Validity of Pre-college Students' English School Based Assessment in Predicting Achievement in University Entrance Examination

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Received: 11 December 2020; Accepted: 31 October 2023

Abstract: *This study investigated the validity of pre-college students' School Based English Assessment (SBEA) as a predictor of their English achievement in University Entrance Examination (UEE). A quantitative research method with predictive correlational design was employed. The participants were 1,113 students from Woldia Preparatory School, Ethiopia; they were selected using convenience sampling. The students' Grade 11 and Grade12 SBEA scores and their English UEE scores were taken as data. Descriptive Statistics, Wilcoxon Signed Rank Test, Spearman's Rank Correlation Coefficients and Simple Linear Regression Analysis were employed for the data analysis. The descriptive statistics indicated that the students' level of achievement was average in SBEA and low in UEE. The Wilcoxon Signed Rank Test result showed statistically significant difference between SBEA and UEE, favoring SBEA. The correlation between students' achievement in SBEA and UEE was found to be positive but moderate for natural science students and low for social science students. The linear regression analysis result indicated that SBEA was found to have a predictive validity on achievement in UEE for natural science students; however, SBEA score did not predict social science students' score in UEE. Recommendations were suggested based on the findings.*

Keywords: pre-college, predictive validity, English School Based Assessment, University Entrance Exam

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Background of the Study

Evaluation is a fundamental tool to identify the level of students' achievement as well as the process and outcomes of education as a whole. In any educational setting, evaluation is an efficient means of collecting evidence for the purposes of making decision about the quality of a program and also an individual (Richards and Schmidt, 2010). It plays an indispensable role in examining individual learners in school settings; accordingly, the notion of assessment was introduced in schools.

The application of assessment in school settings is crucial; it judges the ability of a learner or the success of a course based on certain conditions and uses this result as a predictive element in the learning of students over time to improve education (Ntiko, 2001). Assessment matters not only in measuring achievement of students and the progress that they are making in a particular ground but also in predicting student's future success. One of the benefits of assessment is its ability to predict future achievement and provides a basis for judgment and decision as to the level of students' understanding (Kellaghan & Greaney, 1992). It also provides the basis for discovering the quality of education in the system in general.

In Ethiopian education, School Based English Assessment (SBEA) is used to determine how much the students have successfully learned with specific reference to the textbook and requires the students' skill and knowledge of the subject to promote to subsequent learning so that it will enable them to check their comprehensive language proficiency. Well-constructed teacher-made tests give students the opportunity of assessing their knowledge with immediate and constructive feedback (Brown & Coughlin 2007); so, tests can help students to improve their performance. For teachers, assessment provides insight into their professional strength and weakness for future remedy. Since assessment plays an indispensable role for teaching, teachers can

subconsciously judge their instructions whenever students react to examinations (Brown, 2004 and Kellaghan & Greaney, 2004).

Quality tests cover important contents and assess mostly knowledge and skills of students. According to Bachman and Palmer (1996), reliability and validity are the two critical qualities of tests that are crucial for making inference and decision. While reliability refers to consistency and accuracy of scores, validity denotes meaningfulness of a test. Validity is by far the most important quality of tests that can be attained by various dimensions. These are content validity, construct validity, face validity and predictive validity (Bachman and Palmer, 1996). A test needs to have a representative sample of contents to gain strong content validity. It is the extent to which the test covers all relevant contents of the topic that it aims to measure. A test should accurately assess what it is supposed to assess to create construct validity. It refers to how well performance on the test can be interpreted as meaningful measures of some characteristics (Bachman and Palmer, 1996). The appearance that a test looks like at a first glance review is also mandatory to display face validity. Among these validities, predictive validity is different because it is used to compare a test score with some subsequent standards of the same examinee mainly to predict a future performance (Bachman and Palmer, 1996). It enables to gain a better understanding of a relationship between test scores and selected criterion variables that are obtained at a later time. Predictive validity is vital to measure the capability of a test in predicting the students' future performance and to reflect how robust and valid the test is.

However, local studies on school based tests revealed that teacher made tests were not properly prepared. For instance, teachers did not use a table of specification when preparing exams and lacked the skill to apply it (Ashenafi, 2014; Mohammed & Abdurehman, 2020; Shambel 2022 and Simachew & Yibeltal, 2019). In addition to this, unfair coverage of contents, i. e., more questions on grammar and vocabulary few questions on speaking, reading and writing and no questions on listening, were found as trends in language tests (Simachew &Yibeltal, 2019). In some context, low

relationship between teacher made tests and content of the text book was observed (Simachew &Yibeltal, 2019). This indicates that the underlying qualities of tests were found to be questionable. On the other hand, other test qualities such as predictive validity of teacher made tests were not examined thoroughly.

University Entrance Examination (UEE), on the other hand, is given at the end of each academic year for students completing Grade 12 almost in all parts of the country. It has an accountability role by offering evidence of standards attained by individual teachers and schools in addition to selection and motivation for greater effort (Kellaghan and Greaney, 1992). It is helpful to unify education all over the country by providing formal evidence of educational achievement beyond screening candidates who can join higher education institutions; thus, it encourages not only teachers but also the school for greater decision making and it can be used to make defensible decisions for authorities as well. To put it in nutshell, the national examination has significant impacts on the systems of education such as in making decisions about school curriculum planning and designing educational policy.

In the Ethiopian context, the qualities of UEEs are compromised and delinquency practices of administering the tests tend to be the trends. Examination negligence including poor examination preparation, administration, and scoring procedures are observed in UEEs (Lemma & Agago, 2022). This may affect the quality of the examination. Largely, the trustworthiness of certifications and the decisions made based on the results are at risk (Kellaghan and Greaney, 2004). This kind of practice negatively impacts all stakeholders including students, teachers, parents and the country at large. There are a number of problems related to test administration. One serious problem is cheating. Cheating is nowadays common among students (Lemma & Agago 2022). When exposed, cheating jeopardizes the reliability of the test. The difficulty level of the examination also becomes awkward; as different exams are administered every year, it is challenging to keep up with the difficulty level required.

Some test items may not function properly as they may be very difficult and not discriminating (Hadya, 2014).

Nowadays, in preparatory schools where students are expected to be prepared for college and university learning, they are observed performing poorly in UEE, and it is creating fear and anxiety in them (Hadya, 2014). The third national learning assessment of Grade 10 and Grade 12 students revealed that the mean score for English was below the minimum requirement; only 10.6% of Grade 10, and 9.5% of Grade 12 students achieved 50% and above in English examinations (NEAEA, 2017).

Therefore, it is essential to compare the level of students' achievement in SBEA and UEE as well as to study the predictive validity of SBEA on students' national examination achievement. This is, on the one hand, to examine the relationship between teacher made test and UEE and to learn whether teacher made test contributes to students' national examination success; on the other hand, to motivate subject teachers to learn the validity of their examination. Besides, as validity is a central concept in language testing, it can have a high benefiting effect on the value of school based English tests as far as their quality is concerned.

Statement of the Problem

Besides checking students' existing achievement, we cannot deny the predictive validity of tests; they may predict future achievement either on the same activity or on another test of the same construct (Brown & Coughlin 2007). This quality of tests enhances not only the predictive validity but also the value of the tests accordingly. It implies that the higher the predictability of a test, the greater its influence on future achievement as learning can be measured by the test scores students earn at the end of a particular session.

However, there is no research that shows whether this kind of rapport exists among tests in the context of the Ethiopian pre-colleges. Some students have performed badly in English national examination although they earn pass scores in their schools based tests. Therefore, for many students, the possibility of joining higher education becomes questionable even if they succeed in SBEA. A study on quality and quality assurance in Ethiopian higher education also revealed that students join universities despite inadequate grounding in their academic studies particularly in English subject (Mulu, 2012). Moreover, evidence from the National Learning Assessments exposed that the mean score of Grade 12 students' English was below the requirement which is 25.9% (NEAEA, 2014). This makes it essential to learn why students fail in UEE when success in teaching is determined by the success of students in external examinations. It could be because of different contributing factors, but there is a need to establish how effective SBEA is in preparing students for UEE as English is one of the compulsory subjects that contributes to their status.

To this end, studies in language testing suggest that predictive validity studies of examinations should be conducted to employ positive influence in the nature of assessment (Alavi, 2012; Kartika & Suranto, 2018 and Kellaghan & Greaney, 1992). Therefore, examining the validity of SBEA is found to be necessary to estimate how strong it is to predict students' achievement in UEE. But it has not been checked so far in the given context.

Previous studies on language testing have attempted to explore the predictive power of tests; for example, Melaku (2013) studied the validity of English UEE and high school grade point for predicting first year university students' academic achievement. He found out that UEE score has higher predictive power for achievement in universities. Geiser & Santelics (2007) investigated the validity of high school grades in predicting students' success beyond the freshman year. They found out that student's high school grade point was the best predictor of freshman

grades. Aboma (2008) has also examined the predictive validity of higher education entrance examination scores for freshman students' academic achievement. However, none of the aforementioned studies have considered how much valid SBEA is for predicting success on students' UEE score as far as English is concerned in pre-college settings.

On the other hand, Alavi (2012) investigated the relationship between students' high school and pre-university English scores with their English national examination score. The result indicated positive correlation between the exams, but they did not predict achievement in UEE due to lack of high correlation. The samples were 42 randomly selected male pre-university students, but the sample size was too small to be acceptable as per the principle that the larger the sample size the better not only for reliability but also for sophisticated statistics to be used (Cohen, Manion & Morrison, 2007). Besides, the study excluded female students. In addition to this, Eunice (2018) examined the validity of primary school certificate examination as a predictor of secondary school scores among 1,391 public secondary school students in Kenya. The finding indicated that there was a strong positive correlation between Kenya's primary education certificate score and secondary education certificate scores. Using *ex-post facto* research design Benjamin & Habila (2020) also investigated the predictive validity of continuous assessment (CA) scores on students' performance of Junior Secondary Certificate Examination (JSCE). The samples were 541 Nigerian students selected using multistage cluster sampling. The data were obtained through an inventory method. The finding showed positive relationship between CA scores and JSCE. Thus, CA scores of students predict their JSCE performance in 2014/15 and 2016/2017 while it could not predict JSCE performance in 2015/2016. Another researcher, Kartika & Suranto (2018), explored the relationship between school based-test and national based test results in a cross sectional research design. The data were collected from 1,446 students from six randomly

selected high schools. They found out that school results could not be used as good predictors of national examination results.

Despite these findings, there is a paucity of studies that probe into the predictive validity of English school based tests on national examination success in the Ethiopian context. The present study, thus, tries to fill the gap. The following research questions are employed to find out possible answers:

- What is pre-college students' level of achievement in SBEA and UEE?
- Is there a statistically significant mean difference between SBEA and UEE scores?
- Is there a statistically significant correlation between SBEA and UEE scores?
- Does SBEA predict pre-college students' English language achievement in UEE?

Methodology

Research Design

The study followed a quantitative research method with predictive correlational design to examine the validity of pre-college students' SBEA in predicting their later score in UEE. The two tests were administered to the same samples; however, SBEA was administered repetitively throughout the academic year before the national exam, whereas UEE was administered later at one point in time when the students completed Grade 12; so, there is an apparent gap in the use of the two tests. Therefore, the design enables to probe the relationship between these variables from the same group of subjects to determine if they are related and, if so, find out the direction and magnitude of that relationship (Ary, Jacobs & Sorensen, 2010 & Cohen et al, 2007). It also enables to recognize not only the relationship between the two variables

but also the predicting soundness of the predictor variable (SBEA) over the criterion variable (UEE).

Participants

The purpose of this study was to investigate the predictive validity of pre-college students SBEA on their achievement in UEE. The participants were 1,113 Grade12 students who graduated in two consecutive academic years in Woldia Preparatory School, which is the only preparatory school in Woldia town, Ethiopia. Due to COVID-19, it was difficult to travel to other areas to gather data. Convenience sampling technique was used to select participants (n= 501, 312 natural and 189 social science students) from 2017/18 entry and (n=612, 340 natural and 272 social science students) from 2018/19 entry. 258 (51.5 %) of the participants were male while 243 (48.5 %) of them were female in 2017/18; whereas 308 (50.3%) of the participants were male, 304 (49.7%) of them were female in 2018/19 academic year.

Data Collection

To attain possible answers for the research questions, the students' SBEA scores and UEE scores i.e., archival data, were obtained from the school record office since the tests had been already administered, documented and kept in the record office there. The participants' Grade 11 and Grade 12 English final examination average score was taken as a predictor variable, whereas their English UEE score was taken as a criterion variable.

Data Analysis

The data was analyzed quantitatively using the Statistical Package for the Social Sciences (SPSS), version 21. Descriptive Statistics, Wilcoxon Signed Rank Test, Spearman's Rank Correlation Coefficient and Simple Linear Regression were employed to analyze the data. Descriptive

statistics was used to determine the level of students' achievement in SBEA and UEE. To check normality, Kolmogorov-Smirnov Test was employed; the results, in the two academic years, were found $p < 0.05$ and concluded that the data did not follow normal distribution. As a result, Wilcoxon Signed Rank Test was used to check whether or not there was a significant difference between achievement in SBEA and UEE. Moreover, Spearman's Rank Correlation Coefficient was run to describe the degree of association between achievement in SBEA and UEE. Finally, Simple Linear Regression Analysis was run as scatter plot showed positive linear relationship between SBEA and UEE. The standardized predicted values verses standardized residuals showed that the data met the assumptions of homogeneity of variance. Following, Linear Regression was computed to determine the predicting effect of SBEA on students' achievement in UEE. As the samples were taken from natural and social science streams in two different academic years, the scores were entered into the regression analysis year by year and stream by stream separately; as a result, four regression models were found. Effect size

$$r=\frac{Z}{\sqrt{N}}$$

r= correlation coefficient, *Z*= z-score and N= total number of subjects

was calculated to determine the power of relationship between variables, and consequently, the values of 0.1, 0.3 and 0.5 were interpreted as small, medium and large effect size, respectively (Cohen et al, 2007).

Result

Students Level of Achievement in SBEA and UEE

To determine pre-college students' level of achievement in SBEA and UEE, descriptive statistics were used. The results are presented below in *Table 1* and *Table 2* based on streams of study in each academic year and gender, respectively.

Table 1: Level of Achievement in SBEA and UEE

Year	Exam	Stream	N	Min.	Max	Mean	Std. D
2017/18	SBEA	Natural	312	18	87	58.42	13.131
		Social	189	28	86	54.18	9.234
	UEE	Natural	312	26	74	49.82	8.879
		Social	189	23	65	45.49	8.522
2018/19	SBEA	Natural	340	30	94	61.13	11.14
		Social	272	36	92	58.25	8.106
	UEE	Natural	340	13	78	43.32	11.931
		Social	272	16	75	39.47	11.588
	SBEA		1113	18	94	58.49	11.030
	UEE		1113	13	78	44.57	11.180

Table 1 displays students' levels of achievement in SBEA and UEE. Thus, in 2017/18, the mean score and standard deviation of natural science students' achievement in SBEA were 58.42 and 13.13, respectively while their UEE mean score was 49.82 with standard deviation of 8.9. Regarding social science students, their SBEA mean and standard deviation were 54.18 and 9.23, respectively whereas the mean score of UEE was 45.5 with a standard deviation of 8.5. On the other hand, in 2018/19, the mean and standard deviation of natural science students' SBEA were 61.13 and 11.14, respectively while their UEE mean was 43.32 in a standard deviation of 11.93. Concerning social science students, the mean score of SBEA was 58.25 with the standard deviation of 8.10 whereas their UEE mean score and standard deviation were found to be 39.47 and 11.5, respectively. Furthermore, the total mean score of SBEA was found to be 58.49 with standard deviation of 11.03 and the total mean score of UEE was 44.57 with the standard deviation of 11.18.

Table 2: Level of Achievement in SBEA and UEE based on Gender

Exam	Gender	N	Min.	Max.	Mean	Std. D
SBEA	Male	566	18	92	58.68	11.777
	Female	547	18	94	58.29	10.221
UEE	Male	566	16	78	46.37	11.213
	Female	547	13	73	42.72	10.863

As shown in *Table 2*, the mean and standard deviation of male students SBEA were 58.68 and 11.77, respectively while the mean and standard deviation of UEE were 46.37 and 11.21, respectively. On the other hand, the mean and standard deviation of female students SBEA were 58.29 and 10.22, respectively; whereas in UEE, the mean was 42.72 and the standard deviation was 10.86. Male and female students scored almost similar mean score in SBEA but they had different mean scores in UEE.

Comparisons of pre-college students' Achievement between SBEA and UEE

To determine if there was a significant mean rank difference between achievement in SBEA and UEE based on streams in each academic year and gender, the data was subjected to Wilcoxon Signed Rank Test, and the results are presented in *Table 3* and *Table 4*.

Table 3: Comparisons of Achievement between SBEA and UEE

Year	Stream	UEE-SBEA	N	Rank Mean	Rank Total	Z	P	r(effect Size)
2017/18	Natural	Negative Ranks	234	166.89	39053.00	-9.904 [b]	.000	0.4
		Positive Ranks	73	112.67	8225.00			
		Ties	5					
	Social	Negative Ranks	145	96.73	14026.00	-8.403[b]	.000	0.4
		Positive Ranks	35	64.69	2264.00			
		Ties	9					
2018/19	Natural	Negative Ranks	298	179.94	53623.50	-14.686[b]	.000	0.5
		Positive Ranks	35	56.79	1987.50			
		Ties	7					
	Social	Negative Ranks	246	144.24	35482.00	-13.207[b]	.000	0.5
		Positive Ranks	25	54.96	1374.00			
		Ties						

*b. Based on positive ranks.

A Wilcoxon Signed-Rank Test was conducted to determine whether there was a statistical significant difference between ranking of scores in SBEA and UEE regarding the students' field of study and academic years. *Table 3* shows in natural science stream, results of the analysis indicated that there was a significant difference between scores in SBEA and UEE, (Z = -9.904, *p*<.001, *r*=0.4); (Z= -14.686, *p*<.001, *r*=0.5) in 2017/18 and 2018/19 academic years, respectively. Likewise, in social science stream, a significant difference between SBEA and UEE (Z= -8.403, *p*<.001, *r*=0.4), (Z=-13.20, *p*<.001, r= 0.5) was observed in 2017/18 and 2018/19 academic years, respectively. The results indicated that significantly more favorable ranking was observed in SBEA than UEA in both of the streams.

Table 4: Comparisons of Achievement between SBEA and UEE based on Gender

Stream	UEE-SBEA	N	Rank Mean	Rank Total	Z	P	r(effect Size)
Male	Negative Ranks	445	304.22	135380.00	-15.525[b]	.000	0.4
	Positive Ranks	109	168.39	18355.00			
	Ties	12					
Female	Negative Ranks	478	288.12	137723.00	-18.209[b]	.000	0.5
	Positive Ranks	59	114.07	6730.00			
	Ties	10					

b*.Based on Positive Rank

Regarding gender, a Wilcoxon Signed-Rank Test results in *Table 4* show that there was a significant difference between scores in SBEA and UEE, (Z = -15.525, p<.001, r=0.4); (Z= -18.209, p<.001, r=0.5) for male and for female students respectively. Significantly, more favorable ranking was observed in SBEA than UEA in both sexes.

Correlation of Students SBEA with Their Achievement in UEE and Field of Study

To estimate the association between pre-college students' achievement in SBEA and UEE, Spearman's Rank Correlation Coefficients was calculated; *Table 5* displays the results.

Table 5: Correlation between SBEA and UEE

			1	2	3	4	5	6	7	8
2017/18	1	SBEA-Natural								
		UEE-Natural	.327**							
	3	SBEA-Social	.077	.021						
		UEE-Social	-.022	.066	.077*					
2018/19	5	SBEA-Natural	-.006	.057	-.174*	-.033				
		UEE-Natural	.085	.053	-.061	-.148*	.266**			
	7	SBEA-Social	.040	.056	.066	.028	.087	.012		
		SBEA-Social	.050	-.060	-.035	-.141	-.068	.042	.084	

** Correlation is significant at the 0.01level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Spearman's Rank-Order Correlation was computed to assess the relationship between scores in SBEA and UEE. As shown in Table 5, in natural science stream, positive relationship between SBEA and UEE scores r (312)=.32, p<*0.01;* r(340)= .266, p <0.01 were found in 2017/18 and 2018/19 academic years, respectively. On the other hand, in social science stream, the relationship between SBEA and UEE was r(189)= .07, $p > .05$, in 2017/18 and r(272)=.08, $p > .05$ in 2018/19. The relationship was moderate for natural science stream, but it was weak for social science stream.

SBEA as a Predictor of UEE Achievement

Simple Linear Regression was computed to examine if pre-college students' UEE achievement was predicted by their score in SBEA; the results which were computed year by year and stream by stream are displayed in *Table 6*.

Table 6: SBEA as a Predictor of UEE Achievement

Model	R	R^2	Adjusted R^2	Std. Error	df1	df2	F	Sig.	Beta
1	.349[a]	.121	.119	12.328	1	310	42.869	.000	.349
2	.138[a]	.019	.014	8.463	1	187	3.64	.058	.138
3	.310[a]	.096	.094	11.358	1	338	36.021	.000	.310
4	.075[a]	.006	.002	11.577	1	270	1.512	.220	.075

1a. Predictor: (Constant), SBEA (Natural) 2017/18
2a. Predictor: (Constant), SBEA (Social) 2017/18
3a. Predictor: (Constant), SBEA (Natural) 2018/19
4a. Predictor: (Constant), SBEA (Social) 2018/19

As *Table 6* shows, simple linear regression was used to predict pre-college students' UEE achievement from their SBEA achievement. For natural science students, significant regression equations ($F(1,310)= 42.869$, $p<0.01$, $R^2=.121$, R^2 adjusted=.119) and ($F(1,338)=36.021$, $p<0.01$, $R^2= .096$, R^2 adjusted=.094) were found in 2017/18 and in 2018/19, respectively. It was found that SBEA significantly predicted achievement in UEE (β=.349, p=.00); (β=.310, p=.00) in 2017/18 and 2018/19, respectively. On the other hand, for social science students, regression equations ($F(1,187)= 3.64$, $p > .05$, $R^2=.019$, R^2 adjusted=.014) and ($F(1,270)=1.512$, $p > .05$, $R^2= .00$, R^2 adjusted=.002) were not significant in 2017/18 and in 2018/19, respectively. The result (β=.138, p=.05), (β=.220, p=.22) in 2017/18 and in 2018/19 respectively indicated that SBEA did not predict UEE score for social science students.

Table 7: SBEA as a Predictor of UEE Achievement

Model	R	R^2	Adjusted R^2	Std. Error	df1	df2	F	Sig.	Beta
Male	.198	.039	.038	11.000	1	564	23.087	.000	.198
Female	.226	.051	.050	10.591	1	545	29.460	.000	.226

To determine whether students' UEE score was predicted by their score in SBEA with regard to gender, simple linear regression was used. As *Table 7* displays, significant regression equations ($F(1,564)= 23.087$, $p<0.01$, $R^{2=}.039$, R^2 adjusted=.038) for male students and ($F(1,545)= 29.460$, $p<0.01$, $R^2= .051$, R^2 adjusted=.050) for female students were found. It indicated that SBEA significantly predicted achievement in UEE ($\beta=.198$, $p<0.01$); ($\beta=.226$, $p<0.01$) for male and female students respectively.

Discussion

Exploring pre-college students' level of achievement in SBEA and UEE is one of the concerns of this study. As shown in *Table 1*, descriptive statistics related to students' level of achievement shows that the overall mean score of SBEA and UEE are (M=58.49, SD= 11.03) and (M=44.57, SD=11.18), respectively. In accordance with gender, with reference to *Table 2*, SBEA score of male and female students were (M=58.68, SD= 11.77) and (M=58.29, SD= 10.22) respectively, whereas UEE score of male and female students were (M=46.37, SD= 11.21) and (M=42.72, SD= 10.86) respectively. Without distinction between streams of study as well as gender, these results indicate that the students' level of achievement in SBEA is average with reference to the minimum requirement which demands students to score 50% and above as a pass point for a grade level (NEAEA, 2017). School based test is likely to provide a more effective appraisal of students' achievements than is possible in external examination (Kellaghan & Greaney, 2004). Surprisingly, their level of achievement in UEE is low which means below

the cutoff point that demands students to score an average of 50% and above in each of the subjects of national examinations for admission into higher education programs (*see* FDRE, 2009). These findings are consistent with the national learning assessment report that showed Grade 12 students' English score was below the cutoff point (NEAEA, 2014 & 2017). In addition to this, the results of the present study confirm the findings of Mulu that unveiled many students are joining universities without having satisfactory scores in UEE in subjects like English (2012). Conversely, the current findings contradict with Higher Education Proclamation (No. 650/2009, FDRE, 2009) which declares students who are to be admitted to undergraduate programs of higher education institutions should obtain the necessary pass marks in the university entrance examination. It requires students to score an average of 50% and above to pass and reach on the cut off score for admission into higher education.

With respect to the second question, a considerable mean rank difference between SBEA and UEE is observed without distinction between streams of study and gender. The result shows that the difference between SBEA and UEE is significant at $p<.001$ favoring SBEA, as shown in *Table 3* and *Table 4*. On examining the effect sizes (r) for the Wilcoxon Signed Rank Test, it is moderate (0.4 for natural and social science streams) in 2017/18, whereas the effect is large (0.5 for natural and social science streams) in 2018/19 academic year. Similarly, moderate (0.4) and large (0.5) effects are found in male and female students respectively. Therefore, students' achievement is expressively higher in SBEA than UEE without distinctions between streams of study and gender. This result corroborates the findings of NEAEA (2017) as such significant difference between classroom result and national examination result was found.

The third research question of this study sought to answer the correlation between students' score in SBEA and UEE. Thus, for natural science students, there is a moderate positive relationship $r(312)=.34$, $p<0.01$;

r(340)= .31, p <0.01 between SBEA and UEE in 2017/18 and 2018/19 academic years, respectively. The results of this study confirm Alavi's finding which showed a positive correlation between English scores of high school and pre-university exams (2012). However, for social science students, weak positive relationships between SBEA and UEE r(189)= .13, p= >.05 in 2017/18 and r(272)=.07, p= >.05 in 2018/19 are found. This finding confirms the finding of Benjamin & Habila; they found out that such relationship was found between CA scores and JSCE (2020). The present finding further supports the result of Kartika & Suranto that indicated no strong correlation between school based-test and national test (2018).

This study further examined whether SBEA is a significant predictor of students' achievement in UEE. The result in *Table 6* indicates that SBEA significantly predicts achievement in UEE in natural science stream. 11% and 9% of the variance in UEE score could be explained by their score in SBEA in 2017/18 and in 2018/19 academic years respectively. However, the contributions are small since the remaining 81.9% and 91% of the variance in UEE scores can be explained by factors other than SBEA scores. In accordance with gender, the predictive power of SBEA is very small for male and female students, as shown in *Table 7*; it only contributes 3% and 5% of their score in UEE, respectively. It implies that if enough credit is not given for students' success in SBEA in accordance with national examination standards, it may lead students to the inability of obtaining good scores in UEE. This result is a bit congruent with the results of Eunice (2018) and Opara, Onyekuru, & Njoku, (2015); they found out that school based assessment scores significantly predicted students' English achievement in junior secondary certificate examination.

The result in *Table 6* indicates that social science students' SBEA score do not predict their score in UEE. A higher score in SBEA does not grantee a higher score in UEE. Teacher made tests were not inclusive in terms of assessing students' higher order learning outcomes from

simple to complex (Kassahun & Teshome, 2021); They are more superficial than national test items; as a result, students tend to be relying on shallow learning strategies; when they face high ordering and transferable skills in standardized tests, they could be less successful (Kellaghan & Greaney, 2004). On the other hand, poor exam preparation, administration and scoring procedures that UEE has recently faced, as Lemma & Agago (2022) exposed, harmfully affect the validity and reliability of the examination, and it may contribute for fake results in UEE. This kind of experience doubts the trustworthiness of the exam and misleads the decisions made based on the results (Kellaghan and Greaney, 2004). The finding of the present study is consistent with the result of Alavi that showed high school and pre-university English exams did not predict students' score in university entrance exam (2012). The present result is also in agreement with Kartika & Suranto's finding that identified school based test score did not predict national based test score (2018).

Conclusions

The aim of the present study was to examine the predictive validity of pre-college students score in SBEA on their subsequent score in UEE at Woldia Preparatory School with reference to natural and social science streams in 2017/18 and in 2018/19 academic years. The study found out that (without distinction between streams of study as well as gender) the students level of achievement in SBEA is average, whereas their level of achievement in UEE is low with reference to the cut off points determined as a pass mark to join higher education institutions. This study has further identified students' better accomplishment in SBEA than UEE as their score in SBEA significantly exceeds the subsequent score in UEE. Thus, students' achievement is found to be satisfactory in internal examinations, whereas it is found to be substandard in external examinations. Besides, this study found moderate positive relationship between SBEA and UEE for natural science students; as a result, SBEA predicts achievement in UEE. In

contrast, because of the weak correlation between the two tests, social science students' SBEA did not predict their achievement in UEE.

The main limitation of this study was the mere use of records whose reliabilities and validities could not be tested and confirmed. Despite this limitation, the result of the present study is likely to contribute to the existing body of knowledge in language testing. The study uncovers students achievement in teacher made test is not in accordance with the national exam standards. Therefore, pre-college students' English school based test achievement has not aptly contributed to their success in UEE, which determines students' admission to Ethiopian higher education institutions. Mainly, the evidences from this study suggest that social science students SBEA has no strong power to predict their subsequent success in UEE. The insight gained from this study may be of assistance to English as foreign Language (EFL) teachers, who are responsible for preparing SBEA in school settings, to inspect their tests and to look into their skills on designing quality tests which prepare students for success in national examination. Besides, the findings are likely to give timely information for the national examination board to review the quality of SBEA and UEE and to evaluate the curriculum implementation as well.

The students' low English achievement in UEE is a considerable problem; so meaningful measures should be taken towards elevating the level of students' achievement in UEE. The unpredictability of English scores in UEE by their SBEA in social science stream also needs special attention. Apart from the quantitative method, the variation in students' score in SBEA and UEE suggests the need to take these variables into account in further studies in areas such as item analysis through qualitative approach. Further study could compare the qualities of teacher made tests with the qualities of UEE to determine whether school based English tests are prepared in same standard with UEE. A study similar to this on more schools and on more students is crucial to validate, and provide new insights into EFL examinations.

Conflict of Interest Statement

I conducted this research without any commercial or financial relationships that could be interpreted as a potential conflict of interest.

Acknowledgment

For critically reading the manuscript and suggesting substantial improvements, I am deeply indebted to the anonymous reviewers.

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