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Moderating Influence of Parental Engangement on Impact of Attention Span on Students' Academic Achievement in Senior Secondary School Computer Studies

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Abstract

This study investigated the impacts of attention span and parental engagement on students' academic achievement in Computer Studies. It also determined the moderating influence of parental engagement on the impact of attention span on learners' academic achievement. A descriptive research design was adopted. The study population comprised all the SS 2 students offering Computer Studies in Public Senior Secondary Schools in Sagamu Local Government Area of Ogun State. Two hundred students were selected randomly from ten randomly selected schools. The data collected were analyzed using simple percentages and multiple regression at a 0.05 level of significance. The findings revealed significant impacts of attention span, $F(1,198) = 101.207$, $p < 0.05$, and parental engagement, $F(1, 198)= 12.346$, $p<0.05$ on students' academic achievement in Computer Studies. The study also established the joint impact of attention span and parental engagement impacted students' academic achievement, $F(2, 197)= 59.168$ $p<0.05$, but no significant moderating influence of parental engagement on the impact of attention span on students' academic achievement $t(196) = 0.301$, $p>0.05$. It is recommended that teachers adopt active learning strategies for their students. Parents should dissuade their children from the extensive use of mobile technologies, which could dwindle their attention span.

Keywords: attention span; parental engagement; moderating influence; academic achievement; secondary computer studies.

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INTRODUCTION

Strong scientific and technological backbones are necessary for nations to be globally competitive. Knowledge of science and technology provides individuals with the skills to navigate the volatile, uncertain, complex, and ambiguous (VUCA) 21st century. The Federal Ministry of Education (2018) acknowledges that science and technology education will cultivate in the learners the skills required to operate in the media, knowledge, and information-driven economy (of Education, 2018).

However, Nigeria lacks the required capacity to grow its science and technology sequel to the persistently poor and disturbing students' performance in science, technology, and mathematics in examinations conducted by the West African Examinations Council (WAEC) and National Examinations Council (NECO), the examinations' regulatory bodies in West Africa and Nigeria respectively (of Education, 2018). The students' achievements in mathematics and science have been consistently below 50% over the years. This outcome discloses the bad outcome of the

science and technology education being provided at the secondary education level in Nigeria. (Tikly et al., 2018) observed that low students' achievement in secondary school science would affect the African Union's (AU) drive to improve students' enrolment in science and technology education at the post-basic education level. This observation implies that the desire of the Nigerian government to also have a 60:40 admission ratio in Science and Arts in tertiary institutions would be an illusion.

Science education at the secondary level lays a solid foundation for higher education in science. Computer Studies/Education is a subject in the science and mathematics field of the senior secondary school curriculum (of Education, 2018). Although an optional subject, learning Computer Studies is key to several advancements in science and technology. Computers are the hearts of information and communication technologies (ICTs) tipped to be crucial to solving many problems confronting the human race. ICTs have impacted the global economy, and it is vital for the achievement of universal competitiveness and sustainable development (of Education, 2018). Therefore, the introduction of Computer Studies provides learners with the foundational skills to apply computers to solve their day-to-day challenges.

Through the National Policy on Education, (of Nigeria, 2004) computer studies as a subject that could help learners acquire practical and applied skills and basic scientific knowledge. (Al'omairi & Balushi, 2015) noted that the subject tends to enhance students' science, technology, and mathematics skills by concentrating on solutions to real-world problems. It also improves learners' higher-order thinking, coding skills, and computational thinking (CT). These skills are essential for productive contribution to contemporary society. For instance, coding is vital for future breakthroughs in science and technology and is part of the computer studies curriculum.

Meanwhile, since the formal introduction of Computer Studies into the senior secondary school curriculum in Nigeria in 2011, there have been reports that students' achievement in the subject at the external examinations required improvement. For instance, the West African Examinations Council's (2015-2019) chief examiners' reports indicated no significant improvement in students' academic performance in the subject. According to the reports, the results have consistently remained unchanged for years under consideration, though not the best. Dishearteningly, it was reported that in 2017, students' performance was lower than in previous years, besides massive cheating in the examinations recorded. Although the chief examiners have observed that teachers and school factors contributed to the performance, students have also been consistently blamed. Therefore, it is imperative to look at students' factors that could affect students' academic performance in the subject.

Federal Ministry of Education (2018) noted that the 21st-century VUCA world powered by media and ICTs is laden with several factors competing for learners' attention. Attention is at the heart of cognitive activity, and it is a vital component for meaningful information processing and self-control and is required for academic achievement (Milovanovic, 2017). Babani (2021) observed that fluctuation in attention is general to individuals and affects learning (Babani, 2021). It was argued that arresting and sustaining the students' attention spans should be one of the critical functions of teachers at all levels of education (Philip & Bennett, 2021). Similarly, (Jessica & Santoso, 2022) stated that one of the learning problems of 21st-century students is due to attention span. Accordingly, (Subramanian, 2018) emphasized that learners' overuse of mobile technology hurts their learning attention span. It is thus inferred that students' attention span is a learning factor that should catch the attention of educational researchers against the backdrop of technology invasion of the learning space due to the covid-19 pandemic witnessed globally in 2020.

An individual's attention span measures the time spent focusing on a task before being distracted. It also represents a person's capacity to focus on a stimulus or item for a given time (Levin & Bernier, 2011). Attention must be sustained through persistence and motivation for effective learning to occur. It has been maintained that attention sustenance needs interest and interactive exchange (Manzoor et al., 2015). Nafisa, Mekhrishod, Dilrabo, & Ali (2020) articulated that students' acquisition of valuable knowledge is determined by how they listen to

lectures and their ability to organise the learning materials (Nafisa et al., 2020). These efforts ensure that their attention is focused on the learning materials' understanding by dissipating their resources. It was also contended that students pay attention both voluntarily and involuntarily. Students pay involuntary attention when teachers plan, prepare and teach lesson content using appropriate instructional tools. When learners use their thoughts and desires to study, they develop a voluntary attention span.

Different factors may distort learners' voluntary attention. Distracting fatigue is one of them and can be induced by an accident or illness, which suggests that the teacher needs to come up with a way to get the students' focus back to learning (Nafisa et al., 2020). Other factors include noise, home environment, financial problems, lack of interest, and individuals' genetic makeup (Manzoor et al., 2015). However, note-taking strategy (Narvaez, 2022), physical activity (Rosenkranz et al., 2020), innovative and remedial teaching (Briggs, 2014); (Hariharan et al., 2018) pictorial illustration, and music therapy (Jacob et al., 2021) can sustain students' learning attention.

Past studies have disclosed that students do not sustain their learning attention beyond the first 10 minutes of classroom activities (Philip & Bennett, 2021). Briggs (2014) also claimed that students have an average attention span of 10 to 15 minutes depending on their motivation, mood, and perceived usefulness of the learning material. According to Babani (2021), extensive use of technologies, course duration, and lack of balance between content and approaches also affect attention span. Besides, teachers' teaching method is an influential contributor to students' waning attention (Jessica & Santoso, 2022; Stasch, 2014).An individual will exhibit a short attention span without sustained attention, culminating in giving up on a task or dissipating less effort into any given activity.

Attention span debates cut across various educational levels due to the difficulty experienced by students to sustain attention throughout the assigned learning periods. Hence, past studies have examined how students' attention span relates to their learning. (Milovanovic, 2017) identified attention components necessary for academic achievement. The research, which had 350 participants, revealed that students' attention significantly impacted their academic achievement. It was concluded that academic achievement could not be enhanced without considering students' attention.

Similarly, (Manzoor et al., 2015) investigated the connection between different levels of attention and academic achievement. The findings revealed that students' level of attention directly impacted achievement. Students with a high level of attention performed better than their counterparts with low-level attention. It was then concluded that psychological phenomenon such as attention affects students' learning. Correspodingly, (Eisensmith & Kainz, 2019) assessed the relationship between students' attention and reading scores and explored the relationship's variation based on students' characteristics. The results depicted that increased students' attention improved reading scores.

Rosenkranz et al. (2020) investigated the assumption that students' attention starts to wane after 10 to 15 minutes of lectures by examining the drop in a guided-inquiry physical class (Rosenkranz et al., 2020). The experimenter used Tobii Glasses and a portable eye tracker to record student gaze during class activities. According to the research, students' on-task performance was 67 percent at the start of class, and it improved to nearly 90 percent for about 7 to 9 minutes with slight fluctuations. Students' on-task spans were more prominent and numerous than their off-task spans, negating the belief that students' attention spans always fall dramatically during class. These findings are consequent upon the teacher's teaching method, which involved student-students and teacher-student interactions. These results suggest that although students' attention span is a significant factor in learning, how the teacher handles his teaching assignment with the learners can sustain or break their attention.

Likewise, (Hlas et al., 2019) examined students' attention lapses in second language classrooms at the university level. The outcome from the mixed-method study showed that students had short lapses of 1 minute or less that occurred two to three times throughout many of

the classes. The report from the qualitative aspect of the work disclosed that students were fatigued and had their attention divided during classes. It was also revealed that the teacher's habit of correcting assignments during the lecture constituted more lapses, whereas active engagement of the learners enhanced their learning attention.

Meanwhile, (Eisensmith & Kainz, 2019) discovered that factors impacting pupils' attention span could be external to them. Hence, this study investigated how parental engagement may influence the association between attention span and academic achievement. (Bradley et al., 2021)opened that parents and peers could help establish psychological links between schools and homes, thus increasing children's learning.

Parental engagement requires forging a relationship between schools, families, and communities to improve parental understanding of the importance of participating in their children's education (Emerson et al., 2012). This engagement serves important social and communal roles in helping students develop positive learning personalities, comfort, and output. It works best when it connects the behaviours of the family, teacher, and learners, and the instructor and parents have distinct responsibilities in school learning activities. The relationship also materializes when family behaviours align with learning objectives, and a harmonious school-parent relationship exists. (Emerson et al., 2012) claimed that parental engagement could lead to high academic achievement, improved students' enrolment in higher education, higher successful completion of programmes, and lower drop rates. It can also lead to more regular school attendance, social skills, improved behaviours, enhanced school adaptability, increased social capital, and a greater sense of personal competence.

Noted that parental engagement could help build the students' needed foundation in reading and numeracy (Brossard et al., 2020). It is the solution to close the performance gap between learners from high and low socioeconomic backgrounds (Hillier, 2021). Therefore, parents must collaborate with schools to create a motivating environment that allows students to reach their greatest potential (Naite, 2021) (Piliyesi et al., 2020). Nevertheless, many parents could not help their children learn due to difficulty creating time, attention, and explaining learning materials to them (Novianti & Garzia, 2020).

However, parental engagement is dissimilar to parental involvement though both are complementary. While parental engagement deals with parents' participation in students' learning at home, parental involvement encompasses parental participation in school-based activities. Reasoned that although parental involvement has social and community benefits, parental engagement in academic activities at home improves learning outcomes (Harris & Goodall, 2008). (Jeynes, 2018) asserted that students' learning outcomes would significantly improve when parental involvement and engagement work together. Both terms are used interchangeably for this investigation because several past studies did not delineate the two concepts.

Harris & Goodall (2008) explored the relationship between parental engagement and students' achievement using parents, students, and teachers (Harris & Goodall, 2008). The case study reported that some parents could not participate fully in their children's schooling due to social and economic factors. It was also discovered that parental engagement improves students' learning, but its aim in education remains contentious among instructors, students, and parents. Compatibly, (Lara & Saracostti, 2019) investigation of the association between parental participation and students' academic achievement found a statistical difference in achievement based on parents' levels of engagement, divided into three categories: low, medium, and high. Students from parents with low engagement had the lowest mean score among the different levels of parental engagement.

Likewise, Naite (2021) surveyed the impact of parental involvement on students' academic achievement at Crescent International School, Thailand (Naite, 2021). The study also explored how demographic factors influenced parents' involvement in their children's education. Twelve parents whose children were enrolled in the school took part in the research. According to the finding, students whose parents were highly involved had higher academic achievement and test scores than students with low parental involvement. It was concluded that parental engagement in

students' learning through visits and necessary support is beneficial to the learners. Thus, it was advised that parents should continue to support their children's education at home and school as their first teachers. This finding is similar to that of the mixed-method study of (Black, 2022) which revealed that parents and students agreed that parental involvement could tremendously boost students' academic achievement because learners feel more comfortable asking questions and getting answers from more knowledgeable adults.

Ma, Liu, & Li (2022) studied the association between a teacher-student relationship (TSR) and adolescent learning outcomes in China (Ma et al., 2022). They also tested the potency of parental involvement (PI) in moderating the relationship. The participants were 332 fourth-graders and 321 eleventh-graders from Shandong Province, China. The findings disclosed that TSR was positively associated with students' academic achievements, and PI moderated the relationship between TSR and students' academic achievement. Likewise, High parental participation in elementary school was also found to lessen the influence of poor teacher-student connections on students' performance. An additional finding revealed that high PI in secondary school, on the other hand, had no compensatory effect on low TSR. However, a high PI still reduced TSR's effects on academic achievement.

According to the literature, students' attention span is critical to their learning. Similarly, past studies have found parental engagement to influence students' learning. However, little is known regarding how parental engagement moderates the relationship between attention span and students' academic achievement. Khanfer described a moderator variable as a qualitative or quantitative variable that influences the strength and direction of the relationship between a predictor and a criterion variable (Khanfer et al., 2013). It was submitted that a substantial statistical interaction between the predictor and the moderator (i.e.$p<0.05$) is required to establish that a variable is a moderating variable. Therefore, this study's objectives were to:

a. examine the relative impact of attention span on students' academic achievement in Computer Studies.
b. examine the relative impact of parental engagement on students' academic achievement In Computer Studies.
c. examine the moderating influence of parental engagement on the impact of attention span on students' academic achievement in Computer Studies.

The following research question was raised to achieve the objective:

Ho_1: Attention span will not significantly impact students' academic achievement in Computer Studies.

Ho_2: Parental engagement will not significantly impact students' academic achievement in Computer Studies

Ho_3: Parental engagement will not significantly moderate the impact of attention span on students' academic achievement in senior secondary school Computer Studies

METHODS

Study Design and Moderation Model

A descriptive survey design was employed for this study because it is flexible in obtaining information from the target respondents. The model explaining the moderating influence of parental engagement on the impact of attention span on students' academic achievement in Computer Studies is illustrated in Figure 1.

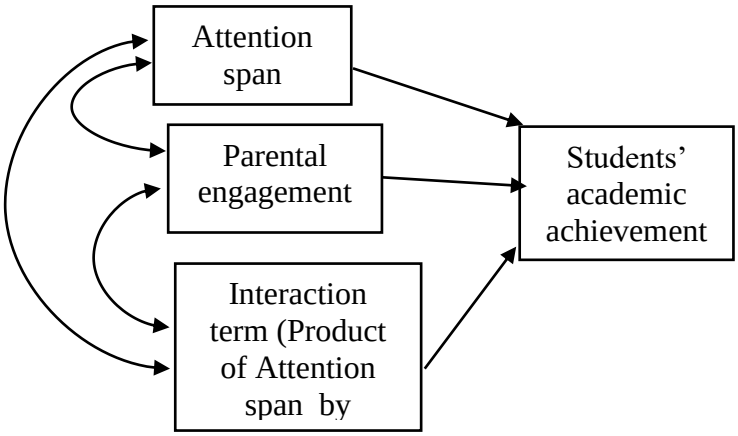

Figure 1. Moderation Model for Attention Span and Academic Achievement by Parental Engagement

Figure 1 shows that by including the product of attention span and parental engagement as an additional predictor variable in a regression model, the moderation or interaction between the independent variable (attention span) and the moderator variable (parental engagement) as predictors of the students' academic achievement can be assessed. The unidirectional arrows from the independent variable, moderator, and the interaction term towards the dependent variable symbolise a regression model capable of predicting students' academic achievement from the attention span, parental engagement, and the product of attention span and parental engagement. The three predictors were correlated with each other to determine multicollinearity among them.

The following are the stages involved in determining a variable's moderating influence on a relationship between two variables:

a. First, avoid multicollinearity by centering the independent variable, moderator, and the interaction term.
b. Create the product terms for the predictor and moderator variables
c. Fit a regression model predicting the outcome variable (Students' Academic Achievement) from both the predictor variable (Attention Span) and the moderator variable (Parental Engagement). Both effects and the model in general (R^2) should be significant.

Check for a substantial R2 change and a significant influence by the new interaction term after adding the interaction effect to the prior model. Moderation takes place if both are significant. Complete moderation has occurred if the predictor and moderator are no longer significant once the interaction term is included. Moderation also happens if the predictor and moderator are significant when the interaction term is included; nonetheless, the main effects are also substantial

Population, Sample and Sampling Procedure

All students offering Computer Studies in senior secondary school two (SS 2) in public schools in Sagamu Local Government Area (SLGA) of Ogun State, Nigeria, constituted the study population. The SLGA has 13 public senior secondary schools

Two hundred (200) students were chosen randomly from ten senior public schools out of the 13 in the SLGA. Fifty percent (50%) of SS 2 students offering Computer Studies in each school were randomly selected, totaling 200 students.

Instrumentation

The adapted Attention Span Rating Scale (ASRS) from the work of (de Bruin et al., 2011) with a reliability coefficient of 0.78, Students' Perceived Parental Engagement Questionnaire (SPPEQ) from the study of (Amponsah et al., 2018) with a reliability coefficient of 0.82, and self-

constructed Computer Studies Achievement Test (CSAT) with a reliability coefficient of 0.62 were the instruments for data collection.

Procedure for Data Collection

The instruments were administered to the students with the permission of the school authorities. The students also consented to participate in the study after thoroughly explaining the purpose and an assurance of confidentiality in data handling. The instruments had a 100% return rate due to the presence of the researchers during administration to clarify grey areas identified by the students.

Method of Data Analysis

The International Business Machine Statistical Package for Social Science 23 (IBM SPSS 23) simple percentages and multiple regression models at a 0.05 level of significance were used to analyze the data collected for the study.

FINDING AND DISCUSSION

The data analyses are presented below according to the research question and hypotheses. Research question: What is students' distribution by attention span?

Table 1. Students' Distribution by Attention Span

Attention span category	Number of students	Percent
Low	15	7.5
High	185	92.5
Total	200	100.0

Table 1 shows that students with a high attention span, 185 representing 92.5%, were more than those with a low attention span, 15 representing just 7.5%.

Test of Hypotheses

Ho_1: Attention span will not significantly impact students' academic achievement in Computer Studies.

Table 2. Impact of Attention Span on Students' Academic Achievement

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	618.432	1	618.432	101.207	0.000
	Residual	1209.888	198	6.111		
	Total	1828.320	199			
		$R = 0.582$; $R^2 = 0.338$; Adjusted $R^2 = 0.335$; Std Error = 2.472				

Table 2 shows that the impact of attention span on students' academic achievement in computer studies is significant, $F_{(1, 198)}= 101.207$, $p<0.05$. This result also reveals that attention span is responsible for 33.8 percent of students' academic achievement variance. Therefore, the hypothesis that attention span will not significantly impact students' academic achievement in Computer Studies is rejected.

Ho_2: Parental engagement will not significantly impact students' academic achievement in Computer Studies.

Table 2. Parental Engagement's Impact on Students' Academic Achievement

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	107.311	1	107.311	12.346	0.001
	Residual	1721.009	198	8.692		
	Total	1828.320	199			
		$R = 0.242$; $R^2 = 0.059$; Adjusted $R^2 = 0.0054$; Std Error = 2.948				

Table 2 discloses that the impact of parental engagement on students' academic achievement in computer studies is significant, $F_{(1, 198)}= 12.346$, $p<0.05$. This result also reveals that parental engagement accounted for 5.9 percent of students' academic achievement variance. Therefore, the

hypothesis that parental engagement will not significantly impact students' academic achievement in Computer Studies is rejected.

Ho_3: Parental engagement will not significantly moderate the impact of attention span on students' academic achievement in senior secondary school Computer Studies.

To test the moderating influence of parental engagement on the relationship between attention span and students' academic achievement, a regression model predicting the outcome variable (Students' Academic Achievement) from both the predictor variable (Attention Span) and the moderator variable (Parental Engagement) was fitted. This fitting determined whether both effects and the model in general (R^2) were significant.

Table 3. Impact of Attention Span and Parental Engagement on Students' Academic Achievement

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	686.111	2	343.055	59.168	0.000
	Residual	1142.209	197	5.798		
	Total	1828.320	199			
		$R = 0.613$; $R^2 = 0.375$; Adjusted $R^2 = 0.369$; Std Error = 2.408				

Table 3 reveals that attention span and parental engagement jointly significantly impact students' achievement in Computer Studies, $F_{(2,197)} = 59.168$, $p<0.05$. The outcome also divulges that attention span and parental engagement contributed 37.5% of students' academic achievement variation.

Next, the product of centred attention span and centred parental engagement were added to the model. The output is shown in Table 4.

Table 4. Moderating Influence of Parental Engagement on Impact of Attention Span on Students' Academic Achievement

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	20.715	0.171		120.898	0.000
	attention span	0.319	0.032	0.568	9.861	0.000
	parental engagement	0.111	0.033	0.198	3.363	0.001
	Centred attention span **X** Centred parental engagement	0.002	0.006	0.018	0.301	0.764

Table 4 indicates that although both the independent variable (attention span), $t(196) = 9.861, p<0.05$ and parental engagement, $t(196) = 3.363$, $p<0.05$ significantly impacted students' academic achievement.in Computer Studies, the interaction effect of attention span and parental engagement (Centred attention span **X** Centred parental engagement) did not significantly impact students' academic achievement in Computer Studies, $t(196) = 0.301$, $p>0.05$. This outcome means parental engagement has no moderating influence on the impact of attention span on students' academic achievement in the subject. It further implies that whether or not parents involve in their children's learning will not determine their attention span. Meanwhile, the finding further revealed that the higher the attention span and parental engagement, the higher the students' academic achievement. Therefore, the hypothesis that parental engagement will not significantly moderate the impact of attention span on students' academic achievement in senior secondary school Computer Studies is retained.

DISCUSSION

This work investigated the relative impacts of attention span and parental engagement on students' academic achievement. It also determined the moderating influence of parental engagement on the impact of attention span on students' academic achievement in senior secondary school Computer Studies, which is the heart of the work.

The finding indicated that attention span significantly impacted students' academic achievement in Computer Studies. It was also revealed that the higher the attention span, the better students' learn. This report means that if students' attention could be sustained during teaching and learning, they will gain tremendously from instructional delivery. This outcome may be due to the students' beliefs that they avoided activities that could distract them while learning. Such activities included not listening to lectures from beginning to end, avoiding distraction by teachers' hostility or discussions with other colleagues during classes, maintaining dwindling attention on complex topics, and jumping from task to task aimlessly. The finding aligns with (Milovanovic, 2017) study, which concluded that academic achievement could not be enhanced without considering students' attention. It also concurs with (Eisensmith & Kainz, 2019) report that increased students' attention improved reading scores.

The study also established that parental engagement significantly impacted students' academic achievement in Computer Studies. This finding suggests that when parents are involved in their children's learning at home and school, it will bear on their academic attainment in school. (Naite, 2021) reported that students whose parents were highly involved in their learning at home had higher academic achievement and test scores than students with low parental engagement (Naite, 2021). This finding could be linked to students' perceptions that their parents monitored their school activities when they returned home, supplied them with the materials needed in school, allocated time to complete their homework/assignments, and pushed them to thrive academically. Naite's finding supports (Black, 2022) study that parental involvement could tremendously boost students' academic achievement because learners feel more comfortable asking questions and getting answers from more knowledgeable adults.

Amazingly, this study further found that parental engagement did not significantly moderate the impact of attention span on students' academic achievement in Computer Studies. This result is unexpected because it suggests that no amount of parental engagement in students' learning could help improve their attention in the classroom. According to this study, most participants have a high attention span, but the target is that all students in the class should have a high attention span. This outcome suggests that teachers should think outside the box to improve students' attention spans rather than relying on parents. Using instructional strategies that actively engage students during teaching-learning activities could be part of the endeavor. These strategies are ideal because they allow students to be active learners rather than passive recipients of teacher instructions. These strategies align with the FRN's (2014, p.3) directive that teaching is practical, immersive, and activity-based. Governments should also oversee teachers' work through their numerous monitoring agencies to ensure activity-based teaching and learning. There should also be efforts towards dissuading the learners' extensive use of mobile technologies. FME (2018) noted that the 21st-century information, technology, and media-driven society came with several gadgets competing for learners' attention and distracting them from effective learning. Education stakeholders should organize workshops to discuss the negative impacts of mobile technologies on students' learning and general well-being

However, there should be restraints in generalizing this finding due to the small samples used. It is thus suggested that the sample frame should be increased, and the parental engagement should be measured through direct responses of the parents rather than students' perceived parental engagement. The finding on the non-moderating influence of parental engagement is discordant with (Ma et al., 2022) that parental involvement moderated the relationship between teacher-students relationship (TSR) and students' academic achievement.

CONCLUSION

The study determined the impact of attention span on students' academic achievement in senior secondary 2 (SS 2) Computer Studies. It was confirmed that attention span is a potent predictor of students' achievement in the subject. Consequently, it is recommended that teachers adopt active learning strategies for their students.

The study also investigated the impact of parental engagement on students' achievement in computer studies. It was discovered that parental engagement significantly impacted students' SS 2 Computer Studies academic achievement. It is recommended that parents participate more in their children's learning at home and school to improve learning, but other means of improving learning attention should be devised.

On the moderating influence of parental engagement on the impact of attention span on students' academic achievement, it is concluded that there is no evidence of the significant moderating influence of parental engagement on the impact of attention span on the students' academic achievement. The study recommended using instructional strategies that actively engage students during teaching-learning activities based on this finding. It is also recommended that Governments should also oversee teachers' work through their numerous monitoring agencies to ensure activity-based teaching and learning.

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