skill and study habit of social studies students in secondary schools is (.744). This indicates a very high and positive relationship. This implies that writing skill has a very high and positive relationship with study habit of social studies students in secondary schools.

Research Question 2: What is the relationship between speaking skill and social studies students' study habit in junior secondary schools in Akwa Ibom State?

Table 2: Summary of Pearson Product Moment Correlation (PPMC) between speaking skill and study habit of social studies students in secondary schools

Variables	$\sum x$ $\sum y$	$\sum x^2$ $\sum y^2$	$\sum xy$	r_{cal}
Speaking skill(x)	8048	502260	172650	.705
Study habit (y)	2457	51115		

(Source: Fieldwork, 2024)

Data in Table2 shows that the r-calculated value in the relationship between speaking skill and study habit of social studies students in secondary schools is (.705). This indicates a high and positive relationship. This implies that speaking skill has a high and positive relationship with study habit of social studies students in secondary schools.

Research Question 3: What is the relationship between listening skill and study habit of social studies students in secondary schools in Akwa Ibom State?

Table : Summary of Pearson Product Moment Correlation (PPMC) between listening skill and study habit of social studies students in secondary schools

Variables	$\sum x$ $\sum y$	$\sum x^2$ $\sum y^2$	$\sum xy$	r_{cal}
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Listening skill(x)	8122	505040		
			164038	.604
Study habit (y)	2457	51115		

(Source: Fieldwork, 2024)

Data in table 3 shows that the r-calculated value in the relationship between listening skill and study habit of social studies students in secondary schools is (.604). This indicates a high and positive relationship. This implies that listening skill has a high and positive relationship with study habit of social studies students in secondary schools.

Research Hypothesis 1: There is no significant relationship between writing skill and study habit of social studies students in secondary schools in Akwa Ibom State.

Table 4: Result of PPMC between writing skill and study habit of social studies students in secondary schools in Akwa Ibom State

Variables	$\sum x$ $\sum y$	$\sum x^2$ $\sum y^2$	$\sum xy$	r_{cal}	p value	Decision @ .05 alpha level
Writing skill (x)	7252	643008				
			182716	.744	.001	Significant
Study habit (y)	2457	51115				

df = 380; (Source: Fieldwork, 2024)

Data in Table 4 shows that p-value (.001) is less than 0.05 level of significance. The null hypothesis is rejected. This implies that there is a significant relationship between writing skill and study habit of social studies students in secondary schools in Akwa Ibom State.

Research Hypothesis 2: There is no significant relationship between speaking skill and study habit of social studies students in secondary schools in Akwa Ibom State

Table 5: Result of PPMC speaking skill and study habit of social studies students in secondary schools in Akwa Ibom State

Variables	$\sum x$ $\sum y$	$\sum x^2$ $\sum y^2$	$\sum xy$	r_{cal}	p value	Decision @ .05 alpha level
Speaking skill(x)	8048	502260				
			172650	.705	.004	Significant
Study habit (y)	2457	51115				

df = 380; (Source: Fieldwork, 2024)

Data in Table 5 shows that the p-value (.004) is less than 0.05 level of significance. The null hypothesis is rejected. This implies that there is a significant relationship between

speaking skill and study habit of social studies students in secondary schools in Akwa Ibom State.

Research Hypothesis 3: There is no significant relationship between listening skill and study habit of social studies students in secondary schools in Akwa Ibom State.

Table 6: Result of PPMC between listening skill and study habit of social studies Students in secondary schools in Akwa Ibom State

Variables	$\sum x$	$\sum x^2$	$\sum y$	$\sum y^2$	$\sum xy$	r_{cal}	p value	Decision @ .05 alpha level
Listening skill(x)	8122	505040			164038	.604	.001	Significant
Study habit (y)	2457	51115						

df = 380; (Source: Fieldwork, 2024)

Data in Table 6 shows that the p-value (.001) is less than 0.05 level of significance. The null hypothesis is rejected. This implies that there is a significant relationship between listening skill and study habit of social studies students in secondary schools in Akwa Ibom State.

Discussion of Findings

Writing Skill and Study Habit of Social Studies Students in Secondary Schools in Akwa Ibom State

The Finding on research question one and hypothesis one as shown in table 1 and 4 reveals that writing skill has a high and positive relationship with study habit of social studies students in secondary schools. Also, there is a significant relationship between writing skill and study habit of social studies students in secondary schools in Akwa Ibom State. The study confirms that repeating an activity, retrieving a memory and reviewing material in a variety of ways helps build thicker, stronger, and more hard-wired connections in the brain. Unless students are asked to write repeatedly, teachers cannot expect them to be able to write well and to understand what they are writing about. In other words, practice matters in order to be able to do anything well, it must be done repeatedly.

Speaking Skill and Study Habit of Social Studies Students in Secondary Schools in Akwa Ibom State

The Finding based on research question 2 and hypothesis 2 as shown in table 2 and 5 revealed that speaking skill has a high and positive relationship with study habit of social studies students in secondary schools. Also, there is a significant relationship between speaking skill and study habit of social studies students in secondary schools in Akwa Ibom State. Effective speaking skills require students to think critically about the content, they analyze different perspectives, and formulate coherent arguments.

Listening skill and Study Habit of Social Studies Students in Secondary Schools in Akwa Ibom State

The Finding on listening skill reveals that listening skill has a high and positive relationship with study habit of social studies students in secondary schools. The null hypothesis tested in this regard also revealed that there is a significant relationship between listening skill and study habit of social studies students in secondary schools in Akwa Ibom State. Listening is not just a passive activity, but rather a complex psychomotor skill that involves both cognitive and physical processes. Listening as a psychomotor skill involves the integration of both mental and physical components. This includes not only hearing sound but also processing and interpreting information in a way that allows for effective communication. The physical aspect of listening involves the movement of the ears and the auditory system, which work together to receive and transmit sound waves to the brain for processing, strong listening skills can also enhance communication with teachers and classmates, making it easier for students to ask questions, participate in discussions, and seek clarification when needed.

Conclusion

It was concluded that writing skill, speaking skill and listening skill has a high and positive relationship with study habit of social studies students in secondary schools in Akwa Ibom State. Also, there is statistically significant relationship between writing skill, speaking skill as well as listening skill, and study habit of social studies students in secondary schools in Akwa Ibom State.

Recommendations

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

- i. Teachers should teach their students the value of psychomotor skills in promoting effective writing skills, encouraging them to create balanced study timetable that cater for learning needs.
- ii. Educators such as Authors should integrate creative exercises into their textbooks to maximize speaking skill proficiency and creative output in students.
- iii. The Curriculum Planners should set a mechanism to help the student improve in their listening skill in order to achieve better academic experiences.

References

- Ardanaz, M. (2019). Systematization of the psychomotor activity and cognitive development. *Psicoy Educational*, 24, 38 - 41.
- Ayodele, S. & Adebisi, R. (2015). Study habits as influence of academic performance of university undergraduates in Nigeria. *Research Journal in Organizational Psychology and Educational Studies*, 2(3): 72 – 75. www.emergingresource.org.
- Duoda, J. S. (2020). An exploration of the relationships between students' listening skills, self-rated academic listening and their metacognitive awareness. Unpublished M.Ed. Thesis, Faculty of Education, Memorial University of Newfoundland.

- Escobar, M. (2019). Good study habits and academic walk hand-in-hand. http://EzineArticles.com/expert/veronicaM._De-Escobar/11678. (Retrieved on 4th February, 2023).
- Krampe, R. T., Tesch – Romer, C. & Ericson, K.A. (2023). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, 100(3): 363-377.
- Gentile, A. M. (2020). A working model of skill acquisition with application to teaching. *Quest*, 17(1): 3-23.
- Lave, J.&Wenger, E. (1991). *Theory of Situated learning: Legitimate peripheral participation*. Cambridge University Press.
- Ola, J. K. (2023). Understanding Social Studies. (Rev. ed). Greenfield Publishers, Ibadan.
- Otote, K. P. (2018). Finger dexterity in a well-functioning cohort of office workers in Macau. *Asia Pacific Journal of Public Health*, 34(6): 642 – 649.
- Pacheco, V. A. (2015). When mathematics meets physical activity in the school-aged child: The effect of an integrated motor and cognitive approach to learning geometry. *PLOS ONE*, 13, e0196024.
- Posner, K. E. (2016). Observational evidence of the association between handgrip strength, hand dexterity and cognitive performance in community-dwelling older adults: A systematic review. *Journal of Epidemiology*, 28(9): 373 – 381.
- Schmidt, R. A., & Lee, T. D. (2021). Motor control and learning: a behavioural emphasis. *Human kinetics*.
- Uzzeto, A. J. (2016). School-based factors affecting senior secondary school students' achievement in English language in Edo State. *European Journal of Research and Reflection in Educational Sciences*, 4(9)