

Early Grade Reading Assessment in the East Wollega Zone of Oromiya: A Study on Mother Tongue Reading Competence of Grade 4 Pupils

Getachew Anteneh^a, Tekle Ferede^b, Yemaneberhan Kelemework^{c*}, Yonas Berkesa^d, Fisseha Mikre^e, Kinde Getachew^f

^aDepartment of Ethiopian Languages and Literature (Amharic), College of Social Sciences and Humanities, Jimma University, Ethiopia

^{b,c,d}Department of English Language and Literature, College of Social Sciences and Humanities, Jimma University, Ethiopia

^{ef}Deapartment of Psychology, College of Education and Behavioural Sciences, Jimma University, Ethiopia ^cEmail: yemars2006@yahoo.com

Abstract

This study investigated Grade 4 students' reading ability in Afan Oromo with particular focus on selected schools in East Wellega Zone of the Oromiya Regional State, Ethiopia. The study specifically assessed the reading proficiency of Grade 4 students and identified the factors that influence reading outcomes. A total of randomly selected 389 Grade 4 students participated in the study. All the teachers who were teaching Afan Oromo language in the selected schools were also purposively selected. Quantitative data were collected from students through standardized test and pre-tested questionnaire, while qualitative data were gathered from their Afan Oromo teachers via open-ended questionnaire. Quantitative data were analyzed using mean, standard deviation and t-test, whereas qualitative data were analyzed qualitatively through the methods of description and interpretation.

* Corresponding author.

The results indicated that the majority of the students had serious problems in identifying letters, understanding phonological patterns, dealing with new words encountered in texts and comprehending longer texts. It is thus recommended that educational bureau officials, school administers and Afan Oromo teachers take necessary measures to enable students to master the basic literacy skills before they join Grade 4.

Keywords: Early grade reading; reading competence; reading assessment.

1. Introduction

Reading is a crucial academic skill [1]. It follows that this skill should be given adequate focus from lower grades. This is because Early Grade Reading Competence (EGRC) has salient roles for the success of pupils' learning and cognitive development. That is why the effectiveness of reading literacy programs should be regularly assessed and interventions made to overcome the prevailing barriers of early grade reading skill development.

Children must begin exploring the world and its dynamics from early schooling. Obviously, explorations of the world and knowledge acquisition become evident through reading. Thus, literacy programs should enable children to develop effective reading skills which include "quick coordination of visual, phonological, semantic and linguistic processes" [2]. Thus, pupils should be trained to develop the skills of discriminating letters, recognizing words, linking print to sound, recognizing word meaning, and comprehending long written discourses [3]. Success in early grade reading is the foundation for achievement throughout schooling and beyond. There is a critical window of opportunity from the ages of four to seven for learning to read. Children who successfully learn to read in the early school years are well prepared to read for learning and for pleasure in later lives. Conversely, children who struggle with reading in Grades 1 to 4 are at a serious disadvantage. Academically, they fall behind their peers in all or most school subjects. For example, studies have demonstrated that children who experience reading difficulties in Grade 4 seldom catch up later. Pupils who encounter reading difficulties are also likely to suffer from low self-esteem and drop out of school. Therefore, early grade reading should be carefully handled since it operates under the influence of a host of factors [4]. Research also shows that effective reading instruction compensates for risk factors that might otherwise prevent children from becoming successful readers. The ability of teachers to deliver good reading instruction and prevent reading difficulties is vitally important.

Therefore, early reading problems must be investigated early in order to avoid the escalation of reading difficulties later. In other words, it is vital to assess the reading proficiency of early grade pupils regularly. In this regard, Early Grade Reading Assessment (EGRA) is an important quality assurance and program appraisal mechanism. It enables schools, educators, policy makers, parents and other stakeholders to obtain information useful to make diagnostic interventions. Unlike formative classroom tests meant to measure particular aspects of pupil's reading achievement at specific times, a comprehensive early grade reading assessment gives holistic data that can lead to appropriate decisions. This facilitates corrective actions aimed at helping learners to identify sounds, discriminate alphabets, master patterns of sound combinations, decode words, extract meanings from written texts and understand the social and political context of the message [5].

In the Ethiopian context, the instructional language in first cycle primary schools (Grade 1 to Grade 4) varies from one administrative region to another. Likewise, in Oromiya Regional State, Afan Oromo is the teaching-learning medium, with the English subject being an exception. Therefore, pupils are required to discriminate alphabets of Afan Oromo, master its phonology, decode words, comprehend information from relatively longer written texts, combine letters to form words in writing and join words according to permissible syntactic rules to produce longer stretches of writing. Nevertheless, observation and research evidences show that pupils complete fist cycle primary school without mastering the basics of Afan Oromo literacy. In other words, a significant number of students who join Grade 5 have poor reading competence.

Students' poor reading competence negatively influences the process and outcome of instruction. It is through reading that students obtain information from a variety of written sources, take class notes, understand written instructions and demonstrate knowledge and skills during exams. Efforts should thus be made to enable early grade pupils to master written Afan Oromo so that they can understand and make sense of information written in this language. To this effect, it is necessary to assess students' early grade reading competence periodically. It is with this understanding that this study assessed Afan Oromo reading abilities of Grade 4 students in East Wollega Zone of Oromiya Regional State, Ethiopia.

2. Statement of the problem

In Ethiopia, promising efforts have been made to improve literacy acquisition in the early grades. Among these, the policy of mother-tongue instruction that helped to match the language of instruction with home language of the child is a case in point. According to a report compiled by Early Grade Reading Assessment (EGRA), there is instructional language and home language match for about 85% of the children in Ethiopian lower primary grades [6]. This apparently has a significant contribution to the literacy acquisition by children [7].

Despite the positive efforts in place, research shows that the reading achievement of Ethiopian children has been generally low [6]. After attending school for about two (2) to three (3) years, a significant percentage of children were found unable to read words correctly to the expected minimum competency level [6]. According to this report, at least 10% of Grade 2 children in Addis Ababa, 41.2% in Oromiya and about 70% in Sidama were not able to read a single word, respectively. The percentage of children who were able to read at the expected minimum competency level was thus very low. Moreover, from the eight regions surveyed, a significant percentage of children in Grade 3 were found illiterate or non-readers in their mother-tongues. Children's achievement was also poor in reading comprehension. In many of the regions, above 50% of Grade 2 students failed to answer basic questions taken from a passage.

Thus, more empirical evidences are required to understand the situation of early literacy programs, early grade reading proficiency of children and the major barriers to the development of early grade reading competence. Therefore, this study assessed the Afan Oromo reading proficiency of Grade 4 pupils in East Wellega Zone of Oromiya and identified the major factors hindering the development of effective reading skills among these pupils. Conducting such a study helps to ferret out information on reading skills of First Cycle primary school children to design and implement appropriate intervention schemes in areas of teacher preparation and

continuous professional development, curriculum development and instruction design plus reading instruction.

The demands of the information age require that people should be competent readers and writers if they are to participate and succeed in society. There is keen awareness that the public education system must therefore focus on providing children with the best possible reading instruction. A broad consensus appears to exist among researchers and educators regarding the knowledge and skills that children need in order to read, the experience that influences the development of such knowledge and skills, and the basic components of reading instruction. The purpose of this study was therefore to draw practical conclusions from primary data with the view to assisting endeavours being made to improve the Afan Oromo reading competence of early grade children.

3. Objectives of the study

The main objective of this study was to investigate the Afan Oromo reading proficiency of Grade 4 students alongside the factors that hinder the development of effective literacy skills among the students in focus. Specifically, the study attempted to:

- Assess Grade 4 children's skill of identifying Afan Oromo alphabets;
- Evaluate Grade 4 children's phonological awareness in Afan Oromo;
- Examine Grade 4 pupils' knowledge of Afan Oromo vocabulary;
- Appraise Grade 4 children's skills on reading fluency in the written language;
- Identify factors that affect Grade 4 students' acquisition of effective reading skills in Afan Oromo;
- Determine the predictor of Grade 4 children's reading achievement.

4. Limitations of the study

A study of any scale would hardly end up without limitations. First, the researchers would like to note that due to scarcity of research budget, they were obliged to limit the study site to only one administrative zone, six schools from three districts/woredas (two schools from each district) and four schools from one city administration. They were also forced to limit the informants to as few as about 389 students (approximately 40 students from each school) and all teachers of Oromo Language. Had it not been for the shortage of resources, it would have been better to reach more areas and more participants that would strengthen the dependability of the data and generalize ability of the results. Secondly, the researchers were able to realize that the respondents, particularly, some school principals were attempting to hide the reality with regards to the reading capacity of their students in the specified grade level in some schools. They tended to communicate only success stories and tried to conceal failures fearing that they would be accountable for.

5. Materials and Methods

5.1 Study setting and design

This study was conducted in East Wollega Zone of the Oromiya Regional State in Ethiopia. The study employed

quantitative and qualitative methods of data collection and analysis. The quantitative component included reading achievement tests and a questionnaire that contains items on demographic variables such as socioeconomic status, preschool attendance and reading time at home. The qualitative part includes structured interview with Grade 4 Afan Oromo teachers.

5.2 Population and sample size

The study population was Grade 4 pupils and teachers in East Wellega Zone, Oromiya Regional State. To determine the sample size for students, single population proportion was calculated using the following formula:

$$n = \frac{Z^2 p(1-p)(DE)}{d^2}$$

with assumptions of expected percentage (P) on reading skills of 0.5 (or 50%) to produce the largest sample size, 95% confidence level (Z- $\alpha/2$) (1.96) and absolute precision (d) of 5%. This yielded a total sample size (n) of 385. Adding 1% non-response rate, the total sample size was 389. This sample size was allocated to the different selected Districts/Weredas based on equal proportion allocation method. All teachers who were teaching Afan Oromo in the selected schools were included in the study.

5.3 Sampling procedures

Multi-stage sampling was used to identify the required sample of Grade 4 pupils for the study. First, three ddistricts/weredas (one urban and the rest rural) were randomly selected from the zone in focus. Then, four schools from the urban areas and six schools from the rural area were chosen. In these ways, approximately 40 students from each school were taken randomly. On the other hand, all teachers who were teaching Afan Oromo language in the selected schools were purposively selected to take reading test and respond to the items in the questionnaire.

5.4 Date collection instruments

Firstly, students' ability in discriminating Afan Oromo alphabets, phonological awareness in the language, unfamiliar word reading, vocabulary skills and reading comprehension competence were tested using a standardized, pre-tested reading assessment test. An interview guideline was also used to identify sociodemographic variables that could affect reading skills. Additionally, interview that focused on that could affect reading acquisition in Grade 4 was conducted with Afan Oromo teachers on factors. The various components of the reading test were adopted from EDDATA II, Ethiopia Early Grade Reading Assessment [6]. In fact, some modifications were made to contextualize the instrument and make it fit for the purpose. Details are given below concerning on the reading test:

1. **Test on letter-naming (or alphabet identification):** This was a 60-second-test that assessed Grade 4 children's ability in identifying the letters of Afan Oromo alphabet with ease and without hesitation. Similarly, phonological awareness was measured through this component of test. Three types of tasks aimed at assessing

students' phonological awareness at individual phone or phonetic, phonemic and at syllabic levels were administered. This part of the test was designed to determine whether children could differentiate syllables at various positions in a word, or to ascertain whether they could identify all of the 'Qubes' (Afan Oromo letters) in a word.

2. Test on unfamiliar or non-sense word fluency: This test was a one-minute test which assessed the ability to process words that could exist in the language in focus or in the language faculty (competence) of the students.

3. Test on comprehension of a connected text: This part of the assessment required the ability to answer several comprehension questions after reading a given passage. Items in this part were taken from a pre-tested reading passage. In addition, to measure the students' vocabulary skill, a two-minute test (one minute for reading a passage and one minute for answering the vocabulary questions based on the passage) which assessed children's word-attack skills was administered. For this purpose, a simple story which was deemed familiar for the students was constructed and used. The passage contained about 60 words in which 5 vocabulary words were written in bold. The students were required to identify the correct meaning from three alternates given for each vocabulary.

5.5 Training enumerators and pilot-testing

A half day training for supervisors and enumerators on the general EGRA protocol and ways of administering the various sub-tests were conducted to improve the performance of the supervisors and enumerators before they began the work. Specifically, the objectives of the training were to:

- 1. orient supervisors and enumerators into the EGRA tools;
- 2. orient supervisors and enumerators on the general protocol and guidelines of EGRA;
- 3. train supervisors and enumerators on the EGRA administration;

The content validity, the difficulty levels of the items and the contextual fitness of the instruments were checked by three experienced Grade 4 Afan Oromo teachers. Similarly, the tests and the questionnaire were administered to 50 Grade 4 pupils in two primary schools. In the pilot test, the researchers learnt that the time allotted to complete the task of unfamiliar word reading was inadequate. It was also identified that several students had problems in letter identification ('Qube' identification).

Thus, decision was taken to shorten the number of unfamiliar word items from 50 to 30 and to include the letter identification ('Qube' identification) sub-scale in the instrument for main the study. Moreover, the researchers got adequate information on the administrative feasibility of the various reading tests. The Cronbach's alpha coefficients for the various dimensions of the reading test were calculated to check the internal consistency of the items (see Table 1 below).

The item level analysis revealed that the majority of the items had acceptable level of difficulty. However, one item in the vocabulary test was revised as it had a very low discrimination index, and 20 items (numbered 31 to 50) in the unfamiliar sub-scales were omitted as they had low level of difficulty and discrimination indices. In

addition, the wording and the organization of the test and the other instruments were checked before administration.

	Number of items	a-coefficients	
Phonological awareness at individual phone level	10	.851	
phonological awareness at phonemic level	10	.800	
phonological awareness at syllabic level	10	.874	
Comprehension	6	.849	
Vocabulary	5	.798	
Unfamiliar words	50	.973	
Total	91	.976	

Table 1: Summary of reliability analysis

5.6 Administration and scoring procedures

5.6.1 Administration

The administrations of the various reading activities were carried out in accordance with the Guidance Notes for Planning and Implementing EGRA [8] and Early Grade Assessment Toolkit [9].

5.6.2 Scoring procedure

1. Test on letter-naming ('Qube' identification)

Pupil's score for this subtest was calculated as the number of correct letters per minute. If the child completed all of the words before the given time ended, the time of completion was recorded for calculations based on that period. Enumerators marked any incorrect letters with a slash (/), placed brackets (]) after the last letter named, and recorded the time remaining on the stopwatch at the completion of the exercise (variables are thus: total letters read, total incorrect responses and time remaining on stopwatch). Three data points were then used to calculate the total correct letters per minute (CLPM): CLPM = (Total letters read –Total incorrect) /[(60 – Time remaining on stopwatch)/60].

2. Tests on phonological awareness: Pupil's score for each of the three dimensions of this part of test were the proportion of correct phonological awareness at individual phone or phonetic level, phonemic level and at syllabic level to each of the total phonological awareness of individual phone or phonetic level, phonemic level.

3. Test on unfamiliar word fluency: The enumerators recorded the number of correct words per minute. If the child completed all of the words before the given time ended, the time of completion was recorded calculated. Correct words per minute were recorded and scored. The same three variables collected for the letter naming

exercise above were collected for this part and the other timed exercises, namely: total words read, total incorrect words and time remaining on stopwatch (see the above discussion for calculations).

4. Test on comprehension of a connected text: Students were rated on the number of comprehension questions answered acceptably and then their scores for the comprehension of the connected text were the proportion of correct answers to the total items presented.

5. Test on vocabulary: Students were scored on the number of correct vocabulary meaning they worked out as their answers (out of the total number of questions).

5.7 Data analysis

Mean scores were computed to indicate the average performance of children in the various reading skill tasks. Percentages at different points and benchmarks were computed. In addition, independent sample t test was conducted to see difference on reading scores by the variables affecting Afan Oromo reading Skill. On the other hand, description and interpretation were used to in the analysis of the qualitative data.

5.8. Ethical considerations

Virtually all studies that involve human subjects raise ethical concerns which should be dealt with appropriately. Accordingly, ethical issues pertaining to the legitimacy of this study and the rights of the human participants were addressed in the following ways. First of all, a letter of cooperation obtained from the Research and Postgraduate Programs Coordinating Office of the College of Social Sciences and Humanities, Jimma University, was submitted to the Educational Bureau of East Wollega Zone. Secondly, a letter of permission secured from this bureau was submitted to the educational offices of the respective districts/woredas. Thirdly, permission letters were obtained from these offices and submitted to the administrations of the selected schools. Fourthly, the purpose and the procedures of the study were clearly explained to the officials of the schools who then allowed the team to conduct the study according to the planned protocol. Finally, the study participants received briefings on the purpose and the procedures of the study. The briefings emphasized that participation in the study was voluntary and anonymous. It was also stressed that the test was intended for the purpose of the study and not used to assign marks as part of classroom assessment. In addition, the data collected from them were kept securely and used only to fulfill the aim of the study.

6. Findings and discussion

6.1 Findings

The study assessed early grade reading in Afan Oromo among Grade 4 students in three districts of East Welega Zone, Oromiya Regional State. To this effect, data were collected from 389 Grade 4 students and 26 Afan Oromo teachers. Of the 389 students, 212(54.5%) were from rural areas while 177(45.5%) were from urban residences. With respect to gender distribution, 132(39.2%) of the students were males while 205(60.8%) were females.

6.1.1 Letter naming ability

In the dimension of letter naming, the results indicated that 2(.5%), 35(9%), 99(25.4%), 99(25.4%) and 141(36.2%) of the students identified no letters per minute, 1 to 25 letters per minute, 25 to 50 letters per minute, 50 to 75 letters per minute and more than 75 letters per minute, respectively (Figure 1).

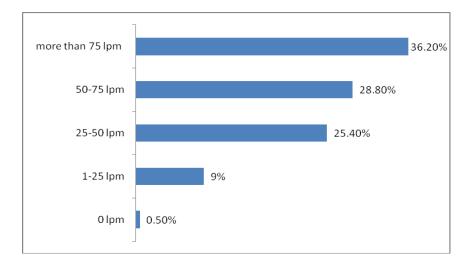
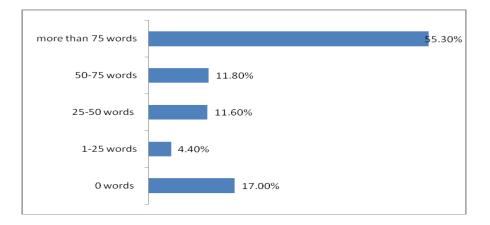


Figure 1: percentage of students who named correctly letters at different performance markers

5.1.2 Phonological awareness at individual phone or phonetic level

The percentage of students on phonological awareness at individual phone or phonetic level was also measured with regard to different markers of performance. As shown below (Figure 2), 66(17%), 17(4.4%), 45(11.6%), 46(11.8%) and 215(55.3%) of the students read zero words per minute, 1 to 25 words per minute, 25 to 50 words per minute, 50 to 75 words per minute and more than 75 words per minute, respectively.





6.1.3 Phonological awareness at phonemic level

In the measure of phonological awareness at phonemic level, as indicated below (Figure 3), 77(19.90%) of the

students could not read a single word per minute, 34(8.80%%) read 1 to 25 words per minute, 68(17.60%) read 25 to 50 words per minute, 50(12.9%) read 50 to 75words per minute, while 158(40.8%) read more than 75 words per minute, respectively.

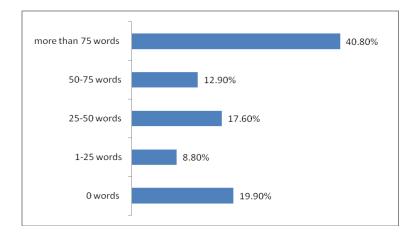
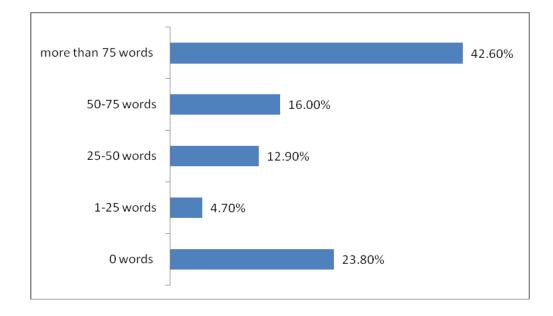


Figure 3: Percentage of students on phonological awareness at phonemic level

6.1.4 Phonological awareness at syllabic level

WiWith respect to phonological awareness at syllabic level, 92(23.80%), 18(4.70%), 50(12.90%),

62 (16%) and 165(42.6%) of the students could read no word per minute, 1 to 25 words per minute,



25 to 50 words per minute, 50 to 75 words and \geq 75 words per minute, respectively (Figure 4).

Figure 4: Percentage of students on phonological awareness at syllabic level

6.1.5 Non-word reading (words do not have meaning in the language)

In the dimension of non-word reading , 105(27%), 60(15.4%), 72(18.5%), 51(13.1%) and 101(26.0%) of the students could respectively read zero, 1 to 25, 25 to 50, 50 to 75 and more than 75 nonsense words per minute, respectively (Figure 5).

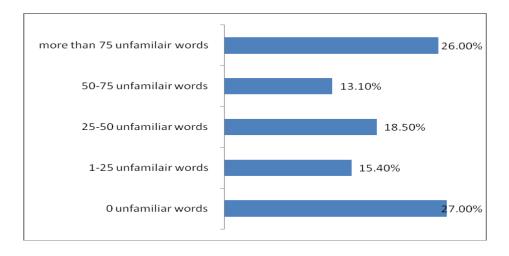


Figure 5: Percentage of students on non-word reading

6.1.6 Comprehension of connected text

In sub-test of comprehending a connected text, 96(24.8 %) the students could not answer a single comprehension question, 37(9.6 %) scored 1 to 25, 24(6.2%) scored 25 to 50, 25(6.5%) scored 50 to 75 and 205(52.7%) scored \geq 75%, respectively (Figure 6).

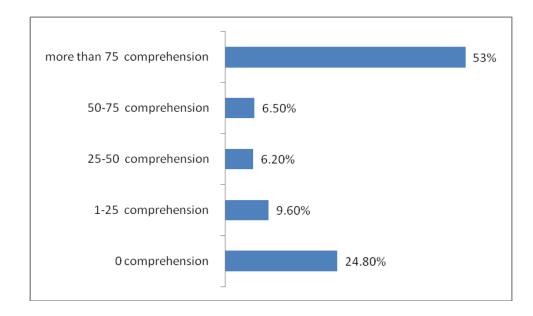


Figure 6: Percentage of students who answered correctly comprehension questions at different markers of performance

6.1.7 Vocabulary score

In a vocabulary sub-test, 56(14.5%) of the students could not answer a single comprehension question, 24(6.2%) scored 1 to 25, 70(18.10%) scored 25 to 50, 85(22.0%) scored 50 to 75 and 151(39%) scored \geq 75, respectively (Figure 7).

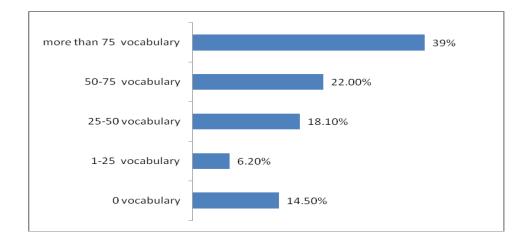


Figure 7: Percentage of students on vocabularies scores at different markers of performance

6.1.8 Summary of students who scored zero and \leq 50 in various subtasks of reading

The figure below shows that students who scored zero and $\leq 50\%$ in the various subtasks of Afan Oromo reading. Accordingly, one in four students scored zero in non-words reading, identifying phonics at syllabic level and comprehending a short text. In addition, nearly one in five students scored zero in identifying phonology at phonetic and phonemic levels. Concerning scores of ≤ 50 , a significant percentage of the students (60.90%) failed in the non-words reading; almost half of the students failed in the phonological awareness at phonemic levels and in the comprehension test. Besides, one in three students failed in letter naming fluency, vocabulary and identifying phonology at phonetic level (Figure 8).

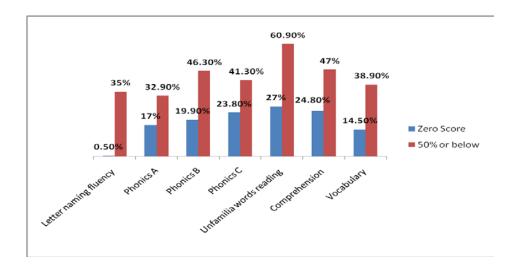


Figure 8: Students who scored zero and \leq 50 on various subtasks of Grade 4 Afan Oromo reading

6.1.9 Difference on reading scores by the variables affecting Afan Oromo reading

Students' socio-economic status, absenteeism from class, availability of textbooks, access to newspapers, and parents' literacy were identified as variables that affect Afan Oromo reading achievement among the target students. Challenges faced in reading, pre-school attendance and repeating classes were also among these variables.

The independent sample t test also indicated that the observed differences on comprehension scores between students who were absent from class regularly and those who attended class regularly (t=-2.93, df=382, sig= .004); students who had textbooks and those who had no text books (t=3.987, df=382, sig= .000); students who had access to newspapers and the ones who did not have access to newspapers (t=6.047, df=375, sig= .000), and students who were from literate parents and those who were from illiterate parents (t=2.753, df=382, sig= .006) were statistically significant. The same analysis indicated statistically significant differences between students who faced no challenges in reading and the ones who faced challenges (t=-5.667, df=367, sig= .000); students who had attended pre-schools and those who had not attended pre-schools (t=3.883, df=358, sig= .000), and students who repeated classes and the ones who had not repeated classes (t=3.301, df=380, sig= .001).

ariables		Mean	t test	Df	Sig	MD
SES	High	55.7	.07	343	.943	.32
	Low	55.4				
Absenteeism	Yes	42.4	-2.93	382	.004	- 16.09
	No	58.5				
Availability of textbook	Yes	62.8	3,987	382	.000	16.77
	No	46.0				
		10.0				
Availability of newspaper	Yes	75.9	6.047	375	.000	27.84
	No	48.1				
Do your father read and write?	Yes	58.1	1.950	382	.052	9.42
	No	48.7				2.44
Do your mother read and write?	Yes	61.3	2 753	382	.006	11.58
	No	49.7	222			
Do you face any type of	Yes	44.4	-5.667	367	.000	-23.36
challenge in reading?	No	67.7				
B-		••••				
Any schooling before entering	Yes	66.9	3,883	358	.000	17.43
grade 1?	No	49.5				
0						
Grade level in last year?						
	Grade 3	57.1	-3,301	380	.001	-33.59
	Grade 4	23.53	2.201			
	Gruue 4	22.22				

 Table 2: Mean, t test, significance level and mean differences on comprehension scores by variables affecting

 Afan Oromo reading skill

Similarly, the research found out that students who had access to newspapers at home scored 27.84% more points on comprehension test than students who did not have newspapers, and students who attended pre-

schools 17.43% more points on comprehension test than students who did not attend pre-schools; students who had textbooks scored 16.777% more points than students who had no textbooks. On the other hand, while students who were regularly absent from class scored 16.09% lower than students who attended class regularly, students who faced challenges in reading scored 23.36% lower points than students who did not face challenges in reading, and students who repeated classes scored 33.595 lower points than students who did not repeat (figure 9).

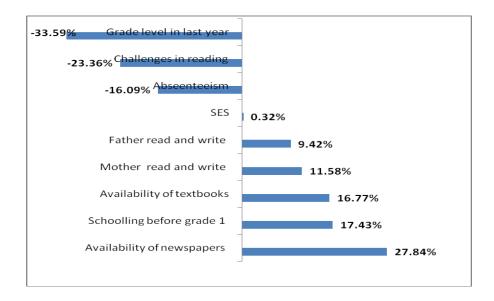


Figure 9: Impact of the variables on comprehension score in connected text

6.1.10 Teachers' views Grade 4 pupils' reading abilities

As mentioned earlier, the study involved 26 Afan Oromo teachers to find out their views on Grade 4 students' Afan Oromo reading abilities and the major factors that hinder the development of reading competence among these students. The teachers' participated in the study by responding to a short interview. The backgrounds of the teachers and their responses are summarized as below:

Out of the 26 Afan Oromo teachers who participated in the study, 14(53.85%) were females while 12(46.25%) males. By the level of education, 21(87.5%) were diploma holders whereas 4(15.38%) were BA degree holders in teaching Afan Oromo. Only one teacher had Teacher Training Certificate (TTI). This shows that the majority of the teachers had the required educational qualification to teach the language (Afan Oromo) skills at Grade 4 level. The majorities (88.46%) of the teachers were above the age of thirty, but eight of them were above the age of fifty. This implies that most of the teachers were in the appropriate productive age group to cultivate the generation in Afan Oromo reading skill.

Regarding their experience of teaching Afan Oromo, the majority of the teachers (except four of them) taught this subject for more than 15 years. In fact, most of them did not teach Grade 4 Afan Oromo (except the three who taught Grade 4 Afan Oromo for the last 14 to 15 years). The remaining 23 taught the subject at Grade 4 for eight years or less with an average of about three years. However, out of the teachers who participated in the

study, 17(65.38%) were teaching Afan Oromo at Grade 4 during the time of data collection for this study. The results derived from the responses of the teachers are presented in the following paragraphs.

Asked to rate the Afan Oromo reading abilities of their students, 5(19.23%) of them reported low or weak ability of the students, and the remaining 21(81.77%) rated the students' Afan Oromo reading abilities as medium or average. Surprisingly, no teacher rated the students' Afan Oromo reading skills as good. Moreover, nearly all of the teachers confirmed that Grade 4 students had difficulties in developing Afan Oromo reading skills. Specifically, according to these teachers, the students had difficulties in identifying letters, differentiating short and long syllables, recognizing and uttering different sounds of words, differentiating between single and double syllables, identifying written words and understanding sentence formation.

Few of the teachers reported that they used various techniques in overcoming learning problems and supporting the pupils with difficulties in Afan Oromo reading. Some of the common techniques mentioned were identifying the learners with difficulties and assisting them in tutorial classes, providing different books which useful for reading exercise, use of group reading exercises, advising to develop their reading skills and motivating them to read. Discussing with parents about students' Afan Oromo reading problems with the view to minimizing these learning difficulties was also used in this regard.

Regarding the their satisfaction and happiness in teaching Afan Oromo to Grade 4 students, almost all of the teachers reported positively. They also mentioned various reasons that made them happy and satisfied with their roles as Afan Oromo teachers. Among the reasons were seeing some children progress in reading and writing in Afan Oromo, the future prospect for the development of the language and short-term trainings offered to them on the skills of teaching Afan Oromo. On the contrary, one teacher reported lack of satisfaction and happiness in teaching this subject. He attributed this to the fact that students do not listen to his/her advice on how to improve their reading and other skills of the language.

Finally, the teachers provided key points as suggestions to improve students' reading skills in Afan Oromo, which can be categorized into 1) learning resources, 2) teacher recruitment and training, 3) learner support and 4) teaching techniques. First, in relation to learning resources, the teachers' suggestion focused on proving the textbook for every student, furnishing libraries with extra reading resources and preparing teaching aids to ease the learning of reading skills. Second, they suggested that the teacher recruitment and training program take account of the candidates' interests. Recruits without interest to teach should not be involved in the selection and training of prospective Afan Oromo teachers. Moreover, the teachers already in the profession need to be retrained and actively involved in continuous teacher professional development (CPD) schemes. The suggestions related to learner support include ensuring mastery of the 'Qubee' (Alphabets) and word formation in the previous grades (Grade 1 to 3), strengthening early childhood education (kindergarten), allowing students to repeat grades (Grades 1 to 3) and provision of parental support and encouragement through modeling and follow-up. Lastly, training teachers to use different innovative techniques of teaching which can enhance the reading skills of students at Grade 4 was deemed important by the teachers. Some of these techniques can be participatory teaching, co-operative learning, peer learning, dialogue and competition. It was also suggested that teachers be models of hard work and achievement for their students.

6.2 Discussion

Afan Oromo is the language of instruction in most primary school classrooms in Oromiya Regional State. Therefore, students in this context need to develop foundational literacy skills of the language in the early grades. Especially, by the time they reach Grade 4, they must have been able to identify letters (Qubee), mastered the phonology and basic syntax of the language and developed threshold word attack skills. Moreover, they are expected to comprehend instructions, questions and longer texts written in this language. This enables them to tackle the various academic readings at this grade level and later in their schooling on the one hand and to develop real life reading skills on the other. Therefore, mastery of the basic reading skills by the time they join Grade 4 should be assessed and timely interventions made. The major findings of this study, conducted with this rationale, are discussed in the following paragraphs.

The study revealed that the mean score on letter naming was 64.10 words per minute. On the other hand, the study singled out students who identified no letters and only a few letters in the given time; nearly one in three students performed poorly in the letter naming subtask. This finding strengthens the interviewed teachers' claim that Grade 4 students had difficulties in identifying Afan Oromo letters.

The results of the study also demonstrated that the mean score for phonological awareness at phonetic level was 6.58 with a standard deviation of 3.77. The mean score here is slightly higher than the cut-off score (5). This implies that the students' average performance in phonetic level awareness was not much frustrating. Besides, the study identified students who did very poorly (could not read even a single word) and poorly (read few words) in the given time. Nearly one in five students scored zero in the phonetic level awareness subtask. This finding is in agreement with the finding of Malawi EGA national baseline assessment which found out that primary (standard 1 and standard 4 in that context) students were unable to identify a single syllable (10). Again, the study unveiled that the students' mean scores on another level of phonological awareness at phonemic level was 5.62 which is slightly higher than the cut-off point (5). The study also disclosed that there were some students who scored zero or poor results on this measure; one in five students scored zero on this subtask. This finding appears to confirm the teachers' claims about students' inadequacies in differentiating short and long syllables, recognizing and uttering different sounds of words, differentiating between single and double phonemes or geminating, and identifying written words.

The results pertaining to phonological awareness at syllable level were similar with those regarding phonological awareness at phonemic level. In this case, the mean score was 5.6 with a standard deviation of 3.90. On this task, students scored slightly above the cut-off point (5.0). On this component, too, students who scored zero results and those who performed poorly were identified; one in four students scored zero on this subtask. This finding concurs with the teachers' concerns mentioned in the preceding paragraph.

Regarding non-word reading, the mean score was 13.06 which is slightly below the cut-off score (15). On the other hand, a large number of students, 105(27%), could not read a single non-word in the given time. In other words, one in four students scored zero on this subtask. The implication is that this subtask was very challenging for the students, and the problem seems the result of poor awareness of the phonology of the language. This

finding adds on the findings of the 2010 EGRA study which found out that Grade 2 and Grade 3 students in eight regions in Ethiopia had word reading problems in their mother tongue languages.

In this study, the mean score on students' comprehension of a short text (fluency reading) was 3.35, showing that they scored slightly above the cut-off (3). The study also revealed that several students were not able to answer even a single comprehension question. Here, too, one in four students scored zero on this subtask. This can be related to students' inability to understand sentence structure which the teacher participants raised as a concern. This finding is also consistent with the 2010 EGA results in Ethiopia and in Malawi.

Another element of literacy assessed in this study was students' ability to guess meanings of words from contexts of use. The mean score on this sub-skill was 2.85 showing that the students scored slightly above the cut-off score for this subtask. The ability to work out meanings of unfamiliar words using contextual clues is integral to reading comprehension and can be practised in mid and upper elementary classes since reading skill is acquired in phases [11].

The factors that hindered the development of Afan Oromo reading skills among 4th grade students were also the focus of this study. Socio-economic status, area of residence (rural vs. urban), absenteeism from school, shortage of Afan Oromo textbook, lack of access to newspapers, challenges faced in reading, class-repeating, support at home and pre-school experience were the factors exerting negative influence on students' reading scores. Of these, area of residence, availability of Afan Oromo textbook and access to newspapers had statistically significant positive relationships with students' reading scores. On the other hand, students' residence, challenges faced in reading (problems in identifying letters, sounds, signs and letters and combining sounds with signs), access to newspapers and pre-school attendance significantly predicted students' reading scores.

7. Conclusion and recommendations

7.1 Conclusions

The following, conclusions have been drawn from the findings of the study:

- 1. In the new Ethiopian educational structure, Grade 4 is the beginning of the second cycle of primary education. By the time students join this grade level, they must have mastered foundational reading skills in the language of instruction. In the study setting, where Afan Oromo is the language of teaching and learning, students at this level are expected to comprehend instructions, questions and longer texts written in this language and demonstrate readiness to tackle the daunting amounts of reading they encounter in their academic journey and in their real lives. However, this study showed that many Grade 4 students had serious problems in letter identification, phonological awareness, guessing meanings from contextual clues and comprehending longer texts. Therefore, these students should be rescued timely so that they can catch up and get the most out of their education.
- 2. Socio-economic status, area of residence, absenteeism from class, shortage of Afan Oromo textbook, lack of access to newspapers, challenges faced in reading, class-repeating, home-based support and

pre-school attendance were the factors that affect students' reading scores. On the other hand, students' residence, challenges faced in reading, access to newspapers and pre-school attendance were the variables which significantly predicted students' reading scores. Thus, literacy programs and interventions schemes aimed at alleviating students' reading difficulties should target these factors.

3. The findings of this study are consistent with a previous EGRA study conducted on Grade 2 and Grade 3 in Ethiopia. This can be a clue to infer that problems pertinent to early grade reading continue to affect the nation. This calls for additional studies and interventions to thwart this immense educational menace.

7.2 Recommendations

Based on the findings and the conclusions drawn from them, the following recommendations are forwarded:

- Afan Oromo is the language of instruction in primary school classrooms in the study setting. Therefore, students should develop foundational literacy skills in this language as early as possible. To this end, educational bureau officials, school administers and Afan Oromo teachers should give due attention to students' early grade reading competence.
- 2. Schools need to ensure that students have mastered foundational readings skills in Afan Oromo before they are promoted to Grade 4. They should also devise strategies for identifying and mitigating early grade reading problems.
- 3. The study also revealed that challenges faced in reading, access to newspapers and pre-school attendance significantly predicted students' reading scores. Thus, Afan Oromo teachers and others concerned should take these variables into account in their instructions and intervention systems respectively.
- 4. School administrators and curriculum committees of the respective schools should take ability and interest into consideration in assigning Afan Oromo teachers to early grades.
- 5. The findings of this study are comparable with the findings of similar studies conducted elsewhere in Ethiopia. Therefore, school-based interventions must be aligned with regional and national intervention schemes to achieve a comprehensive solution.

References

- K.J. Topping, J. Samuels, and T. Paul. "Independent Reading: The Relationship between challenge, Non-fiction and Gender to Achievement." British Educational Research Journal, vol 34 pp.505-524, August 2008.
- [2] D. Plaut. "Connectionist Approach to Reading." In The sciences of Reading: A Handbook, M.J. Snowling and C.J. Hulme. Oxford: Blackwell, 2005, pp. 24-38.
- [3] A. Klaas and B. Trudell, "Effective Literacy Programs and Independent Reading in African Contexts." Language Matters, vol 42, pp. 22-38, 2011.

- [4] K.E. Stanovich. Progress in understanding reading: Scientific foundations and new frontiers. New York: Guilford Press, 2000.
- [5] K. Stahl. "Improving the Asphalt of Reading Instruction. A Tribute to the Work of Steven Stahl." The reading Teacher, vol. 59, pp. 184-192, October 2005.
- [6] B. Piper. Ethiopia Early Grade Reading Assessment Ed Data II Task, August 31, 2010. Executive summery pp. 1-8, pp. 1-51
- [7] C.E. Snow, M.S. Burns, and P. Griffin, (eds.). Preventing *reading difficulties in young children*. Washington, DC: National Academy Press, 1998, pp. 16-22.
- [8] RTI International and International Rescue Committee. Guidance Notes for Planning and Implementing EGRA, 2011. pp. 1-88
- [9] RTI International. EARLY GRADE READING ASSESSMENT TOOLKIT, 2009, pp. 1-58
- [10] USAID Funded Malawi Teacher Professional Development Support Program). Early Grade reading assessment: National baseline report, 2010, pp. 21-35
- [11] A. Gove, and A. Wetterberg, (eds.). The Early Grade Reading Assessment: Applications and interventions to improve basic literacy. Research Triangle Institute, 2011, pp. 9-24.