Student Testwiseness as Predictors of Test scores Among Form One students in Dadaab Refugee Camp, Kenya.

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Abstract

The magnitude with which test scores are regarded in Kenya makes KCSE and KCPE a matter of life and death for kenyans. The purpose of the study therefore was to determine the relationship between student testwiseness and test scores among form ones students in Dadaab Refugee Camp, Kenya. The study was guided by the following theory: Social cognitive learning by Albert Bandura. The study adopted a correlational design in order to be able to investigate and analyze the relationship between student testwiseness and form one test scores. It also used simple regression to find out whether the various variables would predict test scores. The study was conducted in four public schools of Dadaab refugee camps in the North-Eastern part of Kenya. The target population consisted of students and teachers. The sampling technique was that of convenient, purposive and systematic sampling in that order, where thirty five participants were selected from each school, to sum up to one hundred and thirty eight form one students and a total of thirty four teachers. Research instruments included questionnaires for teachers and students, while interview schedule was for teachers. The results revealed that there is a positive and significant relationship between student test wiseness and test scores.

Key Words: Student testwiseness, test scores, Dadaab Refugee Camps, form ones.

Introduction

Overview

There is so much pressure to perform in the Kenya National Examinations. It is important to establish whether these low scores would have satisfactorily determined their performance in the Kenya Certificate of Secondary Education. Low achievers have been labeled as failures in life. At most instances, low academic achievement has been irrationally attributed to low

intellectual development. However, research has shown that, other than the intellectual development, student testwiseness is related to low test scores among students.

Given the importance of the decisions made based on the test scores, and the clear cut differences between primary and secondary school, many educational researches have not been done on the factors that may explain the individual difference in performance at the learning levels and especially form one.

It is not exactly known what factors may be held responsible in explaining the differences, consistencies and inconsistencies in performance at primary and secondary school levels amongst form one students. It was therefore imperative that, student test wiseness**,** a term which refers to a student's knowledge of how to tackle examination questions so as to maximize their scores may determine their performance, be examined in terms of its effects on test scores. An inquiry made on whether they run short of time during examinations shows that: 21.7% strongly agreed, 30.4% agreed, 21.7% disagreed, and 20.9% strongly disagreed while 5.2% were unsure. This revealed that a greater number of form one students run short of time when answering exam questions. This reveals a gap in test wiseness.

1.1.0 Biodata Demographics

a) Distribution of student respondents by age

Table 1.1 shows the distribution of respondents by age group. Majority of form one respondents were between eighteen to twenty years of age

Table 1.1 Distribution of student respondents by age

Age	F	%
Below 18 years	40	29
18-20 years	70	50.72
Over 20 years	28	20.28
Total	**n=138**	**100**

The results in table 1.1.0 report that, 50.72% of the form one respondents who participated in this study were between 18 and 20 years of age, compared to 29% of the respondents who were below the age of eighteen years. Further, 20.28% of form one respondents were over 20 years of age. Age is considered an extraneous variable that is likely to affect the academic performance of students. Cognitive development and maturity (which are associated with age) are necessary for worthwhile performance of students. As the age of an individual increases, it usually affects the various developmental changes. It also affects every area of human performance (Ukueze, 2007).

b) Distributions of student respondents by gender

Student gender was considered in this study. Gender relates to the difference in sex (that is, either male or female) and how this quality affects their dispositions and perception toward life and academic activities (Okoh, 2007).

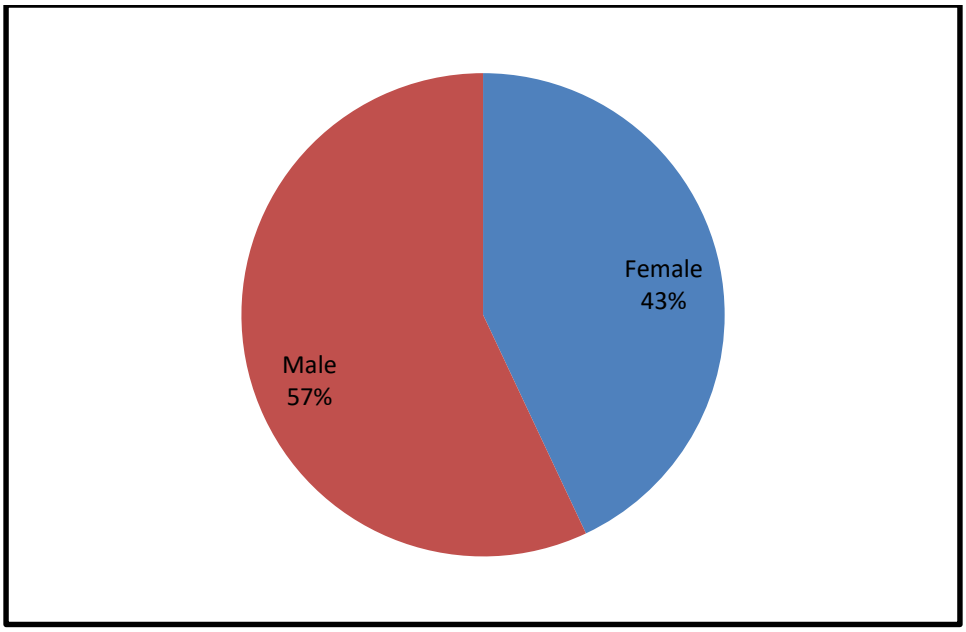

Figure 1.1 Distributions of student respondents by sex

Majority of the student respondents were male who formed 57% of the form one students who responded to the study. Female student respondents consisted 43% of the total form one students who responded to the study. Buadi (2000) underscores that, difference in gender as it affects students' and academic performance is inconclusive. This has necessitated the need to explore any significant difference between male and female form one students as reflected in their academic performance and in test scores in particular.

c) Distribution of student respondents by academic performances

Student respondent's academic performance was considered for the study. The distribution of respondents by academic performance is shown in figure .1.1

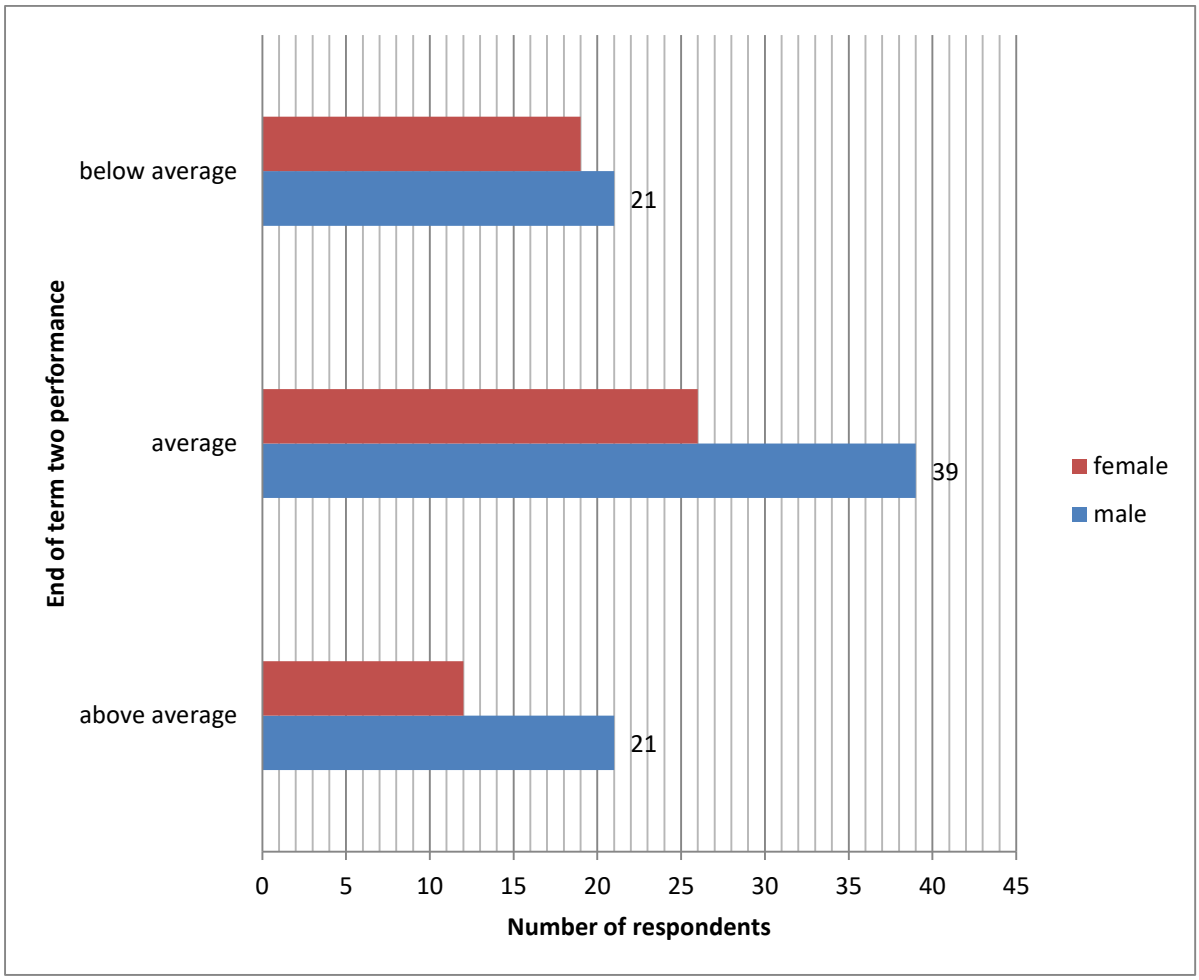

Figure 1.2 Distribution of student respondents by academic performance

Figure 1.2 reports that, majority of boys performed better than their female counterparts. More girls than boys fall below the average category given that the number of girls who participated in the study was less than that of the number of boys. Buadi notes that difference in gender as it affects students' and academic performance is inconclusive. This has necessitated the need to explore any significant difference between male and female form one students as reflected in their academic performance and in test scores in particular

Table 1.2 Tally of test wiseness predictors

Statements	SA		A		D		SD		UNSURE		TOTALS	
	F	%	F	%	F	%	F	%	F	%	F	%
I always run short of time when answering end term exam questions	25	21.7	35	30.4	24	20.9	6	5.2	25	21.7	115	100
I prefer questions that are subdivided into many parts than a question not subdivided into many parts	38	33	27	23.5	21	18.3	7	6.1	22	19.1	115	100
I understand the meaning of different key words used in asking questions such as: state, explain, differentiate and discuss.	72	62.6	29	25.2	7	6.1	3	2.6	4	3.5	115	100
I am able to Use information from other questions to answer other questions	35	30.4	39	33.9	16	13.9	7	6.1	18	15.7	115	100

On investigating their question preference; 33% strongly agreed that they preferred divided questions, 23.5% agreed, 19.1% strongly disagreed, 18.3% disagree, while 6.1% were unsure. To find out whether they were aware of the different key verbs used in questions; 62.6% strongly agreed, 25.2% agreed, 3.5% disagreed, and 6.1% strongly disagreed while 2.6% were unsure.

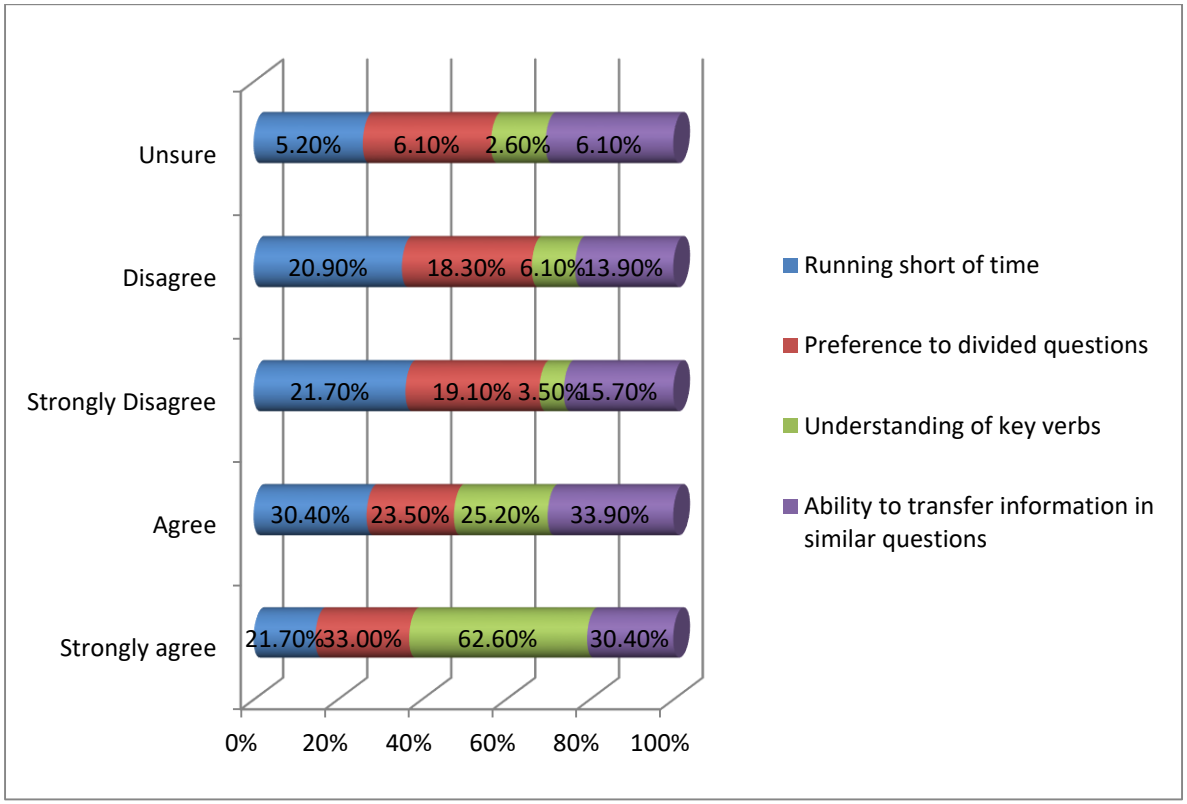

Figure 1.3 Student's response on test wiseness predictors

This means that 87.8%, a majority of form ones understand key verbs used in questioning. As to whether they are able to transfer knowledge from one question to another, 30.4% strongly agreed, 33.9% agreed, 15.7% disagreed, and 13.9% strongly disagreed while 6.1% were unsure. This reveals that majority of form ones can transfer knowledge from one question to another.

Table 1.3 Relationship between students' test scores and scores on test wiseness scale

Aspect	N	Rx	Significance
Test wiseness scale scores and test scores	138	0.543	0.01

Table 1.4 Regression analysis of student test wiseness and test scores

Simple Regression analysis

Model	β	t-value	Significance Model	R square
Total test wiseness scale Scores	-0.251	-0.6.700	0.001	0.543

It is evident from table 4.13 that a positive and significant relationship exists between students' test scores and test wiseness scale scores. The range of relationship of the scale is more than 54%. To determine the possibility of test wiseness as a predictor of students' tests score a Regression analysis was run; it showed that 54% of variance in form one students test scores can be attributed to student test wiseness. Therefore, test wiseness predicts test scores.

The study was guided by the following theory: Social cognitive learning that posits, factors inside and outside the individual influence their behavior. In the Social cognitive learning theory , Bandura (1977) defined learning as an internal mental process that may or may not be reflected in immediate behavioral change and postulated that human behavior is as a result of interplay of factors both inside and outside the individual. He suggested that personal factors like cognition, biological variables and other internal events like a person's beliefs and expectations relevant to ability are related to behavior which affects the external environment. In the same way, the environment can influence the person's feeling and cognition. According to Bandura (1986), one of the basic principles of learning is that learning is as a result of reciprocal causation or determination. This implies that learning involves the interaction of several factors, such as behavior, environment, storing information in memory and personal factors. This theory was of great significance to the study, because it concurs that personal and socio-contextual factors affect learning. In addition to that, success on a first attempt on a task may change internal events such as feelings about the circumstance involved with the success.

Methodology

The study adopted a correlational design because it is appropriate in discovering the existence of relationships between variables and the degree to which the variables relate and simple regression to examine whether each independent variable would predict the dependent variable (Mugenda and Mugenda, 1999). Here, the relationship determined was the degree to

which student test wiseness affected the test scores of form one students. The study was conducted in four public schools of Dadaab refugee camps in the North-Eastern part of Kenya. The location of the study was chosen owing to the researcher's familiarity with the area, and because of available existence of the characteristics that the researcher was interested in.

The population of study consisted of four hundred form one students, both boys and girls in equal numbers, and of mean age fifteen and also thirty-four form one teachers of four secondary schools. The rest of the classes, from form two to four were not chosen, as the study was interested only in form ones because they are the first class immediately from primary school and these factors are directly unique to them. From the seven secondary schools, one hundred and thirty eight form one students and thirty four form one teachers were sampled. A total of thirty-five form one students and nine teachers from each of the four schools formed the sample. In addition, out of the eleven subjects studied by form ones only three subjects were examined .The researcher administered questionnaires and the respondents filled them in immediately. The responses of the questionnaires were recorded on a four-point Likert scale.

One hundred and thirty eight form one students and thirty four form one teachers were selected in the study. In addition out of the eleven subjects studied, they were grouped into three categories, in terms of languages, humanities and Maths & sciences. Convenient sampling was used to select four schools out of the eight secondary schools based on the accessibility of the schools due to security impediments as movement from one camp to another is enabled only by means of police escort. Stratified random sampling was used to ensure that form one students both female and male students were selected and at equal numbers to ensure representativeness. Systematic random sampling was used to select students from each class based on the class register to come up with fifty students. Purposive sampling was used to select the subject areas on whose test scores were examined so as to ensure that each group of subjects is adequately represented. They were grouped into languages, sciences and humanities. To select the teachers, purposive sampling was used to select teachers based on their subject areas, so that the three categories of subjects are represented. Convenient sampling was used to select four schools to be used in the study.

The study employed a close-ended questionnaire and interview schedules as the most convenient instruments for collecting data on the students and teachers as it can reach a large

number of students who are able to read and write independently (Orodho, 2008). Each of the statements were scored on a four-point Likert-type scale, ranging from 4 (Strongly agree) to 1 (Strongly disagree).The positively and negatively worded questions were randomly arranged in the questionnaire. The data was processed, coded and analyzed using the computer based Statistic Package for Social Sciences (SPSS 17.0) and this facilitated the testing of the null hypotheses.

Results

The results of the study concluded that, there is a positive and significant relationship between student test wiseness and test scores. This is in agreement with findings by Zeidner, Klingman& Papko (1988) who concluded that, the teacher implemented training programmes was useful in enhancing student cognitive performance in test situations and Ritter and Idol-Maestes (1986) who reported that, students trained on test-taking strategies scored higher in tests. They assert that training in test wiseness is effective for improving achievement test scores.

On the contrary, it differed with a study by Deaton, Halphin &Alford (1987) ,on the coaching effects using the CAT, which involved 925 students in 40 classes at five elementary schools. The study concluded that, there were no consistent effects of the coaching program. The inconsistencies in the results may be attributed to the larger sample size used in the latter study as compared to this study. In addition, the study focused on elementary schools while the study in here focused on high school students specifically form ones.

Conclusion

The study further explored the relationship between student test wiseness and test scores. The findings established that a strong positive and significant relationship exists between students' test scores and test wiseness scale scores. The range of relationship of the scale is more than 54%. It was also established that test wiseness is a predictor of students' tests scores. Majority of form one students are aware of the different key verbs used in exam questions, and are able to transfer knowledge from one question to another, this means that in addition most of the understand the meaning, The range of relationship of the scale is more than 54%. It was also established that test wiseness is a predictor of students' tests.

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