

PSYCHOLOGICAL FACTORS INFLUENCING STUDENTS PERFORMANCE IN INTEGRATED SCIENCE OF JUNIOR SCHOOL CERTIFICATE EXAMINATION IN RIVERS STATE, NIGERIA

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ABSTRACT

This study investigated the psychological factors that influencing the academic performance of students in Junior Secondary School Certificate Examination (JSSCE) in Integrated Science in Rivers State, Nigeria. The Survey Research Design (SRD) method was adopted. A total of 240 students in junior secondary schools were selected randomly for the study through Stratified Random Sample (SRS) from eight (8) Junior Secondary schools in the state. Five research questions were formulated to guide the study and Likert scale was used to obtain data for the study. Data was analyzed using mean and standard deviation, and a standard reference mean of 2.50 for a 4-point rating scale was adopted for the purpose of decision making. Analysis of data showed that the psychological problems that affect academic performance of students in JSSCE in integrated science in the state include, stress, phobia, depression, inferiority complex and delinquency. It is recommended that parents should consciously show love and care for their children to ensure good upbringing and prevent phobic tendencies. School principals and teachers are urged to instill strict discipline on students to avoid truancy and other acts of delinquency. Government should engage qualified counsellors in schools who in conjunction with the teachers would evolve positive ways of managing stress, depression and interiority complex among students in Junior Secondary schools.

Keywords: *Psychological factors, JSSCE, Integrated Science, Rivers State, performance*

INTRODUCTION

Academic performance is a measure of the ability of a learner to recall appropriate learned facts and information at a particular time. The degree of recall of learned experiences seem to depend on the influence of some psychological factors. These psychological factors that affect the academic performance of students in Junior Secondary Schools, include, phobia, stress, depression, delinquency and inferiority complex (Uzoeshi, 2005).

The fear of failing exams produces stress among students. According to Uzoeshi and Iwundu (2002), the mere fact that exams are approaching triggers off tension and anxiety". They found out that potential stress situations among learners include; lack of time to study, insufficient finance, fear of examination, poor interpersonal relationship, inadequate learning facilities and perceived difficult courses or subjects which leads to poor performance of learners in Junior and Senior Certificate Examinations. Goleman (1995) noted that irrational fear or dread of school situations has led to withdrawal of some young learners from schools. This irrational fear which is described as phobia has contributed to poor performance of students in some subjects perceived to be difficult especially in Junior Secondary Schools.

Collagham and Joseph (1995) stated that bullying of the young ones by the older students creates fear in the mind of the young ones. They opined that such situations could lead to lack of poor performance. Most school dropouts blame their misfortune on the inhuman treatments meted out to them during their early school days. Franklin (2004) remarked that the school environment tends to socially alienate the weak learners and create fear or emotional disturbances that culminate to failure in examination.

Depression disorder is an illness that involves the body, mood and thoughts. Asagwara (1996) stated that symptoms of depression may vary from person to person and also depend on the severity of the depression. According to him, the depressed person experiences problems in concentration and decision making, feels sad and shows changes in physical well being such as loss of appetite and tiredness which inhibit work performance and attendance to school. Onyejiaku (1991) also noted that depression due to loss of hopes, disappointments and failures, may inhibit learner's performance of intellectual task. According to Ukpong (2000) inferiority complex among students affects their participation in classroom learning. There is a close relationship between self perception and participation in intellectual activities. Negative self concept inhibits an individual's participation in group activities that leads to socialization. Morrison (2001) described self concept as interplay between the individual and the environment.

Students who engage in disruptive acts sometimes result in poor academic performance. Deviant acts in school include; cultism, stealing, violation of school rules, examination malpractice, drug abuse and prostitution. Such students do not take their studies serious; hence they perform poor in examination. Integrated Science is an aggregation of subjects which demands learner's adaptive skills and intellectual competence in order to cope with the diversified areas of the subject matter. In terms of learning and recall of learned experiences, these psychological factors tend to inhibit a learned response, and their inhibitory potentiality varies from moment to moment. This study aims to investigate the extent to which the psychological factors such as: stress, phobia, depression, inferiority complex can contribute to poor performance of students in Junior Secondary Schools Certificate Examination in Integrated Science in Rivers State, Nigeria.

The following research questions were formulated to guide the study

- 1 To what extent does stress contribute to poor performance of students in Junior School Certificate Examination in Integrated Science?
- 2 To what extent does phobia contribute to poor performance of students in Junior School Certificate Examination in Integrated Science?
- 3 To what extent does depression contribute to poor performance of students in Junior School Certificate Examination in Integrated Science?
- 4 To what extent does inferiority complex contribute to poor performance of students in Junior School Certificate Examination in Integrated Science?
- 5 To what extent does delinquency contribute to poor performance of students in Junior School Certificate Examination in integrated Science?

METHODOLOGY

This study is a descriptive research. The survey research design method was adopted. Students in Junior Secondary Schools in Rivers State constitute the population of this study. There are 32 Junior Secondary and Nine Thousand Three Hundred (9,300) students on enrolment. Stratified random sampling technique was used to select a total of 240 Junior Secondary Three (JS3) students from eight (8) Junior Secondary Schools out of 32 Junior Secondary Schools in the State. Thirty students made up of equal number of boys and girls were randomly selected in each of the sample schools. The stratum for sample selection is based on school location, i.e. urban areas, semi-urban areas and rural areas of the State. The research instrument for this study is a 23-item rating scale designed for JS3 students in the sample schools. It is a 4-points rating scale, rated as follows: strongly agree (SA) = 4 points agree (A) = 3 points disagree (DA) = 2 points and strongly disagree (SDA) = 1 point.

The face and content validities of the research instrument was approved by senior lecturers in the department, after careful reading and comments. The reliability of the instrument was established using split- half method. By this method, the instrument was administered to a group of twenty (20) JS3 students randomly selected to test the reliability of the instrument prior to data collection. The students were split into two halves and their rated scores were correlated using Pearson Product - Moment Correlation Method. The split-half formula was then applied to obtain a correlation coefficient of +0.78 and +0.85, which shows that the instrument is reliable. The instrument was administered to the sampled Junior Secondary School students, after a brief explanation of the purpose of the study. It was administered and collected personally by the researcher. The period of data collection lasted for two (2) weeks. Data were analysed using mean and standard deviation. A standard reference mean of 2.50 for a 4-point rating scale was adopted for the purpose of determining the degree of acceptable psychological problems that affect the academic performance of students in Junior School Certificate Examination in Rivers State.

RESULTS AND DISCUSSION

Table 1: Contribution of stress to poor performance of students in Junior School Certificate Examination in Integrated Science

<i>Variables Associated with stress that contributes to poor performance in integrate science</i>	<i>4</i>	<i>Student's Response</i>			<i>Mean</i>	<i>Std. Dev.</i>	<i>Total</i>
		<i>3</i>	<i>2</i>	<i>1</i>			
Lack of concentration in preparation for examinations	84	152	34	6	3.01	0.66	240
Anxiety and restlessness in examination hall	34	164	34	8	2.93	0.64	240
Emotional instability and poor recall of learned concepts	34	160	38	8	2.92	0.65	240
Increase in common mistakes in response to examination questions	36	1658	29	7	2.97	0.62	240

Standard reference mean = 2.50.

Table 2: Contribution of phobia to poor performance of students in students in Junior School Certificate Examination in Integrated Science

<i>Variables Associated with stress that contributes to poor performance in integrate science</i>	<i>4</i>	<i>Student's Response</i>			<i>Mean</i>	<i>Std. Dev.</i>	<i>Total</i>
		<i>3</i>	<i>2</i>	<i>1</i>			
Fear of attending school	40	154	39	7	2.95	0.67	240
Fear of school academic work load	26	172	32	10	2.89	0.63	240
Poor social maladjustment in school	20	178	34	8	2.88	0.59	240
Fear of failure in participating in classroom interactive questions	30	179	24	7	2.97	0.58	240

Standard reference mean = 2.50.

Table 3: Contribution of depression to poor performance of students in Junior School Certificate Examination in Integrated Science

<i>Variables Associated with stress that contributes to poor performance in integrate science</i>	<i>4</i>	<i>Student's Response</i>			<i>Mean</i>	<i>Std. Dev.</i>	<i>Total</i>
		<i>3</i>	<i>2</i>	<i>1</i>			
Menial slavery inability to retain or recall learned concepts	14	180	41	5	2.85	0.54	240
Persistent sadness in classroom interaction with peers	26	179	29	8	2.93	0.59	240
Feelings of hopelessness and poor participation in classroom activities	24	181	25	10	2.91	0.60	240
Loss of interest of pleasure in school activities	41	174	20	5	3.05	0.58	240

Standard reference mean = 2.50

Table 4: Contribution of inferiority compel to poor performance of students in Junior School Certificate Examination in Integrated Science.

<i>Variables Associated with stress that contributes to poor performance in integrate science</i>	<i>4</i>	<i>Student's Response</i>			<i>Mean</i>	<i>Std. Dev.</i>	<i>Total</i>
		<i>3</i>	<i>2</i>	<i>1</i>			
Feelings of inadequacy in interaction with school mates	23	190	22	5	2.96	0.52	240
Feelings of rejection in classroom interaction	30	170	33	7	2.93	0.60	240
Feelings of dejection in response to school activities	39	164	36	10	2.89	0.66	240

Standard reference mean = 2.50

Table 5: Contribution of delinquency to poor performance of students in Junior School Certification Examination in Integrated Science

<i>Variables Associated with stress that contributes to poor performance in integrate science</i>	<i>4</i>	<i>Student's Response</i>			<i>Mean</i>	<i>Std. Dev.</i>	<i>Total</i>
		<i>3</i>	<i>2</i>	<i>1</i>			
Truancy in school	34	169	30	7	2.96	0.62	240
Disobedience to school rules and regulations	14	188	26	9	2.86	0.56	240
Commitment to gangs violence and cultism	28	180	26	6	2.96	0.59	240
Involvement in acts of examination malpractices	29	182	22	7	2.97	0.57	240

Standard reference mean = 2.50

Table 1 shows that the mean values are greater than the standard reference mean of 2.50. This indicates that JS3 students were of the view that lack of concentration in preparation for examinations, anxiety and restlessness in examination hall, emotional instability and poor recall of learned concepts and increase in common mistakes in response to examination questions are stress-induced variables which contribute to poor academic performance in Junior School Certificate Examinations in Integrated Science. Low value of standard deviations obtained indicates that the students were homogeneous in their response. This finding supports the views of Uzoeshi (2005) that students who are stressful in school perform poorly in examinations.

Table 2 shows the mean values, which are greater than the standard reference means of 2.50. This indicates that the students were of the view that; fear of attending school, fear of school academic work, load, poor social maladjustment in school and fear of failure in participating in classroom interactive questions are variables of phobia which contributes to poor performance of students in Junior School certificate Examination in Integrated Science. The low values of standard deviations obtained indicate that the students were homogeneous in their response. This finding supports the views made by Robert-Okah (2002) that school environment often create fear in the mind of students leading to poor concentration in their studies, poor participation in classroom learning and poor performance in examinations.

Table 3 shows the mean values, which are greater than the standard reference mean of 2.50 indicates that the students were of the view that; mental slavery and inability to retain or recall learned concepts, persistent sadness in classroom interaction with peers, feelings of hopelessness and poor participation in classroom activities and lots of interest or pleasure in school activities are variables of depression that contributes to poor performance of students in Junior School Certificate Examination in Integrated Science. Small values of standard deviations obtained indicate that the students were homogeneous in their response. This results supports the remarks of Franklin (2004) that depression affect students devotion to home preparatory studies, which results to poor academic performance.

Table 4 shows the mean values, which are greater than the standard reference mean of 2.50 indicates that the students were of the view that feeling of inadequacy in interaction with school mates, feeling of rejection in classroom interaction, and feelings of dejection in response to school activities are variables associated with inferiority complex which contribute to poor performance of students in Junior School Certificate Examinations in Integrated Science. Small values of standard deviations obtained show that the students were homogeneous in their response. This finding agrees with the views of Uzoeshi and Iwundu (2002), that inferiority complex results to poor inter-personal relationship among students which inhibits group learning, leading to poor performance in examinations.

Table 5 shows that means of 2.96, 2.86, 2.96 and 2.97 respectively, which are greater than the standard of 2.50, indicates that the students were of the view that;

truancy in school, disobedience to school rules and regulations, commitment to gangs of violence and cultism, and involvement in acts of examination malpractices are variables associated with delinquency which contributes to poor performance of students in Junior School Certificate Examination in Integrated Science. Small values of standard deviations obtained indicate that the students were homogenous in their response. This finding supports the remarks of Morrison (2001) that delinquency promotes truancy and disobedience to school rules among students and inhibits their rational thoughts that could lead to hard work and success in examinations.

The findings of this study offers a lot to students on the need to emulate good models that will inspire their academic pursuit. It is a challenge to the teachers and school principals who often neglect their responsibilities to instill discipline among students in the school. It will inspire parents and teachers to evolve strategies that will help in managing phobic students who are afraid of the school environment. It is also a call to parents to endeavour to love and train up their children in a disciplined manner so that they will not engage in acts of deviancy that will have negative impact on their social, emotional, moral and academic up bringing. The result is a challenge to the government to evolve ways of restoring depressed, delinquent and immoral youths to become ideal members of the society, so that they do not engage in acts of examination malpractices, and other social vices.

CONCLUSION AND RECOMMENDATIONS

This study found out that the psychological problems that affect the academic performance of students in Junior School Certificate Examinations in Integrated Science include; stress, phobia, depression, inferiority complex and delinquency. These variables have negative impact on academic achievements among junior secondary school students in Rivers State. Based on the findings of this research work and its consequent implications to academic achievements of students in Junior Secondary Schools in Rivers State, Nigeria the following recommendations are necessary made:

- i Parents should ensure that they teach their children the basic moral standards of conduct so that they can develop to become good citizens of the society. School principals and teachers should ensure that they maintain strict school discipline and shun all acts of delinquency among students.
- ii Government should employ guidance counsellors in all Junior Secondary Schools to counsel delinquent and phobic students in order to adjust and conform to the challenges of secondary education.
- iii Government should organize seminars to inculcate in delinquent juvenile necessary acceptable moral standards of conduct and behaviours. School administrators and teachers should liaise with parents to inculcate discipline and ideal social values in children and youths of secondary school age.

- iv School principals, teacher and guidance counselors should organize social awareness campaign against juvenile delinquency and examination malpractices.
- v Guidance counsellors should evolve strategies to managing phobic students and those who manifest acts of inferiority complex, especially in classroom interaction.

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