Impact of Teachers’ coping Strategies on Students’ Misbehaviours in Mathematics Class

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Abstract:- Disciplined class and good teacher’s skills are not negotiable in teaching and learning of mathematics. This paper investigates the impact of mathematics teachers’ coping strategies on misbehaviours of secondary schools’ students in mathematics class. Senior secondary schools mathematics teachers in Ikorodu Local Government Educational Area of Lagos State Nigeria were the subjects of this study. Twenty senior secondary schools were randomly sampled from the educational area: ten public secondary schools and ten private secondary schools. Three mathematics teachers were randomly selected from each school. Two hypotheses guided the study, and Mathematics Teachers Coping Strategies Questionnaire was used to get necessary information from the subjects. Data obtained were analyzed with multiple regression analysis and chi-square statistics. The result shows that some teachers coping strategies have effect on students’ misbehaviour in mathematics class. Necessary recommendations were given for future improvement.

Keywords:- Coping Strategies, Disciplined Class, Students’ Misbehaviour, Teachers’ Skills.

I. INTRODUCTION

Discipline is a way of behaviour which has to follow the rules set by a superior and it is the result of carefully designed treatment of classroom disruptions. Discipline does not mean only punishing students for inappropriate behaviour but involves providing an atmosphere that prevent problems from arising (Marciniak, 2015). Discipline in classroom provides rules based on reciprocal understanding and tolerance and requires establishing limits that must not be transgressed.

The teacher is the person that needs to be responsible for what is happening in the classroom, including not only the learning process taking place but also behaviours of students in the classroom. He/she needs to control the learners and the activities that are supposed to lead to the realization of the learning goals. A lesson which is not well controlled, guided and disciplined appropriately is a waste to teaching-learning system. In a well-guided and disciplined class, learners stand a good chance of learning and enjoying the process while in an undisciplined one they feel uncomfortable. So, a classroom needs to be well arranged and students need to be giving appropriate discipline for teacher to achieve his/her lesson objectives (Moges, 2017).

Misbehaviour is any activity that hinders the students to learn. Occasionally, there is possibility for teachers to encounter disruptive behaviour, which is a misbehaviour from a learner or a group of students whose inappropriate behaviour gets in the way of the class. So, teachers need to notice all minor disruptions in the classroom and correct such disruptions by using the simplest intervention. This misbehaviour usually impedes the progress of other students and create difficulties in learning for the students and inconvenience for the teacher. Classroom misbehaviour among secondary schools students is any activity that interferes with teaching and learning. Some of these activities that interfered teaching and learning are: unpreparedness for class, talking in class, fighting, cheating, and rudeness to teachers (Durmuscelebi, 2010). Misbehaviour can arise because students feel frustrated and bored in class and sometime they misbehave such that they can get teachers’ attention. Student’s misbehaviour can be attributed to the teacher’s personality and attitude. When the teacher is not well prepared before going to class or teacher gives boring lessons where students are not engaged with a topic or a topic and thus students are more likely to behave disruptively. Also when teacher is inconsistent in his/her word and action this encourage students to behave problematically. So, if teachers takes necessary measures on all disruptions in classroom and applies the appropriate class control method, punishment or sanctions, then the students will derive maximum advantage from the classroom learning (Marciniak, 2015). Therefore, for a classroom to be effectively manage, teacher needs to have sufficient and importantly confidence and develop good ability in classroom management (Kane, Taylor, Tyler & Wooten, 2011). Tahir and Qadir (2012) found that the inability of most teachers to deal with misbehaviour in their classrooms was as a result of their lack of experience and preparation. Nevertheless, confidence of a well prepared teacher is prerequisite to effective classroom management (Hart, 2010).

Misbehaviours in the class cause damages to the class atmosphere, teaching process and prevent both students and teachers from achieving their aims and this leads to the problems in time management (Onasanya, 2020). Misbehaviours in the class threatens both teachers and learners. When some students are disruptive and off-task,
assimilation by others learners reduce. When students ignore rules and challenge their teacher’s authority, learning ceases. When students fight with one another and create a hostile environment filled with fear and uneasiness, insecurity comes in and nothing can be learnt in that situation (Osben, 2010).

Students’ learning experience of all kinds may affect their attitude in the classroom. Adolescent learners come to the classroom with some previous educational experiences which to some degree influence their feeling towards the lesson and the teacher. Some learners may have unpleasant memories, some may be challenging to the teacher, while others may be completely undisciplined because previous teachers allowed them to be (Oyedemi & Onasanya, 2010). Students’ falling towards school, the way they view the class, the teacher and the subject being learnt affect their behaviour during the lessons. When students start with negative attitude in a class, there is tendency that they are going to show their frustration through different kinds of misbehaviour (Abacioglu, Volman& Fischer 2019).

Fairness is vitally important if effective learning is to take place. The teacher does not need to be unfair, either to the whole class or to a particular student. Most teachers have students that they like or dislike more than others, but they cannot allow themselves to show their preferences and prejudices in front of the class. Sometimes the lesson material may be presented in such a way that it causes disciplined problems. Even the most interesting activity may become very boring because of the way it is presented to the learners, who perceive the time spending on doing it as a wasted time. When the expectation are too low and classroom activities are not challenging for the students, frustration and students’ misbehaviour are likely to occur.

II. CLASSROOM MANAGEMENT

Classroom management refers to actions taken to create and maintain a learning environment conducive to successful instruction such as arranging the physical environment, establishing rules and procedures, maintaining students’ attention to lessons and engagement in activities (Brophy, 2006). Trussell (2008) stressed that teacher needs to post the rules for the classroom in a position that is very visibly for all students such that good expectation may be expected from teacher. It is not possible to have perfect classroom management system but we need to be closer to perfection. Managing classroom perfectly is a major challenge for teachers. The degree of classroom control desired by teacher differs from one teacher to another. Some teachers make discipline as the primary goal of their lesson. They make their role in the classroom for controlling and maintaining discipline as first task and teaching comes later. Those teachers take more actions in order to prevent any misbehaviour to arise in the classroom than to achieve certain educational objectives. Levin & Nolan (2014) reported that many teachers used 1/3 to 3/4 of their lessons to address students’ misbehaviours. The most commonly listed misbehaviours by teachers are emotional bullying, verbal bullying, physical bullying, lack of concentration or daydreaming, disobedience, being late to class, idleness, truancy, talking out of turn, andestating when the class is on (Aliakbari, Mirzaee&Aliabadi2013; Kyriacou and Martín 2010; Sun and Shek 2012).

If there exist a teacher which does not cope with discipline problems during lessons, it does not mean that such teacher is ineffective. There are some students sitting quietly in class and do not necessarily learn; they are afraid of their teachers; such students are afraid of their teacher, it is better in their opinion to sit silently and do nothing in order not to make the teacher angry (Sun & Shek, 2012). Students may prevent to express himself/herself in the class due to fear of ridicule or punishment, but this unquestioned compliance may not teach students self-control and may inhibit active participation in the learning process (Kesici, 2008; Amook&Onasanya, 2010). Discipline is not synonymous with absolute quietness and although quiet pupils may not be interfering with learning process they may not be learning anything (Durmuscelebi, 2010).

Lake (2004) revealed that rewards and punishments are the most common classroom management design used in schools. Under this system, teachers always control students’ behaviour believing that young learners are not capable of controlling themselves; adults use to decide and set limit on what is right or wrong for children because children are feel of not capable of determining what is right or wrong for themselves. However, total controlling of children hinders their development of self-concept, self-esteem, self-determination, self-discovery, self-efficacy, self-control, self-discipline, self-confident, self-effacing, and self-identity. Controlling young children may also reinforce the powerlessness they feel in adult environments and could stunt their growth toward equality. This system of controlling children is the act of oppressing children.

Treating discipline as a good condition for acquisition to take place in the classroom is another attitude towards discipline (Marcinak, 2015). If students are bound to be disciplined then it is necessary for teacher also to be disciplined. This has positive effect on classroom management and improve conditions for students to assimilate the teacher’s knowledge. The primary goal of those disciplined teachers is to teach and to achieve educational objectives without terrorizing learners. When there is mutual understanding among all learners respectfully in a classroom, teachers don’t have to act controlling. Teachers can create a classroom environment that is nurturing learners to self-esteem and to good academic performance. The ability of teacher to create and maintain positive relationships with students, fosters students’ motivation and engagement in class work (Demirdag, 2015).

Human behaviour is the most complex phenomenon. So, in a school’s system judicious discipline is a basic thing needed for students to feel safe, to be protected against dangers and to show respect to other students. In this type of discipline, student rights are guaranteed by the rules and regulations of the school and these rights encourage students.
to respect one another’s range of freedom. Judicious discipline makes opportunity to make use of own rights and responsibilities available to students, apart from creating a peaceful school climate, which allows other students a safe, healthy, and comfortable classroom (Kesici, 2008).

Classroom management is a complicated activity in teaching and learning process. It requires a lot of energy, skills, ability, and experience from teachers to be able to manage classrooms successfully. Teachers that have good strategies, skills, good practical vision, knowledge, and maturity can manage classroom effectively (Hart, 2010). Classroom management comprises all of the things that teachers do to organize students, time, and materials such that teaching-learning is meaningful (Qinglan, Junyan&Shongshan, 2010). It is an effective teaching strategy and a key concern of many teachers while providing important teaching approaches for students (Cothran, Kulmina, &Garrahay, 2009). Also, it is the process of ensuring that classroom lessons run successfully despite of students’ misbehaviour. Classroom management comprises all essential activities which are compulsory not only to create but also to maintain a supportive and orderly atmosphere. It includes planning and preparation of teaching materials, organization of the instructional aids, decoration of the classroom, creation of expectation and establishment and enforcement of rules and routines in the classroom (Jolivette& Steed, 2010). According to Qinglan, Junyan&Shongshan(2010), teacher plays an important role in the development of a positive classroom environment. Teacher’s role in classroom is to maximize learning and minimize disruptions by fostering among students attitudes of trust, acceptance, cooperation and tolerance.

Teacher is paramount leader in classroom atmosphere. Teachers with no classroom management skills, could have a questionable impact on student learning (Marks, 2010; Jo, 2014). Such teacher may have frequent challenges in classroom control, large number of disciplinary referrals. Those challenges may be related with students’ noise and their disrespectful attitudes towards their friends and teachers (Marcinak, 2015; Mahon, Bryant, Brown & Kim, 2010). One of the challenges of new teachers in classroom is lack of skills in classroom management because organizing students’ behaviours is an important factor in the teacher’s classroom effectiveness and job satisfaction (Omotoso&Semudara, 2011). Good strategies for lesson presentation and creating positive relationship with students always help new teachers to successful in their teaching.

III. STATEMENT OF THE PROBLEM

Onasanya (2020) classified students’ misbehaviours into three groups: conduct misbehaviours, learning misbehaviours and emotional misbehaviours. He stressed further by grouping the following into conduct misbehaviors: drinking and eating food or snacking in class, coming late into class, leaving class when lesson is going on, sassing to teacher, inviting intruder/non-member to class, inattentiveness in class, using mobile phone to make call, and making noise in excess. He listed the learning misbehaviours as: dominating classroom discussion, seeking attention/demanding time rudely from teacher, discussing and answering question by disrespecting the right of others, interrupting teacher or student anyhow when talking, and asking question from topic that is not relevant to the teacher’s presentation. He concluded that emotional misbehaviours are: speaking profanity or pejorative language during the class, intoxication, abusing of teacher or student verbally or by body language, threatening to harm teacher/student, bullying class mate, and refusal to comply with school rules and regulations. Others common students’ misbehaviours in secondary schools are: failure to do take-home-assignment, disrespectful or yelling to subject teacher, sleeping during lesson, malpractice during test or examination, noisily entering into the on-going class, yawning loudly and distracting others, solving mathematical problem in silly form on board with disruptive talking, inaudible responses and insulting others learners when called by teacher to answer questions, idleness toward doing class work/exercise or working in group with other students, general unruliness, and refusing to accept punishment (Jo, 2014; Durmuscelebi, 2010). This implies that there are many students’ misbehaviours in secondary schools when learners are still in adolescent stage. So, teacher needs to use some strategies to reduce such misbehaviours in classroom to a bearable minimum. Some coping strategies which teachers can use in this situation according to Ozben(2010) are: ignoring the learner, eye contact with the culprit, verbal warning, questioning, changing activity of the presentation, talking to the student, counselling the students, referring to senior teacher or other teachers, referring to school Counsellor or Principal, referring to parents, minor punishment, and corporal punishment. These strategies are grouped into five which are: Non-verbal Action (ignoring, and eye contact); Verbal Action (verbal warning, questioning, and talking to the student); Presentation Action (changing activity or method of teaching, changing the seating position of the student); Referral Action (referring to senior teacher, other teachers, counsellor, principal or parents), and Punishment Action (minor punishment or corporal punishment).

IV. PURPOSE OF THIS STUDY

The purpose of this study is to find out students’ misbehaviours in secondary schools mathematics classroom, and find out the strategies which teachers use to reduce them is behaviours to almost zero level.

V. RESEARCH HYPOTHESES

The following null hypotheses were formulated for this study (to be tested at 0.05 level of significance):
1. There is no significant impact of teachers’ coping strategies on students’ misbehaviours in secondary school mathematics class.
2. Experience and gender of teachers have no significant impact on students’ misbehaviours in secondary schools mathematics class.
VI. METHODOLOGY

i. Design, Participation and Instrument

This study adopted a survey research design of the ex-post factor type. It was conducted in Ikorodu Local Government Educational Area of Lagos State Nigeria. Mathematics teachers in both public and private senior secondary schools in the area formed the population of the study. Ten public senior secondary schools and ten private senior secondary schools were randomly sampled from the population; three mathematics teachers were randomly selected from each school. This gives total of 60 mathematics teachers. The only instrument of the study is Mathematics Teachers Coping Strategies Questionnaire. The questionnaire is of three sections: A, B and C. Section A is on informed concept, a confidentiality and anonymity were provided such that informed concept is obtained, and the respondent has to indicate his/her interest in participating in the study and not to reveal his/her identity. Section B is on background information of the respondent. Section C is of 6 items, the first five items are on 5 strategies’ groups in which the respondent writes out the average total number of such strategies he/she applied in all his/her lessons in a week per class during a previous academic term of a present session; and the items 6 is on the average total number of misbehaviours which the respondent is having presently on his/her lessons in a week on the same class in the present academic term of the same session.

Table 1: Regression Analysis on Impact of Teachers’ Coping Strategies on Secondary Schools Mathematics Students’ Misbehaviours.

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<td>Std. Error</td>
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<td>1</td>
<td>(Constant)</td>
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<td></td>
<td>Non-Verbal Action</td>
<td>.993</td>
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<td></td>
<td>Verbal Action</td>
<td>.175</td>
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<td></td>
<td>Presentation Action</td>
<td>.578</td>
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<td></td>
<td>Referral Action</td>
<td>.109</td>
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<td></td>
<td>Punishment Action</td>
<td>.319</td>
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The table 1 above shows that:
- the non-verbal action model has Beta value 0.488 and significant value of $P = 0.000$ (this $P < 0.005$) which implies that the non-verbal action model is significant, that is there is significant impact of non-verbal action (ignoring student’s misdeed, or eye contact to student) of teachers on students’ misbehaviours in secondary schools mathematics class.
- the verbal action model has Beta value of 0.102 and significant value of $P = 0.119$ (this $P > 0.05$), this indicates that the verbal action model is not significant. Hence, there is no significant impact of verbal action (verbal warning, questioning, or talking to the student) of teachers on students’ misbehaviours in secondary school mathematics class.
- the presentation action model has Beta value 0.192 and significant value of $P = 0.021$ (this $P < 0.05$) which implies that the presentation action model is significant. Hence, there is significant impact of presentation action (changing activity/method of teaching, orchanching the seating position of the student) of teachers on students’ misbehaviours in secondary schools mathematics class.
- thereferral action model has Beta value of 0.053 and significant value of $P = 0.413$ (the $P > 0.05$) this indicates that the referral action model is not significant. Therefore, there is no significant impact of referral action (referring students to senior teacher, other teachers, counsellor, principal or parents) of teachers on students’ misbehaviours in secondary school mathematics class.

ii. Procedure

Permission of all the principals of the sampled schools were obtained before conducting the study among the selected mathematics teachers. The instrument was administered to the participants by the researcher at the beginning of second term and retrieved back two weeks after, through their schools principals. The instrument was validated by some lecturers in educational management and mathematics curriculum departments of Colleges of Education in Nigeria. Also to ensure reliability, a pilot study was conducted with 20 senior secondary schools mathematics teachers selected from schools which were not among the sampled schools in the population. A test-retest correlation coefficient of 0.795 was obtained, which shows that the instrument is reliable. Sixty questionnaires distributed were filled and returned. Hence, the analysis was done on the data obtained from the returned questionnaires.

VII. RESULTS

Data from the first five items of Section C of the questionnaire which were on teachers’ coping strategies used in first term academic session of this research year and item 6 which was on average number of misbehaviours in the class as at the second term of the year were used to test the first null hypothesis. Multiple regression analysis was used for the analysis of the data, the result is in the table 1 below.
The table shows that the critical value at $P = 0.01$ is less than the calculated $\chi^2$, this implies that it is significant at $P = 0.01$ and $P = 0.05$. So, the second null hypothesis is rejected and the alternative hypothesis is hereby accepted. Therefore, there is significant impact of teachers’ experience and gender on students’ misbehaviours in secondary schools mathematics class. Experienced teachers have few misbehaviours in their classes. Also female teachers have less misbehaviours in their classes than male teachers.

**VIII. SUMMARY OF FINDINGS**

1. Non-verbal action of teacher (such as ignoring of student’s misdeed, or eye contact to student) has significant impact on students’ misbehaviours in secondary schools mathematics class.

2. Verbal action of teacher (such as verbal warning, questioning, or talking to the student) has no significant impact on students’ misbehaviours in secondary schools mathematics class.

3. Presentation action of teacher (such as changing activity/method of teaching, or changing the seating position of the student) has significant impact on students’ misbehaviours in secondary schools mathematics class.

4. Referral action of teacher (such as referring students to senior teacher, other teachers, school counsellor, principal or parents) has no significant impact on students’ misbehaviours in secondary schools mathematics class.

5. Punishment action of teacher (such as minor or corporal punishment) has significant impact on students’ misbehaviours in secondary schools mathematics class.

6. Experienced teacher has less misbehaviours in his/her secondary schools mathematics class.

7. Female teachers have less misbehaviours than male teachers in secondary schools mathematics class.

**IX. DISCUSSION OF FINDINGS**

The result of analysis shows that non-verbal action has significant impact on students’ misbehaviours in secondary schools mathematics class while the verbal action (such as verbal warning, questioning, or talking to the student) has no significant action. This result is in support of Onasanya & Oyedemi (2017) which stated that raising voice by teacher on anything outside the normal presentation of teaching makes class not comfortable because the students feel such voice is distracting noise. Teacher does not need to be talking on misbehaviour in class, body language is important.

The result shows that presentation action (such as changing activity/method of teaching, or changing the seating position of the student) has significant impact on students’ misbehaviours in secondary schools mathematics. This is in support of Hart (2010), Qinglan, Junyan & Shongshan(2010) and Demirdag (2015) that teacher with practical vision, good presentation, skills and knowledge of subject matter with good usages of instructional materials manages classroom effectively.

Result shows that referral action (such as referring students to senior teacher, other teachers, school counsellor, principal or parents) has no significant impact on students’ misbehaviour in mathematics class. This is in support of Jo (2014) which found that adolescents make self-esteem so important, they appreciate private rebuke than public one; in the case of referring student to other for counselling or punishment does not bring any tangible result.

Punishment action (such as minor or corporal punishment) was found to have significant impact on students’ misbehaviours in mathematics class, this is in support of Lake (2004) and Kesici (2008) which believe that rewards and punishments are good for learners, to feel safe and show respect to other classmates.
Year of teaching experience and gender of teacher were found to have significant impact on students’ misbehaviours in secondary schools mathematics class. This is in support of Kane, Taylor, Tyler & Wooten (2011), Hart (2010) and Tahir & Qadir (2012) that lacks of experiences cause inability to deal with misbehaviours; and it is also in support of Amoo & Onasanya (2010) that students are very comfortable with their female mathematics teachers’ lesson presentation.

X. CONCLUSION

Some teachers’ teaching strategies are very useful in reducing misbehaviours in secondary schools mathematics class. Teacher needs to apply these useful strategies maturely, good result will follow, and this will make teaching-learning environment to be friendly and the task will be easy accomplished.

RECOMMENDATION

The followings are hereby recommended for future improvement:
1. Mathematics teachers should try to discipline their students without involving any third party.
2. Mathematics teachers should desist in using verbal action in controlling misbehaving learners.
3. Mathematics teachers should try to be using different teaching methods and activities that are students-center.
4. Mathematics classes that are of more challenging behaviours should be given to teachers with more years of teaching experiences to handle.

REFERENCES


