

English Language and Gender Influences on the Prediction of Junior Certificate Performance among Students in Botswana

By

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Abstract

The poor and deteriorating overall performance in Botswana junior school certificate (JSC) examination is a problem that tends to defeat all efforts at finding a solution to it. Language has been found to be a powerful element of quality of education (Obanya, 2004) and the language of instruction, especially if not the learners' first language, tends to have unlimited power to bring down performance even on other subjects. This study was designed to determine the extent to which this might be true for students in Lobatse cluster schools in southern region of Botswana. Two hypotheses were posited to guide this determination and data on the performance of the 1204 students used in the study was collected from the Examination, Research and Testing Division (ERTD) of Botswana. Correlation and regression analyses were done using SPSS statistical package, and the results support the dominance of English language in determining overall performance in JSC especially for the combined group and for females. A little surprising observation was made in the case of males where science, instead of English language was the significant main predictor. The findings were discussed and recommendations made.

Introduction And Background

In Botswana school system, pupils are taught in vernacular from Standard One to Four and starting from Standard Five onwards, English language is used as a medium of instruction. Supporters of this policy claim the preparation of learners for international communication and maintenance of national unity in a multilingual nation. According to Nenty (1999), "the very high percentage of performance variance accounted for by English language indicates the overwhelming influence of language on pupils' general achievement in the Primary School Leaving Examinations (PSLE)." This study revealed that "96.8% of all pupils who obtained first class pass got first class level in English as well" (p. 41). Both conceptually and practically, this is worth noting since mastery of language is crucial in any successful teaching and learning. This also indicates, as per Bamgbose (1992) cited in Nenty (1999) that "language is without doubt the most important factor in the learning process for the transfer of knowledge or skills...as mediated through spoken or written word." In other words, successful acquisition of skills, knowledge, values and attitudes, requires the individual to first master the language of instruction since language is the medium of cognitive and affective thought processing. Therefore, to understand the influence of English language on academic performance, it is imperative to consider the relationship between language and academic performance in terms of language development as more comprehensive cognitive processes (Saville-Troike, 1991).

According to Vygotsky's (Patsula, 1999) socio-cultural theory of cognitive development, learning precedes development. This theory has centrality on the importance of knowing one's culture and attaining proficiency in language use and usage in order to develop cognitively. So, language in its broader sense is a complex social system that allows children to understand and influence their environment (Garcia, 1990). According to Mwamwenda (2004), "language is a means by which learning is acquired...information is transmitted through language and children use language to ask questions." Therefore, for learners whose normal language environment is bilingual, instruction need not to be a worrisome affair. The literatures reviewed indicate that language may have positive influence on students' overall academic performance thus increasing the school's academic performance index (API) scores.

Problem And Purpose Of The Study

Commenting on language-related failure of education in Africa, Obanya (2004) indicated that, "Education on the African continent has long failed the majority of . . . learners. The systemic failure can be measured in high drop-out and repeater rates, low learner participation and poor academic results" (p.4). The influence of English language as a medium of instruction and a mode of communication in Botswana school system has been surrounded by a lot of controversy. Basically, as it is the case mastery of English language is the building block for success in educational attainments, even in other subjects. Saville-Troike (1991) contends

"Our efforts in English as a second language (ESL) and bilingual education in the 1960s and the 1970s were founded largely on the premise that linguistic differences, and particularly a lack of proficiency in English, are a primary causative factor in the low academic achievement of students in . . . schools who are from minority language backgrounds (p. 1)"

This is indicative that English language has a significant contribution in determining the students' overall academic performance and the schools performance index scores. Besides this, there are incidences whereby a significant number of students are denied spaces to pursue university degrees simply because they failed to score satisfactorily in English language even though they performed well in other subjects. However, since the adoption of General Certificate of School Examination (GCSE), a significant number of learners secure spaces at colleges of education and universities even though they score low marks in English language. This creates a dilemma as to the level to which English language is a strong predictor of educational success among the students.

It is against this background that this study primarily aims at examining the extent to which English language as a medium of instruction influences the overall academic performance of students in junior secondary schools in Lobatse cluster. Specifically, this study seeks to establish the strength of prediction by English as a second language of students' overall academic performance in Botswana. The other principal aim of the study is to determine the underlying motives of gender-based differences in performance among students in Lobatse cluster schools.

Research Hypotheses

The following research hypotheses are posited to guide the study in achieving these purposes:

- H₀₁. Gender has a significant influence on the JSC overall performance among junior secondary students in Lobatse cluster schools in Botswana.
- H₀₂ - English language is a significant predictor of overall performance among male and female students in junior secondary schools in Lobatse cluster in

Botswana

Literature Review

Gender, Language and Academic Performance

Medina's (1993) studied language proficiency, grade and gender comparison in Spanish achievement in a maintenance bilingual education program. Achievement in reading and mathematics for 676 Grades 1-8 pupil and social studies and science for 518 pupils in Grades 2 – 8. The study revealed that fluent Spanish proficient (FSP) subjects consistently outperformed their limited Spanish proficient (LSP) counterparts for each of the four subtests used in the study. In other words, achievement is limited by the level of fluency in the language through which the achievement is measured. The findings also indicated that girls achieved significantly higher reading scores than boys, but no gender differences were noted for the other three subtests.

Thomas and Collier (2002) conducted in US a national study of school effectiveness for language minority students' long term academic achievement. The findings revealed that native-English speakers involved in two-way bilingual immersion programs maintained their English, added a second language to their knowledge base, and therefore achieved well academically scoring at least 50 percent in all the subject areas on norm-referenced tests in English. The findings also indicated that native English speakers in two-way bilingual immersion programs outperformed their monolingual counterparts academically. This symbolizes that language as a mode of communication has strong bearing on students' overall academic success.

Learning Points Associates (2007) investigated the different factors affecting the academic achievement of Asian and Latino immigrant and second generation students. The findings indicated that Latino girls are more likely than Latino boys to be bilingual; earn higher grades and graduate from high school. The study also revealed that Latino boys are more likely than Latino girls to be put into remedial courses; and take an adversarial stance toward teachers. This study also found that Vietnamese students who were fluent in both English and Vietnamese received better grades than Vietnamese students who were not fluent in both languages. About 47% of fluently bilingual Vietnamese were A students; 25% of Vietnamese students who could read or write Vietnamese fairly well were A students; and about 8% of Vietnamese students who could not speak Vietnamese were A students. These findings illustrate the strength of English language as a strongest predictor of students' overall academic achievement and their educational aspirations and attainments. Another finding of the above study revealed that male students in Punjabi were more likely than female Punjabi students to take college preparatory courses and attend four-year colleges.

English Language and Overall Academic Performance

A study by Butler and Castellon-Wellington (2000) on the comparison of student content performance and concurrent performance on a language proficiency test established correlation between English language proficiency and performance on standardized achievement tests in English.

Maleki and Zangani (2007) surveyed the relationship between English language proficiency and the academic achievement of Iranian EFL students. The findings revealed a significant relationship between English language proficiency and academic achievement. In other words, there is a positive correlation between English proficiency and students' academic success. The

findings also indicated that proficiency in English influences achievement in English writing subjects of students more than achievement in English speaking subjects. In other words, students who are fluent and probably have reached automaticity in communicating in English score higher in other subjects where English is used as a medium of instruction and a mode of communication than those subjects where English is spoken.

Garcia (1990) investigated on bilingualism and the academic performance of Mexican-American children. This study finding revealed that bilingual children raised in supportive and nurturing environments demonstrated linguistic and academic advantages in comparison to monolingual children. This shows that bilingual instructional environments enhance high academic achievements amongst students. In other words, classrooms where two languages are used promote academic prowess and proficiency in content mastery and retention hence high overall academic performances by students.

Nenty (1999) examined the relative influence of language on primary and secondary school pupils' performance in science and mathematics in Lesotho. This study found that English language significantly relate to students' performance in mathematics, science, social studies as well as on their performance in the overall Primary School Leaving Examination (PSLE) results. Also, the findings indicated that students' performance in English is significantly related to their performance in science, mathematics as well as to their performance in the Junior Secondary Certificate (JSC) examination. These show that English language is the strong predictor of students' overall academic performance. That is, the more the proficiency in English language, the higher the chances for students to attain high overall academic performances.

In a longitudinal study Golding and Donaldson (2006), examined the extent to which the quality of English language grades relate to performance among students in Jamaica. They found that English language was not a strong factor in determining grade point average (GPA). This was deemed to be unexpected because according to this finding, proficiency in English language does not influence students' overall academic performance and or educational attainments.

Rauchas, Rorman, Konidaris and Sanders (2006) conducted a study on language performance at high school and success in first year Computer Science and found that success in English at the first language level in high school correlates better with actual performance. However, the findings also indicated that English is the best predictor of success in Computer Science though a combination of English and mathematics is the overall best predictor of success in Computer Science (Rauchas, Rorman, Konidaris and Sanders, 2006). The indication is that the use of English language as a medium of instruction may be detrimental to overall academic performance of speakers of English as a second language. Nenty (1999) posits that "by teaching with the English language and using it in the attempt to determine achievement, especially in other subjects, the dice is significantly loaded against speakers of English as a second language." The essence is that thought processing is done with the vernacular language and then translated to English and this is vulnerable to information distortion.

In a study on foreign language education, academic performance, and socio-economic status in California schools by Sung, Padilla and Silva (2006), the researchers found that that there was a strong and statistically significant correlation between student enrollment in foreign language classes and school's academic performance index (API) scores among junior secondary students. This pinpoints English language as a second language to be a strong predictor of students' overall JSC academic performance. However, in this study the results of the stepwise regression analysis revealed that the strongest predictor of a school's academic performance was socioeconomic status, followed by the foreign language enrollment and the number of English

language learners (ELLs) in a school. Obviously, this means that foreign language plays pivotal role in determining the overall academic performance index scores in schools. The expected findings of the study showed that schools that supported study abroad and foreign programs had significantly higher API scores than schools without these language programs. The surprising finding is that the relationship between academic achievement and language proficiency disappears as students approach native-like proficiency levels (De Avila, 1990). This means that when students reach automaticity and fluency in the use and usage of English language, its predicting ability on overall academic performance index scores become insignificant.

Research Design And Methodology

This is a quantitative study employing a causal-comparative research design to determine the extent to which English language as a second language and a medium of instruction predicts the JSC examinations overall academic performance of students in Lobatse cluster schools in Botswana. The population of the study consists of all the students in the 14 junior secondary schools in Lobatse cluster schools in southern region of Botswana who took their junior school certificate (JSC) examination in academic year 2006.

A purposive sampling procedure was used to draw a sample of 1204 students from the four urban and three rural schools which were selected for the study from the 14 schools in the population. The participants constituted 551 males and 653 females. Amongst the participants were an untraceable minute percentage of students who attended English medium schools while majority attended non-English medium schools with in the same catchment area. JSC 2006 performance data were retrieved from the department of Examination Research and Testing Division website in the Ministry of Education. The overall academic performances (grades for students) were coded as follows; merit was coded as 5; first class was coded as 4; second class was coded as 3; third class was coded as 2 while failure was coded as 1. For the 6 Core Subjects coding was done as follows; grade A was coded as 5; grade B was coded as 4; grade C was coded as 3; grade D was coded as 2 while grade E was coded as 1. The information on genders of students was sourced from attendance registers from schools in this study and male was coded as 1 while female was coded as 2.

Data Analysis And Interpretation Of The Results

A Pearson inter-correlation coefficient matrix for the variables in the study was calculated separately for the male and female students (see Table 1). The correlation values between the predictors and the criterion – JSC overall performance were all high and significant ranging from a low of .577 for social studies to .776 for science for males, and from .502 for mathematics to .801 for English language for females. To test the first hypothesis, using Model 14 of SPSS, an independent t-test analysis was done for the overall JSC performance as well as for the performance in the different subjects under study (see Table 2). Except for Setswana, the resulting t-values for all the JSC subjects were less than the critical value of 1.98 (df = 1202) and hence the null hypothesis was retained for these subjects. That is, gender has no significant influence on the performance of students from Lobatse cluster schools in these subjects. For Setswana, the t-value of -3.10 indicated significant gender influence as it is higher than the critical t-value of 1.98. This led to the rejection of the null hypothesis for Setswana. A close look at the group means indicates that female students perform significantly higher than their male counterpart in Setswana.

For the second hypothesis, a stepwise multiple regression analysis was done for all the students, then for males and females students respectively under study (see Tables 3 to 5). The results showed that the six cognitive variables together provided significant ($p < .000$) prediction for JSC-overall performance for all students and for males and females separately

Table 1
Pearson Correlation Matrix of Relationship Among Variables in the Study

Variables	Overall Grades for 2006 JSC Exams	Students' grades in English	Students' grades in Setswana	Students' grades in maths.	Students' grades in science	Students' grades in social studies	Students' grades in agriculture
Overall Grades for 2006 JSC Examination	1.00	.770(**) ^a	.688(**)	.719(**)	.776(**)	.577(**)	.749(**)
Students' grades in English	.801(**) ^b	1.00	.719(**)	.726(**)	.781(**)	.573(**)	.721(**)
Students' grades in Setswana	.719(**)	.693(**)	1.00	.667(**)	.681(**)	.508(**)	.654(**)
Students' grades in mathematics	.502(**)	.485(**)	.412(**)	1.00	.781(**)	.539(**)	.663(**)
Students' grades in science	.782(**)	.786(**)	.627(**)	.541(**)	1.00	.623(**)	.792(**)
Students' grades in social studies	.771(**)	.783(**)	.635(**)	.520(**)	.832(**)	1.00	.617(**)
Students' grades in agriculture	.584(**)	.582(**)	.509(**)	.351(**)	.601(**)	.606(**)	1.00

** Correlation is significant at the 0.01 level (2-tailed). ^aCorrelation values for Males are above the diagonal

^b Correlation values for females are below the diagonal

Table 2
Independent t-Test Analysis of Gender Influence on JSC Performance of Students in Lobatse Cluster Schools

Subjects	Gender Males (n=551)		Females (n=653)		SE	t-value
	Mean	SD	Mean	SD		
Overall Performance in JSC	2.15	0.75	2.15	0.76	0.04	0.02
Performance in English Language	2.25	0.95	2.35	0.97	0.56	-1.72
Performance in Setswana	2.18	0.80	2.33	0.85	0.05	-3.10*

Performance Mathematics	in	JSC	2.22	1.02	2.24	1.58	.078	-0.35
Performance Science	in	JSC	2.21	1.00	2.20	1.05	.06	0.19
Performance Social Studies	in	JSC	2.24	1.31	2.14	1.02	0.07	1.54
Performance Agriculture	in	JSC	2.13	0.89	2.16	1.24	0.06	-0.49

*p<.05

Table 3
Multiple Regression Analysis of the Overall JSC Performance on the Core JSC Subjects for All Students in Lobatse Cluster Schools

Predictor Variables	Unstandardized Coefficients		Standardized Coefficients (Beta)	t	Sig.	Correlations		
	B-weight	Std. Error				Zero-order	Partial	Part
(Constant)	.476	.034		13.909	.000			
Students' grades in English (JCENG)	.227	.022	.292	10.460	.000	.782	.291	.162
Students' grades in Science (JCSC)	.188	.021	.257	8.753	.000	.774	.246	.135
Students' grades in Setswana (JCSW)	.178	.020	.200	8.821	.000	.702	.248	.136
Students' grades in Agriculture (JCA)	.062	.015	.091	4.232	.000	.630	.122	.065
Students' grades in Social Studies (JCSS)	.057	.015	.088	3.851	.000	.657	.111	.059
Students' grades in Mathematics (JCM)	.035	.011	.063	3.183	.001	.558	.092	.049
Source of Variation	Sum of Squares	df	Mean Square	F	Sig.	R	R ²	
Regression	472.525	6	78.754	503.363	.000	.847	.718	

n			
Residual	186.026	1189	.156
Total	658.551	1195	

a Dependent Variable: Overall Performance in 2006 JSC (JSC)

For the combined group, scores on the six subjects significantly predicted overall performance in the JC final examination. They accounted for 71.8% of the variability in JSC overall performance. English language on its own alone was found to account for 61.1% of the total variation in this performance. Over and above this, grades in science, Setswana, agriculture, social studies and in mathematics, accounted for 6.9%, 2.5%, 0.6%, 0.4% and 0.2% respectively of the variability in JSC overall performance. Equation 1 provides a prediction equation from the analysis. When the same analysis was done for male students only (see Table 4), social studies

$$JSC = .476 + .227JCENG + .188JCSC + .178JCSW + .062JCA + .057JCSS + .035JCM \quad (1)$$

was not found to be among the significant predictors, and science grades became the strongest predictor of JSC overall performance. Grades in science accounted for

Table 4
Multiple Regression Analysis of the Overall JSC Performance on the Core JSC Subjects for Male Students in Lobatse Cluster Schools

Predictor Variables ^a	Unstandardized Coefficients		Standardized Coefficients (Beta)	t	Sig.	Correlations		
	B-weight	Std. Error				Zero-order	Partial	Part
(Constant)	.485	.052		9.319	.000			
Students' grades in Science (JCSC)	.143	.036	.192	3.980	.000	.773	.169	.093
Students' grades in English (JCENG)	.201	.033	.257	6.089	.000	.768	.253	.142
Students' grades in Agriculture (JCA)	.195	.034	.231	5.804	.000	.744	.242	.135
Students' grades in Mathematics (JCM)	.107	.029	.146	3.685	.000	.716	.156	.086

Students' grades in Setswana (JCSW) .114 .033 .123 3.421 .001 .688 .146 .080

Source of Variation	Sum of Squares	df	Mean Square	F	Sig.	R	R ²
Regression	211.059	5	42.212	261.763	.000	.841	.708
Residual	87.241	541	.161				
Total	298.300	546					

*Dependent variable: Overall Performance in 2006 JSC (JSC)

59.6% of the variability in JSC-overall performance, while English language, agriculture, mathematics and Setswana each accounted for 7.0%, 2.4%, 1.1% and 0.6% respectively of the variability in overall JSC performance. Equation 2 gives the prediction equation for this analysis.

$$JSC = .485 + .143JCSC + .201JCENG + .195JCA + .107JCM + .114JCSW \quad (2)$$

For the female students the analysis showed that English language emerged the strongest predictor of overall JSC performance (see Table 5). It accounted for a total of 63.2% of the variability in JSC overall performance, while science, Setswana, and social studies accounted for 6.1%, 3.6%, and 0.8% respectively of this variation. Mathematics and agriculture were not significant predictors. All the significant predictors accounted for a total of 73.5% of the variability in JSC overall performance. The prediction equation for the female group is as given on Equation 3

$$JSC = .435 + .232JCENG + .175JCSC + .220JCSW + .128JCSS \quad (3)$$

Table 5
Multiple Regression Analysis of the Overall JSC Performance on the JSC Subjects for Female Students in Lobatse Cluster Schools

Predictor Variables	Unstandardized Coefficients		Standardized Coefficients (Beta)	t	Sig.	Correlations		
	B-weight	Std. Error				Zero-order	Partial	Part
(Constant)	.435	.045		9.630	.000			
Students' grades in English (JCENG)	.232	.029	.299	8.031	.000	.795	.302	.162

Students' grades in Science (JCSC)	.175	.028	.243	6.206	.000	.775	.238	.125
Students' grades in Setswana (JCSW)	.220	.025	.251	8.721	.000	.719	.325	.176
Students' grades in Social Studies (JCSS)	.128	.029	.172	4.398	.000	.763	.171	.089
Source of Variation	Sum of Squares	df	Mean Square	F	Sig.	R	R ²	
Regression	265.523	4	66.381	451.336	.000	.859	.737	
Residual	94.717	644	.147					
Total	360.240	648						

^aDependent Variable: Overall Performance in 2006 JSC.

Summary of Findings

The first null hypothesis of this study, which asserts lack of significant gender influence on the JSC overall performance among junior secondary students in Lobatse cluster schools in Botswana was rejected for Setswana but retained for English, science, mathematics, social studies and agriculture each at less than the critical value of 1.98 (df = 1202). In other words, except for Setswana, there is no significant gender influence on students' performance in 2006 JSC examination. Female students were observed to significantly outperform their male counterpart in Setswana language.

The second null hypothesis of this study, which states that English language is not a significant predictor of overall performance among male and female students in junior secondary schools in Lobatse cluster in Botswana was rejected for the combined group; as well as for male students and female students separately. For the combined group, all the six subjects were found to be the significant predictors of students' overall performance in 2006 JSC examination and accounting for 71.8% of its variability. Performance in English language emerged the strongest single predictor accounting for 61.1% of the variation in this performance.

For male students only, the interesting finding was that only five subjects with the exception of social studies were found to be the significant predictors of students' overall academic performance in 2006 JSC examination. These subjects combinely accounted for 70.8% of the total variability of the JSC performance. However, science alone accounted for 59.6% of the variability in JSC-overall performance thus becoming the strongest predictor of students' overall performance while English accounted for only 7.0% of the variation.

For female students only, the analysis indicated that English, science, Setswana and social studies were the significant predictors of students' overall JSC performance while mathematics and agriculture were not significant predictors. The four significant predictors accounted for 73.5% of the variability in JSC overall performance with English language emerging the strongest predictor and accounted for 63.2% of the variation in 2006 JSC overall performance. This means that proficiency in English language significantly relates to the overall performance in 2006 JSC examination by students in Lobatse cluster school in southern region of Botswana.

Discussions

The general lack of significant gender influence on the overall academic performance in 2006 JSC examination by students in Lobatse cluster school in southern region of Botswana strengthens the review findings by Powney (1996) which implies that when attempts are made to equalize environmental factors, gender has no significant influence on overall academic performance. But evidence of female superiority in language arts is buttressed by the significantly higher female performance in Setswana observed in this study.

The findings of this study offer strong evidence that there is a strong and statistically significant relationship between English language and students' overall academic performance in Lobatse cluster schools. This supports the premise that linguistic differences and particularly a lack of proficiency in English are a primary causative factor in the low academic achievement of students (Saville-Troike, 1991). This finding also supports the view that advanced bilingualism promotes academic excellence by encouraging constructive forms of behavior (Saville-Troike, 1991). Botswana children do not start learning all over again when first taught in English but instead interpret meanings in terms of the already existing schemata acquired through the social interaction. This means that bilingualism is pivotal in advancing students' cognitive development or grasping the subject matter of English writing subjects as it facilitates communicative process (Maleki & Zangani, 2007).

The findings of the stepwise multiple regression analysis revealed that for the combined group, and in fact for females too, the strongest predictor of students' overall academic performance and that of English writing subjects was the proficiency in English language as a medium of instruction. The higher percentage (61.1%) accounted for by English language for the combined group indicated that English language directly influenced students' overall academic achievement in Lobatse clusters schools. This supports Maleki and Zangani's (2007) findings which revealed a significant relationship between English language proficiency and academic achievement. Obviously, this means that English language also accounted for performances in the other five variables more especially the English writing subjects in this study. English language serves as a pre-requisite for Botswana school system and though social interaction is important for cognitive development as per Vygotsky's socio-cultural theory (Berk, 2002), bilingualism plays a pivotal role in promoting academic achievement.

This finding is consistent with Sung, Padilla and Silva's (2006) findings that revealed a strong and statistically significant correlation between students' enrollment in foreign language classes and schools' academic performance index (API) scores. However, the findings revealed that being bilingual plays an integral role in assisting students to interpret and attach meanings to phenomena. That is, Setswana as a vernacular language in Botswana underlies the basis of mental processes. This is because children apply both accommodation and assimilation to make sense of instruction delivered when first taught in English. The higher percentage (61.1%) accounted for by English for the combined group tends to strengthen the need to send children to English medium schools. This creates and promotes social stratification because not many

Batswana do afford to pay school fees charged by the private schools. However, the experience has shown that students attending English medium schools perform better academically than students in government schools. So, using English as a medium of instruction places majority of Batswana learners at disadvantage and in most cases they are marginalized during classroom learning. Most frequently, students produce sub par performances not that they do not know but because they fail to interpret the questions appropriately. Actually, this is a dilemma because the international community communicates in English and for Batswana to compete globally they have to be fluent and proficient in English language. Then if English is only used as a medium of instruction from upper primary classes what impact can it have two years later when pupils sit for final examinations? Obviously, this will negatively impact on the overall academic performance of the learners at primary school level. This will definitely be a death penalty for such individuals in the subsequent years of their schooling.

The unexpected finding was that though English language showed to be a significant predictor of all students' overall academic performance, science emerged the strongest predictor of overall academic performance for male students. The stepwise multiple regression analysis showed a significant contribution of science (59.6%) to the prediction of overall JSC results for male students while English language accounted for only 7.0% of the prediction after science. This means that even though English language enhances performances of English writing subjects including science, for males science relates higher ($r = .776$) with overall JSC performance than English language ($r = .770$). This is consistent with Golding and Donaldson' (2006) findings that English language is not a significant predictor in determining grade point average (GPA) for students in Jamaica. The finding places a combination of science and English language as the strong and significant predictor of boys' overall academic achievement while mathematics, Setswana, and agriculture accounted for only 4.1% of the variability in overall JSC performance. This is more intriguing when it is observed that there is no gender influence on science performance in the examination. A close look the three prediction equations and the accompanying tables shows that the b-weights and beta-weights of English language are about the same in the three cases. This means that though English language might differ in the order among variables predicting overall JC performance for male and female students, it maintains about the same relative weight in the prediction of such performance across gender.

It was also unexpectedly to find that social studies did not make a list of the predictors for male students' overall academic performance. This posits that the more English language significantly predicts the boys' performance the more the likelihood to reduce the quality of schools' academic performance index scores as students may focus their attention only on the subjects where they presently perform better. For example, boys may devote their energy on science and marginalize other subjects where they lack interest thus impacting students' overall academic performance. Obviously, this contributes to low students' academic performance thus hindering students' educational aspirations and educational attainments thus impacting on the 2016 vision of producing "an educated and informed nation." So teaching in English language may be suicidal to the nation due to biases and stereotypes that may be coming with it. This is evident as a large number of Batswana are unemployed because they cannot communicate in English. So, where are we going to as Batswana? This is a question that needs to be posed in order to experience the reawakening of the entire education system so that we embark on education for production policy to ensure self-reliance and self-sufficiency holistically.

Another important finding of this study which is worth highlighting is that English language proficiency has greater impact on academic achievement of female students than for male students. The stepwise multiple regression analysis showed that English language emerged the strongest predictor of overall academic performance for girls. The interesting finding is that

English language accounted for 63.2% of the variability in JSC overall academic performance while science (6.1%) just as for the combined group became the second strongest predictor of female students' academic performance. This higher contribution of English language to students' overall academic performance further confirms why students achieve relatively low grades in Botswana. This means that English as a medium of instruction and being the second language places students at disadvantage as they have to struggle to learn it as well as the concepts in English writing subjects. Obviously the indication is that students' work is bound to be hit hard by distortions and hence guaranteeing failing grades for students whose mental processes revolve around their mother tongue. That is when students are given a problem to solve they use the already existing schemata or scripts and most effective in their mother tongue to generate new ideas. Obviously, this impacts negatively on their cognitive development and hence contributing to lower overall academic performance.

An expected finding is that mathematics and agriculture were not significant predictors of female students' overall academic performance. Basically, this may mean that lack of proficiency in English renders female students inability to fully understand the concepts plausible in these two variables. The plausible argument could be that since students first learn subject specific concepts in schools, they find it difficult to understand because neither accommodation nor assimilation can be used to build on new information. Of course if this is the case low academic performance can be rightfully attributed to lack of Proficiency in English language.

Conclusions And Recommendations

Except for Setswana, gender does not significantly influence overall JSC academic performance of students in Lobatse cluster schools. English language proficiency while serving as the strongest predictor of students' overall JSC academic performance for females as well as for all students combined, failed to serve the same purpose for the male group. Instead science showed up significantly as the strongest predictor for the male group. The findings also indicated that English language can be though not a wholly deterministic factor of performances of English writing subjects. The finding that English remained a highly significant predictor of students overall JSC academic performance explains why public schools in Botswana yield low academic performance index scores. The Ministry of Education (MoE) should modify the policy that allows the use of vernacular language as a medium of instruction in lower primary classes so that students become grounded in English in the earliest convenience. This will enhance thought processing and English proficiency thus assisting students to grasp concepts effectively and efficiently therefore contributing to the improved schools' academic performance index scores.

The parents should also take initiative of sending their children to better schools where English language is instilled at a tender age. This will assist students to reach automaticity in the usage of the language therefore avoiding distortions during learning episodes. Though English language is a foreign language; it is a means of international communication, our medium of instruction and a strong predictor of students' academic achievement, therefore Ministry of Education and schools should strive for the development and acquisition of English language in order to improve school's academic performance index scores hence rendering Botswana students internationally viable.

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