Class Size as Determinant of Junior Secondary School Students' Motivation towards Learning in Osun Central Senatorial District, Osun State

¹Christianah O. Sam-Kayode, Ph.D.

Department of Science Education Lead City University, Ibadan, Nigeria samkayodeolajumoke@gmail.com +2348165357640

²Christiana A. Adeyemo

Department of Educational Management Lead City University, Ibadan, Nigeria christianaayotunde | 23@gmail.com +23480384496 | 0

Abstract

A driving force needed by any student to learn any school subject is motivation. This study investigated Class Size as the Determinant of Junior Secondary School Students' Motivation towards Learning in Osun Central Senatorial District, Osun State. Two research questions and one hypothesis guided the study. A descriptive survey research design was adopted in carrying out the study. Population of the study consisted of 12,072 JSS2 students in public secondary schools in the 10 Local Government Areas in Osun Central Senatorial District. A multi-stage sampling procedure was used to arrive at 2070 respondents for the study. Four-points Likert scale questionnaire was used for the research instrument. Frequency counts, simple percentages and mean were used to answer the research questions while multiple regression was used to test the formulated hypothesis at p < 0.05, (B = 0.987, t = 347.142) which indicated that Class Size contributed to students' motivation towards learning. The study recommended that teacher-students' ratio should be 1 to 20 in every class in Osun Central Senatorial District, Osun State.

Word Count: 165

Keywords: Class size, Junior Secondary School, Motivation, Students, Learning.

Introduction

Motivation is an impetus which serves as a driving force for students to learn any school subject. The best lessons, books, and materials in the world will not get students excited about learning or willingness to work hard if they are not motivated (Abdu-Raheem & Olayinka, 2015). Motivation towards learning, therefore, is both an internal and an external issue which is an inspiration that needs to grow from within the students or the learners (internal) as well as from other forces surrounding the students externally. The external motivation can stem from teachers or instructors, parents and guardians, home environment, school environment, class size and other motivators like extra-curricular activities and peer group influence in and around the school.

A study carried out by Nwagu (2018) submitted that low motivation towards learning contributes to low level of academic achievement in public secondary schools. The study also indicated that other related factors, such as, socio-economic situation, school related factors and government policies, do have influence on the academic performance of students. The internal motivation, which is inherent, and the external motivation are referred to as intrinsic and extrinsic

motivation by scholars. In all cases, when the issue of students' motivation towards learning is discussed, these two types of motivation are quickly recognised. Intrinsic motivation is called self-motivation. It is seen as the inherent, inbuilt as well as the innate ability in a student to have strong affection for learning. In other sense, a student, without being forced (that is, on his or her own), will desire to learn, be informed, achieve a goal or perform a task simply because he or she takes pleasure in doing so and sees the value in it (Adimonyemma, Ruffina, Akachukwu & Igboabuchi, 2018). This is the reason for tagging intrinsic motivation as a motivation which when students are intrinsically motivated, they are less likely to be hindered by factors such as peer pressure, complacency or indecisiveness (Ahmad & Khan, 2018; Aikens & Barbarin, 2018). A person who is intrinsically motivated or possesses self-efficacy skills will have the belief in his or her ability to organise and execute a plan of action that will solve a problem (Ajayi, Audu & Ajayi, 2017).

Extrinsic motivation on the other hand is an external incentive, inspiration or drive. Unlike the intrinsic motivation which comes from within, students can also be motivated by external (outside) driving forces. Research has shown that students who are extrinsically motivated do not necessarily take pleasure in the learning process. However, they may show commitment in school just because they want to graduate or because they do not want to disappoint their parents (Anderson, 2015). It goes to say therefore that, either type of motivation may produce positive results (Adimonyemma, Ruffina, Akachukwu & Igboabuchi, 2018). This means that, motivation, whether intrinsic or extrinsic, is a key factor in the success of students at all stages of their education. Regardless of the type of motivation a student possesses, researchers believe that a high level of motivation is the key to academic success. Not only has a high level of motivation been linked to better academic performance, it has also been linked to better conceptual understanding, higher self-esteem, increased satisfaction with school, increased graduation rates and better social adjustment (Adeyemo, 2021).

When students have self-efficiency skills, they will develop stronger sense of commitment towards their interests and activities and recover faster from setbacks. Motivated students do not give up easily and are resilient which means that they do not easily get overpowered. This is because of their belief that they can achieve their goals even if they fail initially. They also do not surrender as easily as unmotivated students. If students are unmotivated, it is extremely difficult to improve their academic performance in school (Cavas, 2020). Motivation affects how students relate with their teachers, how much time they devote to studying, and how they go about seeking help when they are having difficulties with assignments.

In a bid to encourage students' motivation to learn, the Osun State Ministry of Education and the State Universal Basic Education Board emphasised on the roles of schools and Local Governments Education Authorities in making sure that various activities that can motivate students to learn are put in place (Osun State Universal Basic Education Board, 2020). While teachers are expected to play pivotal role in providing and encouraging motivation in their students, school principal and head of schools across the State, are held accountable for how well they educate students and prepare them for the next level of performance. Together they use various methods to motivate students and to encourage them to live up to their true potential. Some of these methods include:

i. Teachers giving students sense of control by allowing them to choose the type of assignments they do or which problems to work on. This move gives them sense of control that does motivate them to do more. At the beginning of the year, teachers and schools lay out clear objectives and define the objectives expected of students to attain at the end of a term so that there is no confusion; and students can have targeted goals. Defining clear objectives removes frustration that can hinder students from completing their assignments or makes them to exhibit wrong behaviour in class. The State educational sector believes that students need to know what is expected of them in order to stay motivated to work; and

ii. Teachers create a safe, supportive environment for students to affirm their belief in their abilities. This threat-free environment motivates students to focus on 'I can' instead of 'I cannot'. To renew interest in learning, teachers give students a chance to get out of the classroom, take field trips, bring in speakers, or even just head to the library for some research. This method, known as 'change of scenery,' validates the belief that the brain loves novelty. Meaning that new settings are what some students need to stay motivated to learn (Altinok & Kingdom, 2019).

In 2018, Osun State Universal Basic Education Board took one thousand (1000) Junior Secondary School Students to Erin-Ijesa water fall, a tourist centre, about 50 kilometers from the State capital. These students were offered varied experiences which are also considered as a good method whereby students are assisted since all students will not respond to lessons the same way. For some, practical or applied experiences may be the best. Others may love to read books quietly or to work in groups. In order to keep all students motivated, the organisers mix up their lessons so that students with different preferences will have time to focus on the things they like best individually. This helped the students to stay engaged and pay attention (Osun State Universal Basic Education Board, 2018).

In modern times, ignorance of the transforming strength of education contributes to the neglect of some factors that can influence the educational development of children in terms of motivation. One of such factors is the class size, which is the number of students per teacher in a given class or the population of a class (Aturupane, Glewwe & Wisniewski, 2018). As the world population continues to increase, class sizes are also affected. It is often mentioned by experts in the educational literature as having influence on students' feelings and performance, quality of school budgets and on school administration (Behsat & Ramazan, 2015; Brewer, 2020). Class size is considered as one of the important determinants of academic performance over which teachers in schools have little or no control. In Nigeria, it is said to be becoming increasingly unmanageable, putting teachers in an impossible position of giving individual student required attention. In the country's public schools, teacher's eye contact with the students in class has become so reduced that some of the poorly motivated students can form number of committees at the back of the class, while teaching is going on, to engage in non-school discussion. Regular assignments and home works are dreaded by teachers considering the staggering number of books to mark and to record (Adeyemi, 2018; Balog & Pribeanu, 2019).

The need for this study was coined out from the facts that students' motivation cannot be treated in isolation, hence, taking into consideration the aspect of Class Size in relation to students' motivation towards learning.

Statement of the Problem

Many factors contribute to students' academic motivation to learning. Students who are inspired have the capability of attaining the desired academic heights. However, some education

administrators and class teachers who are uninformed about these factors do allow such ignorance to play out in their duties; they do not put all the necessary things the students will need to be motivated in place. In other instances, the number of pupils in the class could either encourage learning or hinder one from learning. It is on this notes that this study is motivated to investigate Class Size as Determinant of Junior Secondary School Students' Motivation towards Learning in Osun Central Senatorial District, Osun State.

Purpose of the Study

The purpose of this study is to investigate Class Size as Determinants of Junior Secondary School Students' Motivation towards Learning in, Osun Central Senatorial District, Osun State. Specifically, the study:

- i. examines the range of class Size in the selected secondary schools (teachers-students ratio) in Osun Central Senatorial District, Osun State;
- ii. determines the level of motivation to learning of the students in, Osun Central Senatorial District, Osun State; and
- iii. determines the influence of Class Size (small, medium or large) on Students' Motivation towards Learning in, Osun Central Senatorial District, Osun State.

Research Questions

The following Research Questions guided the study:

- I. What is the range of class size (small, medium or large) at the Junior Secondary Schools in Osun Central Senatorial District, Osun State?
- 2. What is the level of students' motivation towards learning at the Public Junior Secondary Schools in Osun Central Senatorial District, Osun State?

Hypothesis

H0₁: There is no significant influence of class size on students' motivation towards learning at the Junior Secondary Schools in Osun Central Senatorial District, Osun State.

Methodology

A descriptive survey research design was used in carrying out the study. Population of the study consisted of twelve thousand and seventy two (12,072) students in public Junior Secondary Schools in the 10 Local Government Areas in Osun Central Senatorial District in Osun State. A multi-stage sampling procedure was used to select two thousand and seventy (2,070) respondents from thirty four (34) schools who participated in the study as follows:

Table I: Distribution of Respondents from Osun Central Senatorial District

S/N	Local Government	Number of Schools	Number of Students	
	Areas			
I	Osogbo	4	212	
2	Olorunda	4	210	
3	Orolu	3	214	
4	Irepodun	4	210	
5	l felodun	3	204	
6	Boripe	3	208	
7	Boluwaduro	4	208	
8	Odo-otin	3	202	
9	lla	3	206	
10	Ifedayo	3	196	
	Total	34	2,070	

The instrument for data collection was a researcher made Four-Points Likert scale questionnaire which was validated by four experts in related fields. The instrument was tested for reliability and a reliability value of 0.82 was obtained using Cronbach Alpha. The data collected were analysed using frequency counts, simple percentages and mean to answer the research questions while multiple regression was used to test the formulated hypothesis at 0.05 level of significance.

Results and Discussion

Research Question 1: What is the range of class size in selected Public Junior Secondary Schools in Osun Central Senatorial District, Osun State?

Table 2: Class Sizes in Selected Public Junior Secondary Schools in Osun Central Senatorial District, Osun State.

Class Size	Frequency	Percentage
10-20	171	5.7
20-30	388	13.0
30-40	323	10.8
40-50	2105	70.5
Total	2987	100

Source: Field survey, 2021

Threshold: 10-20 (Low Class Size), 20-40 (Moderate Class Size), 40-50 (Large Class Size). Table 2 presents the existing Class Sizes in selected Public Junior Secondary Schools in Osun Central Senatorial District, Osun State in order of size from the largest to the smallest class. This showed that two thousand and one hundred and five (2105) were in a class size of 40 to 50 students which is 70.5% of the students; three hundred and eighty eight (388) were in a class size of 20 to 30 students which is 13.0% of the students; three hundred and twenty three (323) were

in a class size of 30 to 40 students which indicated 10.8% of the students; and one hundred and seventy one (171) were in a class size of 10 to 20 students which is 5.7% of the students. This implied that class size in public secondary schools in Osun Central senatorial districts in large.

The result shown on class sizes in Public Junior secondary schools in Osun Central Senatorial District could be due to the effect of high enrolment of students in public schools which is a product of free education policy of Osun State Government. This finding is in line with the submission of a study carried out by Aturupane, Glewwe and Wisniewski (2018) where large class size was found significant among other factors responsible for poor academic achievement among public secondary school students in Nigeria. The finding is also in line with the submission of Balog and Pribeanu, (2019) who were of the view that, large class size and poor class control were reasons why teachers' job performances were low. A related study by Nwagu (2018) also corroborated the findings of this study where large classes found in public secondary schools affected students' motivation to learn school subject and their outcome in examinations. However, this finding contradicted the submission of Behsat and Ramazan (2015) who discovered that other factors such as peer influence and student's personal disposition in the class were considered as stronger determinants of students' motivation towards learning. This implies that views on class sizes and student's motivations towards learning were inconclusive.

Research Question 2: What is the level of students' motivation towards learning at the Public Junior Secondary Schools in Osun Central Senatorial District, Osun State?

Table 3: Level of students' motivation towards learning on the Selected Public Junior Secondary Schools in Osun Central Senatorial District, Osun State.

S/N	Items	Always	Seldom	Rarely	Never	Mean	Std
I	I like to do all assignments given	2028	397	391	171	3.43	0.923
	to me.	(67.9%)	(13.3%)	(13.1%)	(5.7%)		
2	I do not like to be distracted by	2083	323	410	171	3.45	0.930
	anyone when my teacher when teaching.	(69.7%)	(10.8%)	(13.7%)	(5.7%)		
3	I like to ask questions on areas	2040	367	409	171	3.43	0.929
	that are not clear to me.	(68.3%)	(12.3%)	(13.7%)	(5.7%)		
4	I prefer studying than playing in	2048	373	395	171	3.44	0.924
	the school when I have assignment to submit.	(68.9%)	(12.5%)	(13.2%)	(5.7%)		
5	Gaining new knowledge in the	2029	379	408	171	3.43	0.928
	class makes me happy.	(67.9%)	(12.7%)	(13.7%)	(5.7%)		
	Weighted Mean	•	•	•	<u> </u>	3.44	0.93

Source: Field survey, 2021

Threshold: < 2.50 Low, 2.50-2.99 Moderate and ≥ 3.00 High

Table 3 presents level of students' motivation towards learning on the secondary schools in Osun Central Senatorial District, Osun State. The result displayed weighted mean of 3.44 which indicated that the level of students' motivation towards learning is high. This shows that, level of students' motivation towards learning was high with weighted mean value of 3.44. The result is in line with the submission of Nwagu (2018) which posited that, class size is a contributor to students'

motivation to learning school subjects, due to the sensitivities of school related factors to students' achievement. A related study arrived at a contradictory conclusion where student's motivation was found low in public secondary schools in Nigeria (Ajayi, Audu & Ajayi, 2017). Also on the contrary, a study found moderate level of motivation among public secondary school students' in Nigeria but with no significant influence on their level of academic performance. This finding contradicts the submission of results (Brewer, 2020). The implication of this finding is that class size has a subtle ways of influencing students' motivation where there are large number of students with no effective class management on the part of the teacher as well as where the class is not large enough to accommodate the number of students therein thereby not conducive for learning.

Hypothesis: There is no significant influence of class size on students' motivation towards learning at the Junior Secondary Schools in Osun Central Senatorial District, Osun State.

Table 4: Summary of Regression Analysis Showing Influence of Class Size and Motivation towards Learning in Osun Central Senatorial District, Osun State

			Coefficient	ts		
		Unstandardised Coefficients		Standardised Coefficients		
Mod	el	В	Std. Error	Beta	Т	Sig.
I	(Constant)	0.473	0.067		7.042	.000
	Motivation	0.084	0.006	0.040	14.120	.000
	Class Size	4.923	0.014	0.987	347.142	.000

Dependent Variable: Motivation Towards Learning

P< 0.05

Source: Fieldwork survey, 2021.

Table 4 presents the summary of regression analysis of influence of class size and motivation towards learning in Public Junior Secondary Schools in Osun Central Senatorial Districts, Osun State. The regression analysis result indicated that class size contributed to students' motivation towards learning, where $\beta = 0.987$, t = 347.142, p < 0.05.

The result of the test of hypothesis carried out to determine the influence of class size on students' motivation towards learning showed that there is a significant influence of class size which is an independent variable on students' motivation towards learning, the dependent variable. This finding is in line with the submission of result that posited that class size is highly significant factors when considering student's motivation towards learning (Cavas, 2020). A related study found a significant connection between numbers of students in the class and students' interest towards learning (Altinok & Kingdom, 2019). Brewer (2020) submission was on the contrary who arrived at a report that found no significant relationship between class size and students' academic achievement in public secondary schools. Other factors that are linked to class size such as indices like the school environment, teacher's class management skills, peer-influence and so on makes these findings to be opened to other studies which could be researched into subsequently.

Conclusion

Based on the findings emanating from this study, it is obvious that Class Size in Public Junior Secondary Schools in Osun Central Senatorial Districts is large and the level of students' motivation towards learning is also high indicating that, lots of effort is involved in getting students motivated at the junior secondary schools in Osun Central Senatorial District, Osun State. Hence, a need to have adequate classrooms and corresponding number of teachers to effectively manage the classes for better outputs at the Public Junior Secondary Schools in Osun State.

Recommendations

Based on the findings of the study, the following recommendations were made:

- 1. Teacher-students ratio should be maintained on ratio I to 20 at the Junior Secondary level in Osun Central Senatorial District, Osun State;
- 2. Teachers should use every class control skill appropriate to manage large classes that can motivate students in any size of class to learn; and
- 3. Government should provide adequate classrooms that correspond to the number of intakes into public schools in Osun State.

References

- Abdu-Raheem, B. & Olayinka, O. (2015). Parental Socio-Economic Status As Predictor of Secondary School Students' Academic Performance in Ekiti State, Nigeria, *Journal of Education and Practice* ISSN 2222-1735 (Paper) ISSN 2222-288X (Online), 6(1).
- Adeyemi. T. O. The influence of class size on the quality of output in secondary schools, in Ekiti State in Nigeria. American, *Eurasian Journal of Scientific Research* 3(1), 2018, 7(14), 566.
- Adeyemo. C. A. (2021). Parental Socio-Economic Status and Class Size as Determinants of Junior Secondary School Students' Motivation towards Learning in Osun Central Senatorial District, Osun State. Unpublished M.Ed Thesis, Department of Educational Management, Lead City University, Ibadan, Nigeria.
- Adimonyemma, N., Ruffina, E., Akachukwu E. & Igboabuchi, N. (2018). Impact of Class Size on Students' Academic Performance in Biology in Idemili North Local Government Area of Anambra State, Nigeria; *International Journal of Education and Evaluation* 4(8), 24-29.
- Ahmad. I. & Khan, N. (2018). Relationship between parental socio-economic conditions and student's academic achievements: A case of district dir, Timergara, Pakistan, Global Advanced Research Journal of Educational Research and Review, 1(7), 137-142.
- Aikens. N. L. & Barbarin. N. (2018). Socioeconomic differences in reading trajectories, the contribution of family, neighborhood, and school contexts, *Journal of Educational Psychology*, 100(23), 245-251, http://dx.doi.org/10.1037/0022-0663.100.2.235.
- Ajayi O. V., Audu, C. T. & Ajayi, E. E. (2017). Influence of class size on students' classroom discipline, engagement and communication: a case study of senior secondary schools in Ekiti State, Nigeria. Sky Journal of Educational Research, 5(5), 60-67
- Altinok, N. & Kingdom, G. (2019). New evidence on class size effects: A pupil fixed effects approach, Oxford Bulletin of Economics and Statistics, 74(2), 203-234.

- Anderson, C. (2015). Hildreth, & John. Howland Laura "Is the Desire for Status a Fundamental Human Motive? A Review of the Empirical Literature". Psychological Bulletin, 574–601. doi: 10.1037/a0038781. PMID 25774679.
- Aturupane, H. P. Glewwe, P. & Wisniewski, S. (2018). "The impact of school quality, socioeconomic factors, and child health on students' academic performance evidence from Sri Lankan primary schools". Education Economics. 21, 29-37.
- Behsat, S. & Ramazan, G. (2015). The variables affecting the Success of Students. *Educational Research and Review*, 9(1), 41-50, 10.DOI: 10.5897/ERR2013.1639.
- Balog, A. & Pribeanu, C. (2019). The role of perceived enjoyment in the students' acceptance of an augmented reality teaching platform, A structural equation modeling approach, *Studies in Informatics and Control*, 19(3), 319-330.
- Brewer, J. (2020). The class size controversy, (CHERI working paper), 14 Cornel University, ILR School.
- Cavas, P. (2020). Factors affecting the motivation of Turkish primary students for science learning. *Science Education International*, 22, 31-42.
- Nwagu, E. K. N. (2018). *Influence of Parents' socio-economic status on students motivation towards learning*. A.P Express Publishers Ltd, Nsuka, Nigeria.
- Osun State Universal Basic Education Board (2018). Excursion to Erin-Ijesa Water Fall for Middle School Students, Video recording (archival material), February 28, 2018.
- Osun State Universal Basic Education Board (2020). Teachers Performance on Students' Academic Motivation, Retrieved from an Archival Material tagged "Internal Memorandum for Head teachers" by the Osun State Universal Basic Education Board in 2018.