ADDIS ABABA UNIVERSITY FRESHMAN STUDENT'S READING SPEED IN THE ENGLISH LANGUAGE

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ABSTRACT

This study was primarily intended to measure how fast students at the freshman level read. Since it would be meaningless to evaluate only speeds, comprehension was also tested. A secondary purpose of the study was to test whether there would be significant speed performance differences between and among subjects with different reading backgrounds.

The sample population, which consisted of 120 Social Science freshmen were randomly selected. Then reading speed and comprehension tests were administered. A questionnaire was also administered to the sample population.

The result of the reading speed tests, which is 96 w.p.m., shows that the subjects are desperately slow readers when compared with both native and non-native speakers of English. However, the comprehension result, which is 64%, is relatively good.

The results of the questionnaire, except in the case of school locations, indicated no statistically significant speed performance differences between and among those with favourable and unfavourable reading backgrounds.

As the findings show, the reading abilities in general and the reading speed levels of the subjects of this study in particular have been ignored and there is a need for paying attention to the problem by people concerned.

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CHAPTER 1

1. INTRODUCTION

1.1. Statement of the Problem

Reading at an acceptable speed and understanding plays a great role in one's life. In respect of this point, Paul D.Leedy (1963:5) writes

> Rapid, precise reading is a skill that will pay you big dividends throughout your life. The chances are that with effective reading skills in school you will earn better grades with less efforts; and in later life you will find that the ability to read well will save you time and enable you to be generally more efficient in your work.

In countries where English serves as a medium of instruction, students are expected to read textbooks, handouts, and other informative and recreational materials written in English. In order to live up to such expectations, students should read well. They ought to improve their reading skills in general and their speed reading in particular so that they can tackle their reading assignments properly. They should also be enabled to get the joy recreational materials offer.

The need for a reasonable reading speed with an appropriate level of comprehension is, therefore, of paramount importance specially to students. Nevertheless, the efficiency of reading at the freshman level, particularly the level of speed reading, is claimed to be discouragingly low. It is commonly assumed that students read at low speed and comprehension. This assumption, in fact, needs a comprehensive investigation and proof.

1.2. The Purpose of the Study

The primary aim of this study is to measure students' initial reading speeds at the freshman level. Furthermore, its subsidiary purpose is to find out whether there are speed performance differences between and among subjects with different reading backgrounds.

1.3. The Importance of the Study

It is hoped that the findings can be helpful to curriculum designers, educators and others concerned about the reading problems and activities of Ethiopian students at the freshman level.

1.4. Limitation of the Study

Teacher made speed and comprehension tests were administered to the subjects since no standardized tests were available. The researcher has attempted to select reading passages which were believed to be fairly easy and roughly close to each other in difficulty level. In addition, the comprehension tests were set carefully as much as possible. Nevertheless, the informal tests that have been employed for the purpose of this work can have some limitation on the result.

1.5. Definition of Terms

Subjects refer to the sample population.

Words refer to free morphemes such as a, man, unbend and briefcase.

Estimate refers to a rough calculation of speed or comprehension of subjects.

Measurement refers to calculations of speed or comprehension of subjects.

Mean refers to the speed or comprehension results of the six passages divided by six.

Aggregate Mean refers to the sum of the means of the six passages' comprehension or speed results divided by the number of observations.

1.6. Abbreviations and Symbols

1.6.1. Abbreviations

Comp. = comprehension

N = number of observations

r = coefficient of correlation

w = class width

w.p.m. = words per minute

C.N. = code number

H.S.I.U. = Haile Sellasie I University

A.A.U. = Addis Ababa University

1.6.2. Symbols

Σ = summation sign

$\bar{X}$ = mean of the speed

X_o = assumed mean of the speed

S_x = standard deviation of the speed

$\bar{Y}$ = mean of the oomprehension

Y_o = assumed mean of the comprehension

S_y = standard deviation of the comprehension

L_1 = First Language Speaker(s)

CHAPTER 2

2. REVIEW OF RELATED LITERATURE

2.1. General Works on Reading Speed

2.1.1. Works on First Language Speakers of English

A great deal of work has been done on reading in general and reading speed in particular. Notable educators have been trying to work out solutions to problems pertinent to reading from the nineteenth century onwards. Nilla Banton Smith (1966:3) in her article on reading writes, "Interest in the scientific study of reading began in Europe about the middle of the nineteenth century."

The subject had interested scholars in Europe earlier but later, scholars in other parts of the world, specially in the United States of America, became interested, too.

In the earlier periods, much of the work was done on oral reading. Traditional educators gave much more emphasis to oral reading and students attending reading lessons had been encouraged to give much emphasis to the improvement of their oral reading abilities. On the whole, oral reading had maintained its supremacy over silent reading for a long time. Gradually, however, the need for silent reading rose. In this regard, Smith (1966:6) has the following to say, "In marked contrast to the traditional practice, we find a period of years, approximately between 1910 and

1925, in which there was an ggregated and, in some cases, almost exclusive emphasis upon silent reading procedures."

People opposed to the traditional way of reading methodology shifted the emphasis from oral to silent reading. Oral reading practice was not totally ignored, but it was no more considered supreme. Giving much weight to oral reading hinders the rate of silent reading. John J.De Boer and Martha Dallmann (1970:229), while discussing the rates of silent and oral reading, say, "The silent reading rate of the efficient reader exceeds that of the oral reading. In the intermediate grades the average pupil may read silently from 1½ times twice his oral reading rate or even more."

Much of our reading is done silently; in fact, people mostly read for themselves. It is rarely that people read orally. Thus, the singling out of speed as a reading skill which could be developed through practice was entertained in the early parts of the twentieth century. De Boer and Dallmann (1970:229) further write, "Professional interest in speed of reading first rose sharply in the 1920s with the shift of emphasis from oral to silent reading."

Authorities have been estimating and measuring the reading speeds of native speakers of English. Their subjects have been the general public, professionals and in most cases students.

Different initial rates of the adult and the general public were estimated and measured. Gertrude Hildreth (1958:102) records, "The typical adult reads silently

at a rate not greater than 250 w.p.m. The range is between 150 and 250 w.p.m." This range is almost a common estimate by many authorities.

Gordon R. Wainwright (1977:2) in discussing the reading speeds of different people reports

> Most of us are very slow readers and inefficient readers. It is generally accepted that the average reader, reading a newspaper article or similar material for a general understanding, reads at a rate of about 200 to 250 words per minute and scores between 60 and 70 per cent on a comprehension test of what he has read.

In the view of Wainwright the majority read at a slow rate. His estimate is closer to most estimates, but his comprehension estimate is below average compared with other estimates.

Manya and Eric De Leeuw (1965:28) while dealing with Napir and Hart's findings write

> In 1965, Miss K.Napier and E.F.Hart tested 147 readers: 82 in business groups and 65 in classes for the general public. The average initial speed was 232 w.p.m. The speed of the business group was 223 w.p.m. and that of the general public 241 w.p.m.

These findings illustrate that the general public's speed is better than the business group. The average reading rate of the general public exceeds that of the business group by 9 w.p.m. The former rate, 241 w.p.m., also exceeds the aggregate average speed, 232 w.p.m., by 18 w.p.m. Both the average reading speed for the general public and the business group lie within the average speed limit of the general public as estimated by the De Leeuws.

Leaving aside the extreme cases, the desperately slow readers and the exceptionally fast readers, the average speed for the general public is estimated 250 w.p.m.

For authorities on reading, more suitable and popular subjects in the appraisal of reading rates seem to be students. Estimates and measurements of rates on the student population at different grade levels are very numerous.

Diversified speeds of students who are native speakers have been measured and estimated. The readers over-all ability and background, in addition to his purpose, determine what speed he has to adopt. With regard to this, various speeds have been estimated and measured. Christine Nuttal (1982:36) while discussing the expected speeds of students who are native speakers states

> ... it is useful to know that for an L_1 speaker of English of about average education and intelligence (for example, a student at a technical college), the rate is about 300 w.p.m. The range among L_1 speakers is very great; rates of up to 800 w.p.m. and down to 140 w.p.m. are not uncommon.

This estimate shows that the speeds of students are greater than those of the general public. The range also exceeds that of the adult readers.

In his experimental work on reading comprehension at the college level, K.R. Narayanaswamy (1972:302) records Fry's estimates on students' reading rates,

"The speed at which a student may be required to read most of the time, according to Fry is 150 w.p.m. for a 'slow' reading, 250 w.p.m. for a 'fair' reader and 350 w.p.m. for a 'good' reader with about 70% comprehension."

Hildreth (1958:102) discusses the reading speeds of high school and college students and writes, "Superior high school students achieve nearer 300 w.p.m.; college students 325 w.p.m."

In the same work, Hildreth (1958) tells us about Taylor's estimate and writes, "Earl Taylor (1954) reported that senior high school students average 296 w.p.m., college students 340 w.p.m." The estimates of Hildreth and Taylor are close to each other.

De Leeuw, as quoted by J.K. Hill (1981:271) while treating the rates at which people aim to proceed, records, "Students and others who read extensively for their professional purposes should aim to cover routine material at speeds between 300 and 600 w.p.m."

A similar estimate has also been made by Harry Shefter (1958:2) who writes, "Our men must learn to read at least 500 w.p.m. in order to keep up with their class assignments."

Another expert on reading, J.J.Augustin (1967:119) writes, "Research in the United States shows an average student reading speed of 600 w.p.m. Malaysian teacher trainees, according to the author's present investigations, read at an average of 250 w.p.m."

While discussing how fast man can read, Harold S. Madsen (1970:2) summarizes Evelyn Wood's statistics

> As indicated above 250 to 500 is top speed for most. A number of people claim to read 1,000 w.p.m. (probably much fewer than 1/1000); President Kennedy apparently read at 6,000 w.p.m. with fairly good comprehension; at Denver University a man read at a rate of 8,000 w.p.m., and at the University of Wyoming a man reportedly read at the rate of 11,000 w.p.m. with reasonable comprehension.

Estimates and measurements of reading rates on native speakers are highly diversified. Rates ranging from 140 to 800 w.p.m. as well as the highly exaggerated claims as shown in Wood's statistics indicate how wide the range is among native speakers.

2.1.2. Works on Second Language Speakers of English

A significant amount of research has also been done on reading abilities in general and reading speed of non-native speakers of English in particular.

The attempts made at assessing non-native speakers' reading rates are, nevertheless, scarce compared with those of native speakers.

Reading at a suitable rate is important to modern man, particularly to students since they have a lot to read within a limited time. Hildreth (1958:102) states that, "Rapid reading is of concern because of the pressures of modern life that demand extensive coverage in limited time, and the student's need to make the most out of his study time."

In spite of the technological advances in the field of communication, the printed page still remains a more significant source of information. This is more applicable to the developing nations where the means of communication in electronics is limited. The majority mostly get the necessary information, whether educational or otherwise, by reading different types of material. U.B. Gbendio (1986:96) in respect of this point writes, "... the printed page still reigns supreme in the world. Without it no higher education or interchange of serious professional knowledge is possible."

At present, English is the most important international language. It is used as a medium of instruction in countries such as Ethiopia, Nigeria, Uganda, Kenya and India. It is also the language of most textbooks, novels, magazines and other printed materials like examinations and newspapers which are read and taken by millions of people throughout the world. The number of reading material written in English, in fact, is enormous compared with that of other languages.

In spite of the fact that English has such a status and wide use, slow reading and lack of adequate understanding in English are said to be serious deficiencies among students who use English particularly as a medium of instruction. This is specially very grave in countries with little tradition of reading. Consequently, slow reading and lack of understanding have an adverse effect

on the quality of education. In relation to this, J.C. Rudd (1969:231) writes

> One of the major problems in education of students from and in the developing countries is their reading ability. The deficiency is below the level of school certificate, though to some extent it is comouflaged by spoon feeding in the schools.

Such is the seriousness of the problem. The reading inefficiency has been very deplorable and has attracted the attention of some experts on reading. In their survey report, T.A. Bamgbose and others (1966:2) state, "Even among Nigerians who have been exposed to English for the entire primary and secondary cycles of schooling, one commonly finds excessively low speeds of reading and comprehension."

A lot of non-native speakers, despite their access to the language for long, are blamed for their slow reading. Works done on non-native speaker students also show varied rates.

Bamgbose and his colleagues (1966:48) record Mrs.Chapman Taylor's reading speed and comprehension test results done at several Nigerian teacher training colleges and report, "At the 'best' college, she obtained an average of 141 w.p.m. and in all colleges tested, an average of 115 w.p.m. Comprehension level averaged 50%." Taylor's findings are very low when compared with those of native speakers.

Discussing the expected speeds of foreign language students of English, Nuttall (1982:35) writes

> Secondary school pupils in countries where English is a second language may read at 120-150 w.p.m. before training. University students in similar areas may read at about 200 w.p.m ... All these students can make very significant advances in speed after training; doubling the rate is not uncommon. An average increase would be 50%.

Nuttall's initial speed estimates are better than or closer to other estimates and measurements of non-native speakers. Her estimates after training become double and this is very encouraging to those who want to give reading speed training.

Edward Fry (1963:2) shows students' initial speeds and comprehension at Makerere University College in table 1 below.

TABLE 1: First Week Speed and Comprehension of Four Classes

Class	Speed(w.p.m.)	Comprehension (%)
B.A. Science	171	56
B.A. Arts	220	65
Mixed B.A. & Six Form	201	63
Six Form	154	40

The subjects were approximately 85% African and 15% Asian. Six form classes were in their senior secondary school, preparing for their university entrance. The speeds are fairly high and the comprehension scores

are not bad in general. Students in the art stream have scored the highest both in speed and comprehension. Those in the science stream scored lower than the mixed B.A. and Six form, but were better than the Six form.

In his experiment in reading comprehension at the college level, Narayanaswamy (1972:302) summarizes rates and comprehension of Indian college students in Table 2.

TABLE 2: Initial Speeds and Comprehension of Three Groups of Students

Group	Speed(w.p.m.)	Comprehension(%)
Hindi Arts	138	36
St.Francis' Arts	216	40
St.Francis' Science	265	65

Hindi Arts, Saint Francis' Arts and Saint Francis' Science were categorized as pretty low, average and high in their general and language proficiency respectively. Those who had better proficiency scored higher both in speed and comprehension; however, the comprehension results were relatively low.

In their English language assessment of students from different nationalities, Bamgbose and others (1966:47) made comparisons among Nigerian, Ugandan, English and American freshman students. Their reading speeds as

quoted by Bamgbose and others from the University of Ibadan Reading Center are shown in Table 3.

TABLE 3: Reading Speeds of Nigerian, Ugandan, English, and American Freshmen

Group	Mean(w.p.m.)	Range
Nigerian	173	116-425
Ugandan	183	
English	250	
American	250	

The ranges for the other groups were not available. The range for the Nigerian freshmen is highly spread out and large.

The importance of reading is still great, for most people obtain vital information mainly from their reading. Reading at a suitable speed and understanding is, thus very useful specially to students. Nevertheless, most average speed and comprehension estimates for non-native speakers are very low compared with those of native speakers.

Related Works on Ethiopian Students

English is used as a medium of instruction from the junior high school to the highest learning institutions in Ethiopia. It is taught as a subject from grade three up to the sophomore classes in the colleges and universities. Some training centers

and institutions use English widely. Moreover, Ethiopia, like many other countries, uses English for international communication.

Most textbooks and other reference materials which are used in the schools and other institutions are written in English. English, indeed, is widely used and students ought to learn to read at an acceptable speed and understanding. In relation to this, Dr. Rose E. Calder (1963:28) writes, "Because so much of the important writing of the world is done in English and translations of this writing are not available in Amharic it is important that students learn how to read well in English."

A fairly good reader has a distinct advantage over others in his academic achievements; furthermore he entertains himself better. Regarding this, Calder (1963:28) further writes, "Reading competence is important, not only because it is necessary for success in the school, but also because it is essential in the enriching of the individual and helps to develop intelligent citizens."

The need for the appraisal of reading abilities of Ethiopian students was realized and a few attempts were made in the 1960s and 1970s. The works were insignificant in number and the attempts made were almost on the general reading abilities, particularly on comprehension. No estimates on reading rate, except a mention why it was excluded in the evaluation, were available in the writer's references.

Charles Langmuir and John E. Bowers (1967:1) in their progress report write, "Ministry of Education and the University Testing centre jointly undertook to develop an objective test of Englsih comprehension to be used for the evaluation of reading abilities of ninth grade students."

In this work, students' English proficiency in general and their comprehension in particular were gauged, but their reading rates were not measured.

Michael King and Charles Langmuir (1969:3) also assessed the reading abilities of Ethiopian university students. In this study, they compared the sample population's first semester grades with their comprehension as well as their comprehension with their first year cummulative grade point average.

Madsen (1970:10), in his work dealing with English language transition problems, describes the language inefficiency of students at the college level in Ethiopia as follows

> Despite his ten-year exposure to English, the first year student is often bewildred at the linguistic demand made of him ... He is similarly limited in his reading. From lexis and structure to total meaning, the written page seems designed to defy and baffle him. He is a painfully slow reader as well, almost overwhelmed with the vast amount of required daily reading.

Students at the secondary and at the college levels were inadequately prepared in their language proficiency in general and in their reading abilities in particular as Madsen put it. This situation seems to have worsened as time went by.

Madsen (1970:10) while treating one of the attempts done on the university students' reading ability tests, writes

> The seriousness of this reading problem was spotlighted in 1967 when 189 HSIU freshmen took the carefully standardized Davis Reading test. Because the students were found to be very slow readers, the speed factor was eliminated from the evaluation.

This work, like others referred to, has excluded the reading speeds of students from the evaluation, for it is said that they were found slow readers.

In the same article, Madsen (1970:11) further states

> Results disclosed that the average first year HSIU students' comprehension level was at the forty-third percentile for a native speaking grade nine student. One fourth of the tested were at the thirty-seventh percentile or below for grade eight students. Most of the top quarter were equivalent to median tenth graders.

Students at the first year level comprehended below the average ninth grade native speakers on the average according to Madsen's estimate. Compared with the native speakers' level of comprehension, Ethiopian freshman students of 1967 were in a more critical and disadvantageous position; in fact, in a much more deplorable situation.

CHAPTER 3

3. METHODOLOGY AND PROCEDURE

3.1. Methodology

In order to measure the reading speed of students at the freshman level, reading passages were administered to the sample population. In addition to speed, comprehension was also tested.

Moreover, a questionnaire was prepared and administered to see if there would be statistically significant differences in speed performances among groups of the sample population which consisted of students with different reading backgrounds such as family, schooling and location.

Both descriptive and inferential statistics were used. The former was used to measure the speed mean, the comprehension mean and other related parameters such as the standard deviations, the modes and medians. The latter was employed to test the assumptions stated in the items of the questionnaire

3.2. Procedure

3.2.1. Selecting the Sample Population

The subjects of the study were freshman degree students, who enroled in the Faculty of Social Sciences at A.A.U. during the 1985/86 academic year. The total enrolment, according to the information from the Freshman Programme Office, was about 1000.

It was assumed that the way the freshman population was divided into sections was random, since the division into sections was made after the names had been alphabetised.

Then four sections totalling 120 students were taken to serve as the sample population of the study. Each subject was given a code number in order to minimize fear and suspicion on the part of the subjects who were told to write only their code numbers on the test papers throughout the administration of the tests.

3.2.2. Preparation of the Reading Passages

The passages, which were considered to be of general interest to the sample population, were extracted from textbooks, magazines and newspapers. The speed and comprehension tests set were prepared informally since standardized ones were not available. Some reading authorities, in fact, do not overrule the use of non-standardized tests to measure reading rates and comprehension. For instance, Albert J. Harris (1965:161) writes,"Informal teacher-constructed as well as standardized tests can be built."

When informal tests are used, they should be made as carefully as possible and in regard to this, Harris (1965:164) further writes, "The selection used should be easy for the group and should be approximately uniform in difficulty throughout." Bearing this in mind, the researcher has attempted, to the best of his ability, to select reading passages which are believed to be fairly easy and roughly close in difficulty level.

The use of six passages was preferred to that of a single passage to increase the degree of reliability of the results. A student may be tense or can be in a bad mood at one time and somewhat relaxed at another. In the former case he could perform badly, while in the latter case he could perform well in a test. In order to minimize such shortcomings, giving more than one speed and comprehension tests seemed advantageous. Donald D. Durell (1940:26) in relation to this states, "To provide a safe guard, the average of several silent-reading speed tests should be used, rather than the result of a single test."

Evaluating students' reading speeds should be followed by comprehension tests; otherwise, students will read superficially and speed will grow at the expense of comprehension. Accordingly, ten multiple-choice questions were included with each passage to gauge students' comprehension together with the speed test. Nuttal (1982:37) states that "Reading speed is worthless unless the reader understands what he has read; so comprehension must always be measured."

3.2.3. Administration of the Passages and the Questionnaire

3.2.3.1. The Passages

The sample population as well as those who administered the tests were briefed on the purpose and procedure. The subjects were informed that

the purpose of the study was to measure their reading speeds; moreover, they were told that the tests were meant for research and not for competition. Based on this, the subjects were requested to give reliable recordings of the time taken to finish reading the passages.

The subjects were also requested to read at their normal speeds since they were to be given a comprehension test after each reading passage. They were told to start off together when the administrator said so, and as soon as they finished reading the passage, they were instructed to look up and record the time written last on the blackboard. Then they were told to place the passage face down when they had finished reading it only once.

Two persons supervised the speed and comprehension tests. While one of them recorded the elapsing time at an interval of five seconds using a digital clock on the blackboard, the other one collected the passages from each subject when the reading was finished. As regards timing, experts on reading have used more or less similar methods. Fry (1963:6) said that recording the passage of time at an interval of ten seconds on the board can be suitable.

Another expert, Durell (1940:26) also advocated the same method, but in his case, the passage of time was recorded at an interval of five seconds.

Finally, the comprehension tests which were prepared on separate sheets to avoid referring back were distributed after each reading passage and answered. The administration of the passages took six days, that is, each reading passage was done on different days. The adminstration which was conducted in the second semester of the 1985/86 academic calendar was completed in one week.

After the administration of the speed and comprehension tests was completed, the necessary statistical calculations were done. In calculating the speed of each subject, the total number of words was divided by the number of minutes taken to finish each passage and the result was stated in words per minute. Then the average speed of the six passages for each subject and the aggregate average speed for the whole sample population were worked out.

The comprehension of each subject per selection was also computed. The number of correct responses was divided by the total number of questions and was converted into a percentage. The average comprehension of the six passages for each subject and the aggregate average for the whole sample population were computed.

Other relevant parameters such as the standard deviations and the coefficient of correlation between the speed and comprehension were also worked out.

3.2.3.2. The Questionnaire

A questionnaire was also administered to the sample population. It was used to categorize the subjects according to their backgrounds pertinent to their reading. The speeds of the subjects with the different reading backgrounds were grouped using their responses to the items in the questionnaire. Then the speed means of each group were statistically tested to see whether there would be speed performance differences between or among them.

CHAPTER 4

4. RESULTS AND DISCUSSION

4.1. Findings of the Reading Passages

4.1.1. The Reading Speed

It is important for college students to read with speed because a lot of reading is expected of them. The question is: do Ethiopian freshman students read at an acceptable speed so as to cover the large amount of reading materials they are assigned?

In order to measure the average speeds of the subjects, six reading passages were used. The raw data, the average speed and comprehension scores of the passages for each subject are shown in appendix 2 on page 69. The average speed results are summarized in table 4.

The average speeds of the six passages for the sample population were 96.78, 95.98, 103.86, 85.75, 89.35 and 100.56 w.p.m. for passage one, two, three, four, five and six respectively.

Based on the information of table 4, the aggregate mean and the standard deviation were calculated using $\bar{X} = Xo + \left(\frac{\sum fx'}{N}\right) w$ and $Sx = w\sqrt{\frac{\sum fx'^2 \quad (\sum fx')/N}{N - 1}}$ respectively. The aggregate mean was 96 w.p.m. and the standard deviation was 19.80. The speed scores ranged between 52 and 144 w.p.m.

TABLE 4: The Average Speed Scores for the Six Passages

C.I.(w.p.m.)	x	f	c.f.	x'	fx'	x'^2	fx'^2
50 - 58	54	2	2	-4	-8	16	32
59 - 67	63	6	8	-3	-18	16	54
68 - 76	72	11	19	-2	-22	9	44
77 - 85	81	23	42	-1	-23	1	23
86 - 94	90	21	63	0	0	0	0
95 - 103	99	12	75	1	12	1	12
104 - 112	108	22	97	2	44	4	88
113 - 121	117	11	108	3	33	9	99
122 - 130	126	7	115	4	28	16	112
131 - 139	135	2	117	5	10	25	50
140 - 148	144	3	120	6	18	36	108
		120		11	74	121	622

C.I. = Class Interval

X = Midpoint

f = frequency

$\bar{X}$ = 95.55 ≈ 96 w.p.m.

Sx = 19.80

c.f. = cummulative frequency

$X' = \frac{X - Xo}{w}$

Xo = 90

Mode = 84.23

Median = 93.21

TABLE 5: Classification of the Subjects According to their Speeds

w.p.m.	52-75	76 - 85	86 - 105	106-116	117-144
No. of subjects	19	24	34	25	18
Speed level	slow	below average	average	above average	fast

Table 5 shows the classification of the subjects according to their speeds when compared with each other. The subjects whose reading speeds were more than one standard deviation above the mean (between 117 and 144 w.p.m.) were categorized as 'fast' readers and they constitute 15 per cent of the sample population. Those who scored between half a standard deviation and one standard deviation above the mean (106-116 w.p.m.) were considered above average.

The subjects whose speeds were between half a standard deviation below the mean and less than half a standard deviation above the mean (86-105 w.p.m.) were considered to have 'average' reading speeds. The ones who scored between the range of less than half a standard deviation and one standard deviation below the mean (76-85 w.p.m.) were categorized as 'below' average; whereas the subjects who read at the speeds of less than one standard deviation below the mean (52-75 w.p.m) were 'slow' readers compared with the rest of the sample population.

Work done on reading speeds of students who were both native and non-native speakers show substantial variations of speed performance. The differences are among countries, universities, and different streams within the same college or university as shown in the Literature Review.

Comparisons of speed performances are made between the sample population and non-native and native speakers of other countries. The comparisons are rough guides since the tests were given at different times against different backgrounds. Nevertheless, the reading speed tests adminstered to the different subjects such as Nigerian, Ugandan and Indian students at the freshman level were meant for general understanding. The comparisons made here, therefore, enable us to see the reading speed of the sample population as compared to non-native speakers.

The aggregate speed mean of the sample population, which is 96 w.p.m., is very low when compared with 173 and 183 w.p.m. for Nigerian and Ugandan freshmen respectively (see table 3 on page 14).

As regards the ranges, the speed scores of the Nigerian students are spread out and much higher (116-425 w.p.m.) whereas the sample population's speeds are more clustered and low (52-144 w.p.m.) The lowest speed of the sample, which is 52 w.p.m., is lower than that of the lowest Nigerian score by 64 w.p.m. The highest, which is 144 w.p.m., is also lower than that of the highest Nigerian score by 281 w.p.m.

Varying reading speeds were also estimated and measured for students who speak English as a first language. According to Lewis and Harris as quoted by Madsen (No Date:2) the normal fourth and fifth graders' reading rates were between 125 and 175 w.p.m., the average eighth graders' reading rates were from 200 to 250 w.p.m.; the normal rate for secondary school students was 250 w.p.m., and for the freshman college level the range was between 325 and 350 w.p.m.

Compared with the figures given by Lewis and Harris, the aggregate mean of the sample population is much lower. It is lower than the minimum fourth and fifth graders' speed by 30 w.p.m., the minimum eigth graders' by 105 w.p.m., the high school students' reading rate by 230 w.p.m. Generally, the aggregate mean of the subjects of the present study is frustratingly low as compared with the mean speeds of the native speakers at almost all levels.

4.1.2. The Comprehension

Reading at an acceptable level of understanding is of great value. Both speed and comprehension are part and parcel of the reading process. Thus, one has to attempt to get good comprehension with an appropriate speed level depending upon the purpose and difficulty of the material to be read.

Different measurements of students' comprehension, together with speed, have been done. Wainwright (1977:1), for instance writes

> The average reader, reading for general understanding (e.g. newspaper articles) reads at a rate of about 200 to 250 w.p.m. and scores between 60 and 70% on a comprehension test of what he has read.

While discussing the 'good' reader's level of understanding Joseph P. Canavan and O.Heckman (1966:1) state, "Keep in mind that the good reader maintains consistently 70 to 80 per cent comprehension, regardless of the material."

A considerable amount of research indicates that a native speaker's average comprehension on reading done for general understanding is about 70%.

Some works have also been done on non-native speakers' comprehension. As quoted by Bamgbose and his colleagues, Mrs. Champman Taylor tested students' reading speed and comprehension at several Nigerian Teacher Training Colleges and the results she obtained showed an average speed of 115 w.p.m. and 50% comprehension (1966:48).

Another study done at Makerere University College showed students' initial comprehension of 56%, 65%, 63% and 40% for B.A. Science, B.A. Arts, Mixed B.A. and sixth form and sixth form respectively (see table 1 on page 12).

The raw data and the average comprehension scores of the six passages are shown in appendix 2 on page 69. The average comprehension results of the six passages for the sample population were 58.65%, 63.62%, 65.11%, 59.67%

64.67% and 69.25% for passage one, two, three, four, five and six respectively.

The mean comprehension results are summarized in table 6. The aggregate mean and standard deviation were calculated using $\bar{Y} = Yo + \left(\frac{\Sigma fy'}{N}\right)w$ and $Sy = w\sqrt{\frac{\Sigma fy'^2 - (\Sigma fy')^2/N}{N-1}}$ respectively.

TABLE 6: The Average Comprehension Scores of the Six Passages

C.I.	Y	f	C.f.	y'	fy'	y'^2	fy'^2
27 - 32	29.5	1	1	-6	-6	36	36
33 - 38	35.5	0	1	-5	0	25	0
39 - 44	41.5	4	5	-4	-16	16	64
45 - 50	47.5	5	10	-3	-15	9	45
51 - 56	53.5	14	24	-2	-28	4	56
57 - 62	59.5	30	54	-1	-30	1	30
63 - 68	65.5	28	82	0	0	0	0
69 - 74	71.5	25	107	1	25	1	25
75 - 80	77.5	8	115	2	16	4	32
81 - 86	83.5	4	119	3	12	9	36
87 - 92	89.5	1	120	4	4	16	16
		120		-11	-38	121	340

Y = midpoint

Yo = assumed Mean = 65.5%

$\bar{Y}$ = 63.6%

S_y = 9.96

$Y' = \frac{Y \quad Yo}{w}$

Mode = 61.83

Median = 63.79

The aggregate mean, which is 64%, is fairly good compared with other comprehension estimates. It is higher than some comprehension measurements of other non-native speakers. For example, it seems relatively better than that of the Nigerian Teacher Training College students' comprehension which was 50%. It is, however, lower than the average comprehension of the native speakers which was around 70% as estimated by many reading authorities

Unlike the speed performances of the subjects, the comprehension result is relatively high. This could be attributed to the subjects' reading more slowly to grasp more ideas of the passages administered. The implication is that most of the subjects seemed to have failed to readjust their speed to their levels of understanding.

Langmuir (1967:5) tested the HSIU freshman reading ability and found that the median was 62.7, the mean was 63.0 and the standard deviation was 4.8. These results were for the comprehension scores of 189 students. His results also showed that the average first year student's comprehension level was at the forty-third percentile for native speaking grade nine students.

The median and mean comprehension of the present study are 63.79 and 63.6 respectively. In this regard, the freshmen of 1967 and 1986 seem to comprehend at about the same level though the comprehension scores of the 1967 and 1986 freshmen are lower than those of the native speakers.

4.1.3. The Relationship Between the Speed and Comprehension Performances

Research in reading indicated that there is a direct relationship between comprehension and speed. In relation to this, Nuttal (1982:32) writes, "There is no doubt that reading speed and comprehension are closely linked. A very slow reader is likely to read with poor understanding" Another expert on reading, Herbert W.Seliger (1972:55) adds that, "Reading comprehension and reading speed are interrelated. Faster readers comprehend more than slower readers because they can focus on the message and not on the mechanics of the reading selection."

Many reading specialists believe that students and others who read fast comprehend as much as or more than slower readers. With regard to slow readers and the correlation between speed and comprehension, Fry(1963:4) states, "Some slow readers will have good comprehension and others poor comprehension. In short, there is little relationship between reading speed and comprehension."

Computing the correlation between the speed and comprehension performances of the subjects of this study was found relevant, for one is dependent upon the other. Since the data were continuous, they were classified in a two way frequency table (see table 7 on page 34).

Using the formula for coefficient of correlation in a continuous data, $r = \frac{\Sigma fx'y' - \Sigma fx' \Sigma fy'/N}{\sqrt{\left[\Sigma fx'^2 - (\Sigma fx')^2/N\right]\left[\Sigma fy'^2 - (\Sigma fy')^2/N\right]}}$, the coefficient of correlation was computed, and the result was $r = 0.04$.

The degree of relationship between speed and comprehension varies; in the primary grades one would expect to find a fairly high relationship, but at higher levels the many research studies show great variations in results and many of the correlations are positive, but very low averaging around 0.30 (Harris, 1965:504).

Compared with such estimates and measurements on correlation between speed and comprehension, the correlation of the present study ($r = 0.04$) is by far smaller. However, it is positive like many others. The result is almost zero and it implies that the relationship between the speed and comprehension performances is very weak. The result shows that as speed increased comprehension also increased, as a positive correlation implies; nevertheless the increase is negligible. The so called fast readers have not comprehended substantially better than the slower readers. The subjects are, therefore handicapped in their reading abilities.

TABLE 7: Correlation Table of the Speed and Comprehension.

Speed in WPM(X)			50-58	59-67	68-76	77-85	86-94	95-103	104-112	113-121	122-130	131-139	140-148				
Midpoint			54	63	72	81	90	99	108	117	126	135	144	Total			
Comprehension in % (Y)	Mid-Point	x' / y'	-4	-3	-2	-1	0	1	2	3	4	5	6	f	fy'	fy'^{2}	fx'y'
87 - 92	89.5	4					1 0							1	4	16	0
81 - 86	83.5	3				1 -3	1 0		1 6	1 9				4	12	36	12
75 - 80	77.5	2		1 -6	1 -4	2 -4	1 0	1 2	1 4				1 12	8	16	32	4
69 - 74	71.5	1			3 -6	3 -3	5 0	3 3	7 4	4 12				25	25	25	20
63 - 68	65.5	0	1 0		3 0	8 0	6 0	1 0	3 0	3 0	3 0			28	0	0	0
57 - 62	59.5	1		4 12	1 2	5 5	4 0	2 -2	5 -10	3 -9	3 -12	2 10	1 -6	30	-30	30	-30
51 - 56	53.5	-2	1 8	1 6	1 4	1 2	1 0	3 -6	4 -16		1 -8		1 -12	14	-28	56	-22
45 - 50	47.5	-3			2 12	1 3	1 0	1 -3						5	-15	45	12
39 - 44	41.5	-4				1 4	1 0	1 -4	1 -8					4	-16	64	-8
33 - 38	35.5	-5												0	0	0	0
27 - 32	29.5	-6				1 6								1	-6	36	6
Total		f	2	6	11	23	21	12	22	11	7	2	3	120	-30	340	-6
		fx'	-8	-18	-22	-23	0	12	44	33	28	10	18	74			
		fx^2	32	54	44	23	0	18	88	99	112	50	108	622			
		fx'y'	8	12	8	10	0	-10	-10	12	-20	-10	-6	-6			

4.2. Findings Based on the Questionnaire

Although the primary purpose of this study was to gauge how fast students at the freshman level read, it was also necessary to find out whether there were significant speed performance differences between and among the subjects.

In order to achieve this goal, an eight item questionnaire was constructed and administered to the sample population. The items which were thought relevant were used to divide the subjects into reading background groups, that is, their speeds were grouped according to their responses.

The reading speed scores were categorized according to their reading backgrounds and the relevant statistical computations were done after the appropriate test statistics had been selected to prove the assumptions stated in the items (see appendix 4 on page 76). The results are discussed item by item below.

Item one of the questionnaire was intended to group the subjects into educated and uneducated family backgrounds. To prove the claim that there would be no significant difference in speed performances between the two groups, the t-test was used. And the result showed no significant difference at 5% level. The subjects with educated family background did not perform substantially better than those with uneducated family background as expected. This implies that family influence on the reading speed test results of the subjects had little role to play.

Item two was used to group the subjects into three areas, namely Addis Ababa, provincial towns and other towns. Dire Dawa, Nazreth and Bahir Dar were included in the Provincial town category, for they have fairly good educational facilities.

The assumption here was that there would be no difference in speed performances between and among the three area groups. To test the assumption, the F-test was used and the result showed a significant difference at 5% level. The implication is that the subjects' speed performances in the three area groups were different. This could be ascribed to the differences in the educational facilities among the three area groups.

Furthermore, comparisons have been made between one area group and another employing Mean Separation Using Least Significant Difference. The results indicated no significant difference between those who attended their junior high school in Addis Ababa and provincial towns nor between those in provincial towns and other towns. There was, however, a significant difference between those in Addis Ababa and other towns.

Item number three was also used to group the subjects into three areas, namely AA, PT and OT, that is, the locations of their senior high schools. The F-test was used and the result was that there was a significant difference at 5% level.

Comparisons were also made between one group and another using the method employed in item two. The results revealed that there was a significant difference at 5% level between those in Addis Ababa and provincial towns. There was also a

significant difference between those in Addis Ababa and other towns. Nevertheless, no significant difference of speed performance was found between those who attended their senior high schools in the provincial towns and other towns.

In item three, the test statistic showed a significant difference between those in Addis Ababa and provincial towns, but this was not true in item two. This may be due to educational facilities such as good libraries and qualified teachers.

Item four was used to inquire whether students, teachers or both students and teachers read more frequently during the subjects' English periods in their senior high schools. The attempt here was to test the claim that there would be no speed performance difference among the groups and the F test result showed no significant difference at 5% level. No sufficient evidence was found to conclude that those students who read more frequently in class did better in the speed tests than the other groups as expected.

Item five was used to know whether the subjects, whose responses to item four were Students Read Frequently, read aloud, silently or both aloud and silently. The claim was that there would be no significant speed performance difference among those groups. The test statistic used was the F-test and the result showed no significant difference at 5% level. The expectation was that those who read silently more often would perform better in speed tests, but no sufficient evidence supported it.

In item six, the subjects were asked if they had reading speed lessons during their high schools. Here, an attempt was made to find out whether there would be speed performance differences between those with reading speed lessons and those without speed reading lessons. The t-test result indicated no significant difference at 5% level. The expectation was, however, those with speed reading lessons would do better in the speed performance tests. The subjects who responded that they had had reading speed lessons might not have had the lessons in the strict sense of the word.

In item seven, the subjects were asked if they had attempted to improve their reading speeds consciously. The claim was that there would be no speed performance difference between the two groups. The result of the t test revealed no significant difference at 5% level. No adequate evidence was found to conclude that those who claimed to have attempted their speeds did better in the speed tests.

Item eight was used to enquire in what types of reading material the subjects were interested. The assumption was that there would be no significant speed performance difference among those who preferred fiction, non fiction or both fiction and non fiction. The F-test result showed no significant difference at 5% level. It was expected that those who were interested in reading fiction would do substantially better than the other groups. However, the test statistic result showed no sufficient evidence to conclude as expected.

CHAPTER 5

5. CONCLUSION AND RECOMMENDATIONS

5.1. Conclusion

The works which have been pointed out in the Literature Review indicate various speeds for both native and nonnative speakers of English. Some of the speeds for the native speakers seem to have been exaggerated while others are very low. A number of specialists on reading have been sceptical of the highly exaggerated claims.

The average reading speeds of students who are native speakers of English range between 300 and 600 w.p.m., as indicated in the Literature Review. In contrast with this range, the average speed of the subjects of this study, which is 96 w.p.m., is done at a very low rate. This speed, which is frustratingly low in comparison with the speeds of native speaker students, is even far lower than the average speeds of fourth and fifth grade native students.

The Literature Review also shows that the speeds of nonnative students at the high school and college level are much lower than those of the native speakers. The average reading speeds of other nonnative students at the college level range from 115-265 w.p.m. The average speed of the present study is also lower than the speeds for other nonnative speakers of English at the high school level;

Nuttal (1977) estimates the average initial speeds of secondary school students to be ranging between 120-150 w.p.m.

As regards the comprehension level, the subjects of this study have done relatively well. The result, which is 64%, however, must have been achieved at the expense of the speed performance. This comprehension result is close to most other nonnative speakers' comprehension and in some cases better. It is, nevertheless, less than the average comprehension of the native speaker which is estimated at 70%

The correlation between the speed and comprehension, which is r = 0.04, is very weak. Although it is positive like most other correlations, it is much smaller. It implies that as the speed increased, comprehension showed a tendency of increasing positively, however tiny the increment was.

Except the area backgrounds, all the other reading backgrounds that have been stated in the questionnaire showed no statistically significant differences. The expectations, nevertheless, were that there would be speed performance differences between and among those with favourable and unfavourable reading backgrounds.

5.2. Recommendations

The findings of the study show that students at the freshman level are handicapped in their reading abilities in general and their reading speeds in particular. They seem unable to read in the strict sense of the word. This implies that something ought to be done to improve the reading abilities of students and the following are some possible recommendations:

1. Students need to be encouraged and guided to read at an acceptable level of speed and understanding,
2. speed reading lessons have to be included in the Freshman English courses.
3. reading speed improvement short courses need to be conducted, for such courses have enabled students to double their initial speeds as some research has indicated.

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APPENDIX 1: The Reading Passages Used to Measure the Speed and Comprehension of the Subjects.

General Instruction: Read the following passages at your normal speeds only once. After you finish reading the passages, you will be required to answer the comprehension questions set on each passage.

Reading Passage 1.

The United Nations estimates that the World Population increases by more than 5,600 people every hour. There are 3 billion people in the world now, and there will be twice as many in 40 years. It took about 8,000 years of civilization to raise the world's population to one billion, about 45 more years to reach 3 billion, and in 40 more years we will have 6 billion. At current growth rates, in 730 years each person alive will have about one square foot of living space.

In 1978 Thomas Malthus wrote that numbers of people will increase much more rapidly than will the ability to produce food for them. Malthus thought that the problem could be solved through what he called a "positive check" and "preventive check". By positive check, Malthus meant that lives would be lost from disease, war famine; and the blind operation of forces beyond human control. The preventive check would limit population growth by preventing births, which, in Malthus's opinion, would best be accomplished by delayed marriage.

Few people paid any attention in Malthus's day. And in some areas of the world not many more are concerned today, because the population explosion is not hitting all countries equally. For the Most part, modern western industrialized nations have no problem. Underdeveloped India, Mexico, El Salvador, Cylon, Egypt and China are experiencing great population growth and suffering most.

Over population brings poverty, unemployment and starvation. These conditions frustrate the important personal goals of a substantial number of people in the over populated countries, and the organization of society may be seriously threatened by the additional numbers of people. Crime and delinquency spring from poverty and flourish in the thickly settled areas. Further, when a nation runs out of a living space, the organization of a society will also be threatened if competetion with other countries becomes excessive and results in war and conflict.

The population explosion is a social problem with unknown causes. Birth rates have generally remained constant or have risen slowly. But advances in medical science have lowered the death rate - especially in the underdeveloped agrarian countries. To solve the problem of over population we might, like Malthus, hope that increased deaths will occur, but that seems a peculiar solution in a modern scientific age. The answer lies either in increased food production through advances in technology, or in control of the birth rate. Many countries have researched forms

of birth control. They have tried methods ranging from state financed voluntary sterilization to legalized abortion, to natural and artificial methods of preventing conception.

(426 words)

(Judson R. Landis. Current Perspective on Social Problems. Belmont: Wadsworth Publishing Company, 1967, pp. 127 - 128)

Time Taken to Finish This Passage: _____Minute(s) _____second(s).

Choose the most appropriate answer and write the letter of your choice on the space provided.

____1. According to the United Nations' estimate, the world population increases by

A) a million people.

B) over 6,000 people per hour.

C) over 5,600 people per hour.

D) the passage does not tell us.

____2. When this passage was being written, the world population was

A) 200 million.

B) 3 billion.

C) 200 billion.

D) 6 billion.

____3. After four decades from the time this passage was written, there would be

A) about 8,000 million people in the world.

B) about 6 million people in the world.

C) over 1e billion people in the world.

D) less than 5 billion people in the world.

____4. Malthus's belief that numbers of people increase much more rapidly than food production

A) is still retained by many people.

B) is no more retained by many people.

C) still disturbs industrialized nations.

D) is a theory that is reviving nowadays.

_ 5. Rapid increase of the World's population, according to the passage results in

A) the prosperity and strength of a nation.

B) epidemic diseases.

C) scientific development.

D) disagreement among neighboring countries due to lack of space.

6. From Malthus's point of view, population explosion would

A) be wealth for a nation.

B) be a problem.

C) never be checked.

D) be considered as a healthy trend.

7. Starvation for Malthus is

A) one method that checks population explosion.

B) caused because of under-population.

C) brought about by corrupted systems of governments.

D) all of the above.

8. The writer of this passage tells us that the real causes of population explosion are

A) well known.

B) partially known.

C) known only to experts.

D) unknown.

9. Birth control methods have been researched on and tried by

A) a few countries.

B) a lot of countries.

C) only the industrialized countries.

D) no country.

10. The writer of this article believes that the problem of population explosion could

A) never be solved except by "positive"and "preventive checks".

B) be worsened when there is advances in technology.

C) be reduced by provoking war.

D) be minimized through scientific developments.

Reading Passage 2

The Red Cross gives help wherever and whenever it is needed. One May morning in 1960 Chile had four big earthquakes and 100 small ones. These were followed by volcanic eruptions and a huge tidal wave. The damage was terrible. Over 2,000 people were killed, 5,000 were injured, and more than 50,000 homes were destroyed. Many people were wet and cold and hungry and without homes. Then help came.

The next day Red Cross workers arrived by planes and trains, bringing clothing, food, pure water, medicine, doctors, nurses and money. Through the Red Cross, thirty-three countries sent help. By the first of June, hospitals were set up, with 900 doctors and nurses. Millions of dollars were being spent. And all kinds of people were working together to help a suffering country.

In June 1956, a hurricane struck the coast of Lousiana in the United States. It brought great wave of water twenty feet high that crushed everything in their path - houses, animals, people. About 40,000 people were saved, but they had nothing left no clothing, no food, no homes and sometimes no families. As always, Red Cross workers came with help. They brought food and clothing, and set up shelters on high ground away from the coast.

In 1956, Austria needed help. Thousands of refugees from Hungary came to Austria. They had to have food, clothing, a place to live, and the care of doctors and nurses. Austria could not do so much for so many people. The Red Cross from

eleven cpuntries sent help. In a few months more than half the refugees were in camps and were being cared for by the Red Cross from different countries.

These are just a few examples of the help the Red Cross gives in time of disaster. After an earthquake, a flood, a forest fire, or any other disaster, the Red Cross is there with help. But it gives other help, too, in every day living. It collects blood for hospital to use when sick people need it. It teaches people how to live better and have better health. And in time of war it sets up hospitals and gives the care of doctors and nurses.

More than eighty countries have Red Cross organizations, but some are called by different names. In most of them the Red Cross flag is a white cross on a red field. These eighty countries have over 100,000,000 members. They cooperate to give help whenever and wherever help is needed.

(414 Words)

(William R. Slager. English For Today - Book Two. New York: McGraw Hill Book Company, 1962, pp. 150 - 151.)

Time Taken to Finish This Passage: _____minute(s) _____(second(s)

Select the most appropriate answer and write the letter of your choice on the space provided.

_____1. The earthquakes which took place in Chile in 1960

A) caused enormous damage.

B) was caused by volcanic eruptions and huge tidal wave.

C) killed 50,000 people.

D) caused insignificant damage.

_____2. The Red Cross provides disaster affected people with help

A) whenever it is required.

B) mostly in certain parts of the world.

C) only when there are earthquakes, hurricane and refugees.

D) if the United Nations ordersit.

_____3. In 1960, when Chile was hit by the earthquakes

A) it was self-sufficient in helping the victims.

B) Red Cross workers brought only food and clothing.

C) over thirty countries sent help through the Red Cross.

D) it got a little money from the Red Cross.

_____4. When Austria was flooded with refugees from Hungary in 1956,

A) it was in a position to help the refugees.

B) it expelled most of the refugees.

C) the refugees got no help.

D) the refugees were being cared for by the Red Cross.

_____5. In 1956, the coast of Lousiana in the United States was struck by

A) a very fast cyclonic wind.

B) an earthquake.

C) a shooting star.

D) a highly contagious disease.

_____6. In times of disaster the Red Cross becomes

A) confused and helpless.

B) helpful for numerous disaster affected people.

C) astonished and collects help from individuals.

D) authoritative and forces governments to give help.

_____7. The disaster affected residents of Lousiana anticipated

A) that the Red Cross would provide them with help.

B) to get help from the Red Cross but did not get.

C) and asked the Red Cross to bring their families together in vain.

d) and insisted on abandoning the area.

_____8. From the passage one could deduce that the Red Cross

A) is partial.

B) is almost a humanitarian organization.

C) provides help for the poor.

D) provides help for certain racial groups.

_____9. According to the passage you have already read,

A) the Red Cross had got only one name.

B) over 80 countries had Red Cross Organizations.

C) Red Cross members worked separately in times of disasters.

D) the members of Red Cross Organizations totalled to 200 million.

_____10. One could consider the Red Cross to be

A) a political organization.

B) a religious organization.

C) a family planning organization.

D) an aid giving organization.

Reading passage 3.

Today anyone will accept money in exchange for goods or services. People use money to buy food, furniture, books and hundreds of other things they usually get paid in money.

Most of the money today is made of metal or paper. But people used to use all kinds of things as money. One of the first kinds of money was shells. The people who lived on the shores of the Pacific Ocean valued shells because they liked to use them for ornaments. Anyone who had more food than he needed must have been happy to trade the extra food for shells.

Shells were not the only things used as money. In China cloth and fishhooks and knives were used. In the Philippines rice was used as money for a long time. Elephant tasks, monkey tails, and salt were used as money in parts of Africa. In some places of Africa people are still paid in salt. Cakes of soap, animal skins and iron bars have all been used as money at some time in some parts of the world. Cattle were one of the earliest kinds of money but were sometimes nuisance.

The first coins were made in China. Some Chinese businessman must have gotten tired of carrying a heavy load of fishhooks and knives and shirts to pay a large bill. So he made a model of the top part of a shirt on metal. It was round and had a hole in the centre. The money was round, according to story, so that it could roll from place to place.

Stone money was one of the most curious kinds. It was made on the island of Yap in the Pacific. A stone "coin" measured 5 feet in diameter and was 7 inches thick. There was a hole at the

centre so that the "coin" could be carried on a pole by two men. It must have been too heavy to carry around. A stone coin was worth 10,000 coconuts or one wife.

Different countries have used different metals and designs for their money. The first coins in England were made of tin. Sweden and Rusia used copper. Some of the Swedish copper money weighed more than 30 pounds. It must have been inconvenient. When people wanted to pay a big bill, they had to use an oxcart.

After trying many different metals and sizes, countries began to make coins of gold and silver. The value of the coins depended upon the weight of the metal used. The heavier the coin, the more it was worth. In those days scales were very important. Because the weight determined the value, the early coins had the same value in different countries. Today few coins are worth their weight.

But even gold and silver coins were inconvenient if you had to buy something expensive. Again the Chinese thought of a way to improve money. They began to use paper money to represent the same amount of money in metal. The first paper money looked more like a note from one person to another than the paper money used today. Paper money is so convenient that it is being used more and more.

(538 Words)

(William R. Slager. English for Today - Book Three. New York: McGraw Hill Book Company, 1962, pp. 150-151.)

Choose the best answer and write your choice on the space provided.

_____1. Nowadays, practically everyone accepts

A) shells in exchange for goods or services.

B) money in exchange for anything.

C) elephant tasks in exchange for goods.

D) salt as a pay for one's work.

_____2. In the past people used

A) monkey tails as money.

B) iron bars as money.

C) fishhooks as money.

D) all of these.

_____3. Rice was used as money for a long time in

A) China.

B) The Phillippines.

C) Africa.

D) India.

_____4. According to the passage you have just read, people were still paid in salt in

A) some parts of Africa.

B) some parts of Asia.

C) the remote areas of China.

D) the Pacific Islands.

_____5. The country to which we are indebted for modernizing money is

A) Japan.

B) England.

C) China.

D) Russia.

_____6. Different nations have employed

A) similar metals and different designs for their money.

B) similar designs and the same metal.

C) different metals but similar designs.

D) different metals and different designs.

_____7. One stone coin in the island of Yap was worth

A) 10,000 shillings.

B) one wife.

C) more than 30 pounds.

D) one ox cart.

_____8. Today people in the world use

A) only paper money.

B) only money made of metals.

C) paper and stone money.

D) metal and paper money.

_____9. Generally, the early coins were

A) with the same values in different countries.

B) valued according to their weights.

C) valued according to their designs.

D) more portable than the present ones.

_____10. The country which made the first coins was

A) Russia.

B) the USA.

C) China.

D) England.

Reading Passage 4

Smoking by mothers endangers the health of at least three million young children a year, and the risk of a non-smoker developing lung cancer increases by 200 to 300 per cent if the spouse is a smoker, the private Worldwatch institute reported.

The report by William Chandler, a researcher at the institute funded privately and by specialized United Nations Organizations, said "passive smoking" ___the inhalation other people's tobacco smoke by nonsmokers ___ affected children most.

Children of mothers who smoke a pack a day are twice as likely to get bronchitis and pneumonia," it said.

Smoking by even one parent retarded a child's development, the report said, adding that in the United States, 11 year olds' learning ability was retarded by about six months if the mother smoked.

"Lung cancer from smoking will increase 50 per cent worldwide by the end of the century, unless stronger measures are taken to control tobacco use,"the report warned.

Tobacco consumption remains at epidemic levels in industrialised countries and is showing exponential growth in the developing world, while it increased by 75 percent worldwide during the last twenty years, it said.

It doubled in China the world watch report said, while in the United States, where the proportion of smokers has fallen from 43 percent to 32 percent of the adult population, fewer smokers consumed more tobacco.

Greece had the highest per capita consumption, closely followed by Japan and the United States, with some Eastern European countries such as Hungary and Poland also high on the list, it reported.

The danger to non smokers was growing, the report said, adding that "cigarette addiction kills 13 times more Americans than illegal drugs."

The US government, Mr. Chandler said in the report, mounts "Paramilitary operations" against producers, traffickers in marijuana and opium, but does not take similar action against dealers in tobacco, which he described as "a far deadlier crop."

He said the tobacco industry defended its interests better than health organisations protected consumers.

The report suggested banning smoking at work, in restaurants and public buildings, and a tax of three dollar per packet to compensate for the annual 100 billion of dollars damage caused by tobacco in the United States.

Mr. Chandler noted US companies had already adopted measures against tobacco addiction after realising that smoker cost them an average 650 dollars a year.

The US media have recently given coverage to objections by smokers who say they are suffering from discrimination because, for example, some employers refuse to recruit candidates for a job if they are smokers.

(416 words)

(The Ethiopian Herald. January 1986.)

Time Taken to Finish This passage:_____(minute(s)

_____second(s).

Choose the best answer and write your choice on the space provided.

____1. According to the Private Worldwatch institute's report

A) the health of 3 million children is affected only if they have smoking mothers.

B) Both smoking and non smoking mothers endanger the health of their children.

C) tobacco kills from 2 to 2.5 million a year in the world.

D) active smokers are the only people whose health is affected.

____2. "Passive smoking" ___the inhalation of others tobacco smoke by non smokers __affected

A) children most.

B) pregnant women most.

C) adults most.

D) married persons most.

____3. Smoking even by one parent, especially by the mother

A) delays the physical growth of children.

B) delays the learning ability of children.

C) speeds up the learning ability of children.

D) does not have any effect in the learning ability of children.

____4. During the last two decades, tobacco consumption has

A) remained almost constant in the industrialized countries.

B) been increasing at an alarming rate in the developing countries.

C) increased by 75% world wide.

D) all of the above.

____5. The highest per capita consumption of tobacco was reported in

A) China.

B) Greece.

C) Japan.

D) the USA.

_____6. The passage enlightens us that

A) smoking candidates are discriminated by some employers in USA.

B) smoking candidates get priority to be employed in USA.

C) both smokers and non-smokers get equal job opportunity in USA.

D) illegal drugs kill more people than cigarette addiction.

_____7. If mothers smoke a pack a day, their children are

A) twice as likely to get bronchitis and pneumonia.

B) often less likely to catch bronchitis and pneumonia.

C) born crippled physically.

D) born healthy and vigorous.

_____8. Unless stronger measures are taken to control tobacco use, lung cancer from smoking will increase

A) 100 per cent by the end of the century.

B) 50 per cent by the end of the century.

C) 200 to 300 per cent by the end of the century.

D) 10 per cent by the end of the century.

_____9. In the United States of America, the proportion of smokers has

A) risen gradually.

B) remained constant.

C) fallen.

D) doubled.

_____10. According to Mr. Chandler's report, the U.S. government fights against

A) dealers in tobacco.

B) producers and dealers in drugs such as marijuana, and opium.

C) any addictive item.

D) tobacco producers.

Reading Passage 5

They are of different races, from different places, but their tales and laments have similarities. Each year more than a million American teenagers will become pregnant, four out of five of them unmarried. Together they represent a distressing problem in the social structure of America. Like Angella, Michelle and Stephanie, many become pregnant in their early or mid-teens, some 30,000 of them under age 15. If present trends continue, researchers estimate, fully 40% of today's 14 year old girls will be pregnant at least once before the age of 20. Says Sally, 17, who is struggling to raise a two year old son in Los Angeles: "We are children ourselves having children."

Teenage pregnancy has been around as long as there has been teenagers, but its prevalence in this country, the dimensions of its social costs and the urgent need to attack the problem are just beginning to be widely appreciated. According to a Harris poll released in November, 84% of American adults regard teenage pregnancy as a serious national problem.

Teen Pregnancy imposes lasting hardships on two generations: parent and child. Teen mothers are, for instance, many times as likely as other women with young children to live below the poverty level. According to one study, only half of those who give birth before age 18 complete high school. On verage, they earn half as much money and are far more likely to be dependent on welfare: 71% of females under 30 who receive Aid to families with Dependent Children had their first child as a teenager.

As infants, the offspring of teen mothers have high rates of illness and mortality. Later in life, they experience educational and emotional problems. Many are victims of child abuse at the hands of parents too imature to understand why their baby is crying. Finally these children of children are likely to dropout and become teenage parents themselves. According to one study, 82% of girls who give birth at age 15 or younger were daughters of teenage mothers.

(330 words)

(Time, December 1985).

Time Taken to Finish This passage:_____minute(s)

_____second(s).

Choose the best answer and write the letter of your choice on the space provided.

_____1. Teenage pregnancy in the USA is estimated to be

A) 30,000 yearly.

B) less than a million yearly.

C) almost four million yearly.

D) over one million yearly.

_____2. Among the teenagers of America who become pregnant

A) the great majority are unmarried.

B) the great majority are married.

C) half of them are unmarried.

D) half of them are married.

_____3. Teenage pregnancy, in fact, seems

A) to have existed ever since teenagers existed.

B) a recent phenomenon.

C) a severe problem especially in the industrialized countries.

D) common and one needn't worry about it.

_____4. In America, where there is much wealth and technological development

A) teenage pregnancy brings no serious problems to the parents.

B) teenage mothers lead happy lives with their children.

C) teenage mothers face problems, but their children don't.

D) both children and their teenage mothers suffer from chronic hardships.

_____5. Children born from teenage mothers experience

A) educational and emotional maladjustment.

B) high rates of illness and mortality during infancy.

C) maltreatment from their parents.

D) all of the above.

_____6. According to the research done on early pregnancy,

A) 40% of the present 14 year old girls will be pregnant at least once before the age of 20.

B) a Harris poll released says the majority of American adults regard teenage pregnancy a normal trend.

C) a few of the teenage mothers live on social welfare aid.

D) a very small number of teen mothers were daughters of teenage mothers.

_____7. The characters of this passage are of

A) the same races with similar tales.

B) the same places with similar tales.

C) different races with the same regretable tales.

D) different races with different tales.

_____8. According to one study, among the girls who give birth before 18,

A) only half complete high school.

B) almost all complete high school.

C) less than one-third complete high school.

D) 71 per cent complete high school.

_____9. Mostly the children of teenagers mentioned in the passage become

A) successful in their school life.

B) unsuccessful in their school life.

C) aware of their parents sufferings and often avoid them.

D) handicapped physically.

_____10. Among those females under 30 who depend on welfare Aid had their children as

A) an adult.

B) a teenager.

C) an infant.

D) unmarried.

Reading Passage 6

The entrance to the factory was well guarded. But no one paid much attention to the man in painter's overalls. Casually he carried his painting buckets in and out. On the fourth day a guard stopped him and asked for a look at the buckets. It was a lucky move. At the bottom of each bucket were pieces of pure silver and gold - enough to buy a sea of paint. The painter is now behind bars.

This was but one of many robberies attempted at the gold factory in Selby, California. Here nearly 40,000,000 dollars worth of precious metals are processed each year. Like the painter, a lot of people would like to take some home. That is why the plant at Selby is one of the most closely guarded in the world.

The plant's own workers are watched carefully, for temptation is always close at hand. Stacks of gold bars are left in the open. Buckets of precious metal shavings stand about. Even the piles of floor sweepings are worth enough to buy a yacht. But employees do not get a chance to take any of this wealth out. Before they leave the plant they are carefully inspected by a guard. A man could smuggle out a fortune in the grit beneath his nails.

Work clothes never leave the factory. Uniforms are cleaned each day. When they become too old to use, they are burned. In the cleaning and burning, every precious grain of metal is recovered.

Floor sweepings are never thrown away. They are burned and every trace of gold and silver is saved. Nothing is ever lost at Selby. Even the factory's sewage is processed to recover any metal it contains.

Selby is a tiny town. Most of the plant's 495 workmen live elsewhere. Some live in a nearby housing project. Others commute from a town a few miles away. Selby contains only the gold plant, a restaurant and a post office.

The plant is located on San Francisco Bay - for gold reason. Most of the ores come in by ship. It is received from far off parts in Australia, Peru, Tasmania, the Phillippines, and Korea. It is unloaded at the Company's own closely guarded dock.

Various methods are used to remove one metal after another from the raw ore. At last only pure gold and silver are left. The silver looks much like sand. It is put in furnace and melted. Then it is poured into moulds to make bars of about 80,000. Each month Selby makes about 2 million ounces of silver and 40,000 ounces of gold.

Almost all the gold is sold to jewelry makers. Silver, however, is bid for by a variety of industries. It is used to make fine ball bearings for high speed motors. It is also widely used in the electronic fields.

The demand for both metals is great. Gold and silver bars are sent out as fast as they are ready. There is practically no space for storage of the Selby plant. Perhaps that is just as well. There would always be a greedy painter just waiting for a chance to paint the storage room.

(530 words)

(Judson R.Landis.Current Perspective on Social Problems.)

Time Taken to Finish This Passage _____minute(s) _____second(s).

_____6. Refined gold and silver are sent out as soon as they are finished because

A) the demand for both metals is great.

B) there is no storage space for extra metal.

C) the metal changes colour when stored too long.

D) there is no safety in the factory.

_____7. At Selby, it seems that a lot of people find it

A) very difficult to take some gold home.

B) easy to steal some gold.

C) easy to take some gold home but they have not tried to.

D) easy to take some gold home if they want to.

_____8. The factory at Selby gets the ores from

A) abroad.

B) local markets.

C) San Francisco Bay.

D) Selby itself.

_____9. All the gold at Selby is sold to

A) banks.

B) anyone.

C) a variety of industries.

D) jewellers.

_____10. The demand for the products of Selby is

A) low.

B) great.

C) average.

D) almost nill.

APPENDIX 2: Row Scores and Average Speed and Comprehension Scores of the Six Passages

C.N.	Passage 1		Passage 2		Passage 3		Passage 4		Passage 5		Passage 6		average	
	w.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp.
001	131	70	79	70	63	60	74	60	75	80	94	40	86	63
002	82	60	99	80	85	50	96	40	88	40	92	80	90	58
003	72	40	96	50	63	50	98	50	79	50	67	50	79	48
004	60	50	142	60	129	40	98	40	88	40	120	80	106	52
005	111	50	101	80	127	80	135	70	110	50	114	90	116	70
006	45	70	97	80	111	80	79	40	75	60	95	60	84	65
007	84	30	87	60	91	80	73	80	72	40	91	50	83	57
008	107	60	87	60	63	80	57	50	81	90	91	60	81	67
009	155	40	131	60	147	50	131	50	116	70	116	70	129	57
010	69	60	81	50	108	80	79	70	79	40	99	70	85	62
011	98	70	142	70	108	70	109	70	120	70	135	70	119	70
012	98	70	90	50	147	80	96	50	141	80	94	90	111	70
013	109	50	81	80	113	70	78	60	71	60	81	80	89	67
014	96	70	116	60	122	80	104	80	74	60	130	80	107	72
015	96	40	81	40	85	30	78	40	80	40	88	50	85	40
016	109	50	134	70	143	70	109	50	107	50	114	70	119	60
017	100	60	74	70	92	50	147	80	69	40	151	60	106	60
018	100	80	116	60	120	70	94	60	94	60	116	70	107	67
019	68	70	75	80	109	70	83	50	68	70	98	80	84	70
020	104	50	134	30	135	80	96	60	83	40	106	50	110	52
021	109	40	118	70	150	70	96	60	137	60	135	80	124	63
022	114	40	116	70	161	70	125	50	116	70	120	60	125	60
023	155	40	166	70	161	80	122	50	132	70	120	50	143	60
024	128	40	80	70	96	60	69	60	66	50	91	80	88	60
025	87	70	78	70	88	60	82	50	67	70	90	70	82	65

APPENDIX 2: (Continued)

C.N	Passage 1		Passage 2		Passage 3		Passage 4		Passage 5		Passage 6		Average	
	W.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp.
026	95	50	78	40	115	60	89	60	102	50	116	70	99	55
027	108	60	124	60	102	50	106	80	107	80	133	50	117	63
028	75	70	87	70	88	80	69	70	88	80	71	90	80	77
029	73	70	66	80	86	40	55	70	57	40	90	40	71	57
030	85	30	104	70	82	80	50	50	57	70	85	90	77	65
031	102	20	71	70	109	70	62	60	78	80	96	70	86	62
032	170	70	104	60	157	70	73	60	78	50	116	80	116	65
033	102	70	138	70	143	80	66	80	102	60	110	70	110	72
034	107	50	138	60	127	70	75	60	104	90	114	60	111	65
035	114	50	63	50	120	60	102	40	158	30	82	30	107	43
036	91	60	60	70	90	60	125	70	99	60	96	60	94	63
037	95	40	103	60	98	70	62	70	86	80	104	80	91	67
038	142	40	104	60	108	60	139	50	147	50	98	60	123	53
039	100	80	138	60	150	70	63	90	104	80	116	60	112	73
040	94	50	99	70	137	80	131	50	180	70	106	70	125	65
041	98	50	68	70	129	60	131	40	110	70	116	60	109	58
042	85	60	118	70	113	40	68	60	83	70	104	60	95	60
043	142	60	166	60	170	30	92	50	124	90	84	80	130	62
044	142	40	113	30	106	70	57	70	67	60	94	60	97	55
045	90	60	83	80	113	70	63	50	78	80	151	80	97	70
046	90	90	104	80	113	80	58	90	81	80	110	100	93	87
047	100	70	99	70	102	80	75	70	76	90	101	70	92	75
048	79	60	101	60	113	60	53	50	71	60	73	40	82	55
049	93	60	104	80	102	70	62	50	79	70	98	70	90	67
050	93	60	99	70	115	70	139	50	141	50	104	50	115	58

APPENDIX 2: (Continued)

C.N.	Passage 1		Passage 2		Passage 3		Passage 4		Passage 5		Passage 6		Average	
	w.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp.
051	110	60	138	70	108	50	81	50	110	50	118	80	111	60
052	107	60	62	60	115	50	100	50	124	70	85	70	99	60
053	85	30	58	40	80	30	128	20	64	20	82	40	83	30
054	170	60	62	70	137	60	92	50	86	50	145	60	115	58
055	73	60	59	60	96	50	50	30	79	30	85	60	74	48
056	79	60	63	60	73	60	52	50	57	50	79	90	67	62
057	148	50	113	80	147	50	139	70	172	60	104	60	136	62
058	74	60	89	70	91	70	57	50	76	60	92	60	80	62
059	104	70	92	50	96	50	75	50	81	50	96	80	91	58
060	135	90	113	70	127	70	86	90	99	90	101	80	110	82
061	102	60	118	40	127	70	96	30	99	60	125	50	111	52
062	170	50	131	60	170	60	131	40	116	60	145	50	144	53
063	107	50	118	60	127	50	78	50	88	50	87	70	101	55
064	79	70	65	70	96	70	77	40	79	40	88	50	81	57
065	91	60	92	70	90	80	82	70	94	70	106	80	93	72
066	59	80	92	70	108	70	70	50	69	70	94	60	82	67
067	96	80	106	70	109	60	75	80	86	80	96	70	95	73
068	135	80	142	70	154	70	113	80	141	80	159	80	141	77
069	114	70	127	70	108	70	83	60	97	80	110	90	107	73
070	105	20	118	80	117	60	92	50	97	50	94	80	107	55
071	98	60	90	80	90	50	73	80	94	60	106	90	92	70
072	109	40	110	60	122	80	98	40	99	50	116	70	109	57
073	111	60	74	70	87	70	75	80	75	70	85	70	85	70
074	146	80	95	80	120	70	65	70	73	90	88	80	98	78
075	114	90	127	60	147	80	104	60	81	70	151	70	121	72

APPENDIX 2: (continued)

C.N.	Passage 1		Passage 2		Passage 3		Passage 4		Passage 5		Passage 6		Average	
	w.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp.
076	107	80	75	50	111	60	75	50	83	70	94	90	91	67
077	108	40	84	40	117	40	77	30	90	60	108	50	97	43
078	114	50	99	60	109	80	96	70	88	100	118	80	104	73
079	119	50	79	80	102	60	83	80	84	50	103	60	95	63
080	102	70	108	70	124	70	102	90	99	80	135	70	112	75
081	119	30	124	50	124	70	88	80	88	80	96	60	107	62
082	87	70	84	60	106	80	64	60	97	90	86	70	87	72
083	119	80	110	60	140	50	113	60	116	50	130	90	121	65
084	84	50	96	40	95	60	68	70	81	60	91	40	86	53
085	98	40	96	30	108	70	76	40	84	40	96	30	93	42
086	114	80	65	80	76	80	68	80	78	90	85	90	81	83
087	109	70	108	80	124	80	102	70	120	70	114	70	113	73
088	64	40	66	60	44	60	109	50	48	80	62	60	66	58
089	66	30	54	50	58	70	48	50	48	60	39	70	52	55
090	109	30	77	40	50	60	68	70	68	90	133	70	84	60
091	67	60	79	60	79	80	63	80	62	60	81	80	72	70
092	77	80	97	70	86	70	94	50	66	60	99	100	87	72
093	73	70	90	50	86	80	78	70	76	70	98	90	84	72
094	75	80	138	70	88	70	83	90	71	90	79	90	89	82
095	64	60	89	80	69	70	67	60	64	50	75	80	71	67
096	61	90	87	80	79	70	68	70	65	80	98	90	76	80
097	100	50	89	50	80	50	125	50	71	40	122	60	98	50
098	79	80	97	70	94	70	91	60	90	70	92	80	91	72
099	73	60	68	60	76	60	54	50	78	60	71	90	70	63
100	74	50	83	60	59	60	77	30	68	40	71	50	72	48

APPENDIX 2: (continued)

C.N.	Passage 1		Passage 2		Passage 3		Passage 4		Passage 5		Passage 6		Average	
	w.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp.	w.p.m.	Comp
101	109	50	138	80	86	70	135	60	128	70	133	80	122	68
102	95	60	94	80	111	60	116	60	75	80	133	100	104	73
103	85	80	96	70	80	70	64	40	68	70	79	70	79	67
104	62	70	56	80	57	50	51	70	45	70	61	70	55	68
105	75	70	80	70	80	70	67	60	59	70	85	90	74	72
106	76	40	74	40	79	30	86	50	72	50	133	70	87	47
107	81	70	108	70	63	70	98	60	88	80	133	80	95	72
108	57	60	50	70	65	60	55	50	52	70	78	60	60	62
109	66	70	78	70	79	80	70	50	62	40	78	80	72	65
110	53	70	60	60	90	70	71	100	62	90	61	60	66	75
111	66	40	79	60	90	60	72	40	65	50	65	70	73	53
112	77	80	68	70	81	50	83	80	92	60	94	50	83	65
113	75	60	118	60	73	70	69	60	75	80	66	60	79	65
114	55	50	61	70	60	60	59	60	60	60	57	50	59	57
115	54	60	47	30	64	60	62	50	53	60	71	60	59	53
116	95	80	138	80	127	80	104	80	152	90	96	80	119	82
117	102	50	110	50	101	70	89	60	120	100	125	60	108	65
118	75	50	95	60	45	80	72	70	83	90	77	80	75	72
119	72	80	87	70	81	70	66	90	68	80	90	80	77	78
120	142	60	118	60	120	60	119	60	180	60	133	70	135	62

6. Were there any speed reading lessons in your English periods during your senior high school?

Yes _____

No _____

7. Have you ever attempted to improve your reading speed consciously?

Yes _____

No _____

8. In what types of reading material have you been interested?

Fiction _____

Non-fiction _____

Both _____

APPENDIX 4: Statistical Test Results and Conclusions Based on the Questionnaire.

Items	Number of Responses		Means ($\bar{X}$)	Standard deviation(Sx)	Test Statistics	Significant Level	Conclusion
1	EP	45	94.93	22.23	t-cal=-0.323	5%	non-significant
	UnEP	75	96.09	16.83	t-tab= 1.960		
2	AA	47	100.96	21.76	F-cal= 3.120	5%	Significant
	PT	26	96.69	20.04	F-tab= 3.070		
	OT	47	90.07	17.90			
3	AA	49	103.61	20.51	F-cal= 4.112	5%	Significant
	PT	35	93.49	17.07	F-tab= 3.070		
	OT	36	90.25	21.22			
4	T	66	96.23	16.22	F-cal= 0.570	5%	non-significant
	S	42	97.24	21.38	F-tab= 3.070		
	B	12	90.67	24.73			
5	Al	28	97.10	20.43	F-cal= 2.470	5%	non-significant
	Si	6	91.70	15.29	F-tab= 3.070		
	B	8	96.10	23.63			
6	Yes	25	94.88	24.65	t-cal=-0.316	5%	non-significant
	No	95	96.33	19.14	t-tab= 1.960		
7	Yes	80	94.04	20.28	t-cal=-1.640	5%	non-significant
	No	40	99.88	12.96	t-tab= 1.960		
8	F	54	100.56	19.30	F-cal= 2.580	5%	non-significant
	NF	52	91.83	20.75	F-tab= 3.070		
	B	14	93.86	20.95			

EP = Educated parents
UnEP = Uneducated parents
AA = Addis Ababa
OT = Other Towns
T = Teacher
S = Student
B = Both
Al = Aloud
Si = Silantly
F = Fiction
NF = Nonfiction
t-cal =t calculated
F-cal = F-calculated
F-tab = F-tabulated

DECLARATION

I, the undersigned, declare that this thesis is my work and that all sources of material used for this thesis have been duly acknowledged.

Name : Molla Jemere

Signature :

Place : Institute of Language Studies
Addis Ababa University.

Date : 8th June 1984