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INFLUENCE OF STUDY HABITS ON THE ACADEMIC PERFORMANCE OF PHYSICS STUDENTS IN FEDERAL UNIVERSITY OF AGRICULTURE MAKURDI, NIGERIA

Bernard A. Atsuwe, Nyikwagh I. Moses

Department of Science Education, Federal University of Agriculture Makurdi, Benue State, Nigeria.

ABSTRACT

This study was designed to investigate the influence of study habits on the academic performance of Physics students in Federal University of Agriculture Makurdi. It focused on the extent to which some study habit constructs such as homework, time allocation, reading and note taking and teacher consultation influence the academic performance of Physics students in the Federal University of Agriculture Makurdi. A survey research design was employed for the study and Study Habit Inventory Questionnaire – SHIQ (Cronbach Alpha Coefficient = 0.72) was administered to a sample of 200 Physics students, drawn using purposive sampling from 200 to 400 levels students of Physics B.Sc. (Ed), Physics B.Sc. and Industrial Physics B. Sc. Mean and standard deviation were used to answer the research questions and Spearman correlation was used to test the research hypothesis. Analysis of the data obtained from the SHIQ revealed that reading and note taking (cluster mean score = 2.77), homework and assignment (cluster mean score = 2.62) and time allocation (cluster mean score = 2.53) have great influence on the academic performance of students, however teacher consultation (cluster mean score = 2.14) has negligible influence on student's academic performance. As a result of this, the study recommends that Physics students should put in efforts to participate in completing their homework and assignments; it can be a way of enhancing peer tutoring among them, they should also adopt the use of planned time tables for their study routine and develop the discipline to stick to it each day's plan.

Keywords: Study habits, Study habit constructs, Academic Performance.

INTRODUCTION

Education is defined as teaching and learning process which aims at an all-round development of an individual's personality, such that his/her moral, social, religious, cultural, intellectual, physical and economic aspects are polished and improved (Sultan, 2011), in other words, it is the acquisition of knowledge and skills required to adapt to and exploit the social and physical environments in the process of development (Adelolu and Obademi, 2014) or in more concise words, Smith (2015) simply puts it as "the wise, hopeful and respectful cultivation of learning undertaken in the belief that all should have the chance to share in life". That is to say that all have the right to be meaningful agents of transformation of a nation regardless of socio-economic background or any other factor. The process of education produces a completely refined individual

which is socially responsible, emotionally and intellectually sound to live with others in the society. It is therefore an indispensable tool for any nation that wants to ride on the road of development. So in a climate of significant national and global restructuring, it is critically important that the nation's work force attain and maintain a state of technological and scientific readiness that will enable it to thrive in the global economy. To ensure this readiness, it is essential that the potential of all sectors of the population be fully developed. One way of doing this is by building and encouraging scientific literacy (Aderemi, Hassan, Siyanbola & Taiwo, 2013).

Science and technology is known for swift transformational strides for any nation that embraces it, China is an example of such nations that science and technology have taken to heights of development. Science is therefore central when it comes to the issue of development of a nation, and so it is imperative to nurture the younger generation in science for continuity,

* Corresponding Author:

Email: ella4mneuter@yahoo.com

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but sadly it has been a challenge since the colonial time that at all stages of studies, the sciences have given students hard time, particularly Physics (Funda, William, Robinson & Mark, 2008). Mendezabal (2013) observed that multiple reports indicate that academic success cannot be predicted by a single variable. It is dependent upon many factors; both cognitive, and non-cognitive, and many reports however have indicated that cognitive factors are responsible for academic success but it has not been the same for the non-cognitive factors like study habits, skill and study motivation, among other attitudinal constructs.

Study habit is a pattern of behaviour adopted by students in the pursuit of their studies that serves as the vehicle of learning. It is the degree to which the student engages in the routines (e.g. reviews of materials, frequency of studying sessions, etc) occurring in an environment that is conducive to studying. Various researchers have shown that there is a positive relationship between study habits and academic performance of students (Bashir *et. al*, 2012; Khurshid, 2012; Mutsotso *et. al*, 2010).

Crede and Kuncel (2008) in Mendezabal (2013) noted that non-cognitive factors like study habit, skill and study motivation, among other attitudinal constructs, accounted for incremental variance in academic performance beyond standardized tests and previous grades. The emphasis on study habits is based on theories that have been propounded on how to enhance academic performance among students through good study habits.

This study therefore aims to find out the effect of study habits on the academic performance of Physics students in Federal University of Agriculture, Makurdi, to see how much the academic performance of Physics students will improve if they adjust their study routine.

This study investigates the extent to which the various study habit subscales influence the academic performance of Physics students in the Federal University of Agriculture, Makurdi. The following research questions guided the study;

- a. To what extent does homework and assignment influence a student's academic performance?
- b. To what extent does time allocation influence the academic performance?
- c. To what extent does reading and note-taking influence Physics student's academic performance?
- d. To what extent does teacher consultation influence student performance in Physics?

The following research hypothesis were formulated for this study and was tested at 0.05 level of significance.

- a. HO₁: The academic performance of a student depends significantly on homework and assignments
- b. HO₂: The academic performance of a student depends significantly on time allocation
- c. HO₃: Reading and note taking does not have a significant influence on the academic performance of a student
- d. HO₄: Teacher consultation does not have a significant influence on the academic performance of a student

Martin ford's motivational systems theory (mst):

This framework focuses on the individual as the unit of analysis, but embeds the individual in the biological, social, and environmental contexts that are crucial to development. Ford proposed a simple mathematical formula that attempts to represent all these factors in one model. The formula for effective person-in-context functioning is:

$$\text{Achievement} = (\text{Motivation} \times \text{Skill}) \times \text{Responsive Environment}$$

The formula proposes that actual "achievement and competence are the results of a motivated, skilful, and biologically capable person interacting with a responsive environment" (Ford, 1992).

Similar formula was used by Pinder (1984) and others (cited in Nonis & Hudson, 2006) to demonstrate the performance as a multiplicative function of both ability and motivation.

$$\text{Performance} = \text{Ability} \times \text{Motivation}$$

The above formula indicates that a student with very high ability but low motivation is unlikely to perform well, whereas a student with low ability but high motivation is likely to perform well. That is, the variability in motivation across students may dampen associations between ability and performance. In the same vein, one can argue that it is simply the study habits that ultimately bring about the desired performance and not students' inner desires or motivations. Therefore, similar to how motivation interacts with ability to influence academic performance, one can infer that study habits interact with ability to influence student's academic performance.

$$\text{Academic Performance} = \text{Ability} \times \text{Study Habits}$$

Kolb's experiential learning theory (elt): David Kolb published his learning styles model in 1984 from which

he developed his learning style inventory. Kolb's experiential learning theory works on two levels: a four-stage cycle of learning and four separate learning styles. Much of Kolb's theory is concerned with the learner's internal cognitive processes. Kolb states that learning involves the acquisition of abstract concepts that can be applied flexibly in a range of situations. In Kolb's theory, the impetus for the

development of new concepts is provided by new experiences.

"Learning is the process whereby knowledge is created through the transformation of experience" (Kolb, 1984).

The Experiential Learning Cycle: Kolb's experiential learning style theory is typically represented by a four-stage learning cycle in which the learner 'touches all the bases':

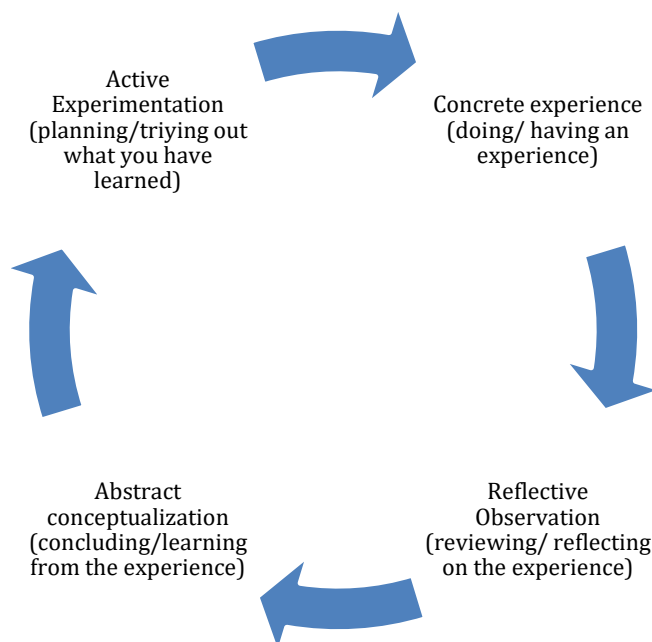


Figure 1. Kolb's Four Stage Cycle of Learning

Concrete Experience - (a new experience of situation is encountered, or a reinterpretation of existing experience).

Reflective Observation (of the new experience. Of particular importance are any inconsistencies between experience and understanding).

Abstract Conceptualization (Reflection gives rise to a new idea, or a modification of an existing abstract concept).

Active Experimentation (the learner applies them to the world around them to see what results).

Effective learning is seen when a person progresses through a cycle of four stages: of (1) having a concrete experience followed by (2) observation of and reflection on that experience which leads to (3) the formation of abstract concepts (analysis) and generalizations (conclusions) which are then (4) used to test hypothesis in future situations, resulting in new experiences. Kolb (1974) views learning as an integrated process with each stage being mutually supportive of and feeding into the next. It is possible to enter the cycle at any stage and

follow it through its logical sequence.

However, effective learning only occurs when a learner is able to execute all four stages of the model. Therefore, no one stage of the cycle is an effective as a learning procedure on its own.

Learning Styles: Kolb's learning theory (1974) sets out four distinct learning styles, which are based on a four-stage learning cycle (Figure 1). Kolb explains that different people naturally prefer a certain single different learning style. Various factors influence a person's preferred style. For example, social environment, educational experiences, or the basic cognitive structure of the individual.

Whatever influences the choice of style, the learning style preference itself is actually the product of two pairs of variables, or two separate 'choices' that we make, which Kolb presented as lines of axis, each with 'conflicting' modes at either end:

A typical presentation of Kolb's two continuums is that the east-west axis is called the **Processing**

Continuum (how we approach a task), and the north-south axis is called the **Perception Continuum** (our emotional response, or how we think or feel about it). Kolb believed that we cannot perform both variables on a single axis at the same time (e.g. think and feel). Our learning style is a product of these two choice decisions.

It's often easier to see the construction of Kolb's learning styles in terms of a two-by-two matrix. Each learning style represents a combination of two preferred styles. The diagram also highlights Kolb's terminology for the four learning styles; diverging, assimilating, and converging, accommodating;

Table 1. Kolb's Learning Style Description.

	Doing (Active Experimentation - AE)	Watching (Reflective Observation - RO)
Feeling (Concrete Experience - CE)	Accommodating (CE/AE)	Diverging (CE/RO)
Thinking (Abstract Conceptualization - AC)	Converging (AC/AE)	Assimilating (AC/RO)

Learning Styles Descriptions: Knowing a person's (and your own) learning style enables learning to be orientated according to the preferred method. That said, everyone responds to and needs the stimulus of all types of learning styles to one extent or another - it's a matter of using emphasis that fits best with the given situation and a person's learning style preferences.

Here are brief descriptions of the four Kolb learning styles:

Diverging (feeling and watching - CE/RO): These people are able to look at things from different perspectives. They are sensitive. They prefer to watch rather than do, tending to gather information and use imagination to solve problems. They are best at viewing concrete situations at several different viewpoints.

Kolb called this style 'diverging' because these people perform better in situations that require ideas-generation, for example, brainstorming. People with diverging learning styles have broad cultural interests and like to gather information.

They are interested in people, tend to be imaginative and emotional, and tend to be strong in the arts. People with the diverging style prefer to work in groups, to listen with an open mind and to receive personal feedback.

Assimilating (watching and thinking - AC/RO): The Assimilating learning preference is for a concise, logical approach. Ideas and concepts are more important than people. These people require good clear explanation rather than practical opportunity. They excel at understanding wide-ranging information and organizing it in a clear logical format.

People with an assimilating learning style are less focused on people and more interested in ideas and abstract concepts. People with this style are more attracted to logically sound theories than approaches based on practical value.

This learning style is important for effectiveness in

information and science careers. In formal learning situations, people with this style prefer readings, lectures, exploring analytical models, and having time to think things through.

Converging (doing and thinking - AC/AE): People with converging learning style can solve problems and will use their learning to find solutions to practical issues. They prefer technical tasks, and are less concerned with people and interpersonal aspects.

People with converging learning style are best at finding practical uses for ideas and theories. They can solve problems and make decisions by finding solutions to questions and problems.

People with converging learning style are more attracted to technical tasks and problems than social or interpersonal issues. A converging learning style enables specialist and technology abilities. People with a converging style like to experiment with new ideas, to simulate, and to work with practical applications.

Accommodating (doing and feeling - CE/AE): The Accommodating learning style is 'hands-on', and relies on intuition rather than logic. These people use other people's analysis, and prefer to take a practical, experiential approach. They are attracted to new challenges and experiences, and to carrying out plans. They commonly act on 'gut' instinct rather than logical analysis. People with an accommodating learning style will tend to rely on others for information than carry out their own analysis. This learning style is prevalent within the general population.

Educational Implications of Kolb's Experiential Learning Theory:

Both Kolb's (1984) learning stages and cycle could be used by teachers to critically evaluate the learning provision typically available to students, and to develop more appropriate learning opportunities. The theory helps us to understand learning at a deeper level and the importance of student's involvement in

planning learning activity, so educators should ensure that activities are designed and carried out in ways that offer each learner the chance to engage in the manner that suits them best. Also, individuals can be helped to learn more effectively by the identification of their lesser preferred learning styles and the strengthening of these through the application of the experiential learning cycle. Ideally, activities and material should be developed in ways that draw on abilities from each stage of the experiential learning cycle and take the students through the whole process in sequence.

Social development theory (sdt): The Social Development Theory has been credited to the Russian Psychologist, Lev Vygotsky (1978). Vygotsky's Social Development Theory, or SDT, introduced two major principles:

1. Cognitive development is limited up to a certain extent or within a certain range, at any given age of the individual; and
2. An individual's full cognitive development requires social interaction.

These principles are encapsulated in three theories or themes: Social Interaction, The More Knowledgeable Other (MKO) and the Zone of Proximal Development (ZPD).

Social Interactions: The social interaction theme cover four concepts viz;

1. Social interaction plays a central role in cognitive development:
2. Social learning precedes development:
3. Language accelerates cognitive development:
4. Self-initiated discovery and collaborative dialogue aid in a child's cognitive development:

Social interaction plays a central role in cognitive development: Cognitive – and human – development, according to Vygotsky, is a result of a “dynamic” interaction between the individual and the society. This dynamic relationship denotes a relationship of mutuality between the two. Just as society has an impact on the individual, the individual also has an impact on society.

Children are unable to learn and develop if they are removed from society, or are forbidden to interact with it. For example, on play dates, the child learned how to play with other kids his age, and slowly built a bond with one or two kids that he ended up being the closest to.

Through these social learning experiences, he was able to gradually develop and grow.

Social learning precedes development: Vygotsky

claims that a child will not be able to develop unless he undergoes or experiences social learning first. He identified two areas, or levels, where the functions in a child's cultural development, appear in:

- a. **Social level, or interpsychological.** The functions first appear between individuals first. This is where the person will have to interact, connect and reach out to other people. This is the level where social learning takes place.
- b. **Individual level, or intrapsychological.** This is the area within the child or the individual. Once he has passed the social level, where he acquired social learning, the functions will appear a second time and, this time, more developed and thus, leading to cognitive development.

That is to say without learning, there is no way that an individual will be able to function and become fully developed, however, that does not mean that people are born with absolutely zero abilities. Vygotsky is quick to point out that everyone is born with basic or elementary functions or abilities that will get them started on the road to their intellectual development.

The elementary mental functions include those that come by naturally with birth and growth, without influence by an external stimulus. In other words, these capacities are not learned, involuntary, and often do not really require any thought on the part of the individual. Vygotsky even went so far as saying that most of these elementary mental functions are acquired by a child through genetics.

Language accelerates cognitive development: It is a given that language is very important in any social interaction, since it is the primary medium of communication in any social setting. But that is not the only reason why language plays a very important role in an individual's cognitive development.

First, let us look at the three stages of speech development, according to Vygotsky.

Stage 1 – Social or External Speech: This covers the preverbal stage, usually under the age of three, when the child is still unable to transcribe his thoughts in complete thought messages. His thoughts are pretty simple, and his emotions basic, and there is no intellectual or thinking exercise involved.

However, despite that, he still wants to be able to control others' behaviours. Therefore, he makes use of his limited speech to express simple thoughts of hunger, pleasure, displeasure, satisfaction and dissatisfaction

through crying, laughing, shouting, and gurgling. As he advances in age, he will start to use what we call “baby-speak”, with phrases such as “Want milk”.

Stage 2 – Egocentric Speech: If, in the first stage, the purpose of the child’s speech is to control the behaviour of other people, the egocentric speech in the second stage is spoken as a way for the child to direct his own behaviour.

This is usually demonstrated between the ages of 3 and 7, when the child starts to enunciate words more clearly and form more complete sentences, with more sense or thought. They practice this by talking out loud to themselves. It is actually normal behaviour for them at this stage to do things, even the simple act of playing with a train set, with a running commentary of every little thing that they are doing.

Stage 3 – Inner Speech: The final speech development stage takes place once the child becomes older and starts growing toward adulthood, and he is able to use it to direct both his thinking and the resulting behaviour or action. This does not require his thoughts to be voiced out loud, with all thinking processes done in his head. He can do mental calculations in his head, analyze a situation from all angles without saying a single word, and form an opinion without verbalizing his arguments. It is during this stage that the individual is now able to engage in all the other higher mental functions.

Language involves speech – both its expression and comprehension. The two-way nature of communication requires that the language must be expressed or delivered, and it must also be understood. When expressed differently, or even erroneously, the recipient will receive a different meaning.

This essentially means that language can dictate the way people look at things, and how they process information. It is powerful enough to have an impact on the rate or speed of cognitive development, given how it is connected or related to the other cognitive functions. For example, language can affect how a person perceives something.

In the same manner that an individual is more motivated to memorize something that is in a language he understands, and ignore one that is expressed in a language that is completely foreign to him.

Self-initiated discovery and collaborative dialogue aid in a child’s cognitive development: Vygotsky postulated that the social and cultural settings that children’s activities take place in requires social interaction and communication, and that the children

learn best through these social interactions. They acquire knowledge and hone skills through these interactions, as well as the culture surrounding them, and these ultimately shape their cognition.

Through the concept of “cooperative or collaborative dialogue”, a child may learn his first words, the alphabet, his first nursery rhyme and how to count from 1 to 10 from his parents. As he grows older, he will be interacting with tutors and teachers, who are likely to provide verbal instructions and model or demonstrate behaviour that will, consequently, guide him.

The More Knowledgeable Other (MKO): Meet the MKO, a person with a better understanding and considerably higher or superior level of ability, skill or knowledge about a particular subject, task or process, than the person who is attempting to learn/*learner*.

The MKO often comes in the person of a teacher, a superior at work, or a peer with more experience. There are instances when he could be someone younger, but with more cultivated knowledge and skill. In this digital age, the MKO may even be a computer or any intelligent machine. In the eyes of a child, adults are the MKOs. While learning and discovery that is self-initiated is effective, learning becomes more productive and contributory to cognitive development when acquired from an MKO.

The concept of the MKO is seen to always go together with his other concept, that of the Zone of Proximal Development.

The Zone of Proximal Development (ZPD): Imagine a circle divided into three rings. The inner circle or ring represents what the child already knows or what the child can achieve or discover on his own, while the third, outermost circle or rings represents what he still does not know what he cannot achieve or discover independently, but can only do so with the help or guidance of someone who is more skilled or knowledgeable.

That gap, or that empty area between the inner and outer circles, is the Zone of Proximal Development. That is where the learning will take place.

Vygotsky said that the ZPD is where the child will be given the most sensitive instruction or guidance, coupled with a lot of encouragement, from the MKO. Take note that the words used were “instruction” and “guidance”, because the MKO will provide just the right amount of guidance, and then allow the child to learn and develop his skills. By letting him do it independently.

Learning in the ZPD, as mentioned earlier, is facilitated with the help of an MKO, which is precisely why we said that these two often go together. The learning process, in itself, is a social interaction, which could be done directly or indirectly (with the use of technology, perhaps), between the learner and the MKO, who can be a teacher, professor, coach, mentor, or any older adult, or a peer or even someone younger, who happens to be more skilful, experienced, or knowledgeable in the area, subject or discipline that is being learned.

The Social Development Theory strongly lays emphasis on one's cognition; it suggests that the mind is an active force that constructs one's reality selectively, encodes instruction, performs behaviours on the basis of value and expectation and imposes structures in its own action (Evans & Julius, 2015). In line with the social development theory, students who have the ability to perform a particular task under the guidance of the more knowledgeable ones should be lead to perform those tasks independently. Students should be encouraged to develop the habit of studying in groups and asking questions among their mates as a means of learning while socializing with each other which will in turn yield more success in the subject matter.

METHODOLOGY

Participants were 200 (63 Physics B. Sc. (Ed).78 Industrial Physics B. Sc. and 59 Physics B. Sc.) Physics student of all second year, third year and fourth year who were enrolled in the three course options in Physics at the Federal University of Agriculture Makurdi, Benue State, Nigeria. The study was carried out during 2015-

RESULTS AND DISCUSSION

To what extent does homework and assignment influence a student's academic performance?

Table 1. Mean Score of Responses on The Effect of Homework and Assignment on the Academic Performance of Physics Students in Federal University of Agriculture, Makurdi, Nigeria.

Sr.	Items	Mean	SD	Remark
1	I do my assignments myself	2.60	0.72	Accepted
2	I read my assignments before exams	2.60	0.60	Accepted
3	I do most of my assignment in a group with other students	2.88	0.39	Accepted
4	I view my assignment as necessary so I dedicate my time to doing them	2.46	0.73	Rejected
5	No matter how difficult my assignments are, I always make sure I solve them.	2.40	0.64	Rejected
6	I submit my assignment on time	2.76	0.50	Accepted
Cluster Mean		2.62		Accepted

From the results obtained from Table 1, the cluster mean is calculated as 2.62, a value higher than the bench mark of 2.50, this indicates the results accept that homework and assignments have high influence on the academic performance of Physics students of University of

2016 academic year. At the time of the study, 139 of the students were studying Physics education, 260 were studying physics B. Sc., and 193 were studying Industrial Physics B. Sc.

The Study Habit Inventory Questionnaire (SHIQ) consisted of 24 items with a four-point Likert-type scale designed by the researcher. The academic performance of the respondents was collected from the department's result board under the consent of the concerned exam officers.

The examination of the influence of the study habit constructs as generated from the Study Habit Inventory Questionnaire was carried out using various statistical analyses. The interpretable factors were labeled as Homework and assignment, Time Allocation, Reading and Note taking and Teacher Consultation. The reliability of the questionnaire was measured using Cronbach's alpha. The Cronbach alpha was 0.72.

Analysis: The four-point Likert-scale invited respondents to the items as Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD).

The data were analyzed using mean, standard deviation and correlation (Spearman). The mean and standard deviation were used to determine the extent to which the study habit constructs influence the academic performance of the students while the Spearman correlation was used to determine the relationship between academic performance and the study habit constructs and hence, the extent of influence of homework and assignment, time allocation, reading and note taking and teacher consultation on academic performance students.

Agriculture, Makurdi. This implies that a student dedicated to completing his/her homework will achieve more success in his/her academic endeavor compared to one which is not committed to doing them.

To what extent does time allocation influence Physics student's academic performance?

Table 2. Mean Score of Responses on The Effect of Time Allocation on the Academic Performance of Physics Students in Federal University of Agriculture, Makurdi, Nigeria.

Sr.	Items	Mean	SD	Remark
1	I have a personal time table for my study	2.40	0.60	Rejected
2	I keep to my planned time table	2.28	0.52	Rejected
3	I study each of my course that appears on time table each before the day end	2.24	0.34	Rejected
4	I am active in extra curricula activities on campus	2.74	0.70	Accepted
5	I read better when the surrounding is quiet, like at night	2.88	0.84	Accepted
6	I do not only study when the time table for exams is out	2.62	0.96	Accepted
Cluster Mean		2.53		Accepted

Form the results of the findings in Table 2, time allocation has a study habit score cluster mean of 2.53, this implies that the extent to which a students can excel in his/her academic endeavour will be highly affected by the student's ability to plan and keep to a study time

table, regulate engagements in extracurricular activities, select when to read and maintain consistency in his/her study pattern for that semester. Time allocation therefore has a high influence on a students' academic performance.

To what extent does reading and note-taking influence physics student's academic performance?

Table 3. Mean Score of Responses on The Effect of Reading and Note-taking on the Academic Performance of Physics Students in Federal University of Agriculture, Makurdi, Nigeria.

Sr.	Items	Mean	SD	Remark
1	I usually take notes during lectures	2.80	0.68	Accepted
2	I have the ability to note down important points during lectures	3.08	0.31	Accepted
3	I set goals for every study session	2.42	0.77	Rejected
4	I have a specific time of the day during which I study	2.94	1.30	Accepted
5	I usually start my study for the semester with the most difficult courses	2.42	0.76	Rejected
6	I cover at least 80% of my set goals for each study session	2.94	0.62	Accepted
Cluster Mean		2.77		Accepted

From Table 3, the cluster mean was calculated to be 2.77, and that indicates that reading and note taking has a significant influence on the academic performance of students, it is obviously the most influential of the four constructs considered in this study. That means a student's academic performance is influenced to a very

great extent by student's ability to note down salient points during reading and lecture sessions, set targets for a study session and strive to meet at least 80% of the set targets, so the academic performance of Physics students in University of Agriculture is dependent largely on his/her ability to utilize reading and note taking skills.

To what extent does teacher consultation influence student performance in Physics?

Table 4. Mean Score of Responses on The Effect of Teacher Consultation on the Academic Performance of Physics Students in Federal University of Agriculture, Makurdi, Nigeria.

Sr.	Items	Mean	SD	Remark
1	I usually ask questions in class when I am confused	2.54	0.36	Accepted
2	I usually go to the course lecturer to explain the concepts I didn't understand	2.02	0.38	Rejected
3	My lecturers usually explain the concepts to me when I go to them	2.04	0.33	Rejected
4	I consult my course lectures at least once in two weeks	1.58	0.37	Rejected
5	My lectures explanations in class are usually very clear	2.62	0.52	Accepted
6	My lectures make out time to help me when come with problems	2.04	0.32	Rejected
Cluster Mean		2.14		Rejected

The findings revealed pertaining to the influence of teacher consultation on students' academic performance that there exists a very low influence of teacher consultation on students' academic performance; the study habit score cluster mean for teacher consultation was found to be 2.14 in Table 4. This implies that even if a student does not ask questions in class often, or always

go to course lecturers for further explanation on concepts he/she is not clear with, such a student will still be able to excel in his/her academic endeavour, but if one tries such with any of the other study habit constructs considered in this study, such a person is not going to have a good achievement.

The academic performance of a student depends significantly on homework and assignment.

Table 5. The correlation between the students Grade Point Average (GPA) score and their Study Habit Inventory Score for Homework and assignment.

Variables	Mean	N	DF	P-value	Spearman Correlation Coefficient (r)
GPA	3.284	200	-	-	-
Homework and assignment	15.875	200	198	<0.0001	0.669

The Table 5 above reveals that there is a positive correlation between homework/assignment and academic performance and hence, homework and assignments have a significant influence on the academic performance of a student from the findings in Table 5, the study shows that there is a strong and positive relationship between academic performance and homework and assignments since their correlation coefficient of 0.669. This means that

as a student's score for homework and assignments in the Study Habit Inventory Questionnaire increases, his/her achievement academically will improve, and if study habit inventory score drops, the academic performance will also drop. Since the variables have a correlation with correlation coefficient (r) = 0.669, the academic performance of a student is dependent significantly on homework and assignment.

The academic performance of a student depends significantly on time allocation.

Table 6. The correlation between the students Grade Point Average (GPA) score and their Study Habit Inventory Score for time allocation.

Variables	Mean	N	DF	P-value	Spearman Correlation Coefficient (r)
GPA	3.284	200	-	-	-
Time allocation	15.875	200	198	<0.0001	0.688

From the Table 6, the correlation between the students Grade Point Average (GPA) score and their Study Habit score for time allocation has been shown to have a positive correlation with correlation coefficient of 0.688, it means that there is a strong relationship between time allocation and students' academic performance. Hence,

time allocation has a significant influence on the academic performance of Physics students in University of Agriculture, Makurdi. That means even if a student has high academic ability but does not have good time management, such a student is liable to perform poorly.

Reading and note taking does not have a significant influence on the academic performance of a student

Table 7. The correlation between the students Grade Point Average (GPA) Score and their Study Habit Inventory Score for reading and note taking.

Variables	Mean	N	DF	P-value	Spearman Correlation Coefficient (r)
GPA	3.284	200	-	-	-
Reading and note taking	15.875	200	198	<0.0001	0.721

The Table 7 above reveals that there is a positive correlation between reading and note taking in academic performance. It has a strong relationship between the two variables hence, reading and note taking have a significant influence on the academic performance of the students since the variables have a correlation with

correlation coefficient (r) = 0.721. Therefore the academic performance of a student is dependent significantly on reading and note taking. This means that if a student have a poor reading and note taking ability, he/she can almost be sure of a poor academic performance.

Teacher consultation does not have a significant influence on the academic performance of a student

Table 8. The correlation between the students Grade Point Average (GPA) Score and their Study Habit Inventory Score for teacher consultation.

Variables	Mean	N	DF	P-value	Spearman Correlation Coefficient (r)
GPA	3.284	200	-	-	-
Teacher consultation	15.875	200	198	<0.0001	0.188

The correlation between Students Grade Point Average (GPA) score and their Study Habit score on teacher consultation is shown to have a positive correlation. However, the correlation is weak as the correlation coefficient has the value (r) =0.188. This indicates that although teacher consultation has influence on the academic performance of Physics students, the influence is not significant comparing to the other constructs. This implies that a student who does not ask questions often in class or go to the lecturers for further explanations on complex concepts is not cut out for bad academic performance, so the study showed that a student who seldom consult with teachers can still excel in studies.

RECOMMENDATIONS

The following recommendations are made based on the findings of this study:

- i. Physics students should put in efforts to participate in completing their homework and assignments; it can be a way of enhancing peer tutoring among them.
- ii. Students should adopt the use of planned time tables for their study routine and develop the discipline to stick to it each day's plan.
- iii. Students usually withdraw from the difficult and complex courses of the semester, but they should rather plan to face them head long and start studying them from the beginning of the semester, that way they can have more time to study it thoroughly.
- iv. Students should develop a cordial relationship with their lecturers and take their areas of difficulty to the lectures for assistance
- v. The lectures should endeavour to squeeze out time out of their tight schedules to help students in need of explanations.

CONCLUSION

This study has provided insights into the influence of four study habit constructs on the academic performance of Physics students in University of Agriculture Makurdi, Benue State, Nigeria. The study has also established that a major study habit that influence the academic

performance of physics students is the reading and note taking skills of the students employed in the course of the study period. These outcomes have shown that the academic achievement of a student is also dependent on the efforts they put in to study, even though it is not the singular variable that exerts influence on academic performance. Other important influences are time allocation and homework and assignment. The interplay of these study habit constructs have continued to influence students' academic performance among physics students in university of Agriculture, Makurdi, Benue State, Nigeria to achieve academic success.

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