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Blueprints to Accelerate the Student's Academic Motivation and Engagement in Health Education

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Abstract. This study looked into ways to boost students' academic interest and involvement in health education. It was designed using survey methods. Two research questions and two hypotheses were explored to achieve the research goal. The study's population included thirty (30) government secondary school health education teachers and sixteen (16) private secondary school health education teachers in Anambra State's Ogidi Education Zone, with no sampling done due to the study's manageable size. Data were collected using a standardized 20-item questionnaire that was thoroughly verified by two experts. For the research questions, mean scores and standard deviation were used, and for the hypotheses, a t-test was used. The study's main findings revealed that students' perceived academic motivation and participation in health education are unaffected by the type of school they attend (public or private). According to the research, there is no substantial difference in the types of schools that students attend (public and private). According to the findings, teachers should establish an active learning environment that increases students' perceived autonomy by giving them choices and chances for self-directed learning, which may improve their motivation and engagement.

Keywords: Blueprints, accelerate, academic motivation, academic engagement, health education.

INTRODUCTION

Health education is a social science that uses biological, environmental, psychological, physical, and medical knowledge to enhance health and prevent disease, disability, and premature death through education-driven voluntary behavior modification activities. One way of conducting health promotion and illness prevention initiatives is through health education. Health education gives opportunities to learn about many health subjects. Health education techniques are adapted to the demographics of the people who will benefit from them [6]. In an appropriate environment, health education gives information to target audiences on specific health subjects, including the health advantages and hazards they face, as well as tools to develop capacity and promote behavior change. Students' participation in health education has traditionally centered on enhancing achievement, good habits, and a sense of belonging for them to succeed in school. Because the goal was to get students to finish high school, research on student engagement focused on students in middle and high school, where disengagement and poor performance are more common [20]. Student engagement in education refers to the level of attention, curiosity, interest, optimism, and enthusiasm that students display when learning or being taught, as well as their drive to study and advance in their education.

Student involvement tactics have evolved and been more widely used as a means of controlling classroom conduct throughout time. Academic engagement is said to be an important academic outcome in and of itself because it improves performance and validates positive expectations about academic abilities, as well as a good predictor of children's long-term academic achievement [9]. Many scholars have focused on student motivation and academic engagement to enhance students' classroom performance [11, 14, 16]. Encouraging children to learn in school is a major worry for educators today, and motivating students to succeed in school is one of the century's most difficult challenges. Lack of desire, according to the authors, is a significant barrier to learning and a contributing factor in the decline of educational standards. The only goal of teachers in the classroom should be to get students to learn and keep them interested in what they

are learning. Motivation is therefore a powerful factor in achieving goals. Motivation is one of the aspects that contributes to academic achievement, according to Olson [13], and parents and educators should attempt to grasp the value of nurturing and supporting academic motivation early in life.

Motivation is defined by Rowell and Hong [15] as forces that influence and fuel human and other creatures' activity, and it is a process that begins, directs, and maintains action to meet physiological or psychological demands. Motivation is also defined as the force that propels one forward, maintains one's progress, and decides one's destination [7]. Intrinsic and extrinsic motivation are the two main forms of motivation. Extrinsic motivation is based on external elements such as rewards and punishment, but intrinsic motivation is based on internal aspects such as self-determination, effort, challenge, and curiosity [8]. Academic motivation, often known as motivation to learn, is a term that relates to a student's major drive for starting and continuing a long and arduous learning process.

Academic motivation and engagement, as defined by Dierendonck et al. [2], are two connected characteristics that are critical for students' greater attainment, progress, and academic success. When it comes to the importance of students' academic motivation in instructional-learning contexts, both intrinsic and extrinsic motivation may positively impact students' academic success. To emphasize the importance of students' academic engagement, Saleh and Suriansyah [16] stated that students who participate actively in instructional-learning environments obtain higher academic marks; hence, a student's level of engagement in educational situations is linked to their academic progress. Furthermore, students' academic engagement can significantly improve their chances of academic achievement. Based on what has been said about the importance of academic motivation and engagement in students' academic achievement, it appears that determining the causes and predictors of these factors is critical. This will make it easier to create a proper blueprint for long-term academic motivation and engagement that demonstrates how it should be done.

Students' academic performance suffers as a result of a lack of academic passion and involvement. Because health education deals with people's lives, a lack of motivation might have a negative impact on public health, resulting in significant financial losses. This study attempts to elaborate on techniques to promote academic motivation and engagement in health education students, considering the relevance of motivation and engagement in health education students as well as the obstacles. Against this context, a number of research have looked at the influence of school type on students' academic motivation (e.g., public and private school). Despite the significance of enhancing students' academic motivation and engagement, only a few academics [1, 4, 5] have examined motivation and engagement in relation to medical and health professions programs. To close the gaps that exist, the present research aims to identify effective ways that might boost students' academic motivation and participation in health education. The study's goals are as follows:

1. to ascertain the strategies to accelerate the public and private secondary school students' academic motivation in health education
2. to determine the strategies to accelerate the public and private secondary school students' academic engagement in health education

The study was guided by the following two research questions:

1. What are the strategies to accelerate secondary school students' academic motivation in health education?
2. What are the strategies to accelerate secondary school students' academic engagement in health education?

Two null hypotheses were tested at a 0.05 level of significance and were formulated to guide the conduct of the study.

Ho_1: The type of school (public and private) attended by the students does not have a significant influence on their perceived academic motivation in health education.

Ho_2: The type of school (public and private) attended by the students does not have a significant influence on their perceived academic engagement in health education.

METHOD

The survey approach was used to compare the tactics employed by public and private school instructors to increase the students' academic motivation and participation in health education. A survey technique is an inquiry that collects information on participants' opinions, interests, abilities, and attitudes with respect to a situation or event using question-based or statistical surveys [3].

This research was carried out at Anambra State's Ogidi Education Zone. Idemili North, Idemili South, and Oyi Local Government areas make up the zone. The study's participants were thirty (30) government secondary school health education teachers and sixteen (16) private secondary school health education teachers in Anambra State's Ogidi education zone. Because the research population was small, no sampling was done. As a result, the sample size for the study was fifty-six (46) secondary school health education instructors. The Student's Academic Motivation and Engagement Scale (SAMES), which the researcher designed, was utilized to collect data. There are two components to this instrument. A and B are two possible options. The demographic information collected in Section A of the questionnaire was used to determine the kind of school. Section B is about academic motivation and engagement, and it contains 20 items on a 4-point rating

scale, with respondents ticking the appropriate column to indicate how much they agreed or disagreed with the items in relation to their students' academic motivation and engagement in health education.

The instrument was tested for face and content validity by two experts: one in educational psychology from Nwafor Orizu College of Education in Nsugbe and another in human kinetics and health education. These specialists were quite helpful in making changes that resulted in the removal of some components and the instrument being recast according to their instructions. A trial test was undertaken to assess the instrument's dependability and assure its reliability. The instrument was given to 20 instructors from public and private schools in the Awka Education Zone of Anambra State, which is not part of the research region. To avoid contamination from the primary parent population, the location was chosen. The instrument's internal consistency was calculated using data from the reliability test. The Cronbach alpha was used to determine the instrument's internal consistency and reliability, and the result was 0.93. To distribute the device, the researcher enlisted the help of six (6) research assistants. To guarantee that the device collected as much data as possible, an on-the-spot mode was used. The data were analyzed descriptively with a mean score and standard deviation. A mean of 2.50 or higher was used as a criterion for adopting a questionnaire item as a factor by the respondents. The hypotheses were examined using t-test analysis in Statistical Package for the Social Sciences, while the research questions were addressed using the mean score and standard deviation. The significance level was denoted by a p-value threshold of less than 5% ($p < 0.05$) of the time under the hypothesis.

RESULTS

The analysis of the data on the research questions and hypotheses obtained from the instrument was presented in Tables 1–4 as follows.

Research question 1: What are the strategies to accelerate the secondary school student's academic motivation in health education?

Table 1 shows the ways of increasing academic motivation in health education among students in public and private secondary schools. Teachers in both public and private schools agreed that assisting students in overcoming educational problems through counseling will increase their academic motivation in health education (public schools = 3.40 and private schools = 3.56). However, when it comes to giving students responsibility, cultivating a good attitude, and sparking curiosity, public and private school instructors have opposing views (public schools = 1.63 and private schools = 3.13). It is self-evident

Table 1. Mean and standard deviation of responses on strategies to accelerate the public and private secondary school students' academic motivation in health education.

S/N	ITEM	Public Schools			Private Schools		
		$\bar{x}$	SD	Dec.	$\bar{x}$	SD	Dec.
1	Utilizing interdependent collaborative student teams and student-centered instruction will accelerate the students' academic motivation in health education	3.03	0.87	A	3.25	0.90	A
2	Appreciating hard-working teachers and establishing a teaching quality improvement committee will accelerate the students' academic motivation in health education	1.96	1.14	R	3.06	0.89	A
3	Providing educational and welfare facilities in a clinical environment will accelerate the students' academic motivation in health education	2.80	1.30	A	1.94	1.02	R
4	Limiting specialized health education courses to morning hours and beginning of the week will accelerate the student's academic motivation in health education	2.83	1.13	A	3.06	1.29	A
5	Offering varied experiences and providing proper educational facilities such as a well-equipped laboratory will accelerate the students' academic motivation in health education	2.96	1.01	A	2.18	1.13	R
6	The use of positive competition and appreciating the academic achievement of hard-working students will accelerate the students' academic motivation in health education	3.26	0.96	A	2.94	1.14	A
7	Supporting students through counseling to overcome educational challenges will accelerate the students' academic motivation in health education	3.40	0.84	A	3.56	0.78	A
8	Giving students responsibility and creating a positive attitude and interest will accelerate the academic motivation in health education	1.63	1.07	R	3.13	1.16	A
9	Holding extracurricular activities such as sports events, cultural works, and leisure activities along with educational activities is effective in the academic motivation of students	3.20	1.16	A	2.94	1.02	A
10	Prioritizing standards, giving praise when earned, and encouraging self-reflection will accelerate the academic motivation in health education	2.86	1.05	A	2.00	1.00	R
TOTAL		**27.93**	**10.53**		**28.06**	**10.33**	

R = Rejected, A = Accepted, $\bar{x}$ = mean, SD = standard deviation, Dec. = decision.

Table 2. The t-test analysis of the influence of the type of the school (public and private) on their perceived academic motivation in health education.

School Type	n	$\bar{x}$	SD	t-cal	t-crit	df	sig.	Dec.
Public schools	30	27.93	10.53					
				−0.0404	2.015	44	.05	Not Sig.
Private schools	16	28.06	10.33					

that using positive competition and praising hardworking students' academic accomplishments would increase students' academic motivation in health education (public schools = 3.26 and private schools = 2.94).

The standard deviation is a measure of the dispersion from the mean or variability. The lower standard deviation of the private school type suggested that a bigger number of respondents agreed on the topic or item discussed, whereas the higher standard deviation of the public school type indicated that a smaller number of respondents agreed on the topic or item given. On the whole, items 1, 3, 4, 5, 6, 7, 9, and 10 with mean scores of 3.03, 2.80, 2.83, 2.96, 3.26, 3.40, 3.20, and 2.86 corresponding to standard deviations of 0.87, 1.30, 1.13, 1.01, 0.96, 0.84, 1.16, and 1.05 were accepted by public school teachers, while items 2 and 8 with mean scores of 1.96 and 1.63 and standard deviations of 1.14 and 1.07 were rejected, respectively. Also, items 1, 2, 4, 6, 7, 8, and 9 with mean scores of 3.25, 3.06, 3.06, 2.94, 3.56, 3.13, and 2.94 corresponding to standard deviations of 0.90, 0.89, 1.29, 1.14, 0.78, 1.16, and 1.02 were accepted by private school teachers, while items 3, 5, and 10 with mean scores of 1.94, 2.18, and 2.00 and standard deviations of 1.02, 1.13 and 1.00 were rejected, respectively.

Hypothesis I: The type of school (public and private) attended by the students does not have a significant influence on their perceived academic motivation in health education.

The students' perceived academic motivation in health education is unaffected by the type of school they attend (public or private), according to data in Table 2. The estimated t-value of −0.0404, which is not significant at the 0.05 level of probability, demonstrates this. The null hypothesis, that there is no substantial difference in academic motivation between public and private schools, is accepted. As a result, the results imply that there is no substantial difference in the types of schools that students attend (public and private).

Research question 2: What are the strategies to accelerate secondary school students' academic engagement in health education?

Table 3 shows the ways of increasing students' academic involvement in health education in public and private secondary schools. Students' academic engagement in health education will be accelerated if activities that allow students to reflect and summarize what they have learned are included (public schools = 3.70 and private schools = 3.00). Investing in a range of support services and incorporating technology into the classroom would also help students participate in health education more academically (public schools = 3.50 and private schools = 3.00). However, public and private school teachers disagree on whether providing students with options within the classroom to help them develop their social capital will increase their academic engagement in health education. The respondents rejected this idea, with a mean score of 1.53 for public school teachers and 2.94 for private school teachers.

A statistic indicating dispersion from the mean is the standard deviation. The lower standard deviation of the public school type showed that more people agreed on the topic than the higher standard deviation of the private school type. In all, items 11, 13, 14, 15, 16, 17, 19, and 20 with mean scores of 3.03, 3.50, 2.83, 3.00, 3.36, 3.70, 3.30, and 3.56 corresponding to standard deviations of 0.87, 0.88, 1.13, 1.06, 0.84, 0.69, 0.78, and 0.84 were, respectively, accepted by public school teachers, whereas items 12 and 18 with mean scores of 1.73 and 1.53 corresponding to standard deviations of 0.96 and 0.76 were rejected. In the case of private schools, items 11, 12, 13, 14, 15, 16, 17, 18, and 20 with mean scores of 2.87, 3.63, 3.00, 2.68, 2.81, 3.06, 3.00, 2.94, and 3.37 corresponding to standard deviations of 1.05, 0.85, 1.00, 1.40, 1.13, 0.89, 0.93, 1.14, and 1.05 were accepted, while item 19 with a mean score of 2.37 corresponding to a standard deviation of 1.11 was rejected.

Hypothesis 2: The type of school (public and private) attended by the students does not have a significant influence on their perceived academic engagement in health education.

Table 4 reveals that the type of school attended by the students (public or private) had no significant impact on their perceived academic engagement in health education. The estimated t-value of −0.0615, which is negligible at the 0.05 level of probability, demonstrates this. The null hypothesis, that there is no substantial difference between public and private schools in terms of their perceived academic commitment to health education, is accepted. As a result, the statistics imply that the difference in school type (public vs. private) attended by the students is not relevant.

DISCUSSION

The first topic of the research was to discover techniques for increasing secondary school students' academic motivation in health education. Based on the data, it was

Table 3. Mean and standard deviation of responses on strategies to accelerate the secondary school students' academic engagement in health education.

S/N	ITEM	Public Schools			Private Schools		
		$\bar{x}$	SD	Dec.	$\bar{x}$	SD	Dec.
11	Using a variety of teaching methods will accelerate the students' academic engagement in health education	3.03	0.87	A	2.87	1.05	A
12	Getting to know the students and ensuring that institutional cultures are welcoming will accelerate the students' academic engagement in health education	1.73	0.96	R	3.63	0.85	A
13	Investing in a variety of support services and integrating technology into the classroom will accelerate the students' academic engagement in health education	3.50	0.88	A	3.00	1.00	A
14	Embracing project-based learning and scaffolding tasks with checkpoints will accelerate the students' academic engagement in health education	2.83	1.13	A	2.68	1.40	A
15	Encouraging friendly competition and educational experiences that are enriching will accelerate the students' academic engagement in health education	3.00	1.06	A	2.81	1.13	A
16	Providing opportunities for students to build on existing knowledge will accelerate the students' academic engagement in health education	3.36	0.84	A	3.06	0.89	A
17	Incorporating activities that allow students to reflect and summarize what they have learned will accelerate the students' academic engagement in health education	3.70	0.69	A	3.00	0.93	A
18	Presenting the students with options within the classroom to enable them to develop their social capital will accelerate the students' academic engagement in health education	1.53	0.76	R	2.94	1.14	A
19	Resisting the temptation to reteach and focusing mainly on depth over breadth will accelerate the students' academic engagement in health education	3.30	0.78	A	2.37	1.11	R
20	Acknowledging students' social and emotional well-being by providing targeted and timely feedback will accelerate the students' academic engagement in health education	3.56	0.84	A	3.37	1.05	A
TOTAL		**29.54**	**8.81**		**29.73**	**10.55**	

R = Rejected, A = Accepted, $\bar{x}$ = mean, SD = standard deviation, Dec. = decision.

Table 4. The t-test analysis of the influence of the type of the school (public and private) on perceived academic engagement in health education.

School Type	n	$\bar{x}$	SD	t-cal	t-crit	df	sig.	Dec.
Public schools	30	29.54	8.81					
				−0.0615	2.015	44	.05	Not sig.
Private schools	16	29.73	10.55					

discovered that assisting students in overcoming educational problems through counseling will increase their academic motivation in health education. Programs, cooperative learning, peer mentorship, peer counseling, and community service all contribute to student feelings and motivation, according to Olson [13]. In addition, Saleh and Suriansyah [16] discovered that counseling increased drive and self-efficacy. Students' motivation, attitude toward the instructor, and impressions of the course have all been demonstrated to improve as a result of this. Students' academic motivation in health education may be accelerated by using interdependent, collaborative student teams and student-centered instruction, according to the research. This is in line with a recent result by Loes [11], who claimed that the favorable association between collaborative learning and academic motivation is the same for all students regardless of race or ethnicity. Positive competition and praising hard-working students' academic achievements would boost students' academic motivation in health education. According to Wilkesman et al. [19], students with high academic drive are more open to learning and have a greater interest in the course. Academic motivation is also necessary for students to tackle challenges that arise throughout the learning process.

The second topic of the research concerns measures to increase secondary school students' academic involvement in health education. The findings demonstrated that including activities that allow students to evaluate and summarize what they have learned helps increase the students' academic engagement in health education, as well as resisting the desire to reteach and focusing primarily on depth over breadth. Wang and Degol [18] echoed these findings, emphasizing the importance of incorporating more research into how learning-related emotions, personality traits, prior learning experiences, shared values across contexts, and participation in nonacademic activities

influence individual differences in student engagement. The findings of this study revealed that investing in a range of support services and incorporating technology into the classroom can help students become more engaged in health education academically. This is in line with Moalosi [12], who states that a "teacher who arrives to the classroom and prepares lessons with intention is much more likely to positively affect student engagement and learning than a teacher who regards his or her role as merely a job to be endured." Another study, titled Improving Student Engagement, claims that student engagement has traditionally centered on raising achievement, good behaviors, and a sense of belonging in kids for them to stay in school [17]. However, the respondents in this survey disagreed that getting to know the students and ensuring that institutional cultures are inviting can help students participate in health education more academically. This study contradicts Liu [10], who claimed that without knowing their students, teachers cannot provide tailored education or inspiring surroundings. Highly effective instructors discover ways to learn about their students and to let them know they are known by creating opportunities for them to do so.

CONCLUSION

The research looked into how to boost students' academic enthusiasm and involvement in health education. The findings of this study demonstrate that assisting students in overcoming educational problems through counseling will increase their academic motivation in health education. Incorporating activities that allow students to evaluate and summarize what they have learned would also increase students' academic engagement in health education, according to the research. Also, getting to know the students and ensuring that the institutional cultures are inviting can help students participate in health education more academically. Teachers and educators will be better able to aid and support students who have been suffering with health education for a long time if they have a better understanding of how each of the motivating objectives, kinds, and dimensions affects learning. The significance of this research stems from the fact that student motivation and engagement are two of the most important examples of positive academic behaviors that aid in their learning achievement. As a result, one of the main responsibilities of all effective teachers is to increase students' academic enthusiasm and involvement.

The findings of this study will be particularly relevant and beneficial to health education teachers and students, given that the study focuses on students' academic motivation and participation in health education. The findings of this study will also be used to urge ministries of education and boards of education, and researchers to emphasize the importance of motivation and participation in health education in both public and private schools.

RECOMMENDATIONS

The student's academic motivation and engagement in health education can be improved by adopting the following measures.

1. Teachers should establish an active learning environment that fosters students' sense of autonomy and competence by giving them options and chances for self-directed learning, as well as organizing learning activities that will boost their motivation and engagement.
2. Schools should work to establish discipline in their children since this is a prescription for success in the classroom.
3. The government should help provide the necessary resources, equipment, and atmosphere for students to acquire health education in public schools.
4. The school board should begin recruiting, training, and developing personnel, which is critical for effective performance, to increase students' academic achievement in health education.
5. Assigning students to classroom jobs is a great way to build a community and give students a sense of motivation.

CONFLICT OF INTEREST

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

AUTHOR CONTRIBUTIONS

Nwankwo Nonyelum Stella: Conceptualization, methodology, investigation, writing—original draft preparation, data curation, software, visualization, and validation and editing.

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