

PERFORMANCE CAUSAL-ATTRIBUTIONS AS PREDICTORS OF SENIOR SECONDARY SCHOOL STUDENTS' ACHIEVEMENTS IN ENGLISH AND MATHEMATICS IN ANAMBRA STATE, NIGERIA

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Abstract

This study investigated performance causal - attributions as predictors of academic achievements of secondary school students in Anambra State. Eight research questions guided the study and eight hypotheses were tested at 0.05 level of significance. The study adopted a correlational survey design. The population of the study consists of 18,852 senior secondary school students (SS II) in the 258 public secondary schools in Anambra State. The sample for the study was 943 SSII students who were drawn using multi-stage sampling. One instrument was used for the data collection of this study along with the students' termly achievement scores in English language and Mathematics. The instrument was: Academic Casual-Attribution scale (ACAS). The instrument was a standardized one and has been properly validated and the reliability has been established. The data collected were analyzed using multiple regression for answering the research questions and testing the hypotheses. The finding of the study showed that Performance causal - attribution predicts also the achievements of students in English and Mathematics. Based on the findings conclusions were drawn, and the study recommended that schools, family and institutions should assist students to develop appropriate locus of control through proper learner- centred instructional strategies.

Key words: Academic achievements, Performance causal-attributions and Predictor

Introduction

The importance of education lies in the fact that it is considered as a key for bolstering human resource for sustainable economy and social change. This is in line with the Nigerian vision 2020 which recognizes education and training within the social pillar, as one of the platforms that will transform Nigeria into a large, strong, diversified, sustainable and competitive economy that effectively harnesses the talents and energies of its people and responsibly exploits its natural endowments to guarantee a high standard of living and quality of life for its citizens. In education, student's educational outcomes and achievement are evaluated and graded using examinations/tests (Chinta, 2005). Testing is

common in everyday life as students have to take many highly competitive centralized and high stakes examination such as the Common Entrance Examination (C.E.E.), First School Leaving Certificate Examination (F.S.L.C.E.), Junior Secondary School Certificate Examination (J.S.C.E), Senior Secondary School Certificate Examination (S.S.C.E.), Unified Tertiary Matriculation Examination (UTME), and a host of others.

These series of examinations play a dramatic role in the lives of students and their parents. In other words, achievement in these high stakes examinations is crucial for moving from one level of education to another, and also to gain access into prestigious careers. A factor which probably affects students' academic achievement is Performance causal - attribution. According to Sukariyaha and Assaada (2015) performance causal - attribution can be referred to as the way in which students interpret their achievements. Performance casual-attribution according to Cambridge English Dictionary is the act of saying or thinking that something is the result or work of a particular person or thing. It is a significant concept of social psychology which depicts how individual explain causes of behaviour and events. Similarly, Busari (2013) defined performance attribution as an individual's perception of the causes of his or her own success or failure. In other words, it is the inference that an individual makes about the results of one's behaviour. This is borne out of man's quest to know the driving force behind all the actions of an individual. This prompted social psychologist to propound the theory of motivation that addresses the question that explains how man's needs and desires have influenced the direction of his behaviour. It is the things in which the students anchor their success or failure in academic activities to. In other words, it is inferred that an individual ascribes to the results of one's behaviour. According to Weiner (1986), a child may attribute test results to several factors, including ability or effort, assistance from the teacher, and the difficulty level of the test. This is based on attribution theory which states students who feel more in control over the outcome of academic task will have more motivation to successfully complete the task. As a learner experiences more situation in which attribution for failure are internally based, the person will develop a pervasive presence of perceived helplessness. Mulokwe (2015) categorized students into those who have internal attributions and those who have external attributions. Students with internal attributions believe that success or failure is due to their own efforts, while those who have external attributions believe that reinforcers in life are controlled by luck, chance, or powerful others. For example, those who have internal attributions consider success in an examination as a result of their hard work (good study skills or behaviour) while, those who have external attributions consider failure in an examination as a result of an unfair test. In Carden, Courtney and Rebekah (2004) study, it was found that internals showed significantly lower academic procrastination, low test anxiety and reported higher academic achievement than externals.

Mkumbo and Aman (2012), studied perceived university students' attributions of their academic success and failure. The study was guided by three purposes which formed the research questions and hypothesis. The study was a descriptive survey. Participants involved a sample of 260 undergraduate students at the University of Dares Salaam, Tanzania. A questionnaire scale with items on locus of control, stability and controllability

dimensions was used for data collection in the study. The data collected were analyzed using mean, standard deviation, percentage and chi square. The results show that the majority of students attributed their academic performance to internal, stable and controllable factors. High performing students were more likely to attribute their academic performance to internal and controllable factors than low performing students. Success was attributed to internal and controllable factors, while academic failure was attributed to external and uncontrollable factors. The results of this study confirm the predictions of the attribution theory and are in line with the findings of similar studies conducted in other university settings.

In the above study performance attribution was considered in relation to performance. This will also be done in the present study. Sadia and Tehseen (2012) designed a study on the causal attribution of mainstream schools and their effect on achievement. The study was a causal comparative design which was guided by three purposes and two hypotheses. Sample of the present study was 490 tenth grade students from Rawalpindi and Islamabad districts of Pakistan. Out of these 490 tenth grade students 260 belonged to mainstream schools and 230 came from religious schools. Data for the study were collected using an attribution pattern scale developed using Weiner theory. The data collected was analyzed by using the techniques of frequency distribution, mean, standard deviation, median, quartile deviations and t-test. The conclusions of the study depicted that there was worth mentioning diversity between the academic achievement of two groups of students, that is, intrinsically motivated students with high causal attributions and extrinsically motivated students with low causal attributions, consequently confirming theory. It is concluded here that the students who experience success usually attribute their failure to external and uncontrollable factors and usually consider themselves as helpless in the face of any achievement related task.

The above study concentrated on finding out the attribution pattern of students and how it affects their achievement. The present study will concentrate on performance attribution rather than pattern of attribution. Sadia, Mohammed and Quaisara (2012) carried out a study on Attribution patterns among high and low group: An application of Weiner's Attribution Theory. The study was guided by two research questions and hypothesis. Correlational survey design was used for the study. The sample consisted of 428 boys and girls, grades 4-6, from primary public schools in Pakistan. The instrument used for data collection was Children's Attribution Style Questionnaire (CASQ) and State-Trait Anxiety Inventory for Children-Trait Form (STAIC-T). The data collected were analyzed using mean, standard deviation and Pearson formula. Results showed a small but significant relationship between negative attribution style and trait anxiety. In addition, girls reported higher trait anxiety than boys, and attribution style and trait anxiety were strongly correlated for girls, but not for boys. Compared to younger students, older students reported more attributions.

Wang and Hall (2018) investigated the A Systematic Review of Teachers' Causal Attribution: Prevalence, Correlates and Consequences on academic attainments. The study was guided by one research question and four hypotheses. Correlational survey design was used for the study. The sample consisted of 389 students of three hundred levels

drawn from eight colleges of Education. The instrument used for data collection was Academic Causal Attribution Scale (ACAS). Students' Grade Point Average (GPA) was used as measures of academic attainment. Then Pearson Product Moment Correlation was employed to determine the degree of relationship of the variables. The findings revealed that there were no significant correlations identified among the causal attributions factors and academic attainment of students except with external attribution of failure in which significant correlation was established with academic attainment.

In likewise manner, Sehnaz (2011) carried out a research to investigate the Young students' success and failure attributions in third grade learning foreign Language in Turkey. The participants were 52 English students attending third grade between the ages of 9 and 10. The instrument used for Data collection was self-made questionnaire-checklist with 25-item task in the academic performance. The Mann-Whitney U-statistics was used at 0.05 level of significance. It was found that both attributions were linked mostly to internal and unstable factors, with listening to the teacher and doing homework being the most significant. The results highlight importance of language teachers' awareness of their students' attributions.

Also Ibeawuchi and Iruloh (2017) investigated the relationship between self-esteem, locus of control and academic underachievement among some secondary school adolescents. The study was carried out in Rivers State secondary schools. Purposive sampling techniques were used to draw a sample of 240 students identified as underachievers. Bakare's (1977) progressive matrices adopted from Uwazurike (2008) was used to identify students with high mental ability while Basic Education Certificate Examination results of 2016 which is a cumulative record of examination and continuous assessment scores of the students' three years in school, was used as a measure of students' academic ability. Based on the attained mental ability performance and academic achievement of the students, the academic underachievers were identified. The various independent variables of the study were measured with a questionnaire whose reliabilities were statistically determined with Cronbach Alpha and reliability coefficients ranging from 0.51 to 0.74. The research questions were answered with mean and Pearson product moment correlation (r) while the null hypotheses were tested with special Z to determine the significance of r . It was found out that there was a very low relationship between self-esteem, internal locus of control, external locus of control and academic underachievement which showed no statistical significance.

Gujjar and Aijaz (2014) carried out a research to determine the degree of students' locus of control orientation with their academic achievements. Sample of study consisted of 466 students, out of which 205 were boys and 261 were girls. This sample was chosen from two female colleagues and one male college located in Rawalpindi city and one Co-education University Institute located in Islamabad city. For the purpose of measuring locus of control, questionnaire was used with a few modifications. Academic achievement was measured by the marks obtained by the sample in their recently held examination at their institutions. The obtained data were analyzed and interpreted using statistical tools such as: Mean Standard Deviation, t-test and correlation coefficient. The results show that the majority of students were found to be more internal than external in their locus of

control. This result is enlightened with other studies that locus of control and academic achievement were related positively to each other. Boys were found to be more internal than girls at college level however, no gender differences in locus of control were found at the University level.

Despite the considerable research attention focused on this construct, it appears that in Nigeria, the comprehensive/ broad nature of this construct as well as its relationship to academic achievements has not been attained. This may be observed in the trend of academic achievement of students in external examinations especially in English Language and Mathematics which has not necessarily improved from what it used to be (WAEC, 2018). This present study deemed it fit to examine achievement causal-attributions as predictors of academic achievement of senior secondary school students in Anambra State.

Purpose of the Study The major purpose of this study is to investigate performance causal attributions as predictors of senior secondary school students' achievements in English language and Mathematics in Anambra State. This study is specifically designed to determine: (a) The extent secondary school students' causal-attributions to their doing well in assignments predict their academic achievement in English Language. (b) The extent secondary school students' causal-attributions to their doing well in assignments predict their academic achievement in Mathematics. (c) The extent secondary school students' causal-attributions to their scoring low marks in assignments predict their academic achievement in English Language (d) The extent secondary school students' causal-attributions to their scoring low marks in assignments predict their academic achievement in Mathematics.(e)The extent secondary school students' causal-attributions to their doing well in examination predict their academic achievement in English Language (f) The extent secondary school students' causal-attributions to their doing well in examination predict their academic achievement in Mathematics. (g) The extent secondary school students' causal-attributions to their not doing well in examination predict their academic achievement in English Language. (h) The extent secondary school students' causal-attributions to their not doing well in examination predict their academic achievement in Mathematics.

Scope of the Study The study is delimited to investigation of performance causal-attributions as predictors of public senior secondary school students' achievement in English and Mathematics in Anambra State. The students' achievement scores in English language and Mathematics for the academic year and the questionnaire were used. The performance causal-attributions of students in doing well and not doing well in assignments as well as examinations were studied. The study was delimited to SS II students. The SS III students were exempted because they were preparing for their final examinations while the SS I students were new in the senior class.

Research Questions The following research questions guided this study: (a) To what extent do secondary school students' causal-attributions to their doing well in assignments predict their academic achievement in English Language? (b) To what extent do secondary school students' causal-attributions to their doing well in assignments predict their academic achievement in Mathematics? (c) To what extent do secondary school students'

causal-attributions to their scoring low marks in assignments predict their academic achievement in English Language? (d) To what extent do secondary school students' causal-attributions to their scoring low marks in assignments predict their academic achievement in Mathematics? (e) To what extent do secondary school students' causal-attributions to their doing well in examination predict their academic achievement in English Language? (f) To what extent do secondary school students' causal-attributions to their doing well in examination predict their academic achievement in Mathematics? (g) To what extent do secondary school students' causal-attributions to their not doing well in examination predict their academic achievement in English Language? (h) To what extent do secondary school students' causal-attributions to their not doing well in examination predict their academic achievement in Mathematics?

Research Hypotheses The following null hypotheses formulated guided the study and were tested at 0.05 significance levels. (a) Senior secondary school students' causal-attributions to their doing well in assignments do not significantly predict their academic achievement in English language. (b) Senior secondary school students' causal-attributions to their doing well in assignments do not significantly predict their academic achievement in Mathematics. (c) Senior secondary school students' causal-attributions to their scoring low marks in assignments do not significantly predict their academic achievement in English language. (d) Senior secondary school students' causal-attributions to their scoring low marks in assignments predict their academic achievement in Mathematics. (e) Senior secondary school students' causal-attributions to their doing well in examination do not significantly predict their academic achievement in English. (f) Senior secondary school students' causal-attributions to their doing well in examination do not significantly predict their academic achievement in Mathematics. (g) Senior secondary school students' causal-attributions to their not doing well in examination do not significantly predict their academic achievement in English Language. (h) Senior secondary school students' causal-attributions to their not doing well in examination do not significantly predict their academic achievement in Mathematics.

Method

Design of the Study The study is a correlational survey. Correlation survey research aimed at establishing relationships among two or more variables without any attempt to influence them. Correlational research is used to describe the relationship between two or more naturally occurring variables (Nworgu, 2016). It is adopted for this study to establish the predictive effect of the independent variables on the dependent variable. This study is on performance causal - attributions as predictors of academic achievement in English and Mathematics of senior secondary school students in Anambra state. The study was guided by Bernard Weiner's attribution theory of 1935.

Population of the Study and Sample and Sampling Techniques The population of the study consists of 18,852 senior secondary school students (SSS II) in the 258 public secondary schools in Anambra State (PPSC, 2017). These SS II students are in the six education zones in the state. The sample of this study consists of 943 SSII students. A

multistage sampling procedure was employed in the selection of the sample of the study. In the first stage, simple random sampling technique was used to select three out of the six education zones in Anambra State. Proportionate stratified sampling was used to select 35 percent of the schools in each of the six education zones in the state. This gave a total of 90 secondary schools. From each of the schools selected, simple random sampling technique was used to select an intact class. But in a situation where there is only one SS II class in a selected school that class was selected and students in the class were used for the study.

Instruments for the Data Collection One instrument was used to collect data for the study. Academic Causal - Attribution scale (ACAS) by Balarabe (2007). The researcher adopted the academic causal attribution scale (ACAS) designed to measure causal attribution for success and failure. It has a Likert scale type of questionnaire developed by Balarabe and used by Obochi (2011) while carrying out a research on motivation and academic attainment among British, Hungarian and Nigerian secondary school pupils. It is a 5point scale of strongly agree (SA), Agree (A), Not Scale (NS), Disagree (D), and Strongly Disagree (SDA). Each degree of agreement was given a numerical score and the respondents total score was computed by summing up scores from all statements.

The question was made up of 4 sections (A-D) with each section having 10 statements making a total of 40 answerable statements. Two (2) sections (B and D) measured failure while sections (A and B) measured success. For each situation, the students had to evaluate some possible causes ability, effort, others mood, personal mood, task difficulty, teacher's generosity and internality. Also the students' academic achievement scores in English Language and Mathematics from the state termly standard general examination for senior secondary two students were collected from their schools through the form masters/mistresses and used for the study.

Validation of Instrument Reliability of the Instruments The correlation coefficient to the validity of the questionnaire on Academic Casual Attribution Scale according to Obochi (2011) was established by Balarabe. The instrument had gone through internal and external validation. Thus, it was formed to be highly acceptable in data collection for attributing success or failure amongst students at various levels in Nigeria. Academic performance Casual-Attribution Scale according to Obochi (2011) has been found to be reliable with Cronbach alpha: internal success at 0.62, external Success = 0.66, internal failure = 0.61 and External failure at 0.63.

Method of Data Collection The researchers adopted face to face method of instrument administration which was done during their free periods in each school selected. This was done through the help of eight existing trained research assistants specifically Mathematics and English teachers in each of the sampled schools. The copies of the questionnaire were distributed and collected by the researchers with the help of the assistants. In each school, the researchers gave copies of questionnaire to the research assistants to distribute to the students and allowed them some times to fill the questionnaire while the research assistants supervised them. The copies of questionnaire were later collected by the researchers with the help of the assistants. This was to ensure high percentage of returned questionnaire. Then the termly results of the students were collected from the form masters/mistresses of the schools used in the study. The copies of the questionnaire were

numbered and tagged in line with the arrangement of the students in their class termly result sheets to ensure that the numbering followed how the students were given the questionnaire to answer. This was to ensure that appropriate achievement scores of the students are properly tagged with their responses on the questionnaire.

Method of Data Analysis The data was analyzed using statistical package for Social Science (SPSS 21). Regression analysis was used to answer the research questions and test the hypotheses, where Beta standardized coefficient, t value and P value guided the decisions of the researcher.

Results

Research Question 1

To what extent do secondary school students’ causal attributions to their doing well in assignments predict their academic achievement in English language?

Null Hypothesis 1

Senior secondary school students’ causal attributions to their doing well in assignments do not significantly predict their academic achievement in English language.

Table 1: REGRESSION ANALYSIS ON STUDENTS’ CAUSAL ATTRIBUTIONS TO THEIR DOING WELL IN ASSIGNMENTS AS PREDICTORS OF THEIR ACADEMIC ACHIEVEMENT IN ENGLISH LANGUAGE

Variable	R	R ²	R ² Change	B	BETA	F _{Cal}	Cal.t	df	Pvalue	Remark
Attributions	.110	.012	.009			4.327		1059	.005	S
AttributionSA				.064	.022		.714	124	.478	NS
AttributionTA				-.458	-.094		-2.647	124	.008	S
AttribuionLA				.686	.119		3.374	124	.001	S

Table 1 indicates that students attributing their doing well in assignments to themselves had Beta of 0.022. This indicates that students attributing their doing well in assignments to themselves predicted 2.2 percent of academic achievement in English language of the students. Moreover, at 124df and 0.05 level of significant, the calculated t.714 with Pvalue 0.476 which is greater than the 0.05, the null hypothesis is accepted. Therefore, secondary school students’ attributing their doing well in assignments to themselves is not a significant predictor of their academic achievement in English language.

In addition, table 1 shows that students attributing their doing well in assignments to teachers had Beta of -0.094. This indicates that students attributing their doing well in assignments to teachers predicted to -9.4 percent for academic achievements in English language of the students. In addition, at 124df and 0.05 level of significant, the calculated t-2.65 with Pvalue 0.008 which is less than the 0.05, the null hypothesis is rejected. Therefore, secondary school students’ attributing their doing well in assignments to teachers is a significant predictor of their academic achievement in English language.

Again table 1 reveals that students attributing their doing well in assignments to luck had Beta of 0.119. This indicates that students attributing their doing well in assignments

to luck predicted 11.9 percent of academic achievements in English language of the students. Also at 124df and 0.05 level of significant, the calculated t3.37 with Pvalue 0.001 which is less than the 0.05, the null hypothesis is rejected. Therefore, secondary school students attributing their doing well in assignments to luck is a significant predictor of their academic achievement in English language.

Research Question 2

To what extent do secondary school students’ causal-attributions to their doing well in assignments predict their academic achievement in Mathematics?

Null Hypothesis 2

Senior Secondary school students’ causal-attributions to their doing well in assignments do not significantly predict their academic achievement in Mathematics.

Table 2: REGRESSION ANALYSIS ON STUDENTS’ CAUSAL-ATTRIBUTIONS TO THEIR DOING WELL IN ASSIGNMENTS AS PREDICTORS OF THEIR ACADEMIC ACHIEVEMENT IN MATHEMATICS

Variable	R	R ²	R ² Change	B	BETA	F.Cal	Cal.t	df	Pvalue	Remark
Attributions	.133	.018	.015			6.43		1059	.000	S
AttributionSA				.087	.028		.923	124	.356	NS
AttributionTA				-	-.078		-2.97	124	.028	S
				.397						
AttribuionLA				.909	.150		4.278	124	.000	S

Table 2 shows that students attributing their doing well in assignments to themselves had Beta of 0.028. This indicates that students attributing their doing well in assignments to themselves predicted 2.8 percent of academic achievement in Mathematics of the students. Again, at 124df and 0.05 level of significant, the calculated t .923 with Pvalue 0.356 which is greater than the 0.05, the null hypothesis is accepted. Therefore, secondary school students’ attributing their doing well in assignments to themselves is not a significant predictor of their academic achievement in Mathematics. Also table 2 shows that students attributing their doing well in assignments to teachers had Beta of -0.078. This indicates that students attributing their doing well in assignments to teachers predicted to -7.8 percent for academic achievement in Mathematics of the students.

In addition, at 124df and 0.05 level of significant, the calculated t -2.20 with Pvalue 0.028 which is less than the 0.05, the null hypothesis is rejected. Therefore, secondary school students’ attributing their doing well in assignments to teachers is a significant predictor of their academic achievement in Mathematics. Again table 2 reveals that students attributing their doing well in assignments to luck had Beta of 0.150. This indicates that students attributing their doing well in assignments to luck predicted 15.0 percent of academic achievement in Mathematics of the students. Also at 124df and 0.05 level of significant, the calculated t4.28 with Pvalue 0.000 which is less than the 0.05, the

null hypothesis is rejected. Therefore, secondary school students attributing their doing well in assignments to luck is a significant predictor of their academic achievement in Mathematics.

Research Question 3

To what extend do secondary school students’ causal-attributions to their scoring low marks in assignments predict their academic achievement in English language?

Null Hypothesis 3

Senior secondary school students’ performance causal - attributions to their scoring low marks in assignments do not significantly predict their academic achievement in English language.

Table 3: REGRESSION ANALYSIS ON STUDENTS’ CAUSAL-ATTRIBUTIONS TO THEIR SCORING LOW MARKS IN ASSIGNMENTS AS PREDICTORS OF THEIR ACADEMIC ACHIEVEMENT IN ENGLISH LANGUAGE

Variable	R	R ²	R ² Change	B	BETA	FCal	Cal.t	Df	Pvalue	Remark
Attributions	.091	.008	.005			2.967		1059	.031	S
AttributionSB				-.086	-.035		-1.025	124	.306	NS
AttributionTB				-.168	.165		-1.015	124	.311	NS
AttribuionLB					.165		2.906	124	.004	S
				.479						

In table 3, it was observed that students attributing their scoring low marks in assignments to themselves had Beta of -0.035. This indicates that students attributing their scoring low marks in assignments to themselves predicted 3.5 percent of academic achievement in English language of the students. Also at 124df and 0.05 level of significant, the calculated t-1.03 with Pvalue 0.306 which is greater than the 0.05, the null hypothesis is accepted. Therefore, a secondary school student attributing their scoring low marks in assignments to themselves is not a significant predictor of their academic achievement in English language. Also table 3 shows that students attributing their scoring low marks in assignments to teachers had Beta of 0.165. This indicates that students attributing their scoring low marks in assignments to teachers predicted 16.5 percent of academic achievement in English language of the students.

Again, at 124df and 0.05 level of significant, the calculated t -1.02 with Pvalue 0.311 which is greater than the 0.05, the null hypothesis is not rejected. Therefore, secondary school students’ attributing their scoring low marks in assignments to teachers is not a significant predictor of their academic achievement in English language. Again table 3 reveals that students attributing their scoring low marks in assignments to luck had Beta of 0.165. This indicates that students attributing their scoring low marks in assignments to luck predicted 16.5 percent of academic achievement in English language of the students. In addition, at 124df and 0.05 level of significant, the calculated t2.91 with Pvalue 0.004 which is less than the 0.05, the null hypothesis is rejected. Therefore, secondary school

students' attributing their scoring low marks in assignments to luck is a significant predictor of their academic achievements in English language.

Research Question 4

To what extent do secondary school students' causal-attributions to their scoring low marks in assignments predict their academic achievement in Mathematics?

Null Hypothesis 4

Senior secondary school students' causal-attributions to their scoring low marks in assignments do not significantly predict their academic achievement in Mathematics.

Table 4: REGRESSION ANALYSIS ON STUDENTS' CAUSAL-ATTRIBUTIONS TO THEIR SCORING LOW MARKS IN ASSIGNMENTS AS PREDICTORS OF THEIR ACADEMIC ACHIEVEMENT IN MATHEMATICS

Variable	R	R ²	R ² Change	B	BETA	F.Cal	Cal.t	Df	Pvalue	Remark
Attributions	.166	.028	.025			10.10		1059	.000	S
AttributionSB				.153	.060		1.744	124	.081	NS
AttributionTB				-.277	-.054		-1.617	124	.106	NS
AttribuionLB					.125		4.018	124	.000	S
				.687						

Table 4 shows that students attributing their scoring low marks in assignments to themselves had Beta of 0.060. This indicates that students attributing their scoring low marks in assignments to themselves predicted 6.0 percent of academic achievement in Mathematics of the students. Again, at 124df and 0.05 level of significant, the calculated t1.74 with Pvalue 0.081 which is greater than the 0.05, the null hypothesis is accepted. Therefore, secondary school students' attributing their scoring low marks in assignments to themselves is not a significant predictor of their academic achievement in Mathematics.

Also table 4 indicates that students attributing their scoring low marks in assignments to teachers had Beta of -0.054. This indicates that students attributing their scoring low marks in assignments to teachers predicted to -5.4 percent for academic achievement in Mathematics of the students. In addition, at 124df and 0.05 level of significant, the calculated t -1.62 with Pvalue 0.106 which is greater than the 0.05, the null hypothesis is not rejected. Therefore, secondary school students' attributing their scoring low marks in assignments to teachers is not a significant predictor of their academic achievement in Mathematics.

Again table 4 reveals that students attributing their scoring low marks in assignments to luck had Beta of 0.125. This indicates that students attributing their scoring low marks in assignments to luck predicted to 12.5 percent for academic achievement in Mathematics of the students. Also at 124df and 0.05 level of significant, the calculated t4.02 with Pvalue 0.000 which is less than the 0.05, the null hypothesis is rejected. Therefore, secondary school students' attributing their scoring low marks in assignments to luck is a significant predictor of their academic achievement in Mathematics.

Research Question 5

To what extent do secondary school students’ causal-attributions to their doing well in examinations predict their academic achievement in English language?

Null Hypothesis 5

Senior secondary school students’ causal attributions to their doing well in examinations do not significantly predict their academic achievement in English language.

Table 5: REGRESSION ANALYSIS ON STUDENTS’ CAUSAL-ATTRIBUTIONS TO THEIR DOING WELL IN EXAMINATIONS AS PREDICTORS OF THEIR ACADEMIC ACHIEVEMENT IN ENGLISH LANGUAGE

Variable	R	R ²	R ² Change	B	BETA	F.Cal	Cal.t	Df	Pvalue	Remark
Attributions	.144	.021	.018			7.54		1059	.005	S
AttributionSC					.123		4.061	124	.000	S
AttributionTC				.361						
				-	-.045		-1.343	124	.180	NS
AttribuionLC				.240						
					.083		2.498	124	.013	S
				.398						

In table 5, it was observed that students attributing their doing well in examinations to themselves had Beta of 0.123. This indicates that students attributing their doing well in examinations to themselves predicted 12.3 percent of academic achievement in English language of the students. Furthermore, at 124df and 0.05 level of significant, the calculated t4.06 with Pvalue 0.000 which is less than the 0.05, the null hypothesis is rejected. Therefore, secondary school students’ attributing their doing well in examinations to themselves is a significant predictor of their academic achievement in English language. Again, table 5 indicates that students attributing their doing well in examinations to teachers had Beta of -0.045. This indicates that students attributing their doing well in examinations to teachers had predicted -4.5 percent of academic achievement in English language of the students.

Also at 124df and 0.05 level of significant, the calculated t -1.34 with Pvalue 0.180 which is greater than the 0.05, the null hypothesis is not rejected. Therefore, secondary school students’ attributing their doing well in examinations to teachers is not a significant predictor of their academic achievement in English language. Again table 5 reveals that students attributing their doing well in examinations to luck had Beta of 0.083. This indicates that students attributing their doing well in examinations to luck predicted 8.3 percent of academic achievements in English language of the students. Also at 124df and 0.05 level of significant, the calculated t2.50 with Pvalue 0.013 which is less than the 0.05, the null hypothesis is rejected. Therefore, secondary school students attributing their doing well in examinations to luck is a significant predictor of their academic achievements in English language.

Research Question 6

To what extent do secondary school students’ causal-attributions to their doing well in examinations predict their academic achievement in Mathematics?

Null Hypothesis 6

Senior secondary school students’ causal-attributions to their doing well in examinations do not significantly predict their academic achievement in Mathematics.

Table 6: REGRESSION ANALYSIS ON STUDENTS’ CAUSAL-ATTRIBUTIONS TO THEIR DOING WELL IN EXAMINATIONS AS PREDICTORS OF THEIR ACADEMIC ACHIEVEMENT IN MATHEMATICS

Variable	R	R ²	R ² Change	B	BETA	FCal	Cal.t	df	Pvalue	Remark
Attributions	.257	.066	.063			25.06		1059	.000	S
AttributionSC				.346	.113		3.804	124	.000	S
AttributionTC				.894	.159		4.879	124	.000	S
AttribuionLC				.506	.101		3.105	124	.002	S

Table 6 shows that students attributing their doing well in examinations to themselves had Beta of 0.113. This indicates that students attributing their doing well in examinations to themselves predicted 11.3 percent of academic achievement in Mathematics of the students. Again at 124df and 0.05 level of significant, the calculated t3.80 with Pvalue 0.000 which is less than the 0.05, the null hypothesis is rejected. Therefore, secondary school students’ attributing their doing well in examinations to themselves is a significant predictor of their academic achievement in Mathematics. Also table 6 indicates that students attributing their doing well in examinations to teachers had Beta of 0.159. This indicates that students attributing their doing well in examinations to teachers predicted 15.9 percent of academic achievement in Mathematics of the students.

Furthermore, at 124df and 0.05 level of significant, the calculated t4.88 with Pvalue 0.000 which is less than the 0.05, the null hypothesis is rejected. Therefore, secondary school students’ attributing their doing well in examinations to teachers is a significant predictor of their academic achievement in Mathematics. Again table 6 reveals that students attributing their doing well in examinations to luck had Beta of 0.101. This indicates that students attributing their doing well in examinations to luck predicted to 10.1 percent for academic achievement in Mathematics of the students. In addition, at 124df and 0.05 level of significant, the calculated t3.11 with Pvalue 0.002 which is less than the 0.05, the null hypothesis is rejected. Therefore, secondary school students attributing their doing well in examinations to luck is a significant predictor of their academic achievement in Mathematics.

Research Question 7

To what extent do secondary school students’ causal-attributions to their not doing well in examinations predict their academic achievement in English language?

Null Hypothesis 7

Senior secondary school students' causal-attributions to their not doing well in examinations do not significantly predict their academic achievement in English language.

Table 7: REGRESSION ANALYSIS ON STUDENTS' CAUSAL-ATTRIBUTIONS TO THEIR NOT DOING WELL IN EXAMINATIONS AS PREDICTORS OF THEIR ACADEMIC ACHIEVEMENT IN ENGLISH LANGUAGE

Variable	R	R ²	R ² Change	B	BETA	F _{Cal}	Cal.t	df	Pvalue	Remark
Attributions	.187	.035	.032			12.95		1059	.000	S
AttributionSD				-	-.087		-2.790	124	.005	S
				.222						
AttributionTD				.662	.099		3.114	124	.002	S
AttribuionLD				.525	.103		3.309	124	.001	S

Table 7 reveals that students attributing their not doing well in examinations to themselves had Beta of -0.087. This indicates that students attributing their not doing well in examinations to themselves predicted -8.7 percent of academic achievement in English language of the students. Also at 124df and 0.05 level of significant, the calculated t2.79 with Pvalue 0.005 which is less than the 0.05, the null hypothesis is accepted. Therefore, secondary school students attributing their not doing well in examinations to themselves is a significant predictor of their academic achievement in English language. Again, table 7 shows that students attributing their not doing well in examinations to teachers had Beta of 0.099. This indicates that students attributing their not doing well in examinations to teachers predicted 9.9 percent of academic achievement in English language of the students. Furthermore, at 124df and 0.05 level of significant, the calculated t3.11 with Pvalue 0.002 which is less than the 0.05, the null hypothesis is rejected. Therefore, secondary school students attributing their not doing well in examinations to teachers is a significant predictor of their academic achievement in English language.

Again table 7 indicates that students attributing their not doing well in examinations to luck had Beta of 0.103. This indicates that students attributing their not doing well in examinations to luck predicted to 10.3 percent for academic achievement in English language of the students. Also at 124df and 0.05 level of significant, the calculated t 3.31 with Pvalue 0.001 which is less than the 0.05, the null hypothesis is rejected. Therefore, secondary school students attributing their not doing well in examinations to luck is a significant predictor of their academic achievement in English language.

Research Question 8

To what extent do secondary school students' causal-attributions to their not doing well in examinations predict their academic achievement in Mathematics?

Null Hypothesis 8

Senior secondary school students' causal-attributions to their not doing well in examinations do not significantly predict their academic achievement in Mathematics.

Table 8: REGRESSION ANALYSIS ON STUDENTS' CAUSAL-ATTRIBUTIONS TO THEIR NOT DOING WELL IN EXAMINATIONS AS PREDICTORS OF THEIR ACADEMIC ACHIEVEMENT IN MATHEMATICS

Variable	R	R ²	R ² Change	B	Beta	F _{Cal}	Cal.t	df	Pvalue	Remark
Attributions	.168	.028	.025			10.33		1069	.000	S
AttributionSD				.331	.124		3.947	124	.000	S
AttributionTD				-.290	-.041		-1.297	124	.195	S
AttribuionLD				-.502	-.094		-3.007	124	.003	S

Table 8 shows that students attributing their not doing well in examinations to themselves had Beta of 0.124. This indicates that students attributing their not doing well in examinations to themselves predicted 12.4 percent of academic achievement in Mathematics of the students. In addition at 124df and 0.05 level of significant, the calculated t 3.94 with Pvalue 0.000 which is less than the 0.05, the null hypothesis is rejected. Therefore, secondary school students attributing their not doing well in examinations to themselves is a significant predictor of their academic achievement in Mathematics.

Furthermore, table 8 shows that students attributing their not doing well in examinations to teachers had Beta of -0.041. This indicates that students attributing their not doing well in examinations to teachers predicted -4.1 percent of academic achievement in Mathematics of the students. Also at 124df and 0.05 level of significant, the calculated t -1.30 with Pvalue 0.195 which is greater than the 0.05, the null hypothesis is not rejected. Therefore, secondary school students attributing their not doing well in examinations to teachers is not a significant predictor of their academic achievement in Mathematics.

Again table 8 reveals that students attributing their not doing well in examinations to luck had Beta of -0.094. This indicates that students attributing their not doing well in examinations to luck predicted -9.4 percent of academic achievement in Mathematics of the students. Also at 124df and 0.05 level of significant, the calculated t3.01 with Pvalue 0.003 which is less than the 0.05, the null hypothesis is rejected. Therefore, secondary school students attributing their not doing well in examinations to luck is a significant predictor of their academic achievement in Mathematics.

Discussion of Results of Findings

Performance casual-attributions and achievements in English and Mathematics
 Performance causal-attributions refer to students' perceptions regarding causes of their educational achievements, and attribution theory is concerned with the ways learners perceive these causes. In educational Psychology Proponents of the theory argue that student's own conceptions for success and failure determine their subsequent strivings in the learning process (Weiner, 2010). Furthermore, learners tend to explain their reasons for success or failure based upon locus of control—internal factors pertaining to the learners' personality which most often are controllable by the learner or external factors which pertain to luck or task difficulty, these factors are uncontrollable by the learner. More still

this theory also suggests that the perception students have of their teachers' behaviour and emotions can determine their subsequent strivings in the learning process (Frenzel, 2014).

The study investigated how the students attribute their doing well and not doing well in the teacher's assignments and in examination. The investigation was done under: Self which contains internal factors pertaining to the student like; effort, ability and emotion; Luck which refers to external factors like luck and task difficulty and Teacher which refers to teacher's behaviour and emotions. The study indicated that students' attribution of their success in assignment to Teachers and Luck predicts their academic achievement in English language. On the other hand, the students' attributing their doing well in assignment to themselves is not predictor of their academic achievement in English. This finding is in disagreement with Gujjar and Aijaz (2014) who found significant relationship between internal locus of control and students' academic achievement but in agreement with that of Wang and Hall (2018) who found that there is no relationship between internal attribution for success and academic attainment

In the subsection of students' attribution of their scoring low mark in assignments, it was observed that students' attributing their scoring low marks in assignments both in English and Mathematics to Teacher is not significant predictor of their academic achievements. The result shows further students attributing their scoring low marks in assignments to luck is a significant predictor of their academic achievement in both English and Mathematics. This finding is in line with Mkumbo and Amani (2012) who revealed that students tend to attribute their failure to external factors such as bad luck and task difficulty.

The result on students' academic casual attributions to their doing well in examination showed that students' attributing their doing well to themselves is a significant predictor of their academic achievement in English and Mathematics. This finding is in agreement with Gujji and Aijaz (2014) who found significant relationship between internal locus of control and students' academic achievement. Furthermore, the finding showed that the attribution of students' success to teacher in English does not predict their academic achievement. This is consistent with the theory that the students tend to attribute their success to internal factors than to external factors (Weiner, 2010). On the other hand, it was indicated in the study that students' attributing their doing well in Mathematics to themselves predicts their academic achievement. This finding agreed with Gujji and Aijaz (2014) who found that there is a relationship between internal locus causality and students' academic achievement. It is pertinent at this juncture to note that Weiner (2008) made interesting discovery that students usually have no idea on how exactly hard they try to succeed. This may imply that students who show significant effort to succeed in academic activities may also likely attribute element of the success to luck most especially when they faced with difficult situation in their learning goal.

Regarding the predictive effect of students' casual-attributions of their not doing well in English, the finding indicated that the more the students do not attribute the cause of their failure to themselves the more their academic achievements in English increase. This showed that the student attributing not doing well to self is a predictor of their academic achievement. More still, the finding showed that secondary school students' attributing

not doing well in examinations to teachers and luck predicts their academic achievement in English. This is in agreement with the theory that the students tend to attribute the cause of their failure to the external factors (Weiner, 2010.) The research result also revealed that students' attributing their not doing well in examinations to themselves (ability) is a predictor of their academic achievement and students not attributing their failure in Examination to luck is also a predictor of their academic achievement. This is in agreement with (Sehnaz, 2011) who found that when students attribute their failure to a stable factor, it will affect their motivation in the learning process. This will in turn affect the overall academic achievement of the student.

Recommendations

Based on the findings of this study, the following recommendations are made: (a) Teachers should use feedback to help their students perform well based on their perception of the outcomes of their work. If a student performs poorly, but has the potential to do better by trying harder, teachers can stress low effort as an attribution and this will likely cause the student to increase performance. (b) Feedback can be also given throughout different stages of learning so that students do not assume negative attributions for performance. If feedback is given in the beginning, middle, and final stages of learning, then students will understand how they can increase performance, and this will increase their confidence within the learning environment. (c) Students should thoroughly commit themselves to their study as this will help them reduce tension during exam and increase their self-confidence. (d) To help students develop their internal locus of control that will promote their academic achievement, school authorities and teachers should utilize learner-centred instructional strategies in applying the contents, behaviours and tasks that are included in the curriculum.

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