

TEACHER EXPECTANCY EFFECT AS CORRELATE OF ACADEMIC PERFORMANCE AMONG STUDENTS IN RIVERS STATE

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Abstract

This study examined Teacher Expectancy Effects as Correlates of Academic Performance of students in Rivers State Public Secondary Schools. Three (3) research questions and three (3) null hypotheses guided the study. Descriptive survey design was adopted. Using Taro Yamene's formulae, sample of 1,080 students were drawn from a population of 38,081 to elicit information on the teacher expectancy effects on academic performance of students' senior secondary three (3). The instrument used for data collection was a structured questionnaire titled "Teacher Expectancy and Academic Achievement Questionnaire (TEAAQ) in a modified four (4) point Likert type rating scale and researchers made achievement test in mathematics and English Language. Face and content validities of the instrument were ascertain by two experts in measurement and evaluation. Two Way Analyses of Variance (2-way ANOVA) was used to test by hypothesis 1, while hypothesis 2 and 3 were tested, using Z- test statistics. The research questions were answered, using mean and standard deviation. The results obtained indicated the teachers' words of encouragement, gender, teachers' gift and reward and teachers' pieces of advice significantly influence academic performance among students. Among other things the researcher recommended that supervisors of Public Schools in Rivers State should emphasize more on responsibilities of evaluating daily classroom activities particularly the teacher – student interaction to be sure there is balance between educational activities and students' performance.

Background

Teacher Expectancy effects came to be first in 1996, when Robert Rosenthal and Lenore Jacobson published the results of a power study known as Pygmalion Effect. According to Tauber (1998), the Pygmalion effect asserts that one's expectations about a person can eventually lead that person to behave and achieve in ways that confirm the expectations" (pg1). When one goes into social interaction of what will happen. Expectancy effects pervades social life. In this way, one predicts the behavior of others and adjusts one's own behavior according to the range of expectations. In fact, expectations are necessarily steps to smooth interpersonal relationship or Brophy (1983) states that teachers behave differently

towards students from whom they held high expectations than they did towards students for whom they had low expectations. Teachers were more likely to praise high – expectancy students for success and less likely to criticize them for failure in classroom tasks. Moreover, teachers offered high-expectancy students feedback on assignments at a higher rate than they offered it to the low- expectancy students.

While Brophy indicated that teachers' criticized high – expectancy students less than low, Mittman (1985) noticed that when teachers' do criticize high expectancy students', they do so for very different purposes. Beyond classroom interaction, teachers may very well grade low- expectancy students differently. Typically Jussim (1991) points out that teachers' inferred high effort on the basis of previous high performance. In addition, teachers' perception of students' normative behavior in the classroom influenced their grading of students' work: Brophy (1983) made a similar point, indicating high – expectancy students were more likely to be given the benefit of the doubt in grading practices than low-expectancy students whose luck would only be temporary. All of the teacher behaviors mentioned can ultimately lead to a “self- fulfilling” prophecy where the students will then perform as expected.

Teachers' expectation concerns self- efficacy (Pintrich, 1996). Schunk defines self- efficacy as people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performance as cited by Pintrich, 1996.

Teaching and learning are likely to be enhanced or inhibited, depending on the teachers' interactions with the students. Teachers' are supposed to be role-models; hence students are easily influenced by the teachers' actions and pronouncements. It is expected that teachers' actions and pronouncements. It is expected that teachers' related to all students equally without any basis. Some teachers in Rivers State Public Secondary Schools find it difficult to do so. Instead some students are more liked by their teachers' who in most cases call them to answer questions, praise them and give more opportunities to learn as well as wait more patiently for them to respond to questions than those who are less – liked. In addition however, differential treatment may indirectly affect achievement by enhancing or undermining student motivation. In the classroom, teachers in Rivers State Public Secondary Schools seem to forget that some students are not well exposed to relevant study materials at home apart from the ones provided by the government to be used in the classroom learning activities which are supposed to enhance their academic performance. Some students come to school late cannot replace torn school uniforms, school scandals. It is the duty of every teacher in Rivers State Public Secondary to ensure that these students do not hide under such reasons to achieve less in the class. Given the foregoing background, it is likely that the teachers' manner of interaction in school with students would enhance or mar students' performance.

Research Questions

The following four questions guided the study:

1. How does teachers' words of encouragement affect male and female students academic performance in Rivers State Public Secondary Schools.
2. How do teachers' pieces of advice to students affect their academic performance in Rivers State Public Secondary Schools?
3. What is the effect of teachers' gifts rewards on students' academic performance in Public Secondary Schools in Rivers State?

Hypotheses

HO₁: There is no significant difference in the academic performance of male and female students based on teachers' words of encouragement Rivers State Public Secondary Schools.

HO₂: There is no significant difference in academic performance of students based on teachers' gifts – rewards in Rivers State Public Secondary Schools.

HO₃: There is no significant difference in academic performance of students based on teachers' pieces of advice in Rivers State Public Secondary Schools.

Methodology

The design adopted for this study descriptive survey. This is because it intends to determine the relationship between two or more variables. It describes the degree of relationship between variables (Awontunde & Ugodulunwa 2002).

The population of this study comprised all senior secondary School Students three (3) in Rivers State Public Secondary School with the population of 38,081 (Source: Rivers State Post – Primary Schools Board 2015) This is irrespective of age ethnic group, religion, gender, home and school location of the students study sample consist consisted of 1,080 drawn from thirty six (36) school populations were considered homogenous, stratified Random sampling technique was applied in the selection of the thirty six (36) schools four (4) schools from each school making a total of 120 students from each local government Area. Three (3) local government from senatorial Zones, 360 students from each senatorial zones. The Teacher Expectancy and Academic Achievement Questionnaire (TEEAQ) was developed and used as instrument for data collection. In addition, research – made English Language and Mathematics achievement test for performance. The (TEAAQ) was validated by two experts in measurement and evaluation for assessment and corrections. The instrument consists of 25 items. The researcher made the TEAAQ available to the sample population and personally administered with the assistance of two research experts. The researcher read out the instructions to all the student who had difficulty in understanding the basic requirement and requested them not to write their names so as to assure them of the desire for confidentiality.

The data collected from the study was analyzed as follows: For all the research questions Mean and Standard deviation were used. Then the null hypotheses. Hypotheses 1 was analyzed and tested with two – way analysis of variance (2-way ANOVA). This is because it has a dependent variable (academic performance) an

independent variable with two levels for instance high and low teachers' words of encouragement and then a moderator variable of two levels for instance male and female students)

Finally, for null hypothesis 2 and 3, a Z-test statistics were used.

Analysis of Data Based on Research Questions.

Research Question 1: How does teachers' words of encouragement affect male and female students' academic performance?

Table 4.1: Mean and standard deviation of students' Academic achievements scores based on their levels of teachers' words of encouragement (TWE) and gender.

TWE levels	Gender	N	Mean	SD
Low	Male	105	19.75	6.70
	Female	248	17.48	4.95
	Total	353	18.16	5.62
High	Male	268	19.71	5.33
	Female	459	19.39	4.66
	Total	727	19.51	4.92
Total	Male	373	19.72	5.74
	Female	707	18.72	4.85
	Total	1080	19.07	5.19

Results in Table 4.1 revealed that for the students who had low level of teachers' words of encouragement, their male had the mean score of 19.75 (SD = 6.70), while their females had the mean score of 17.48 (SD =4.95). Hence, it is deduced that the males had a higher mean of 2.27 more than their female counterparts.

Considering the mean scores of the students with the high teachers' words of encouragements, the male students had the mean of 19.71 (SD=5.33), while the females had 19.39 (SD=4.66), that means, the males performed better than their female counterparts by a mean difference of 0.32.

Furthermore Table 4.1 also revealed that the students with low and high levels of teachers' words of encouragement irrespective of their gender had the mean scores of 18.16 and 19.51 respectively. This indicated that the students with high levels of teachers' words of encouragement performed better than their counterparts with low levels of teachers' words of encouragement with a mean difference of 1.35.

Finally, Table 4.1 also showed that the mean scores of the male and female students irrespective of their levels in teachers' words of encouragement were 19.72 and 18.72 respectively. This indicated that generally the males performed better than the females by a mean difference of 1.00.

Research question 2: How does teachers' pieces of advice to students affect their academic performance in Rivers State Public Secondary Schools?

Table 4.5: Mean and Standard deviation analysis on how teachers' pieces of advice affect students' academic performance.

Teachers pieces of advice	N	M	SD
Low	407	18.28	5.54
High	673	19.55	4.91

Results in Table 4.5, revealed that the students who had low and high teachers' pieces of advice had the mean scores 18.28 and 19.55 respectively. The standard deviation of their scores were 5.54 and 4.91 respectively for the low and high teachers' pieces of advice groups of students. Based on their mean scores, it was deduced that the high teacher pieces of advice students performed better than their low teachers' pieces of advice group by a mean difference of 1.27.

Research Question 4: What is the effect of teachers' reward on students' academic performance in Rivers State Public Secondary Schools.

Table 4.4: Mean and standard deviation analysis in the effect of teachers' reward on students academic performance.

Teachers reward	N	Mean	SD
High	395	19.51	4.91
Low	685	18.81	5.33

Result in table 4.4, revealed that the students that had high teachers reward were 395 in number while those that had low teachers reward were 685 in number. Their mean score were 19.51 and 18.81 respectively for high and low teachers' reward groups. Based on their mean scores it is deduced that those with high, teachers' reward performed better than their counterpart by a mean difference of 0.696.

Testing of Hypotheses

Hypothesis 1: There is no significant difference in the academic performance of male and female students based on teachers' words of encouragement.

Table 4.2.1: Summary of 2-way ANOVA on the difference between the academic achievement of the male and female students based on teacher's words of encouragement.

Source of variance	Sum of squares	df	mean squares	F	Sig
TWE Level	178.66	1	178.66	6.80	0.009
Gender	343.36	1	343.36	13.07	0.000
TWE level xGender	195.68	1	195.98	7.45	0.006
Error	28258.21	1076	26.26		
Total	29088.07	1079			

Results in table 4.1 revealed that the calculated F-value 6.80 obtained for teachers' words of encouragement is significant at 0.05 level of significance ($P = 0.000 < 0.05$). This means that teachers' words of encouragement significantly differ on male and female students' academic achievement.

Table 4.1 also revealed that the calculated F-value 13.07 obtained for gender is significant at 0.000 level which is lower than the 0.05, the chosen level of significance ($p < 0.05$). Thus, gender significantly influence the academic achievement of the students.

Finally Table 4.1 revealed that the calculated F-value for interaction effect between teachers' words of encouragement and gender 7.45 is significant at 0.006 which is lower than the 0.05, the chosen level of significance. Thus, there is a significant influence of interaction effect between teachers' words of encouragement and gender on students' academic achievement.

Hypothesis 2: There is no significant difference in academic performance based on teachers' reward in Rivers State Public Secondary Schools.

Table 4.2.4: A Z- test analysis on the difference in academic performance of students based on teachers' reward.

Teachers' reward	N	Mean	SD	Mean Difference	Df	Z	P-value
High	395	19.51	4.91	0.696	1078	2.12	0.034
Low	685	18.81	5.33				

Results in Table 4.4, revealed that when the Mean difference of 0.696 was subjected to a Z- test analysis, a calculated Z value of 2.12 was obtained at a degree of freedom 1078 at 0.034. Thus, teachers reward on students significantly influence academic performance of students.

Hypothesis 3: There is no significant difference in academic performance of students' based on teachers' pieces of advice in Rivers State Public Secondary Schools.

Table 4.2.5: A Z- test analysis on the difference in academic performance of students based on teachers' pieces of advice

Teachers' Pieces Of advice	N	Mean	SD	Mean Difference	Df	Z-cal	P-value
Low	407	18.28	5.54	1.27	1078	3.93	0.000
High	673	19.55	4.91				

Results in table 4.5, revealed that when the Mean difference of 1.27 was subjected to a Z- test analysis, a calculated Z-value of 3.93 was obtained at a degree of freedom of 1078 at 0.000 level. Thus, since 0.000 level is lower than 0.05 the chosen level of probability, it is then deduced that teachers' pieces of advice significantly influence students' academic performance.

Recommendations

Based on the findings of this study, the researcher recommends that:

- Teachers' should provide a healthy teacher-student interaction and relationship in the classroom environment in order to give the students' education needs and capabilities for the academic excellence.
- Supervisors of public secondary schools in Rivers State should emphasize more on responsibilities of evaluating daily classroom activities particularly the teacher – student interaction to be sure there is balance between the educational activities and students performance.

Conclusion

Based on the findings of the study, it was concluded that teacher – student interaction in the classroom based on teachers' words of encouragement, gifts/rewards and teachers' pieces of advice will enhance academic performance of students in Rivers State Public Secondary.

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