ISSN:2584-2706 DOI: https://doi.org/10.67317/IJMSRT26SEP133

Perception of Causes of Mass Failure in Mathematics in Senior Secondary School Examination in Olorunda Local Government of Osun State

Dr. Safiriyu Owolabi Adeyemo
National Open University of Nigeria

Dr. Musiliu Olayemi Adeyemi
National Teachers Institute, Kaduna

Abiola Olutope Lawrence, PH.D
Osun State Polytechnic, Iree

Fadele Babtunde Paul
National Teachers Institute, Kaduna

Ojo Mary Oluwafolakemi
National Teachers Institute, Kaduna

Banke Joy Akinyemi
.

Abstarct
This paper investigated Perception of Causes of Mass Failure in Mathematics in Senior Secondary School Examination in Olorunda Local Government of Osun State, in Nigeria. The study was descriptive survey research design; the population of the study were all the secondary school students in the Local Government. The sample of the study were 100 teachers selected from 10 secondary schools. The secondary schools were selected using simple random technique, while the students were selected using systematic random method. Structured questionnaire was used to collect data from the respondents the results show that there is significant influence between the perception of male and female teachers, rural and urban teachers, private and public school teachers and trained and untrained teachers of the causes of Mass failure in Mathematics in Olorunda Local Government

I. INTRODUCTION

Background to the Study

Mathematics is the science that deals with the Logic or Shape, quantity and arrangement. Mathematics is all around us, in everything we do. It is the building block for everything in our daily lives. Including mobile devices, architecture Ancient and modern art, money, engineering and even statistics.

Definition of Mathematics by Nermam Websar says that "Mathematics is the science of numbers and their operations, interrelations, combination, generalizations. Mathematics is one of the compulsory subjects in the school curriculum".

This involves calculations, different formulae and theorems. It is learnt in school every day through mental sums and working exercises. Like Statistics, Geometry, Trigonometry, Algebra, Arithmetic, calculus, pure Mathematics Probability. Mathematics is the mother of science and all corner of life. That is why you see Mathematics in Financial houses, Engineering, Architecture Agriculture etc

The importance of Mathematics to the society therefore creates an awareness to develop the interest of positive attitude of the parents, teachers, Learners and the society in the study of the subject.

ISSN:2584-2706 DOI: https://doi.org/10.67317/IJMSRT26SEP133

In today's technological breakthrough the knowledge of Mathematics has led to communication between people by radio,television and development of infrastructures. Mathematics is the backbone of the recent technological development of economy.

When government realized the importance of the Mathematics makes it compulsory subject for all student in secondary school level educational system.

In Senior Secondary School Certificate Examination today the fact remains that the trends in performance of student in mathematics is disturbing. This could be seen in the Low Level of Students' Performance in Mathematics and science as recommended by West Africa Examination Council (WAEC 2018).

The Mass failure in this subject at school certificate Examination Level has led to the inability of the students from gaining admission into any institution of higher learning.

Therefore, to make mathematics easy for learner, Mathematics teacher most understand which teaching method or technique to use to make students develop interest in the subject.

Adeleye (1980) in his work on vocation education say Mathematics, requires regular and continuous practice and learning for anybody who intends to be knowledgeable in the subject. Therefore, good Mathematics teacher should make Mathematics as a vocational subject for his student.

The alarming rate of examination malpractices at all levels of the education sector poses a significant threat to the validity and reliability of any examination conducted in Nigeria. The recognition and value of certificates issued in the country seem diminishing over time. The blame has been placed on moral decadence in society, and the high value placed on certificates for admission and employment were identified as some factors that also contribute to the high rate of examination malpractices. Education is pivotal for national development, influencing a nation's technological, sociological, and physical progress (Shomoye et al., 2023). It is the process through which a person gains knowledge and enlightenment. It is a lifelong process that begins at birth and continues until death (Cooper & Olson, 2020; Tan, 2017). Education can be seen as the endeavour to shape or modify an individual's behaviour to equip them with desirable skills, habits, and attitudes to effectively contribute to the growth and development of the community in which they reside. During the educational process in a school, examination is considered the most important and often the only acceptable method of evaluating whether the objectives and goals of teaching and learning have been achieved. The examination serves as a key factor in gauging students' competence and progress, as highlighted by Nnam & Inah (2015) and supported by Ayoade & Farayola's (2020). Students are regularly tested to assess how well they have learned the curriculum, and their level of understanding is determined through examinations. This process serves as the basis for promotion from one class to another, and certificates are awarded upon achieving the required grades. In today's society, certificates hold significant importance, in contrast to the past when competency was judged primarily by experience and skill rather than formal qualifications

Given the significance of education, students often resort to any means necessary to pass their exams, including illegal methods. They devise numerous ways to cheat, treating examinations as a do-or-die affair (Longat et al., 2021). Examination malpractices, however, lead to erroneous judgments, negatively impacting teachers, students, the education sector, and society at large (Ojonemi et al., 2013). Additionally, the country’s reputation is tarnished abroad due to these issues. A key cause of examination malpractice is the excessive value placed on educational certificates, as they are often seen as essential for securing good jobs. According to Onyibe (2015), moral decadence which is now rampant in society and the degree of value placed on personal achievement and certificates by most Nigerians have contributed immensely during this era to increase in examination malpractice and this has prompted parents to bribe their ways to assist their wards. Over-dependence on certificates as a yardstick to measure the knowledge and competence of individuals to be gainfully employed has led to a very high race by most people to have educational certificates (Odili, 2012). The rise in examination malpractices in Nigeria is largely due to insufficient capacity in tertiary institutions, creating intense competition among applicants. The pressure to achieve higher scores has led to an increase in malpractices, as only top scorers are likely to gain admission. Federal Ministry of Education (FME, 2016) reported that candidates admitted into universities ranged between 5% and 32% of the applicants for the period 1999 – 2016. In the 1999/2000 academic session a total of 417,773 candidates applied for admission while only 78,550 candidates were admitted, which shows an admission rate of 19%.

Maheshwari (2011) opined that various forms of malpractice are usually committed before the conduct stages, during the conduct stages, and evaluation stages of the examination. Ayanniyi & Anya (2017) stated that examination malpractices include giving examinations as a contract, assistance by lecturer or teacher, computerized means, impersonation, leakage of the examination paper, expo, tattooing of the body with likely answer, collusion among students, use of materials that are not acceptable during the examination, giraffe method and copying from answer booklet of others during the examination.

ISSN:2584-2706 DOI: https://doi.org/10.67317/IJMSRT26SEP133

Maheshwari (2011) also stated that forms of examination malpractices include leakage of examination question papers, spying of answers from another candidate, exchange of answer booklet with another candidate, impersonation, misconduct that occurs during the examination, inappropriate conduct of invigilators/examiners, fake entries in examination registers, and issuing of fake certificates/degrees. Numerous solutions have been adopted by different examination bodies at the local, state and federal government levels and even by school stakeholders to curb the occurrence of examination malpractices. Some of the solutions are checking the examination cards of candidates sitting for the examination, forbidding the use of electronic devices such as mobile phones and pagers, questioning examination officers that come for visitation unannounced, and prohibiting the use of booklet other than the answer booklet provided for answering of examination questions (Onyibe et al., 2015).

Despite several control measures that were put in place to serve as a deterrent to the perpetrators, all are to no avail as examination malpractices are increasing daily. For instance, Examination Malpractice Act 33 of 1999 (revised edition) stipulates that perpetrators should be punished with fines that range from N50,000.00 to N100,000.00 and also imprisonment of perpetrators for 5 years without a fine for the offenses that are stipulated in the Act. This may however be because of non-implementation of the laws (Omeri, 2012).

Also clark (1995) sees teaching as the interaction between a teacher's responsibility in order to bring about the expected change in the student's behavior. However, crabble (19810) says "..... but still learning is labour call it what you will" and nearly 30 years ago,White pointed out that while to be illiterate is shameful to be on numbered' carries less stigma, since numeracy is regarded as a special gift (White 1979).

The teachers are the major sources of information to the students. The teachers are the builders of the builders. This is because it takes the teacher to make the Doctor, Lawyer, Engineer, Accountant, Architect, and all the rest of the professionals that could be regarded as nation builders, Ogun Sanju (1984) said that the teachers are the major source of school knowledge hence, it is incumbent on the quality of teaching influenced by the teacher experience and competence.

Adesina and Fagbemiye (1988) assented that the quality of education in any country is reflected by and related to the quality of men and woman who served as teacher in its school system. This is supported by Ohuche (1995) when he assented that it is not possible for an educational system to raise above the quality of its teachers.

IBRD/Word bank (1999) asserted that good quality of education requires efficient systems that would provide supportive learning environment, motivate staff with mastery of their subject matter, adequate access to resources and students who are healthy and ready to learn, Obanya Okpala (1984) submitted that, it is only a combination of quality inputs and quality processes that can produce quality outcomes.

Concert effort have been made at investigating trends of students' achievement in mathematics as well as factors responsible for the level of their achievement.

Some of the reasons to the poor performance in Mathematics as submitted by scholars Include, shortage of qualified Mathematics Teachers (Ohuche 1989), poor facilities, equipment, and Instructional materials for effective teaching (Akpan, 1987 & Odogwu 1994) use of traditional chalk and talk method (Oshubodu, 1988, Edwards & Knight, 1994), Large pupil to teacher ratio (Adele-Willians, 1988) and Mathematics phobia/fright (George will, 1990).

Abdullahi (1995) in Ijaiya (2000) studied student’s achievement in Mathematics based on selected teacher variables namely, Qualification, Experience, Instructional activities, Co- curricular activities in Urban and Rural area in kwara state, using multiple regression analysis at 0.05 alpha level, it was found that significant variations exist among the three groups of the students in all the teacher variables except teacher qualification. The researcher recommended good and qualified teachers as well as provision of adequate instructional materials as solution to ineffective teaching of Mathematics Teachers definitely make some impact on the learners but Educational practitioners generally believe that provision and utilization of appropriate instructional materials can promote effective teaching and learning while back of them can lead to ineffective teaching.

Also Fajemidagba (1986), identified problems of Mathematics learning as teacher adopt poor methods in the teaching of Mathematics in schools and that high percentage of the relatively small number of the available textbooks does not reflect the culture of the Nigerian Children. He submitted further that Mathematic Teacher often say mathematic is useful but failed to show its usefulness. Hence, most students could not see reason for study mathematics.

Further to this study, Aremu and Sokan (2003) quoted by Akanmu & Fajemidagba (2013) submitted that the research for the causations of poor academic achievement in mathematic is unending but some of the major factors are methods of teaching, self-esteem, self-efficacy, study habits, teacher, consultation and poor interpersonal relationship.

ISSN:2584-2706 DOI: https://doi.org/10.67317/IJMSRT26SEP133

Abdullahi (1996), advises and the greater commitment and the part of the teachers and good supervision on the aid of the authority. If all these are well taken care off the problem of mass failure in Mathematics will be reduce, Sona (1982) asserted that the teacher is to bear in mind that effective evaluation in both continuous and periodic that teacher should be making continuous appraisal of the report, checks their homework, availability of teacher is also important to student's academic performance in mathematics.

II. STATEMENT OF PROBLEM

The concern shown by the parents, teachers, students and the government over the poor performance of students nowadays in science subject especially Mathematics is justified considering its numerous, obvious and serious implication.

Students, despite this, regard Mathematics as the most difficult science subject, Mathematics is care subject for students offering science courses and Management courses e.g. Business statics, Business Mathematics and cost Accounting in the higher institutions of learning. Difference categories of teachers teaching Mathematics in secondary school. There is need to know the perception of each teachers of courses of mass failure in Mathematics.

The main purpose of the paper was to investigate teachers' perception of the causes of mass failure in mathematics in Senior Secondary School Examination in Olorunda Local Government. The specific purposes of this study were:

1. Examine the perception of male and female teachers of causes of mass failure in Mathematics.

2. Verify perception of rural and urban teachers of mass failure in Mathematics.

3. Determine perception of private and public school teachers of causes of mass failure in Mathematics.

4. Examine perception of trained and untrained teachers of causes of mass failure in Mathematics.

The following research questions were answered by the researchers:

1. Is There Any Significant Difference Between Perception Of Male And Female Teachers Of Causes Of Mass Failure In Mathematics.

2. Is There Any Significant Difference Between Perception Of Rural And Urban Teachers Of Causes Of Mass Failure In Mathematics.

3. Is There Any Significant Difference Between Perception Of Teacher Of Private And Public Schools Of Causes Of Mass Failure In Mathematics.

4. Is There Any Significant Difference Between The Perception Of Trained And Untrained Teachers Of Causes Of Mass Failure In Mathematics.

The following research hypotheses were raised in this study.

1. There is no significant difference between the perception of male and female teachers of causes of mass failure in Mathematics.

2. There is no significant difference in the perception of urban and rural school and failure in Mathematics.

3. There is no difference between the perception of private and public schools' teacher of causes of mass failure in Mathematics.

4. There is no significant difference between perception of trained and untrained teacher of causes of mass failure in Mathematics.

This study would enable the teachers, students, parents, the curriculum planners, school authority, Government, researchers, school administrators and all those involved in educational management to know the causes of student mass failure in mathematics in senior school certificate examination and what should be done to improve the Situation.

ISSN:2584-2706 DOI: https://doi.org/10.67317/IJMSRT26SEP133

It would enable the education ministries supervisor and principals to know that if the teachers in secondary school especially mathematics teachers are properly monitored and motivated, they lean as well do better than their private school counterpart, because most of the public school teachers nowadays are more qualified and trained. Teaching is a complex act of a person or group of persons trying to influence the behavior of another person or group of persons.

It is the act of transmitting knowledge of some Fact, Ideas, Information, Skills and capacities through the use of some techniques. Teaching according to clark and staff (1970) is an attempt to help people acquire some skills, Attitudes, Knowledge, Ideas, and Appreciation.

This study was descriptive survey research design. The population of the study were all the students in all the secondary schools in Olorunda Local Government Area of Osun State, Nigeria.

The sample of the study were 100 teacher selected from 10 secondary schools in the Local Government. The schools were selected using simple random technique, while the students were selected using systematic random technique. Structured questionnaire that were validated by consortium experts, as well as having reliability consistency of 0.87 was used to collect data from the respondent

The data collected from respondents was analyzed using mean, standard deviation and t-test inferential statistics.

Data Analysis, Interpretation, Results and Discussion of the Findings

Hypothesis One: There is no significant difference between the perception of male and female teachers of causes of mass failure in Mathematics.Teachers' Gender

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	2.451	27	.091	2.050	.008
Within Groups	3.189	72	.044		
	5.640	99			

Decision Making / Interpretation: Since the P\text{-value} = 0.008 is less than the level of significance (0.05), the null hypothesis is rejected, and the alternative hypothesis is accepted. Hence, there is a significant difference between the perception of male and female teachers regarding the causes of mass failure in Mathematics.

Result: There is a significant difference between the perception of male and female teachers regarding the causes of mass failure in Mathematics.

Hypothesis Two: There is no significant difference between the perception of rural and urban teachers regarding the causes of mass failure in Mathematics.

School Location

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	5.039		.187	.822	.710
Within Groups	16.351		.227		
Total					

Decision Making / Interpretation: Since the P Value is greater than Level of Significance, the above null hypothesis should be accepted. Hence, there is no significant difference between the perception of rural and urban teachers regarding the causes of mass failure in Mathematics.

Result: There is no significant difference between the perception of rural and urban teachers regarding the causes of mass failure in Mathematics.

Hypothesis Three: There is no significant difference between the perception of private and public school teachers regarding the causes of mass failure in Mathematics.

ISSN:2584-2706 DOI: https://doi.org/10.67317/IJMSRT26SEP133

Table: School Type

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	9.995		.370	1.654	.047
Within Groups	16.115		.224		
Total	26.110				

According to the above table at 0.05 Level of Significance P Value is 047, P Value = 047<Level of Significance = 0.05

Decision Making / Interpretation: Since the P Value is less than Level of Significance, the above null hypothesis should be rejected. Hence, there is significant difference between the perception of private and public school teachers regarding the causes of mass failure in Mathematics.

Result: There is significant difference between the perception of private and public school teachers regarding the causes of mass failure in Mathematics.

Hypothesis Four: There is no significant difference between the perception of trained and untrained school teachers regarding the causes of mass failure in Mathematics

Table: Teachers' Qualification

	Sum of Squares		Mean Square	F	Sig
Between Groups	10.827		.401	1.647	.049
Within Groups	17.533		.244		
Total	28.360				

According to the above table at 0.05 Level of Significance P Value is 049, P Value = 049<Level of Significance = 0.05

Decision Making / Interpretation: Since the P Value = 049 is less than Level of Significance = 0.05, the above null hypothesis should be rejected and then accept the alternative one. Hence, there is significant difference between the perception of trained and untrained teachers regarding the causes of mass failure in Mathematics.

Result: There is significant difference between the perception of trained and untrained teachers regarding the causes of mass failure in Mathematics.

The sample of the study were one hundred selected from ten secondary schools in Olorunda Local Government Area of Osun State. The collected data was analyzed using mean, standard deviation and t-test inferential statistics.

The result shows that:

1. There is significant difference between the perception of male and female teachers of mass failure in mathematics.

2. There is no significant difference between the perception of rural and urban teachers and causes of mass failure in mathematics.

3. There is no significant difference between the perception of private and public teachers of causes of mass failure in mathematics.

4. There is no significant difference between the perception of trained and untrained teachers of causes of mass failure in mathematics

ISSN:2584-2706 DOI: https://doi.org/10.67317/IJMSRT26SEP133

III. DISCUSSION OF THE FINDING

This investigation reveals that there is significant difference between the perception of male and female teachers regarding the causes of mass failure in Mathematics. This means that the two genders perceptions regarding the causes of mass failure in Mathematics are different. This might be cause by gender factors.

The study also shows that there is no significant difference between the perception of rural and urban teachers regarding the causes of mass failure in Mathematics. This indicate that the perception of rural and urban secondary school teachers regarding the causes of mass failure in Mathematics is positively correlated, that is there is no difference in their perception, but almost equal. This might happen both rural and urban teachers had the same training on examination.

It was recommended that the issue of examination malpractices cannot be solved by one personality, but could be resolved by all the secondary school stakeholders in Olorunda Local Government of Osun State.

REFERENCES

[1]. Adekunmisi, S.R., (2018). Curbing examination malpractices through information literacy programmes. Journal of Humanities, 4(1), 53-61
[2]. Adeniran, F. A., Bakare, K. M., & Akinpade, O. A. (2020). The Stakeholders' responsibilities in managing examination malpractice in Secondary Schools, in Lagos State, Nigeria. International Journal of Advanced Academic Research, 6(4), 13-36.
[3]. Asinya, O.E., (2012). Examination Malpractice in Nigerian Schools; An Obstacle to Progress in Socialization in School Environment, Causes, Effects and Remedy. Journal of Resourcefulness and Distinction, 1 (1), 139-145
[4]. Ayanniyi, B. A., & Anya, C. O. (2017). Forms and consequences of examination malpractice in Nigerian schools and Universities: What should the stakeholders do? International journal of education, training and learning, 1(1), 9-21.
[5]. Ayoade, A. A., & Farayola, P. I. (2020). Dynamics of examination malpractice among the key players in Nigeria. Daffodil International University Journal of Science and Technology, 15(2), 25-32.
[6]. Cooper, K., & Olson, M. R. (2020). The multiple 'I's' of teacher identity. In Changing research and practice (pp. 78-89). Routledge.
[7]. Federal Ministry of Education (FME, 2016). Nigeria Digest of Education Statistics 2014-2016. Abuja: Federal Ministry of Education.
[8]. Longat, D.D., Blessing, S.M., Bitrus P.D., Badung D.M. and Emmanuel, M.D. (2021). Examination malpractice: A threat to educational reforms in tertiary institution in Nigeria. South eastern journal of research and sustainable development (SEJRSD), 4 (1), 17-23
[9]. Maheshwari, V. K. (2011). Malpractices in examinations. The termites destroying the educational set up. K.L.D.A (P.G) College.
[10]. Nnam, M. U., & Inah, A. F. (2015). Empirical Investigation into the Causes, Forms and Consequences of Examination Malpractice in Nigerian Institutions of Higher Learning. International Journal of Novelhttp:/www.Sunday.tribune.com.ng/index.ph
[11]. Ojonemi, P. S., Enejoh, W., Enejoh, A., & Olatunmibi, O. (2013). Examination Malpractice: Challenges to Human Resource Development in Nigeria. International Journal of Capacity Building in Education and Management, 2(1), 91 – 101
[12]. Olamoyegun S.O, Aibe J.N, Ahmed F.M, Ogunode N.J (2022) Causes, Effects and Remedies of Examination Malpractices among secondary school Student in Osun State. International Journal on Integrated Education. https://creativecommunications.org
[13]. Oko, S. U., & Adie, R. I. (2016). Examination Malpractice: Causes, Effects and Possible Ways of Curbing the Menace. A Study of Cross River University of Technology. International Journal of Management Studies and Research, 4(1), 59-65.
[14]. Omeri, M (2012) Nigeria Ranked Number 1 In World Examination Malpractice Index (Retrieved from http://www.ngtrends.com/2012/07/smh-nigeria-ranked-number-1-in-world- / examination-malpractice-index)
[15]. Onyibe, C. O., Uma, U. U. & Emmanuel, I. (2015). Examination malpractice in Nigeria: Causes and effects on national development, Journal of education and practice, 6(26), 100-103.
[16]. Shomoye, M. A. Adelakun, N. O. Adebisi, K. L. (2023). Exploring the Use of Electronic Resources for Undergraduate Learning at the National Open University of Nigeria in Kwara State, WSEAS Transactions on Computers, vol. 22, pp. 302-310. http://dx.doi.org/10.37394/23205.2023.22.34
[17]. Tan, C. (2017). Confucianism and education. In Oxford research encyclopedia of education.