

A comparison of Students' of Junior and Senior Secondary Schools and Teacher Trainees' reading speed and comprehension in the native language with their reading speed and their comprehension in the target language.

S. V. Varada Bhatta Char

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Is there a significant relationship between reading speed and comprehension in the Native Language (NL) and reading speed and comprehension in the Target Language (TL)? Before we can study the possibilities of such a relationship, we must identify those components of reading we wish to compare. The reading specialists have identified four levels of reading, viz, Skimming, Scanning, Rapid Reading and Critical Reading. Reading specialists in the 70's have identified one more dimension, that is, Creative Reading. This level of reading has not yet gained popularity in the educational field. «Rapid Reading» is the target of this study.

SAMPLE:

The sample consists of subjects from 9th grade (Junior High School) 48, 10th grade 123, 87 from 11th grade, 73 from 12th grade (Senior Secondary School); 38 teacher trainees from teacher training institute who are all studying in Dessie, which is the capital city of the Wollo Administration Region, Ethiopia. All the above referred subjects had studied English as a Second Language from 3rd grade onwards, and as a medium of instruction from 7th grade onwards, and Amharic as First Language, from 1st grade onwards and as MI from 1st grade to 6th grade.

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PURPOSES OF THE STUDY:

The purposes of this study are to compare the reading speed and comprehension in Amharic (NL) with the reading speed and comprehension in English (TL) of the students of Junior and Senior Secondary Schools and teacher trainees of the Teacher Training Institute (TTI)

HYPOTHESES:

A. Major :

1. The reading speed of the subjects will be better in Amharic (NL) than in English (TL).
2. The comprehension of the subjects will be better in Amharic (NL) than in English (TL).
3. The over-all performance of the subjects will be better in Amharic (NL) than in English (TL).
4. Those who read fast in Amharic will register better comprehension than those who read slow.

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4. Those who read fast in Amharic will register better comprehension than those who read slow.

5. Those who read fast in English will register better comprehension than those who read slow.
6. Those who read fast in Amharic (NL) will also read fast in English (TL).
7. Those who score high in comprehension in Amharic will also score high in comprehension in English.

B. Minor :

1. There will be gradual increase in the speed and comprehension in both Amharic and English from 9th grade to TTI.
2. There will be better consistency in the over-all performance in Amharic than in English from 9th grade to TTI.
3. There will be greater increase in speed in Amharic than in English from 9th grade through TTI.
4. There will be greater increase in comprehension in Amharic than in English from 9th grade to TTI.
5. There will be better performance among the subjects of TTI in reading speed, comprehension and the over-all performance in both languages than that of Junior and Senior subjects.

EXPLANATION OF THE TERMS USED:

It was necessary to define 'native' and 'target' language for the of this study, because of the different language back-grounds of subjects studying in schools in Ethiopia. Although most of the were born in Ethiopia and speak 'Amharic' there are many schools and teacher training institutes, for whom 'Amharic' is the Language and English is the third. It was decided to take 'Amh' the 'native' language, which the students knew best and in which they could express themselves with ease. English is considered as the language for this study.

TESTS:

In the absence of availability of standardized tests in speed-reading and comprehension in Amharic (NL) and English (LTL), the investigator selected two passages, one in Amharic and another in English. After both the passages were pretested for their readability (with all categories) of subjects, ten comprehension questions on each passage in Amharic and English were prepared with four alternative choices. These were pretested and revised and used in actual testing. The same tests were used for all the subjects viz, students of Junior and Senior Secondary Schools and teacher trainees of the TTI.

RESULTS :

Table 1: the mean scores and differences in
the Reading Speed, Comprehension and
Reading Index of the subjects in Amharic
(NL) and English (TL).

Grades	N	SPEED (WPM)		dif.		Comprehension		dif.		Reading Index		dif.	
		Amh.	Eng.	A	E	Amh.	Eng.	A	E	Amh.	Eng.	A	E
				%				%				%	
9	48	77	99	(20.20)		56	38	(32.14)		4704	3849	(18.18)	
				+E				+A				+A	
10	123	74	96	(22.92)		62	44	(29.03)		4495	4345	(3.34)	
				+E				+A				+A	
11	87	93	118	(21.19)		58	43	(25.86)		5326	5189	(2.55)	
				+E				+A				+A	
12	73	85	116	(26.72)		58	46	(20.69)		4759	5151	(7.61)	
				+E				+A				+E	
TTI	38	101	133	(24.06)		58	52	(10.34)		6002	6359	(5.61)	
				+E				+A				+E	

PROCEDURE:

The passages were distributed during the regular class periods one at a time to the subjects and they were asked to read as fast as they could silently after hearing the instructions «Get ready and start reading». Further, the subjects were instructed to raise their hands as soon as they finished reading the passage. The actual time taken to read the passages (nearest to five seconds) was notified to the subjects by the investigator, and it was recorded on the answer sheet of the individual subjects. Then the passage was taken back and comprehension questions were distributed. There was no fixed time allotted for answering the questions. But it was noticed that almost all the subjects answered the questions in between six and eight minutes. First the Amharic passage (322 words) was given. After a break of ten minutes the English passage (500 words) was given.

Note: +E indicates better performance in English over Amharic;
 +A indicates better performance in Amharic over English

By observing the data presented in table 1 we infer:

1. that the mean reading speed in English is better than reading speed (mean) in Amharic. Hypothesis No. 1 (major) rejected.
2. that the mean comprehension of Amharic is better than the mean comprehension of English. Hypothesis major No. 2 accepted.
3. that the mean over-all performance (RI) of 9th, 10th and 11th grade subjects is better in Amharic than in English, whereas the mean over-all performance (RI) of 12th grade and TTI subjects is better in English than in Amharic. Hypotheses major No. 3 partially accepted
4. that the reading speed (mean) in English through 9th to TTI has registered ascending tendency except in the case of 10th and 12th grade. The slight fall from 9th to 10th and from 11th to 12th is very negligible and statistically insignificant.
5. that the mean difference in reading speed between Amharic and English is more than 20% +E among the subjects of all categories. The range of mean difference in reading speed between Amharic and English is (20.20% + E to 26.72% + E); only 6.52% + E differ which is very feeble
6. the mean difference in comprehension of Amharic from grade 9th to 12th grade is very insignificant. The range is 56% to 62%. In most of the cases there is a gradual increase in the comprehension of English from 9th grade to grade 12. The range is 38% to 52%. Hypothesis minor rejected.
7. the mean difference in comprehension between Amharic and English slumps down from 32.14% +A (9th grade) to 10.34% +A (12th grade)
8. that the mean over-all performance (RI) between 9th and 10th grades slumps down from 18.18% +A to 3.34% +A; between 10th (3.34% +A) and 11th grade (2.55% +A) is). 79% +A which is very meagre and statistically insignificant; between 12th grade (7.61% +E) and TTI (5.61% +E) which is 2% +E can also be treated as insignificant.

Table 2A: Correlates between grades and speeds in Amharic.
(Speed differences in %)

Grades	9	10	11	12	TTI
9	-	3.90	+17.20	+ 9.41	+23.76
10	-	-	+20.43	+12.94	+26.73
11	-	-	-	- 8.60	+ 7.92
12	-	-	-	-	+15.84
TTI	-	-	-	-	-

Note; (-) indicates the decrease of speed (reading) in higher grades .
(+) indicates the increase of reading speed in higher grades.

Table 2B: Correlates between grades and speeds in English.
(Speed differences in %)

Grades	9	10	11	12	TTI
9	-	- 3.03	+16.10	+14.66	+25.66
10	-	-	+18.64	+17.24	+27.82
11	-	-	-	- 1.69	+11.28
12	-	-	-	-	+12.78
TTI	-	-	-	-	-

Note: (-) indicates the decrease of reading speed in higher grades.
(+) indicates the increase of reading speed in higher grades.

By observing the data presented in tables 2A and 2B we infer that even though there are differences in speeds in Amharic and English through 9th to TTI, there is no consistency. Hence the hypotheses minor No. 1 rejected.

Table 3A: Correlates between grades and comprehension in Amharic. (Comprehension difference in %)

Grades	9	10	11	12	TTI
9	-	+ 9.68	+ 3.45	+ 3.43	+ 3.45
10	-	-	- 6.45	- 6.45	- 6.45
11	-	-	-	0	0
12	-	-	-	-	0
TTI	-	-	-	-	-

Table 3B: Correlates between grades and comprehension in English. (Comprehension difference in %)

Grades	9	10	11	12	TTI
9	-	+13.64	+11.63	+17.39	+26.92
10	-	-	- 2.27	+ 4.35	+15.38
11	-	-	-	+ 6.52	+17.31
12	-	-	-	-	+11.54
TTI	-	-	-	-	-

Note: In tables 3A and 3B (+) indicates the increase of comprehension in higher grades.
 (-) indicates the decrease of comprehension in higher grades

By observing the data presented in tables 3A and 3B we infer:

1. that there is an increase in comprehension in Amharic from 9th to TTI
 2. that there is no difference in the comprehension in Amharic between 11th and 12th and between 12th and TTI.
 3. that there is an increase in the comprehension in English from 9th to TTI, except at 11th which is not of great significance.
 4. that the rate of progression in comprehension in Amharic and in English between the grades is neither uniform nor consistent.
- Hypothesis minor No. 1 rejected

Table 4A: Correlates between grades and over-all performance (RI) in Amharic. (RI difference in %)

Grades	9	10	11	12	TTI
9	-	- 4.44	+15.43	+ 1.16	+21.63
10	-	-	+15.60	+ 3.45	+25.11
11	-	-	-	+10.65	+11.26
12	-	-	-	-	+20.71
TTI	-	-	-	-	-

Table 4B: Correlates between grades and over-all performance (RI) in English. (RI difference in %)

Grades	9	10	11	12	TTI
9	-	+11.42	+25.82	+25.38	+39.47
10	-	-	+16.27	+15.65	+31.67
11	-	-	-	- 0.73	+18.40
12	-	-	-	-	+19.00
TTI	-	-	-	-	-

Note: In tables 4A and 4B (+) indicates the increase of over-all performance (RI) in higher grades.
(-) indicates the decrease of over-all performance (RI) in higher grades.

An examination of data shown in tables 4A and 4B reveals:

1. that there is an increase in the over-all performance in Amharic among the subjects of all grades, but the increase is not uniform between the grades
2. that there is an increase in the over-all performance in English among the subjects of all grades, but the increase is not uniform between the grades.
3. that the increase in over-all performance between grades in English is better than the increase in the over-all performance between grades in Amharic. Hypothesis minor No. 2 rejected.

The data presented in the tables 1, 2A, 2B, 3A, 3B, 4A and 4B reveals that the subjects belonging to the TTI have shown better reading speed, comprehension and over-all performance (RI) in English and reading speed and over-all comprehension in Amharic when compared with other subjects (9th to 12th grades). The comprehension in Amharic of the subjects of TTI when compared with other grades in of no reasonable difference. Hypotheses minor No. 3 partially rejected.

Table 5: Low reading speed with comprehension and high reading speed with comprehension in Amharic (NL) and English (TL.)

Grades	9		10		11		12		TTL	
	S	C	S	C	S	C	S	C	S	C
<u>Amharic</u>										
Low	44	60	35	70	51	70	51	40	65	60
High	130	90	137	80	160	70	148	70	160	40
<u>English</u>										
Low	62	50	42	40	61	30	68	50	92	30
High	177	70	167	40	156	80	177	20	222	70

Note: 'S' indicates reading speed of the individual subjects' in WPM
 'C' indicates comprehension in % of the individual subject's

By observing the data presented in table 5, we infer:

1. that in the majority of the cases the subjects have registered better comprehension when they have read fast. This is true in both the languages viz, Amharic (NL) and English (TL). Hypothesis major No 4 and 5 are accepted.
2. that in the majority of the cases the subjects who read slow registered low scores in comprehension when compared with the fast readers. This is true in both the languages viz, Amharic (NL) and English (TL).

Table 6A: Individual subjects' highest speed in Amharic and correspondent (the subjects) speed in English; individual subjects' highest comprehension in Amharic and correspondent (the subjects) comprehension in English.

Grades	9		10		11		12		TTI	
Language	A	E	A	E	A	E	A	E	A	E
Speed	130	100	137	118	160	115	148	177	160	222
Comp.	90	80	90	70	90	90	90	70	80	70

Table 6B: Individual subjects highest speed in English and correspondent (the subjects) speed in Amharic; Individual subjects highest comprehension in English and correspondent (the subjects) comprehension in Amharic

Grades	9		10		11		12		TTI	
Language	A	E	A	E	A	E	A	E	A	E
Speed	177	91	167	91	156	142	177	148	222	160
Comp.	80	90	80	80	90	90	90	80	90	60

By observing the data presented in tables 6A and 6B we infer:

1. that only 12th grades TTI subjects who have read fast in Amharic have read fast in English too. Hypothesis major No. 6 partially accepted.
2. that only 9th and 11th grade subjects who have scored highest comprehension in Amharic have also scored highest comprehension in English. Hypothesis No. 7 partially accepted.

DISCUSSIONS

1. The fact that reading speed in English is better than in Amharic among all the categories of subjects may be because the subjects spend more time in reading English than Amharic. Besides, the medium of instruction of the subjects is English from 7th grade onwards. They also study it as a Second Language from the 3rd grade. Another important reason may be that the orthographic structure of Amharic is more difficult to read than that of English. Of course the writer of this report feels that this fact has to be confirmed further by more authentic research. Concurrently it may also be said that the subjects may be neglecting reading Amharic and spending more time in reading English, with the impression that Amharic is their NL and they have already mastered all the reading skills in it. This, of course, is a misconception.
2. Comprehension in Amharic is better than comprehension in English. This may be attributed to the fact that the Amharic Language is the (NL) of the subjects
3. It is really interesting to note that the over-all performance i.e., reading with speed and comprehension (RI) of subjects, in Amharic, is better than in English up to 11th grade. The over-all performance shifts from Amharic to English among the subjects of 12th grade and TTI

This may be due to the fact that the 12th grade subjects spend additional time and attention to the preparation of the ESLC examination, which is an important examination of high standard in English Language Skills.

The TTI subjects registered better over-all performance in English than in Amharic, but less than the 12th grade subjects. This is due to the teacher trainees studying their curricular programme in English (eight subjects) and Amharic (nine subjects) and their practice teaching being in Amharic medium except for the English language.

4. Even though an increase in reading speed and comprehension is noticed from grade to grade, it is observed from the tables 2A, 2B, 3A, 3B, 4A and 4B that the increase is not uniform. This may be attributed to the fact that the subjects do not have formal training in fast reading with comprehension in their school curriculum.
5. The fact that the difference in comprehension between Amharic and English (which is +A in all grades) has gradually decreased from 9th grade (32.14% +A) to TTI (10.34% +A) is quite significant. The observation is further confirmed by the fact that the subjects of

all grades have shown greater increase in the comprehension of English than in that of Amharic. This may be due to the fact that the subject's interest has shifted from Amharic to English. Besides, the subjects were supposed to spend more time in reading English than Amharic, since the MI is English

6. The fact that the subjects who have read fast have also registered better comprehension in both NL and TL falls in line with the established research finds, i.e., 'Those who read faster will have better comprehension'.
7. The fact that those who read fast in Amharic (NL) will also read fast in English (TL) has become true only in higher grades (12th and TTI). That those who have high comprehension scores in Amharic (NL) will also have high comprehension scores in English (TI) has become true only in lower grades

These may be attributed to the fact that practice in reading in one language will help to achieve better performance in another language also (transfer of language skills from NL to TL). This finding needs to be confirmed further by more authentic research.

CONCLUSIONS:

1. The fact that Amharic is a native language doesn't give any scope for better reading speed with comprehension at the higher grades.
2. The inconsistent variation in the reading speed and comprehension among the subjects of all grades both in Amharic and English establishes the fact that there wasn't any formal training given to the subjects in fast reading and comprehension.
3. When we compare the results of reading speed and comprehension of the subjects in NL and TL with the similar subjects of other natives we find a vast difference. This is due to the fact that the educationists and curriculum designers have not shown sufficient attention towards imparting training in this vital aspect, that is reading with comprehension.

RECOMMENDATIONS:

1. Systematic analysis should be made to study the various difficulties experienced by students in reading Amharic and English at all grades and remedial programmes should be conducted.
2. Systematic courses in fast reading and comprehension should be introduced at all grades as part of the curriculum.

3. Standardized tests in 'Fast Reading and Comprehension' in both Amharic and English have to be developed.
4. Teaching 'Silent Reading' and 'Fast Reading' should be introduced in the curriculum of Teacher Education Programme at all levels.

Notes: (1) Reading Speed (RS) is defined as number of words read per minute (WPM). Example: Let us suppose that there are 500 words in the given passage, and the reader has taken five minutes to read the passage. Then, the Reading Speed (RS)

$$\frac{\text{Number of words in the passage } 500 \text{ words}}{\text{Total time taken } 5 \text{ minutes}} = 100 \text{ WPM}$$

(2) Reading Comprehension (RC) is always expressed in percentage (%). For Example: If there are 'ten' questions and the student has answered 'seven' of them (correctly, the comprehension is $7 \times 10 = 70\%$.

(3) Reading Index (RI) is defined as the product of Reading Speed (RS) and Reading Comprehension (RC). For Example: Let us suppose that a subject's reading speed in Amharic is 100 WPM and the Reading Comprehension in the same test is 70%. Then, the $RI = 100 \times 70 = 7000$. This is a mere number. This is used to compare the over-all performance in the speed-reading tests.

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