

Study Habits A Predictor Of Upper Basic Education Students' Academic Achievement In Basic Science In Anambra State

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Abstract: *The study investigated study habit as a predictor of upper basic education students' academic achievement in basic science in Anambra state. Two research questions guided the study and two null hypotheses were tested at 0.05 level of significance. The design adopted for the study was predictive correlation design. The population of the study was 19,172 senior upper basic two students. A sample of 2000 students drawn using random and purposive sampling techniques was involved in the study. The instrument for data collection was Study Habit Scale (SHS) validated by three experts. The reliability of SHS was established using Cronbach Alpha which yield coefficient of internal consistency of 0.80. The students' achievement scores in Basic science were obtained from the teachers' score folder. The data obtained were analyzed using simple and multiple linear regressions. The findings of the study revealed that students' study habit predicted 1.2 percent of the variance in their Basic science scores increasing it by 0.118 with every unit rise. Also, achievement scores in Basic science was significantly predicted by students' study habit. It was recommended that orientation programme should be conducted for basic science students on how to develop better and effective study habit that could earn them higher academic achievement scores.*

Keyword: *study-habit, achievement, basic-science, predictors, regression*

I. INTRODUCTION

Basic science and Technology for upper basic schools (Basic science) is a three-volume series written in line with the Universal Basic Education (UBE) Curriculum for Basic science, developed by the Nigerian Educational Research and Development Council (NERDC). It was called Basic sciences because they provide a fundamental understanding of natural phenomena and the processes by which natural resources are transformed.

Some of the challenges noted in recent times among others are: lack of resources for teaching and learning; time management; deficiency in content knowledge; their students' inability to understand the lessons taught; poor instructional resources and study habit; student indiscipline; lack of their students' interest in science; and their inability to complete the integrated science syllabus, low self-efficacy and test anxiety (Inweregbuh, Agugoesi, Mbonu-Adigwe and Ofot, 2022). However, Nwankwo (2020) asserted, that, the Basic science

syllabus has some serious structural problems and contents are not arranged in order of importance in science learning making it difficult for teachers to teach and for students to learn as well.

The study of science oriented subjects like Basic science requires that students have well patterned strategy of study that is systematic known as study habit. Study habit to Mahwish, Naima, Hira and Wajiha (2017) are the array of skills or strategies which tackle the process of organizing and taking in new information, retaining information, or dealing with assessments all for the purpose of learning. Study habit as Ebele and Olofu (2017) puts it, is an action such as reading, taking notes, holding study groups which the students perform regularly and habitually in order to accomplish the task of learning. Study habit includes such skills as time management, study environment, test taking/preparation habit, note taking habit, reading habit and writing habit (Gordon, 2000).

Time management has to do with the skills of effective time usage, enabling students to become more confident and

organised by limiting distractions, breaking time consuming tasks into smaller tasks among others. Effective time management skills are particularly essential for upper Basic science students, as it is their first science subject that has been arranged to introduce them to pure science subjects like chemistry, physics and biology. Study environment refers to the physical, psychological and social circumstances that affect the wellbeing of a student and how such experiences affect their studies.

Test taking/preparation habit refer to the skills a student employs when preparing for a test and during the moment of test taking such as predicting test questions, joining a group to study for a test and revision of past test questions. Note taking and reading habits refers to how students jot down important points and how to study them effectively whereas writing habits describes the skills of communication what is learnt either verbally or in written forms. Researchers such as Jafari, Aghaeri and Khaton (2019) and Joseph, Esia-Donkoh and Rober (2018) have also shown that developing effective study habit, can increase a students' confidence and help them reduce test anxiety that may be related to Basic science evaluations.

Basic science as a subject has continued to pose a serious challenge to upper basic education students owing to its unifying curricula contents which covers chemistry, physics, Agricultural science, Geography and biology at a foundational level. This challenge along with others emanating from the issues of improper implementation of the 9-3-4 basic education system especially at the basic level has resulted in fluctuating academic achievement in Basic science among upper basic education students in Anambra state. Although, researchers blame the teaching methods adopted by the Basic science teachers as one of the most contributing to students' academic achievement in Basic science, and therefore focus their studies on determining innovative teaching methods that can boost academic achievement. Only a few of the studies have tried to explore how the students' study-habit predicts academic achievement especially in the subject of Basic science. Studies and literature however, have not consistently reported any findings or research outcomes that would enable the academic populace to understand how the aforementioned predictor variables predicts academic achievement in Basic science among upper basic education students in Anambra state. These issues beg the question: How does study habit predict upper basic education students' academic achievement in Basic science?

PURPOSE OF THE STUDY

The purpose of the study was to investigate study habit as a predictor of upper basic education students' achievement in Basic science. Specifically, the study determined the:

- ✓ Extent to which study habit predicts upper basic education students' academic achievement in Basic science;
- ✓ Relative contribution of the dimensions of study-habit (time management, study environment, test taking/preparation habit, note taking habit, reading habit and writing habit) to the prediction of upper basic education students' academic achievement scores in Basic science.

RESEARCH QUESTIONS

The following research questions guided the study:

- ✓ To what extent does study habit predict basic education students' academic achievement scores in Basic science?
- ✓ What are the relative contributions of the dimensions of study habit (time management, study environment, test taking/preparation habit, note taking habit, reading habit and writing habit) to the prediction of upper basic education students' academic achievement scores in Basic science?

HYPOTHESES

The following null hypotheses were tested at 0.05 level of significance:

- ✓ Study habit is not a significant predictor of upper basic education students' academic achievement scores in Basic science.
- ✓ The relative contributions of the dimensions of study habit (time management, study environment, test taking/preparation habit, note taking habit, reading habit and writing habit) to the prediction of upper education students' academic achievement scores in Basic science is not significant.

II. METHOD

The design adopted for the predictive correlation design. The study was carried out secondary schools in Anambra state, Nigeria. The population of the study comprises 19, 172 upper basic two (Upper Basic 2) Basic science students in the six education zones in Anambra state. The sample size for the study was 2,000 upper basic two basic science students. The sample was obtained using a multi-staged sampling procedure. The first stage involved the selection of four education zones in Anambra state at random (balloting without replacement). At the second stage, the researcher selected ten upper basic education schools at random from each of the four education zones obtained at the first stage, giving a total of forty schools. At the third stage, a minimum of 30 upper basic two students was selected purposively from each school. The rationale behind their selected was because their scores in Basic science for the past three terms were readily available at the time of the data collection and because they are available also to respond to the instruments.

The instrument used for data collection was Study Habit Scale (SHS). Study Habit Scale (SHS) is a 39 item questionnaire adapted from Gordon (2000) which had six dimensions namely: time management, study environment, test taking/preparation habit, note taking habit, reading habit and writing habit. The main modification made in the original instrument involved changing the subject to Basic science. SHS as adapted was designed on a five point scale of from never, seldom, often, very much and very much often. The scores of the students in Basic science were collected using a profoma. The students' scores in Basic science for two most recent terms were collected and the mean was computed and used as the students' academic achievement.

The title, instruments, purpose of the study, research questions, hypotheses and scope of study were given to two lecturers from Department of Science Education and Department of Educational Foundations Nnamdi Azikiwe University, Awka and one other from Federal College of Education (Technical), Umunze. The validators were asked to scrutinize the instrument in terms of clarity of language, sentence structure and items relatedness to the construct being measured and appropriateness for the level of students under study. They were requested to write ‘R’, ‘M’ and ‘D’ against any items they needed them to Retain, Modify and Delete respectively, after which the corrections, recommendations and suggestions given by the validators were effected in the instruments. The reliability of SHS was established using Cronbach Alpha as the instruments were polytomously scored and it yielded a coefficient of internal consistency of 0.80.

The instrument was administered with the aid of four research assistants who will receive a brief instruction and training on how to administer the instruments. The research assistants worked closely with the Basic science teachers of the schools chosen for the study. They first obtained permission from the appropriate authority. They then proceeded to the Basic science teachers from whom they obtained the scores of students in Basic science for the last two terms. The scores were arranged according to the orderly sequence of the serial arrangement in the diary. The instrument was administered and collected on the spot to ensure high return and reduce sample mortality.

Data generated from the study was analysed using simple linear and multiple regressions. The r-value was used to determine the magnitude and direction of relationship while the r-square value indicated the variance in Basic science academic achievement that is caused by the predictor variables. The prediction powers and relative contribution was determined using the unstandardized beta coefficients. The significance of the prediction powers of the variables was tested using Analysis of Variance (NOVA) whereas the significant of the predictive powers of the dimensions of each predictor variable was tested using the t-values and P-values. The interpretation of the correlation coefficient was according Nworgu (2015) who provided a three-way guide for interpreting correlation coefficient values when a large number of pairs of scores have been correlated. They are as follows: $r = \pm .30$ and below, low relationship; $r = \pm .30$ to below ± 0.80 , moderate relationship and $r = \pm .80$ and above, high relationship. All null hypotheses were tested at 0.05 level of significance. The criteria for rejecting or not rejecting any null hypothesis was that whenever Pvalue is less than or equals 0.05 ($P \leq 0.05$) the null hypothesis was rejected and was accepted whenever Pvalue is greater than 0.05 ($P > 0.05$).

III. RESULTS

RESEARCH QUESTION 1: To what extent does study habit predict basic education students’ academic achievement scores in Basic science?

Model	R	R ²	Adjusted R ²	Unstandardized coefficients (b)	Std. Error
Constant	.107 ^a	.012	.011	91.203	14.562
Study Habit				.118	

a. Predictors: (Constant), Study Habit

Table 1: Prediction of Students’ Achievement score in Basic Science by Study Habit

Table 1 shows that a positive correlation ($R = 0.107$) exists between students’ study habit and their achievement score in Basic Science. The R-Square value of 0.012 indicates that 1.2percent of the variance in Basic Science scores is predicted by study habit. The unstandardized coefficient β of 0.118 shows that a unit rise in study habit increases academic achievement score in Basic science by 0.118.

RESEARCH QUESTION 2: What are the relative contributions of the dimensions of study habit (time management, study environment, test taking/preparation habit, note taking habit, reading habit and writing habit) to the prediction of upper basic education students’ academic achievement scores in Basic science?

Model	Unstandardized Coefficients		Standardized Coefficients		t	Pvalue
	β	Std. Error	β			
(Constant)	73.332	5.909			12.410	.000
Time Management	.005	.192	.001		.028	.978
Study Env.	.099	.208	.024		.476	.634
Test Taking/Prep. Habit	.090	.130	.021		.690	.491
Note taking habit	1.043	.321	.153		3.245	.001
Reading Habit	1.095	.341	.151		3.212	.001
Writing habit	.424	.209	.045		2.025	.043

a. Dependent Variable: Basic Science Achievement score

Table 2: Contributions of the Dimensions of Study Habit in the Prediction of Achievement scores in Basic Science

Table 2 shows the standardized beta coefficient which indicates predictive correlation between variables. The unstandardized beta coefficient shows the predictive value of each dimension of study habit which indicates their relative contribution to achievement score in Basic Science. The table shows that time management has a positive predictive correlation ($R = 0.001$) with students’ achievement score in Basic Science, study environment has a positive predictive correlation ($R = 0.024$) with achievement score in Basic science, while test taking/preparation habit has a positive predictive correlation ($R = 0.021$) with achievement score in Basic science, note taking habit has a positive predictive correlation ($R = 0.153$) with achievement score in Basic science, reading habit has a positive predictive correlation ($R = 0.151$) with achievement score, where writing habit has a positive predictive correlation ($R = 0.045$) with achievement score in Basic science. Table 2 also shows that time management contributed 0.005 to achievement score in Basic science whenever a student increased study time by one unit. With a unit change in study environment, achievement score in Basic science by 0.099, when test taking/preparation habit increases by a unit, achievement score in Basic science increased by 0.090, note taking habit increases achievement score in Basic science by 1.043 when a students’ note taking increases by a unit, with a unit rise in reading, achievement

score in Basic science increases by 1.095, and where writing habit increases by a unit achievement score in Basic science increased by 0.424. The order of relative contribution to achievement score in Basic Science from the highest to lowest by each dimension of study habit therefore is; reading habit (1.095), followed by note taking habit (1.043), writing habit (0.424), study environment (0.099), test taking/preparation habit (0.090) and then time management (0.005).

HYPOTHESIS 1: Study habit is not a significant predictor of upper basic education students' academic achievement scores in Basic science.

Model	Sum of Squares	df	Mean Square	F	Pvalue
Regression	4935.652	1	4935.652	23.275	.000 ^b
1 Residual	423698.823	1998	212.061		
Total	428634.476	1999			

a. Dependent Variable: Basic Science Achievement score

b. Predictors: (Constant), Study Habit

Table 3: ANOVA on Significance of Prediction of Achievement score in Basic Science by Students' Study Habit

Table 3 shows that study habit is a significant predictor of achievement scores in Basic Science, $F(1, 1998) = 23.275$, $p < .05$. The null hypothesis was therefore rejected meaning that study habit is a significant predictor of secondary school students' achievement scores in Basic Science. Since study habit is a significant predictor of achievement scores in Basic Science, the regression model ($Y = a + bX$) for the prediction of achievement score in Basic Science as derived from Table 1, where constant = 91.203 and b value = 0.118 is:

$$ASBS = 91.203 + 0.118(SH)$$

Where, ASBS = Achievement score in Basic Science and SH = Study Habit score.

HYPOTHESIS 2: The relative contributions of the dimensions of study habit (time management, study environment, test taking/preparation habit, note taking habit, reading habit and writing habit) to the prediction of upper education students' academic achievement scores in Basic science is not significant.

Model	Sum of Squares	df	Mean Square	F	Pvalue
Regression	3603.201	6	600.534	2.816	.010 ^b
1 Residual	425031.274	1993	213.262		
Total	428634.476	1999			

a. Dependent Variable: Basic Science Achievement score

b. Predictors: (Constant), Writing habit, Study Environment, Note taking habit, Test Taking/Preparation Habit, Time Management, Reading Habit

Table 4: ANOVA on Significance of Prediction of Achievement score in Basic Science by the Individual Dimensions of Study Habit

Table 4 shows that all the individual dimension of study habit jointly predicted the students' achievement scores in Basic Science significantly, $F(1, 1993) = 2.816$, $p < .05$. However, data contained in Table 2 shows the significance of the contributions of the individual dimensions to the prediction of achievement scores in Basic Science.

Table 2 shows that time management is not a significant predictor of achievement scores in Basic Science, $t(1, 1993) = 0.028$, $p > 0.05$; Study environment is not a significant predictor of achievement scores in Basic Science, $t(1, 1993) = 0.476$, $p > 0.05$, Test taking/preparation habit is not a significant predictor of achievement scores in Basic Science,

$t(1, 1993) = 0.680$, $p > 0.05$, note taking habit is a significant predictor of achievement scores in Basic Science, $t(1, 1993) = 3.245$, $p < 0.05$, reading habit is a significant predictor of achievement scores in Basic Science, $t(1, 1993) = 3.212$, $p < 0.05$, and writing habit is also a significant predictor of achievement scores in Basic Science, $t(1, 1993) = 2.025$, $p < 0.05$. Thus, the only significant contributors to the achievement score of students in Basic Science in order of significance are reading habit, note taking habit and writing habit. However, since the joint prediction of all the dimensions of study habit in the prediction of achievement score in Basic Science is significant, the regression model ($Y = a + bX_1 + cX_2 + dX_3 + eX_4 + fX_5 + gX_6$) for the prediction of achievement score in Basic Science. The equation is derived from Table 2 as follows:

$$ASBS = 73.332 + 0.005(TM) + 0.099(SE) + 0.090(TTPH) + 1.043(NTH) + 1.095(RH) + 0.424(WH)$$

Where, ASBS = Achievement score in Basic Science and TM = time management, SE = study environment, TTPH = test taking/preparation habit, NTH = note taking habit, RH = reading habit, WH = writing habit

IV. DISCUSSION

Students' study habit significantly predicted 1.2 percent of the variance in their Basic science scores increasing it by 0.118 with every unit rise. Study habits are learning tendencies that enable students work privately. Study habits refer to the learning inclinations exhibited by students that facilitate their ability to engage in independent and self-directed academic work. It encompasses strategies such as summarization, note-taking, outlining, and information retrieval that learners utilise to enhance their efficiency in acquiring the relevant resources for learning purposes. The word "study habit" connotes a systematic and enduring approach to the act of studying. The academic achievement of students who frequently employed active learning tactics, such as self-evaluation and explaining concepts are superior to that of their counterparts who do not utilise such strategies. In general, there is a positive correlation between the amount of time students devote to engaging in active learning and their academic success.

It was observed that certain students exhibit regular attendance to classes, actively engage in note-taking and assignment completion, diligently study their assigned books, and effectively utilise the resources available in the library improves their achievement. These particular habits have a demonstrably favourable impact on their academic achievement. The utilisation of effective study techniques and strategies provide individuals with the chance to systematically and autonomously engage with learning assignments. Developing effective study habits is crucial for students to enhance their intellectual capabilities and attain academic achievement. The implementation of effective study techniques frequently facilitates students' ability to efficiently complete their school assignments within a reduced timeframe, while simultaneously attaining a higher level of comprehension and proficiency in the subject matter. Students who engage in effective and efficient study practises employ various learning strategies that facilitate the acquisition,

retention, and application of knowledge, facts, and information derived from textbooks, class discussions, courses, and supplementary resources. As a result, these students tend to achieve higher levels of academic success compared to their peers.

The findings of the study also indicated that the habit of taking notes, the habit of writing, the study environment, the habit of test taking/preparation, and time management were significant predictors of academic achievement in the subject of Basic science. The act of reading involves a deliberate effort to comprehend the ideas presented by the author and get an understanding of the intended message being communicated. It is the process of interpreting written texts. The cultivation of reading habits holds significant importance for students, as it encompasses various essential abilities such as time management, note-taking, online proficiency, minimising distractions, and prioritising academic pursuits. Developing effective reading habits can greatly benefit students by enhancing their ability to engage in critical reflection and achieve proficiency in important cognitive skills such as the aptitude to choose, analyse, criticise, and synthesise information. It is believed that students who engage in independent reading have enhanced reading comprehension, verbal fluency, and general knowledge compared to their counterparts who do not partake in such activities. Individuals who engage in regular reading activities exhibit enhanced reading skills, get higher scores on academic assessments across several subjects, and possess a more extensive knowledge base compared to their counterparts who do not engage in reading.

The act of reading has been shown to enhance several cognitive abilities in pupils, including attention focus, memory retention, empathetic understanding, and proficiency in communication. Engaging in this activity has the potential to mitigate stress levels, enhance mental well-being, foster critical thinking abilities, and augment reading comprehension proficiencies, so conferring advantages within the realm of fundamental scientific knowledge. Proficient readers often engage in the practise of formulating and addressing inquiries internally before and during subsequent reading endeavours. Prior to engaging in the act of reading, individuals may experience a sense of curiosity over the subject matter and content of the book. While engaging in the act of reading, individuals may find themselves inclined to inquire about the significance or interpretation of an unfamiliar lexical item. Subsequently, individuals may engage in an analysis of the central thesis of the book or endeavour to obtain further elucidation regarding any areas of uncertainty. Proficient readers possess the ability to comprehend the sequential structure of a given text, rephrase it using their own language, and identify and summarise the key concepts conveyed by the author or instructor. Additionally, students may possess the ability to amalgamate concepts derived from their reading materials, exemplifying a cognitive aptitude that involves the integration of pre-existing knowledge with novel information. The acquisition of new knowledge has the potential to either validate pre-existing beliefs held by a reader or present them with other perspectives that need consideration.

The practise of note-taking holds significant importance in the process of learning, as it facilitates the establishment of

links between lesson content and enhances memory retention. If students are able to take notes in a manner that is both efficient and effective, there is a high probability that their overall performance in the respective subject will also exhibit improvement. There is a positive correlation between inadequate note-taking skills and academic difficulties, perhaps resulting in a decline in subject performance. The implementation of strategic and comprehensive note-taking practises has been shown to enhance students' learning outcomes and academic performance within a classroom setting. One of the primary advantages associated with the practise of note-taking is the active engagement during instruction. This engagement is achieved through the process of attentively listening to the teacher's delivery of crucial information and subsequently transcribing it in one's own words. Literature shows that the act of note-taking yielded enhanced learning outcomes and heightened comprehension by virtue of actively engaging with the subject matter contents. Active listening and note-taking facilitate cognitive processing, enhancing students' comprehension of the learned information. Possessing this skill is highly advantageous, as certain students may engage in writing without adequately engaging in cognitive processing of the information they are transcribing.

The utilisation of strategic note-taking techniques has been found to positively impact problem-solving abilities and self-explanation skills, ultimately resulting in heightened levels of learning and comprehension. Strategic note-taking is widely regarded as an effective learning approach that enhances problem-solving abilities. Its advantages encompass not just the mere retention and recollection of instructional material, but also the comprehension and assimilation of the knowledge. The act of taking notes without engaging in deep attention or making alterations hinders the process of meaningful learning. Merely transferring the content of a course from one medium to another, such as from a textbook to a notebook, without actively processing and internalising the information, diminishes the overall learning experience. The essential aspect of effective note-taking lies in acquiring the skills necessary to employ strategies that enable individuals to selectively process and structure incoming information during a lesson, thereby transforming it into coherent and meaningful units of knowledge.

The practise of maintaining organised and well-structured notes can greatly benefit students, as it has been found to have a clear correlation with examination scores and active participation in the learning process. When students engage in active listening, they possess the ability to discern the relevance of information, distinguishing between what is applicable and what is extraneous in the context of long-term retention. When students engage in the practise of strategic note-taking, they employ several techniques such as connecting prior knowledge, summarising incoming information, familiarising themselves with relevant terminology, comprehending the primary ideas conveyed during lectures, and grasping the contextual meaning of the word employed. This phenomenon has the potential to facilitate students' academic progress and significantly influence their overall performance in the field of Basic Science. The act of taking notes supports the development of

knowledge creation, which is widely recognised as a necessary foundation for meaningful learning. Educators strive to engage students actively in the learning process, rather than allowing them to passively receive information.

The act of writing has a favourable impact on student accomplishment since it facilitates the development of essential skills, including higher-order thinking and critical thinking abilities. Furthermore, it is important to note that it also augments the capacity for information retention, a crucial aspect in the academic journey of a student. Writing plays a crucial role in the cultivation of higher-order cognitive skills among students, encompassing the processes of analysis, assessment, and creativity. During the initial stages of the writing process, students commence by formulating a cogent thesis and effectively articulating it. Writing, as an illustrative example, enables the student to give tangible form to abstract concepts and establish connections within their existing knowledge. It is plausible that specific types of writing assignments can truly contribute to the enhancement of intellectual vigour, creativity, and cognitive capacities. The act of writing facilitates the process of storing information in an external manner, allowing for its symbolic representation through various means such as letters, numbers, words, formulas, and drawings. This stored knowledge can subsequently be subjected to analysis, critique, reproduction, and transformation, among other possible acts. The act of writing has the potential to enhance cognitive capacities due to its need for attentional focus, strategic planning, thoughtful organisation, and reflective thinking. Through repeated practise and reinforcement, these skills can be sharpened. Enhancing writing skills facilitates the development of effective communication abilities and also enhances reading proficiency.

The study revealed that learning environments are of significant importance in determining the achievement of students. Numerous variables have the potential to influence an individual's capacity for learning, including aspects such as seating arrangements, lighting conditions, ambient noise levels, and even the presence of specific colours. Literature demonstrated that students who are immersed in a positive learning environment have heightened levels of motivation, engagement, and general learning aptitude. Conversely, students who are exposed to substandard learning settings, characterised by discomfort, noise, or numerous distractions, may encounter greater challenges in assimilating material and maintaining their level of engagement. Regardless of the chosen study location, whether it be within one's bedroom, a nearby coffee shop, or the library of the educational institution, it is imperative that individuals prioritise their comfort. When students experience a sense of comfort, they are more likely to sustain their focus and motivation, resulting in enhanced knowledge absorption. Proper seating selection can also enhance posture, promote physical activity, and mitigate the likelihood of sustaining injuries. The role of lighting in facilitating effective learning engagement should not be overlooked. Research has demonstrated that natural light can successfully enhance mood and alleviate symptoms of stress and anxiety.

There exists a divergence in individuals' preferences regarding the presence of ambient noise during their study

sessions, with some individuals exhibiting a preference for such auditory stimuli, while others demonstrate heightened efficacy in their studying endeavours while immersed in an environment characterised by absolute stillness. There are occasions whereby the utilisation of background noise and music can be advantageous for students, yet there are also instances wherein seeking out silence during study periods is preferable. The presence of ambient noise at a low intensity has the potential to foster creativity and promote a state of relaxation among students throughout the process of studying. Excessive noise can serve as a disruptive element, impeding the ability to concentrate and absorb information throughout the learning process. The decision of whether students want to study amidst background noise or in a state of perfect silence is entirely contingent upon their individual preferences. Nevertheless, in the event that individuals perceive that noise is detrimentally impacting their learning process, they frequently seek out a serene and tranquil environment conducive to optimal learning outcomes. Efforts are made to mitigate distractions, such as cell phones and other devices that may have adverse consequences.

The employment of practise examinations and test preparation strategies leads to enhanced academic performance outcomes. The purpose of test preparation extends beyond achieving a good score; it encompasses the monitoring of one's progress and the assessment of one's potential score, taking into account prior performance and growth. While it is essential for students to have a foundational understanding of the subject included in the test, the formulation of an effective test-taking preparation approach is equally crucial in achieving success. By engaging in test preparation sessions with a knowledgeable instructor, students have the opportunity to acquire valuable strategies and techniques that enable them to optimise their time management and enhance their overall performance. Various factors, such as the process of elimination, pace, and the identification of question complexity, contribute to enhancing students' comprehension of how to approach fundamental scientific concepts.

The study revealed a significant association between time management and students' academic performance in the field of Basic science. Effective time management is crucial for students to attain significant objectives, minimise the tendency to procrastinate, and enhance overall productivity. The implementation of efficient time management strategies mitigates overwhelming influences and facilitates the process of prioritisation, so enabling individuals to work more intelligently and expedite the attainment of their objectives. Possessing these skills enables students to effectively strategize and allocate their time and resources towards organising and prioritising impending tasks and events. Maintaining student organisation and minimising procrastination is a crucial element that eventually contributes to achieving academic success. Effective time management might prove to be quite advantageous in the demanding schedule of a student. Effective time management for students involves the establishment of attainable objectives and timeframes in relation to significant academic tasks. The implementation of this system guarantees that students possess the necessary skills, structure, and concentration to effectively

navigate their daily routines and successfully fulfil their academic obligations within designated timeframes. Enhanced achievement can be attained through the acquisition and refinement of this ability, which necessitates students' active engagement and regular exercise. The findings of the study collaborate with the findings of Fatemeh, Shideh, Mahdie, Foozieh, Mohamad, and Emad (2014) and Aransi (2020) that there is a correlation between study habits and academic achievement and that when the study habits scores increase, the academic achievement scores also increased. The findings of the study contradicts the findings of Leah and Shannie (2013) that the contribution of the learning styles and study habits as predictors of chemistry students' academic achievement in chemical group theory was not significant among others.

V. CONCLUSION

The study concluded that study habit is significant predictors of students' achievement in basic science. Reading habit, note taking habit and writing habit dimensions of study habit are very important if students must attain a higher academic achievement in basic science.

RECOMMENDATIONS

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

- ✓ Students should be given learning exercises that could enable them develop more study skills with a view to improve academic achievement in Basic science.
- ✓ Orientation programme should be conducted for basic science students to help them develop better and effective study habit.

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