Class Size and Class-Room Disruptive Disorder among in-School Adolescents in Aba North Local Government Area, Abia State

Rev. Sr. Dr. Ogazie, Celestinaadaku
&
Ogwu John Makochukwu
Department of Psychology and Counselling,
Michael Okpara University of Agriculture Umudike, Abia State.

Abstract
The study sought to investigate class size and classroom disruptive disorders among in-school adolescents in Aba North L.G.A. Area Abia State. Four research questions and one null hypothesis guided the study. The study adopted ex-post facto survey research design. The population of the study comprised of 5,472 students. The sample size was 400 SS2 using Taro Yamane formula. Stratified sampling technique was used to select 8 schools out of 17 private schools in Aba North Local Government Area of Abia State. Then, Simple random sampling was used to select the 400 SS2 students. A-30 item instruments titled: 'Class Size Inventory (CSI) and Classroom Disruptive Disorder Questionnaire (CDDQ) were used for the study. The instruments were rated on a 4-point scales of Strongly Agree (SA)[1], Agree (A)[2], Strongly Disagree (SD)[3], and Disagree (D)[4]. The instruments were validated and reliability indices of 0.81 and 0.85 for CSI and CDDQ obtained respectively. The collected data was analyzed using Mean, Standard Deviation to answer the research questions while t-test was used to test the hypothesis at 0.05 level of significant. The result of the study showed the followings: Class size has influence on student's disruptive disorders, overpopulated class size influences classroom disruptive behaviours among students, normal class sizes do not promote classroom disruptive behaviour, and that there is no significant difference between the mean responses of male and female students on class size and classroom disruptive behaviours. Based on the findings of the study, the researchers recommended that government and communities should assist to provide more class rooms to accommodate students for a conducive learning and good behaviour.

Key words: Class-Size, Classroom, Disruptive Behaviour and School Adolescents

Introduction

The increase in population of students in the schools affects the class sizes and the performances of students. Class size refers to the number of students in a given course or classroom, specifically either the number of students being taught by individual teacher in a course or classroom or, the average number of students being taught by the teacher in a school or educational system. Adeyemi, (2008) sees class size as an educational tool that could be used to describe the average number of students per class in a school. The researchers see class size as the number of students in a classroom which may be standard, undersized or overpopulated. In Nigeria, the class size in private secondary schools is far above the recommended 30 or 40 students per classroom. According to Martins, Peter &

Isaiah, (2007) the average class size in most secondary school exceeds 50. This could be as a result of students and parents looking for miracle centres or better schools that students will go and make a good result at a sitting.   In the same vein, Osim, (2011) reported that some schools in Nigerian have as many as eighty (80), to hundred (100) and above 100 students per class. The researchers have also observed that most private schools in Abia State and in Nigeria at large are over populated and as a result, some students are seen loitering about in the streets and nearby markets during lecture periods. When the class sizes are considered to be too large for optimum academic achievement of student, it constitutes disruptive behaviour among students. Kolawole (2008) in his study between class size and student's behaviour problems found out that, the larger the class, the more increase of student's disruptive behaviours. This among other factors might have prompted Yusuf (2012) to conclude that a number of things are wrong with the educational systems in Nigeria. Class size is almost an administrative decision over which teachers have little or no control.

Class room is a physical place in the school where the teacher meets with the students and interacts with the subject matter and the materials so that learning can take place. It is in the classrooms that students exhibit their behaviours either in the positive or negative direction. Class sizes are classified into three major categories namely; Overpopulated class size also known as large class size, Small class size also referred to as under populated class size and Normal class size which is also known as average class size.

Overpopulated/overcrowded Class Size. A classroom is overpopulated when the number of students in a particular class goes beyond the best possible level such that it poses obstacle in the teaching-learning process. According to the National Policy on Education (2019), for effective teaching and learning, the teacher-pupil ratio shall be 1: 35. In this regard, a normal class room size is expected to be a teacher to thirty-five (35) students. Therefore, when any class size is above thirty-five students, it is considered to be over populated. Over populated class room put more pressure and stress to the teacher and cannot give the teachers opportunity for one on one interaction with individual student. It constitutes problems ranging from: noise making, bulling, fighting in the classroom even when lesson is on, watching films, chewing gum, looking at the mirror while the lesson is on, mimicking the teacher as he or she demonstrates among others. As a result of over- populated class size, sometimes, the teacher cannot know those among his students who need extra attention and besides, the classroom situation makes no room for teachers' easy movement round the class and hence becomes un-conducive for teaching and learning to take place. It also has a potential to encourage distraction and disruptive behaviours amongst the students. (Adeyela, 2000; Adeyemi, 2012; McKeachie, 2008) have reported that overpopulated class sizes have negative effect on adolescent's behaviour. Idienumah (2007) posited that class size ranks amongst the most important factors that have strong and direct influence on adolescent's behaviours in the classroom. Nwadiani (2000), also stated that overpopulated classes present more challenges for classroom management, pupil control, planning, and assessment. Teachers are put under more strain when faced with large classes. On the other hand, he argued that the larger the class-size, the smaller the cost of education. Toth (2000) opined that overcrowded classrooms create a number of problems for modern school systems such as; lack of space for the teacher to go around. Students perform better when the teacher is able to give one-on-one or small-group instruction on a regular basis. As classroom size increases, this becomes increasingly difficult to do.

Small or under populated class size is another type class size. Grant (2003) referred small class size as a class of fewer than 20 students. Small class size often results in more individual attention, increased participation, and better communication between the teacher and students. Looking at the specification of the National Policy on Education (2019), small class size is identified to be the ratio of 1 teacher is to 40 students. Here, students receive more feedback from their peers and teachers than those in large classes. One of the advantages of Small class room size is that it helps students to learn faster and perform better than over populated class size. Oderinde (2003) also posited that smaller classes encourage participation for students to pay attention and become involved in the class activities. Since it is easier to focus on individuals in a smaller group, the smaller the class size, the more likely individual attention can be given.

The researchers are of the view that small class size should enhance accepted behaviour because students look up to others whose characters are commendable and share their ideas and ask questions politely when they do not understand the lesson. They also receive more feedback and more effective learning experience from the teachers. Finally, McKeachie (2018) pointed out that large classes are simply not as effective as small classes for retention of knowledge, critical thinking and attitude change.

Normal class size in secondary schools according to Okoro (2005) should range between 35 or 40 students. Okoro (2005) argued that few students per class are uneconomical, as they do not make full use of space, teachers and teaching materials. Alebiosu (2000) and Oderinde (2003) also reported that students in normal classes have greater achievement level than those in overcrowded class rooms. The researchers refer to normal class size to be in the ration of 1:40. On the contrary, Olatunde (2010) advised the National Educational Policy on class sizes to be less than 30. The piece of advice may be as a result of the dangers of disruptive behaviour found in the students in an over populated classroom. Finn and Achillesl (2003) in his study found out those students in normal class display less disruptive behaviour than those in large classes. They also affirmed that class size significantly affects the level of students' cognitive skills in the classroom. They further posited that normal classes improved the students' performance and learning behaviour as well as yielding fewer classroom disruptions and discipline problem.

The disruptive behaviours shown by the students in the classroom while the lesson is going on create a very big problem to the teacher and also have negative effect on the behaviour of the students. As a result, the teacher may not be able to achieve the goals of his/her instructions as well as control classroom discipline in this nature. As far as the classroom is not properly controlled and managed, there will be disorder and confusion and students will resort to behavioural problems. According to Okeke (2006) behavioural problems are obvious in our schools and these problems are therefore the concern of parents, teachers, counsellors, administrators and students. If these problems are identified and treated, then we would have gone a long way in solving our numerous problems, especially during teaching/learning process in the classroom. Jessor (2002) and Perry (2004), observed that disruptive behaviours tend to have common psychosocial challenges. Disruptive behaviours ranges from: poor social skills, academic underachievement, negative attitudes toward school, examination malpractices, cheating quarrelling, peer group influence, bullying, stealing, destruction of school properties, truancy, fighting, lateness to school, free exit and entering while lesson is on, singing in the classroom, watching blue films in the classroom, eating/chewing gum in the classroom while the lesson is on, among others. These

behaviours are of particular concern in secondary schools, where contagious youth and peer behaviours of academic negativism and misconduct can frustrate learning and interrupt the school routine. However, secondary school teachers have repeatedly ranked disruptive behaviour as one of the most serious impediment to effective teaching and learning process in the classroom. Students with disruptive behaviour have problems with their ability to understand and manage emotions and higher risk of committing anti-social and criminal behaviour.

Generally, boys and girls behave differently. Wexler-Stratton (2006) in his study found boys to be more physically negative than girls at school, as determined by teacher ratings and in-home observations of parent-child interactions. Boys seem to exhibit more behavioural problems than girls starting from the early childhood. Boys shows more of external behaviours such as troublesome, aggressiveness, emotional disorder, hostility, fighting violent, destructive among others while girls exhibit more of internal behaviours such as; withdrawn, crying, revenge, talking too much to attract trouble among others.

Statement of the Problem

There is alarming problems of disruptive behaviour among students due to high population in the schools. Overpopulated class size has been a worry among students, teachers, parents and the educational sector.It's negativeimpact has resulted in disruptive behaviour of students such asnoisemaking, playing in the classroom, shuffling of feet, singing, loiter about during lesson, making calls and receiving calls in theclassroom, personal conversations during teaching and learning, coming to class late, chewing gum during lesson, use of mirrors and phones while lesson is on, backing the teacher and engaging in other group discussions, among others. All these disruptive behaviours has cause problems in the classroom due to large population size of students and if not handled properly, will affect teaching and learning and majorly the academic achievement of the students. It is against this background that the researchers sought to examine if class size has influence on student's classroom disruptive behaviour.

Objective of the Study the objective of the study is to:

1. find out the classroom disruptive behaviours exhibited by students as a result of class size
2. Determine whether overpopulated/overcrowded class size has influence on classroom disruptive behaviour among students.
3. find out whether small or under populated class size has influence on classroom disruptive behaviour among students.
4. Ascertain whether normal/average class size has influence on classroom disruptive behavior among students.
5. determine if there is significant difference between the mean responses of male and female students on class size and classroom disruptive behaviours.

Research Questions

1. What are the classroom disruptive behaviours exhibited by students as a result of class size?
2. How does overcrowded class size influences classroom disruptive behaviour among the students?
3. How does small class size influences classroom disruptive behaviour among the

students?
4. How does normal class size influences classroom disruptive behaviour among the students?

Null Hypothesis
The hypothesis will be tested at 0.05 level of significance.

1. There is no significant difference between the mean responses of male and female students on class size and classroom disruptive behaviours among the students.

Methodology

The study examined class size and classroom disruptive disorder among school adolescents in Aba North. Four research questions and one null hypothesis guided the study. The study adopted ex-post facto survey research design. The population of the study comprised of 5,472 students. The sample size was 400 SS2 using Taro Yamane formula. Stratified sampling technique was used to select 8 schools out of 17 private schools in Aba North Local Government Area of Abia State. Then, simple random sampling with replacement was used to select the 400 SS2 students. A-30 item instruments titled: 'Class Size Inventory (CSI) and Classroom Disruptive Disorder Questionnaire (CDDQ) were developed by the researchers for the study. The instruments were rated on 4- points scales of Strongly Agree (SA)[1], Agree (A) [2], Disagree (SD) [3], and Strongly Disagree (D) [4]. 2.50 was the decision rule. The study passed through validation and reliability indices of 0.81 and 0.85 for CSI and CDDQ were obtained respectively. The researchers administered the instruments with the help of form the masters and mistresses of each class used. The collected data was analyzed using Mean, Standard Deviation to answer the research questions while t-test was used to test the hypotheses at 0.05 level of significance.

Results.
Research Question 1: What are the classroom disruptive behaviours exhibited by students as a result of class size?

Table 1. Mean and Standard Deviation rating of the responses of the respondents on the classroom disruptive behaviours exhibited by students as a result of class size

S/N	Items	$\bar{X}$	SD	Remarks
1	Noise making in the class room	3.10	0.68	agree
2	The strong and bigger students bulling the younger and smaller ones	3.10	0.83	agree
3	Watching blue films in the classroom while lesson is going on	3.30	0.79	agree
4	Chewing gum	3.31	0.80	agree
5	Looking at the mirror	3.06	0.53	agree
6	Mimicking the teacher as he or she demonstrates in the classroom	3.21	0.84	agree
7	Indulging in examination/test malpractices	3.31	0.80	agree

8	Free entering and exits during lessons	2.83	0.74	agree
9	Stealing	3.19	0.83	agree
10	Destruction of other students' properties	3.06	0.53	agree
	Ground mean scores	**3.20**	.057	agree

The analyzed data on Table 1 showed that all the items had their mean scores above 2.50. Thus this shows that the respondents agreed to all the items since their respective mean scores were above the mean cut-off of 2.50. However, since the grand mean score of 3.20 above is greater than the cut-off score of 2.50,it was therefore, concluded that all the items in this cluster constitutes classroom disruptive behaviouramong the students.

Research Question 2: How does overpopulated class size influences classroom disruptive behaviours among in-school Adolescent?

Table 2. The Mean and Standard Deviation rating of responses of the respondents of students on the overpopulated class size influence on classroom disruptive behaviours among in-school Adolescent?

S/N	Items	$\bar{X}$	SD	Remarks
1	Students fighting in the classroom as a result of overpopulated class size?	2.86	1.09	agree
2	Students loitering about in the class rooms during lessons because they lack space.	2.80	0.98	agree
3	Students coming to school late because they population thick that no one will notice a late comers.	2.50	0.71	agree
4	Truancy is found among over populated class size?	3.98	0.83	agree
5	Cheating in test/examination as a result of lack of spacing in the examination hall	3.20	0.60	agree
6	Watching films with the cell phone during lessons as a result of overcrowding.	2.81	0.92	agree
7	Overpopulated class attracts noisemaking and contributes to disruptive behviours among students	3.01	0.75	agree
8	Class size can shape students behaviour?	2.85	0.76	agree
9	Overpopulated class sizes contribute to a decrease in students' achievement.	2.60	1.01	agree
10	Overpopulated class size influences student's disruptive behaviour?	3.50	0.63	agree
	Ground mean scores	**3.01**	**0.72**	**agree**

The analyzed data on Table 2 showed that all the items had their mean scores above 2.50. This shows that the respondents agreed to all the items since their respective mean scores were above the mean cut-off of 2.50. However, since the grand mean score of 3.01 above is greater than the cut-off score of 2.50, it was therefore, concluded that overpopulated class size influences classroom disruptive behaviours among the students.

Research Question 3: How does small class size influences classroom disruptive behaviours among in-school Adolescent?

Table 3. The Mean and Standard Deviation rating of the responses of the respondents on the small class size influence on classroom disruptive behaviours among in-school Adolescent

S/N	Items	$\bar{X}$	SD	Remarks
1	Small class size promotes classroom disruptive behaviours of students?	1.17	0.63	disagree
2	Small class size promotes teaching and learning?	3.32	1.79	agree
3	Small class size discourages excessive noise making in the class room?	3.47	1.87	agree
4	Small class size exposes students who engage in examination malpractice?	3.07	1.75	agree
5	Small class size discourages students to absent from lessons because the teacher knows them by names	3.18	1.78	agree
	Ground mean	**2.84**	**1.67**	**agree**

The analyzed data on Table 3 showed that all the items had their mean scores above 2.50. However, the ground mean score of researcher question three amounted to 2.84 with Standard Deviation of 1.67 which is higher than the cut-off score of 2.50, it was therefore, concluded that it was concluded that small class size does not promote classroom disruptive behaviours among students, rather; it encourages teaching and learning

Research Question 4: How does normal class size influences disruptive behavior among in-school adolescent ?

Table 4. The Mean and Standard Deviation rating of the responses of the respondents on the normal class size influence on disruptive behavior among in-school adolescent

S/N	Items	$\bar{X}$	SD	Remarks
1	Normal class size promotes teaching and learning?	3.21	0.45	Agree
2	Normal class size helps the teacher to know his students by names	3.09	0.83	Agree
3	In a normal class, under achievers can be helped to understand better?	3.13	0.62	Agree
4	Normal class size makes it easier for both the teacher and students to interact in a classroom discussions	3.18	0.75	Agree
5	Students achieve more in normal classroom size than in overpopulated class?	3.61	0.63	Agree
	Ground Mean	**3.15**	**1.78**	**Agree**

The analyzed data on Table 4 showed that all the items under research question four had their mean scores above 2.50 which is the baseline. Thus this shows that the respondents agreed to these items since their respective mean scores are above the mean cut-off of 2.50,

and since the grand total amounted to 3.15 with the Standard Deviation of 1.78. It was concluded that normal class size does not promote classroom disruptive behaviours rather; it promotes teaching and learning among students too.

Null Hypothesis 1: There is no significant difference between the mean responses of male and female students on class size and classroom disruptive behaviours among students**.**

Table 5: Related t-test analysis of the difference between the mean responses of male and female students on class size and classroom disruptive behaviours among students**.**

Groups	Number	Mean	SD	df	t.cal	p.value	Decision
Male	168	2.66	0.88	398	-0.35	0.73	Not Significant
Female	232	2.69	0.84				

The data on Table 5 showed a p-value of 0.73 which is greater than 0.05 at 0.05 level of significance. This implies that the null hypothesis, which states that there is no significant difference between the mean responses of male and female students on class size and classroom disruptive behaviours among students, was retained. The study concluded that there is no significant difference between the mean responses of male and female students on class size and classroom disruptive behaviours among students.

Discussion of Findings

Research question 1 which sought to find out those disruptive behaviours exhibited by students as a result of class size revealed the followings: noise making, bulling, watching blue films, chewing gum, the use of mirror in the classroom, mimicking the teacher when delivering lesson, examination and test malpractices, free entering and exit during lessons, stealing and destruction of students' properties among others are factors that promotes disruptive behaviour among students. According to Idienumah (2007), class size ranks highest amongst the most important factors that have strong and direct influence on adolescent's behaviours of students in the classroom. This implies that the size of any class,may likely influence of promote the behaviour of students in that particular classroom.

Research Question 2, which sought to find out whether overpopulated class size has any influence on students disruptive behaviours. The study showed that overpopulated class size has negative influence on classroom disruptive behaviours of the students. The finding of the study is in agreement with the study of Hill (2008) who reported that classes packed with students provide more opportunities for personality conflicts, tension, and general disruptive behaviourand the overall noise level is increased. However overcrowded classrooms are characterized with Noise making which constitutes distraction, making it more difficult for students to learn and also for teachers to impact on the students. In addition, (Adeyela, 2000; Adeyemi, 2012; McKeachie, 2008) reported that overpopulated class sizes have negative effect on adolescent's behaviour. In line with the findings of the present study, Kolawole,(2008) in his study on class size and student's behaviour problems found out that the larger the class-size, the more increase on student's disruptive behaviour.

Research Question 3, which sought to find out whether small class size has influence on disruptive behaviours among the students also revealed that small class size does not promote classroom disruptive behaviour. The findings of this present study is in line with the findings of Oderinde (2003) who stated that smaller classes encourage participation for students to pay attention and become involved in the class activities. This also implies that the smaller the class-size, the more normal and accepted behaviour exhibits by the students.

Research question 4, which sought to find out whether under populated class size has influence on disruptive behaviours among the students confirmed that, normal class size does not promote disruptive behaviours among students rather, it promotes teaching and learning among students. The present study agreed with the study of Alebiosu (2000) and Oderinde (2003) who reported that students in normal classes have greater achievement level than those in overcrowded class. Equally, Finn et al (2003) observed that students in normal classes display less disruptive behaviour than those in large classes. This could be as a result of the moderate number which may help the teacher to identify the students easily and equally know them by individual names

Null Hypothesis one which stated that there is no significant difference between the mean responses of male and female students on class size and classroom disruptive behaviours was accepted. The study concluded that there is no significant difference between the mean responses of male and female students on class size and classroom disruptive behaviours among students. The findings of this study deviated from Wexler-Stratton (2006) study which found out that boys are more physically negative than girls at school, as determined by teacher ratings and in-home observations of parent-child interactions.

Conclusion

The study examined class size and classroom disruptive disorders among in-school adolescents in Aba North L.G.A. Area Abia State. Based on the findings of this study, the researchers concluded that class size has influence on the students' disruptive behaviour. Again, the overpopulated class-size had negative influence on studentsbehaviours, while small and normal class sizes do not promote disruptive disorder among the students.

Recommendations

Based on the conclusion and findings the study, the researchers recommended that:

1. Counsellors should assist students with orientation so that they may be aware of the dangers of disruptive behaviours and its effect on their academics.

2. It was also recommended that the government and communities should assist to provide more class rooms to accommodate students for a condusive learning and good behaviour.

3. Normal class size should be encouraged in our various schools in order to help teachers check the behaviour of the students in the class.

4. Overpopulated classrooms should be avoided in our various schools since it has

negative influence of students' disruptive behaviours.

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