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INFLUENCE OF TEACHERS' ATTITUDE ON STUDENTS' SELF-EFFICACY IN OGBOMOSO, NIGERIA

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ABSTRACT

The teachers' attitude matters in performance of students. The literature revealed that teachers' attitudes could influence students' self-efficacy and, subsequently, their academic performance. To determine if teachers' views affect their students' self-efficacy, this study looked at this question. Teachers have prominent roles in helping students develop basic concepts,connect their interests to their abilities, and sustain their curiosity from early years. Research on descriptive surveys used proportional and stratified sampling methods. Teachers' Attitude Questionnaire and Science Self-Efficacy and Motivated Learning Questionnaire were used to gather the data (SSMLQ). Three (3) research questions and three developed and tested hypotheses were posed. At a significance level of 0.05, acquired data were analyzed using mean scores, chi-square, and regression analysis. Results revealed a positive (but not significant) relationship between (i) teachers' attitudes and students' self-efficacy, (ii) teachers' gender has no significant relationship with students' academic self-efficacy. conclusion is that teachers' attitudes did not significantly influence self-efficacy of students. So, It was suggested that biology teachers be urged to have the proper mindset as an attitude to foster students' sense of self-efficacy.

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INTRODUCTION

The advancement of science is essential to a nation's progress. It is a necessary component of creativity and innovation in the modern world. As a result, there is increasing need for active, specialized experts and others to receive scientific education. Science is collection of knowledge and a style of thought that aims to comprehend nature (Abimbola, 2013). Scientific knowledge is among knowledge acquired at formal institutions. It plays a vital role globally in any nation's educational, industrial, technological and socio-economic growth and development. Indeed, every country requires teaching of ample knowledge of science and technology to its citizens to overcome its challenges. These difficulties will be solved through effective science instruction and learning at all educational levels. According to Abimbola (2017), the knowledge of science

education equips students with scientific literacy, environmental and health literacy, information and technology literacy as well as visual literacy. Thus, science education is the area of study that produces scientifically literate citizens (Oyekan, 2013). The state of a country's health care delivery, agricultural production, economic growth and change, entrepreneurial advancement, as well as technological development also depends on the quality of science education (Lawal, 2013).

Science education is becoming increasingly important for advancement of nations. As a result, science teachers are extremely important in education. They may help the next generation be ready to play their parts in all facets of national life in a way that fosters repute and respect via effective and professional teachers (Khatoon, Alam, Bukhari, & Mushtaq, 2014). The Nigerian educational system teaches the biology, chemistry, and physics as its three main areas of pure sciences at senior secondary school level. These subjects aid in preparing students for scientific and science-based courses at university level (Nwachukwu & Nwosu, 2007). Adubi and Adebiyi (2012) defined Biology as branch of science that studies living things and their interaction with each other and their environment. Botany and zoology are the two primary subfields of biology (studying plants & animals). By offering solutions to variety of issues, like containing disease outbreaks, increasing agricultural yields by breeding the disease-resistant, high-yielding plants and animals, and controlling by evolving hormone-based contraception, biological considerate has significantly influenced society's response to the population growth and greatly aided human development (Maundu, Sambili, Muthwii, 2005). Hence, the biology teachers must possess the requisite knowledge and pedagogical skills to enhance students' meaningful learning of biological concepts.

Effective teaching and learning require the welcoming or pleasant learning environment. As a result, teachers must deliver well-planned, interesting lessons tailored to each student's talents and interests to create a good and productive learning environment. Setting feasible academic standards is another aspect of evaluating student achievement. Teachers must show interest in, attend suitable in-service courses, and participate in program of professional study that proves their commitment to teacher professional development (Bonney, Amoah, Micah, Ahiamenyo & Lemaire, 2015). Koballa and Glynn (2007) and Roebianto (2020), in their research, said that attitudes as both the implementers and products of science learning and teaching and research efforts focused on detailing teachers' attitudes and their relationship to student's self-efficacy. Teacher sense of self-efficacy is an important factor in recent studies (Chacon, 2006; Tournaki & Podell, 2005) that has been revealed to have effect on students' behavior towards learning. Investigation of Weinburgh and Steele (2000) and Roebianto (2020), stated that attitudes are not reflections of what humans are pre-thought, but attitudes are inferred from behaviours. In other words, good attitude comes from right action, and conversely. According to Baldwin et al. (1999), prior knowledge and experience shape learning process, which in turn affects teacher's attitude.

Purpose of Study

This work aimed to examine the relationships between biology student self-efficacy and teacher attitudes in Ogbomoso, Oyo State, Nigeria. Specifically, the research study sought to examine that:

1. To examine how the teachers' perspectives affect the biology students' self-efficacy.
2. To analyze the degree of biology students' self-efficacy in the concerned instiutions.
3. Establish the gender of teacher Influence on biology students' degree of self-efficacy.

Research Questions

1. Do teachers' attitudes influecne students' confidence in their biology skills?
2. What level of the academic self-efficacy do the students have in the biology?
3. How does teachers' gender affect students' confidence in academic abilities?

Research Hypotheses

H01: There is no significance diffrence between biology teachers' attitude & their students' self efficacy.

H02: There is no significance diffrence in level of female & male teachers on students' academic self-efficacy

LITERATURE REVIEW

In science education, attitude toward science is vital variable affecting students' performance, teacher attitude, as well as self-efficacy, are theorized to impact student self-efficacy; perceived caring, motivation and encouraging attitude of teachers can improve students expectations for success while perceived negative dispensations have the opposite effect (Pajares, 1997) Ahmed (2021). However, literature on teacher attitudes again has focused more primarily on student achievement. The teacher sense of self-efficacy is also important factor in recent studies (Chacon, 2006; Tournaki & Podell, 2005) that has been revealed to have an influence upon the students' behavior towards learning. Self-efficacy makes up expectations portion of the framework; the values portion, also described as the subjective-task-value consists of four parts: utility value (the importance of a task in relation to future goals), intrinsic value (interest in/enjoyment of the material), attainment value (consistency of the material with a person's identity), and cost perception (if the task takes away from other activities or has any other negative consequences) (Eccles, 2009). The self-efficacy generally refers to the trust an individual has toward oneself to produce certain tasks, responsibilities properly and effectively (Bandura, 1977; Lee & Mendlinger, 2011).

Self-efficacy is an evaluation of the ability to perform certain behavior in certain circumstances (Pajares, 1994). Academic self-efficacy refers to students' assessment towards their own ability to organize and implement learning behavior to achieve chosen level of academic achievement; for example, to pass the exam (Bandura, 1986, 1997). Yusuf (2021), on the other hand, argues that academic self-efficacy makes students to always think about the most effective ways to accomplish each task. It refers to the level of confidence and self-belief of a student to complete a task and to produce something at its best according to their respective capabilities. Thus, the self-efficacy is also the crucial aspect in achieving an outstanding achievement in all the fields explored by students; including academic. However, literature on teacher attitudes again has focused more primarily on the student achievement. Basically, there can be two broad important factors contributing to the development of the academic self-efficacy of students in science. The two broad components are self-academic optimism and encouragement of the self-efficacy. The academic optimism is defined as the ability of the students to complete assignments, regulating learning activities, and meet the achievement expectations and objectives (Zare & Mobarakeh, 2011).

Teachers' variables such as attitude, qualification, experience, self-efficacy and gender has been shown to have positive significant relationship with academic achievement as well as outcomes (Adeyemi, 2008; Gbore & Daramola, 2013; Abe, 2014; Ogembo, Otanga & Yaki, 2015; Awodun,

Oni, & Oyeniyi, 2015) and academic self-efficacy has been shown to have significant relationship with academic performance (Kifle & Melese, 2017; Britner, 2008; Pintrich & Shunk, 2002). However, though most existing literature surrounds impact of teachers' variables on student achievement; for this study, literature on impact of the teachers' variables with connection to students' non-cognitive or affective factors such as self-efficacy, attitude and motivation will be reviewed in other to hypothesize the ways in which teachers' variables may impact construct of student science self-efficacy. Tella (2008, 2020) examined the relationship between Teachers' attitude, self- efficacy, interest, , qualification, experience and pupils' academic achievement in primary school mathematics. The participants of the study comprised of 254 primary school teachers and 120 primary school pupils in the Ejigbo Local Government Areas of Osun State, Nigeria. Modified instrument tagged teachers variables questionnaire was used for collection of data in study which has three sections, section 'A" for participant demographic information, section 'B' for the teachers attitude sub-scale while the section 'C' has the teachers self-efficacy subscale.

Data collected in study were analyzed using stepwise multiple regression analysis. The results reveal that teacher attitudes and interest had a significant correlation with pupils' achievement scores. Teacher self-efficacy was best predictor of pupils' academic success in mathematics was followed by the teacher's interest. Attitude, qualification, and experience were not significantly correlated with pupil's achievement in mathematics. Hakan (2013) conducted study to analyse biology teachers' responsibility beliefs for student academic successes and failures in terms of different variables. Data were collected with teachers' responsibility for student achievement scale, teachers' sense of self-efficacy scale, the scale of attitudes toward teaching profession and open-ended interview questionnaire. For data analysis, descriptive statistics, one-way variance analysis (ANOVA) and independent groups'-test and Pearson correlation coefficient were used. On other hand, data collected through open-ended interviews were subject to content analysis. While teachers' responsibility beliefs were not significant in terms gender, teachers' sense of self-efficacy and teachers' attitudes toward teaching profession, there are significant results in terms of length of service (teaching experience). There was an average, positive and significant relationship between teachers' responsibility beliefs for student success and years of teaching experience, perception of self-efficacy in teaching profession and attitudes toward the teaching profession.

Recent studies imply that the link between student success and non-cognitive characteristics, or collections of behaviors, abilities, attitudes, and academic performance techniques, should receive more attention to raise standard of science and other academic disciplines (Farrington, Roderick, Allensworth, Nagaoka, Keyes, Johnson, & Johnson, 2012). One of these features is student self-efficacy or the belief that a student will succeed in a specific task or field of study. Self-efficacy has been linked to academic success in numerous studies (Linenbrink & Pintrich, 2003; Brintner & Pajares, 2006; Graham, Frederick, Winston, Hunter, & Handelsman, 2013), but little research has been done on academic self-efficacy; as a result variable and looks at how teachers might help students increase their self-efficacy (Donahue, 2016). Self-efficacy mostly relates to confidence in one's ability to finish specific works or duties suitably and effectively (Bandura, 1977; Lee & Mendlinger, 2011). The self-efficacy assesses one's capacity to carry out the certain action under specific conditions (Pajares, 1994). Academic self-efficacy describes students' evaluation of their capacity to plan and carry out learning strategies to attain the desired level of academic accomplishment, such as passing the exam (Bandura, 1986, 1997).

Academic self-efficacy encourages students to select the most efficient techniques to finish each work in the diverse circumstances and situation. Yusuf (2011). It displays the degree of self-assurance and trusts a student has in their ability to complete a task and accomplish a goal to the best of abilities. The teacher's attitude might affect how much confidence a student displays in class.

Teacher attitudes also emerged as influential predictors of science self-efficacy for all students. The researcher then argued that students who perceive affirming attitudes from their science teachers reported higher levels of science self-efficacy. In addition, teacher qualification and teaching experience were found to be relatively significant in predicting science self-efficacy of male students only. The study then concluded that since self-efficacy has been proven to be a precursor to both achievement and persistence in science, the findings from the study would have significant implications for researchers, educators, and policymakers aiming to improve student success in science. Teacher factors frequently determine dynamics of student-teacher interactions in classroom. A substantial scholarship has examined these elements' effects on student success and found a variety of outcomes. These elements are common in radical debate on teacher quality. Even more so, in specific area of scientific education, Influence of teacher factors on student self-efficacy has not received many studies. Current research examines the connection between students' hope for success in science, sense of self-efficacy, and traits that have often been associated with student growth (Goldhaber & Brewer, 2000; Eckert, 2012). In other words, most of material that has been written about teacher factors has compared them to measures of the student accomplishment, such as how well they performed on standardized tests.

The teachers' variables such as the attitude, qualification, experience, self-efficacy, and gender have been shown to have a strong positive correlation with the successful academic outcomes (Gbore & Daramola,2013; Abe, 2014; Ogembo, Otanga & Yaki, 2015; Awodun, Oni, & Oyeniyi, 2015) academic achievement has been demonstrated to be significantly correlated with the self -efficacy (Kifle & Melese, 2017; Britner, 2008; Pintrich & Shunk, 2002). Thus, Hakan (2013) examined biology teachers' responsibility beliefs on students' academic success using teachers' gender, attitudes toward teaching, self-efficacy, and years of service as key variables. According to the study's findings, there is no connection between teachers' attitudes about responsibility and their students' academic progress regardless of teachers' gender, self-efficacy, or attitude. However, there was strong correlation between teachers' years of classroom experience and the academic achievement of their students. Donahue (2016) looked at variables affecting ninth -grade kids' hopes for the academic achievement in science. An analysis of the collected data discovered that teacher variables, such as teacher attitudes, are major predictor of all students' self-efficacy in science. In contrast, it was found that teacher credentials and length of teaching experience were significantly relevant in estimating the required self-efficacy of just male science students.

RESEARCH METHODOLOGY

This study was a survey-style descriptive study. Questionnaires were used in the descriptive analysis of survey type to get data from respondents (teachers and students). The survey type of research deals with collecting information whose conclusion can be generalized. All biology students and teachers enrolled in senior secondary schools in Ogbomoso, Oyo State, Nigeria, made up the sample for this study. All biology teachers and students enrolled in SSS I and II

classes at secondary schools in the five (5) Local Government Areas that make up Ogbomoso comprise target demographic (Ogo- Oluwa, Surulere, Orire, and Ogbomoso North and South). Study used proportional and stratified selection approaches to choose 98 secondary schools from among five local government areas in Ogbomoso. Also, 207 biology teachers were selected using proportionate and purposeful sample methods. Purposive and simple random sampling were used to choose 392 SSS I and II students depending on the sex for student sample. The first instrument used in this study is teachers' attitudinal questionnaire (TAQ) which is science teachers attitude sub-scale with teachers as respondents. This part contains items measured teachers' attitude toward teaching biology and helping students improve their self-confidence in science.

It comprises twenty-seven (27) items of Likert scale with strongly disagree, disagree, strongly agree, agree, and undecided responses. The Teachers' Teaching Attitudinal Scale by Renthlei and Malsawmi (2015) and the Science Teaching Attitude Scale by Thompson and Shrigley were adjusted and converted into items in this section (1986). Science Self-Efficacy and Motivated Learning Questionnaire's second tool was created with students in mind and consists of two sections, each with eight items. Students are asked to complete both portions. Students' skills and confidence in doing activities relevant to biology were assessed in the first section. In the second section, students' views of how the attitude of their teachers affected their perception of their teacher's attitude were examined. Several of the items on this questionnaire are based on Pintrich, Smith, Gracia and Mckeachie Motivated Student Learning Questionnaire self-efficacy subscale (1991). The items of the two instruments, Teachers' Attitudinal Questionnaire (TAQ) & Science Self-Efficacy & Motivated Learning Questionnaire (SSMLQ), were from standardized and validated tools. Three and two lecturers validated the instruments in the Science Education and Guidance and Counseling Departments of the University of the Ilorin, Nigeria, and two secondary school teachers outside the participating schools to verify the accuracy of the tools used in this research. Therefore, the validators checked the items and also made the necessary adjustments.

To determine the study's validity, a field test was carried out with 39 SSS II students and 21 biology teachers in Oyo State secondary schools outside of Ogbomoso. The test-retest approach was used twice to administer instruments two weeks apart to calculate reliability coefficient. Pearson to determine relationship between respondents opinions and replies, product-moment correlation was used. Teachers' Attitudinal Questionnaire (TAQ) and the Science Self-Efficacy and Motivated Learning Questionnaire (SSMLQ) had calculated reliability coefficients that were judged sufficient for the investigation at 0.83 and 0.76, respectively. Biology teachers and students had access to informed consent papers outlining all the pertinent details concerning study's ethical considerations, including voluntariness, confidentiality, readiness to withdraw, and potential dangers. Informed consent papers were collected following week and determined each school and kids' and teachers' levels of engagement. Ethical considerations were properly handled by assuring participants of the confidentiality of the data they provided and explaining the benefits of research. The data and information gathered were exclusively utilized for the study.

RESULTS OF STUDY

This study was conducted as a survey, and data gathered was examined with descriptive and inferential statistics. Descriptive statistics were used to address research subjects, like means of

respondents' frequencies, percentages, and frequency counts. In contrast, inferential statistics (chi-square & regression analysis) were used to evaluate study hypotheses at significance level of 5%.

Research Question One: Do teachers' attitudes influence the students' self-efficacy

The items used to answer this research question were split into two parts, positive and negative items. Positive item consists of items 3, 5, 6, 9, 10, 11, and 12, while negative items comprised items 1, 2, 4, 7, 8, 13, and 14 of the questionnaires. For positive items, the researcher computed a mean benchmark of 2.5; any mean value above 2.5 indicates that respondents agreed to such item and any value below 2.5 indicates otherwise. The greater mean value above 2.5 indicates positive level of attitude of teacher respondents and also shows teachers with positive attitudes positively influence students' self-efficacy. Considering negative items, a computed mean value of 2.5 was also arrived at; an average higher than 2.5 indicates that respondents disagree with such items. A mean value less than 2.5 suggests that respondents agree with such items. If teacher respondents disagree with negative items, have positive attitudes toward their student. Mean values of all 14 items were above 2.5 mean benchmarks. Teacher respondents agree with positive items 3, 5, 6, 9, 10, 11, and 12 and disagree with negative items 1, 2, 4, 7, 8, 13, and 14. Study result shows that teachers' attitudes effect student self-efficacy in biology. The outcome demonstrates that teachers' attitudes on students' growth in self-efficacy were only generally favorable.

Table 1
Mean Value of Influence of Teachers' Attitudes on Students' Self-Efficacy

S/N	STATEMENT	SA	A	U	D	SD	Mean	S.D
1.	I feel uncomfortable teaching biology as a subject.	35	32	2	58	78	3.32	0.78
2.	I am unable to maintain discipline in my class.	32	38	7	52	78	2.88	0.72
3.	I take in some students' mistakes so far, they learn	39	69	27	38	34	2.63	0.65
4.	My duty to students stops when I leave classroom.	24	29	12	68	74	2.98	0.82
5.	I consider myself a "master" science teacher.	69	62	28	27	28	2.92	0.80
6.	I listen to students & values students' ideas	66	66	20	27	28	2.90	0.77
7.	I am worried that students may ask me questions.	28	24	10	61	77	2.98	0.78
8	I am worried when won't get the results I expect.	28	24	14	67	74	2.96	0.75
9.	I wish to be able to inspire my kids about biology.	76	74	6	24	27	2.99	0.65
10.	I treat every student fairly in class & outside class	76	77	9	23	22	3.05	0.81
11.	I believe students do look me as role model in class	75	61	9	21	29	2.97	0.82
12.	I do think all students can be successful in academic	74	60	7	31	25	2.96	0.80
13.	Teaching biology takes too much effort for me	27	36	8	68	68	2.89	0.84
14.	I do not bother about success levels of students.	29	29	5	67	77	2.84	0.78

Research Question Two: What is the students' academic self-efficacy level in biology?

After converting each response to a mean value, 3.0 was used as the benchmark mean value to respond to the study question. Students feel sure in such items whenever the mean value is more than 3.0. Students who score on average 3.0 or higher are considered to be confident, whereas those who score less than three are considered less confident in their academic self-efficacy. Since all eight questions have a mean value of over 3.0, this result demonstrates that respondents are confident in their academic self-efficacy in biology.

Table 2
Mean Value of Students' Academic Self-Efficacy In Biology

S/N	ITEMS	TC	V.C.	FC	OLC	NAC	MEAN	SD
1.	I anticipate realizing superior grade in biology.	116	110	90	71	15	3.66	0.87
2.	I'm convinced that I can comprehend the ideas.	90	109	98	69	26	3.37	0.88
3.	I anticipate succeeding in the biology course.	110	109	88	45	35	3.50	0.78
4.	I'm assured that I can know fundamental ideas.	102	107	97	73	13	3.54	0.78
5.	I have hopes that I will perform well in exams.	105	102	92	74	19	3.51	0.86
6.	My sympathetic of concepts covered in course.	102	105	94	60	31	3.42	0.73
7.	I have ability to comprehend difficult lessons.	92	99	88	83	30	3.35	0.45
8.	If I make vital effort, I find solutions to issues.	106	108	92	68	18	3.55	0.56

Research Question Three: What effect does the gender of the teacher have on the academic self -efficacy of biology students?

The gender of the teacher was cross-tabulated with students' academic self-efficacy in biology to proffer an answer to research question; a benchmark means of 3.0 was arrived at after each response is converted to a mean value. Whenever mean value generated is more than 3.0, such teachers' gender influences students' academic self-efficacy in biology; if value is less than or equal to 3.0, such gender does not influence students' academic self-efficacy in biology. Mean value of students' self-efficacy that male teacher taught was 3.06, while that of students taught by female teachers was 3.56. Female teachers have greater influence on students' self-efficacy in Biology.

Table 3
Influence of Teachers' Gender on Students' Academic Self-Efficacy In Biology.

	Self-Efficacy of Students in Biology							
Teachers Gender	Totally confident	Very Confident	Fairly Confident	Only a Little Confident	Not all Confident	Total	Mean	S. D
Male	305	458	456	253	256	1728	3.06	0.48
Female	325	352	189	417	125	1408	3.56	0.56
Total	730	810	545	670	381	3136		

Research Hypothesis One
H01: there is no significant difference between teachers' attitudes and students' self-efficacy in biology.

Table 4
Illustration of teachers' factors have predictive effect on student self-efficacy using beta estimates of predictors of students' biology self-efficacy and regression coefficient

Variables	B	SEB	BETA	T	PV. Sig.
Teachers' attitudes	0.243	0.201	0.332	1.211	.132
Students' perception of teachers' attributes in fostering students' science self-efficacy	1.337	0.521	0.431	2.990	.045
Constant	5.87	0.932	2.281	6.21	.000

Table 4 shows that the teachers' attitudes toward students' self-efficacy in biology are generally favorable but not statistically different. At a significance level of 0.05, the B=0.2434 T=1.121 and p-value =0.1325 show that it is not significant. As a result, study did not disprove the null hypothesis.

Table 5
Summary of the SGB's Predictor Variables' Regression Analysis

Source	Sum of Squares	D.F	Mean Squares	F-stat	Sig.
Regression	4663.665	5	932.733	45.362	0.000
Residuals	4153.524	202	20.562		
Total	8817.189	207			

The estimated model in Table 5 suggests that model does a great job fitting data. Since, model's F-statistic is high, it is significant (45.362). The independent (teacher self-efficacy & attitudes) and dependent variable are satisfactorily matched by estimated model (self-efficacy). Research question two translated to Hypothesis, which states that H02: Levels of academic self -efficacy amid female and male students do not significantly differ. Table 6 showed that the chi- square calculated value of (13.928) was greater than tabulated chi-square value at 5% of significance (X2cal > X2Tab) with 4 degrees of freedom (9.488). Study goes on to say that there is significant diffrence in academic self-efficacy levels of female & male students, with the difference favoring female students as added chi-square value is higher than tabulated chi- square value; this means that study rejects null hypothesis. Result offer solution to research question number two.

Table 6
Chi-Square Test Result Comparing Self-Efficacy Levels Between Male And Female Students.

Gender	Totally Confident	Very Confident	Fairly confident	Only a little confident	Not at all confident	Total	X2cal	X2Tab	df
Male	669	473	210	137	26	1515			
Female	790	482	177	131	44	1624	13.928	9.488	4

Summary of Findings
The study came to the following primary conclusions, which are founded on the research issues raised and the theories looked at:

1. Teachers' and student opinions had relatively positive (but not statistically significant) association.
2. The academic self-efficacy among concerned students was reported to be rather more stronger.
3. How male and female teachers impact how students build the academic self-efficacy in biology are different.

DISCUSSION

The study conclusions showed no connection between students' degree of academic self-efficacy in biology and teachers' attitudes. The study found that, though students reported moderately high confidence in their degree of academic self-efficacy with a positive view of their teachers' attitudes, there were no strong or significant correlations to show that these teachers' attitudes affected or had a substantial influence on students' biology academic self-efficacy. This study

then submits that teachers' attitude was rather positive and average but with minimal influnce on self-efficacy of students' academic in biology. The results, however, are at odds with those of Donahue (2016), who found that teacher views were strong predictors of all students' scientific self-efficacy. This finding implies that biology teachers' attitudes do not significantly influence science students' self-efficacy. As such, irrespective of the teachers' attitudes, the students will always exhibit strong determination for success and work towards achieving academic success. Findings of the study also revealed that there was no significant relationship between teachers' attitude and students' level of academic self-efficacy in biology. Study found out that, though the students reported normal confidence in level of academic self-efficacy with positive perceptions of concenred teachers' attitudes, there were no strong or significant correlations to show that the teachers' attitude affected or have a significant influence on the students' academic self-efficacy in biology.

This study then submits that teachers' attitude was relatively positive and average but with the minimal influence on academic self-efficacy of students in biology. On the contrary, according to Donahue (2016), teacher attitudes emerged as powerful predictors of science self-efficacy for all students. Result of this study therefore suggests that that biology teachers' do not possess or show the right attitudes towards development of students' self-efficacy which have a resultant negative effect on their academic performance. However, study surveys students' perception of teacher' attitudes towards development of their academic self-efficacy. How students perceived the attitude either positive or negative of their teachers towards them could have an effect on their academic self-efficacy belief in biology. Finding of study shows that there was a relatively positive perception of teachers' attitudes by the students which also have a positive relationship with their academic self-efficacy. This finding is in line with finding from the study by Donahue (2016), which submitted that perceived teacher attitude proved to be an important predictor of student science self-efficacy. This finding was supported by Pajares (1997), who stressed that student perceptions of teacher attitudes can impact students' self-efficacy; perceived positive and inspiring attitudes can increase self-efficacy while perceived negative attitudes have opposite effect.

The study revealed that teachers' gender has some level (but not significant) of the influence on biology students' academic self-efficacy. Investigation outcome showed that teachers generally have high self-efficacy and attitudes. Still, male and female teachers differ in favour of female Sin their influential roles in developing students' academic self-efficacy in biology. This finding corroborates Donahue (2016) findings, who observed that teachers' gender was significant only for improving female students' scientific self-efficacy. However, it is contrary to those of Hakan (2013), who reported that teacher gender has nothing to do with student academic self-efficacy. The implication is that teachers' gender could have positive or negative Influences on students' self-efficacy. This finding is in agreement with Aurah (2017) study which indicated the gender differences in level of science self-efficacy of students affecting their academic performance. Aurah (2017) results further indicated gender differences in both self-efficacy and academic achievement, with female students performing better than male students in both the outcome variables. The study also surveys students' perception of teacher attitudes toward developing their academic self-efficacy in Biology. How students perceived the attitudes, either positive or negative, of their teachers towards them could affect academic self-efficacy belief in biology. The outcome shows students had a generally good opinion of their teachers' attitudes, which was associated favorably with sense of academic self-efficacy. Result is inline with Donahue's

(2016) results that perceptions of teacher attitudes were crucial indicator of self-efficacy of science students.

CONCLUSION

The study shows that biology teachers in Ogbomoso do not have the necessary skills or exhibit good attitudes about the stated degree of biology students' academic self-efficacy. Additionally, previous studies have shown that teachers' views toward students don't always reflect a favorable outlook and that these opinions frequently vary according to the student's gender and class (Tenenbaum & Ruck, 2007; Kumar & Hamer, 2013). In light of the fact that the teacher attitudes impacted on motivation of students and confidence in doing science, the outcome of this research points out the importance of having good teacher views in predicting students' academic self-efficacy. This study submits that the reported level of teachers' attitudes could be due to some of the challenges teachers face in schools, especially in government schools in Nigeria. Such challenges may include lack of motivation from the employer, unavailability of standard teaching aids, and delay in salary payments by state governments. Thus, this study shed more light on how students' self-efficacy can be improved and how teacher factors affect students' self-efficacy in learning biology. Thus, the outcome of this research may be applied to students.

Recommendations

1. The concerned biology teachers should be encourage to more positive attitude to foster the students' sense of self-efficacy in the instiutions.
2. To boost students' confidence in biology teaching and learning, teachers must establish a favorable environment for constructive engagement with students.
3. Male Biology teachers should be accountable and focus on helping all students improve their sense of self-efficacy just like their female counterparts.
4. The school authority should plan motivational lectures and other activities for students, which will greatly boost their self-confidence in their academic endeavors.

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