



## Effects of Text Modification on Bahir Dar Secondary School Students' Reading Comprehension and Motivation to Read

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### ABSTRACT

The study explored how modifying texts affects reading comprehension and motivation among Ethiopian secondary school students. 120 students participated, initially taking a reading comprehension pretest and completing a reading motivation questionnaire. Despite differences in (variables related to the study), all groups displayed comparable reading motivation and comprehension. Then the participants were assigned to three groups controlled, simplified, and elaborated) in their intact classes. After intervention, all groups participated in the reading comprehension posttest and reading motivation questionnaire. The data were analyzed using SPSS version 25. The study used a one-way ANOVA to examine the effectiveness of modified texts in promoting reading comprehension. Interestingly, the experimental groups demonstrated superior performance on the posttest compared to the control group. This finding indicates that incorporating modified texts into EFL reading instruction can positively influence students' comprehension skills. In addition, the impact of text changes on student reading motivation was assessed using a one-way ANOVA and the results indicated that both elaborated and simplified groups' results were higher than the control group in students reading motivation dimensions (reading efficacy, curiosity, challenge, involvement, and reading work avoidance). However, the control and simplified groups showed nearly similar mean scores in students' reading competitions. This clearly indicated that teaching students with text modification can improve EFL learners' reading motivation.

**Keywords:** Simplification, elaboration, reading motivation, reading comprehension

### INTRODUCTION

Reading is crucial for students to gain knowledge and understand the world around them. According to Nation (2005), it's more than just decoding words; it's about actively interpreting and questioning the text to extract meaning. Caldwell (2008) echoes this, emphasizing reading as a key method for extracting information and creating understanding from written content. In today's tech-driven world, reading is a fundamental skill, essential for success in various aspects of life. Children who struggle with reading face potential academic, behavioral, social, and emotional challenges (Nunan, 2005).

Understanding written text is influenced by the reader's prior knowledge, interaction style, and engagement level. Poor

comprehension often arises from a mismatch between the text's style and the reader's preferred interaction style, leading to a lack of motivation and unwillingness to continue reading. (Alyosef, 2005). The Ethiopian Ministry of Education (MoE) is concerned about students' low English proficiency, particularly in reading and states that many children struggle to read well by the end of primary school, and this continues into secondary school. Researchers like Sona (2018) highlight the negative impact of these difficulties on students' academic achievement, job prospects, and daily life tasks. This emphasizes the urgent need to improve reading skills among Ethiopian learners.

Texts presented in students' grade 10 text books are written without considering students reading performance. (Sualih

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& Gebeyehu 2020). Based on their findings, the texts were found fully authentic and containing very long sentences, difficult vocabularies, difficult syntax, complex structures and expressions beyond student's level. Moreover, majority of the contents and topics of the texts are not appealing and relevant for student's temporal needs, expectations and lives to make students enjoy in reading. Despite the recognized importance of reading, researchers reveal that many Ethiopian secondary school students struggle to achieve the expected level of reading competence (Pawlos, 2015; Misganaw, 2017; Dawit & Simachew, 2019; Tekalign, 2019)

The Ethiopian Early Grade Reading Assessment (EGRA, 2021) revealed that across numerous regions, a majority (over 50%) of students struggle with reading comprehension, unable to answer even basic comprehension questions. Efforts to improve this situation, such as English language training programs for teachers and the establishment of English language clubs in schools, have yielded limited observable progress in student reading performance (Abinet 2011). An analysis by the American Research Institute (2012) corroborated these findings, highlighting that Ethiopian students' English language proficiency falls well below expectations, with the average EGRA performance falling short of the Ministry of Education's (MOE, 2005) benchmarks. The overall percent of reading scores increases as students' move higher in their grade levels. Samuel (2011) in his study also found that for Ethiopian learners it is very difficult to read and take information from a long and difficult passage and answer comprehension questions.

The process of making text more comprehensible has the potential to be rather haphazard in nature and wonder if comprehensible text is always the result. Most material developers are acutely aware of teaching students with lexically, syntactically or linguistically adjusted or modified texts that enhance students' reading performance as well as students reading motivation. Students in elementary, secondary, and tertiary schools develop reading as one of their primary English language skills. English is used as a written language for reading texts and materials at the secondary and tertiary levels in Ethiopia. Examinations designed to evaluate achievement in different subject areas also require mainly students' reading competence (MOE, 2005). That is why general secondary school students in Ethiopia are made to learn reading as a major skill. However, local research findings conducted at different levels indicate that many elementary, high school and college students lack the required competence in reading, and reveal that teachers often complain about the lack of reading comprehension ability. Therefore, the ability to extract meaning from textbooks, articles, magazines or academic texts written in English to acquire knowledge and gather information for both their careers and their academic studies is very demanding

Researchers have developed methods to make reading easier for language learners, focusing on input, which refers to the specific linguistic data they are exposed to (Van Patten &

Lee, 2003). By choosing appropriate input, and aligning with learners' needs and preferences, the reading process can be more effective and enjoyable. Language input is a necessary prerequisite for both first and second language learning but some texts are demanding particularly for low proficient readers (Oh, 2001). One method to make language input comprehensible is to provide modified language input. Texts can be simplified or modified to make it easier for readers. This can be achieved by defining challenging words, paraphrasing complex structures, and enhancing semantic features

The majority of language researchers believe that language input requires modifications in order for the student to comprehend it (Yano, 1994; Oh, 2001; Sonmez, 2007; Allen, 2019). Majority of studies regarding the effect of text modification on learners' reading comprehension have reported a significantly positive effect. For example, Kong (2007) showed that both simplified and elaborated input promoted the participants' reading comprehension and the two have no any significant difference. Hasan (2008) concluded that both simplification and elaboration would facilitate L2 reading comprehension. O'Donnell (2005) argued that L2 readers of elaborately modified short literary texts can recall more information of the texts they have read. Students reading these types of texts are able to identify more of the vocabulary that appears within the text. Kim (2003) stated that input modified by elaboration is preferred in SLA on the grounds that elaborated input retains the original material that L2 learners need for developing their inter language. Moreover, Crossely and Mcnamara (2016) Crossely and Mcnamara (2016) found that simplifying texts leads to better comprehension gains

On the contrary, there are some studies on different types of text modification.. Chaudron (1985) revealed that linguistic simplification has not had a substantial positive impact on reading comprehension. Similarly, Ulijin and Strother (1990) conducted a study on the effects of syntactic simplification on reading comprehension and found that there was no significant difference between a baseline science text and a simplified text. Maxwell (2011) also compared the effects of simplification and elaboration on reading comprehension and found no indication of a significant difference on elementary ESL learners' reading comprehension. In addition, Brewer (2008) investigated if lexical modification had any effect on his learners' sentence-level comprehension and the results of the test showed no significant difference in comprehension for items that had been simplified, elaborated, or left intact

In an EFL classroom, the motivational effect of teachers who teach reading may have a substantial impact on students' pleasure with reading activities. Teachers may be able to identify what teaching strategies their students find interesting and motivating if they are more aware of the impact of their teaching techniques on their students' reading motivation. In addition, Biruk (2014) in his study showed that teaching reading techniques and strategies were not motivating and almost not exercised by the teachers, therefore, students' motivation was very low and selecting and using reading materials that students are interested in and

prefer to read is critical for the development of reading motivation. In addition, Vincent (1986) found motivational aspect to be the most important benefit that simplified literature may provide. She describes the demoralizing effect of L2 learners attempting to read unmodified literary works before their developmental stage has reached the appropriate level. When unmodified texts' linguistic levels are too difficult in comparison to students' level of understanding, they are unlikely to be considered as motivating or interesting for those students.

Research suggests that input modification can positively impact students' affective factors, such as self-confidence and motivation. This is particularly relevant when students' proficiency in the target language is low, as they may experience anxiety or demotivation when struggling to express themselves or understand the input (Ohata, 2005; Young, 1991). Strategies like repetition, elaboration, and paraphrasing within modified input can alleviate these challenges by providing more processing time, clarifying meaning, and enhancing overall comprehensibility (Tiono & Sylvia, 2004). This, in turn, can foster a more positive learning environment and potentially trigger increased student motivation (Light & Spada, 2013).

This research is motivated by two key factors. Firstly, the issue of text modification in language learning remains a topic of debate, with ongoing discussion about its effectiveness. Secondly, a thorough review of the literature reveals a gap in research specifically focused on the Ethiopian context. While some international studies have explored text modification, no investigations have examined its potential impact on reading comprehension and motivation among Ethiopian secondary school students. This lack of research within the Ethiopian educational system necessitates the exploration of text modification as a tool to enhance EFL learners reading comprehension and motivation to read.

### Research Questions

Does text modification strategy use improve students' reading performance?

Does text modification strategy use improve students' motivation to read?

### LITERATURE REVIEW

Reading, the process of obtaining meaning from print (Berendes et al., 2018), is one of the major channels of information intake during learning ( Crossley & McNamara, 2016; Catrysse, Gijbels & Donche, 2018; Ariasi, Hyönä, Kaakinen & Mason, 2017). Some readers may have a higher tolerance for uncertainty when dealing with a text they do not understand. The difficulty in understanding these texts hinders their ability to learn. Studies show a gap in reading comprehension between native and non-native English speakers (Mulligan & Kirkpatrick, 2000). Textbooks written beyond students' abilities create a barrier to learning (Erling, Adinolfi & Hultgren, 2017; Sualih & Gebeyehu, 2020). This highlights the importance of linguistic accessibility, where learning materials should be adjusted for the learner's

proficiency. The concept of input modification comes from the idea that language acquisition happens through comprehensible input (Krashen, 1982). Simplifying language structure and vocabulary, along with repetition, can make learning materials more understandable. Research by Oh (2001) and Maxwell (2011) supports that simplification and elaborations are very essential for improved reading comprehension. Input modification goes beyond just simplifying texts. It aims to make reading easier and smoother by using strategies like repetition, elaboration, and paraphrase Crossley and McNamara (2016). This reduces learner anxiety and boosts motivation. and students have more time to process information and teachers can ensure clear communication with the text. They also suggest that modified texts can lead to better mutual conversation between the writer and reader and helps to project their reading motivation.

## RESEARCH METHODOLOGY

### Research Design

Based on this, the study employed a quasi-experimental research design, especially the pre-test post-test comparison group design whereby one group received a treatment while another representing the same population as the experimental subjects, did not receive a treatment. This design was chosen because conducting an experiment means that at least one independent variable is manipulated and its effect is measured by some dependent variables while other factors are controlled in various ways. Creswell (2009) explains that this design is used when participants cannot be randomly selected or randomly assigned to groups. The main reason is that it is usually impossible to form new groups in a natural educational setting.

### Participants of the Study

The research study was conducted with 120 tenth-grade students from Bahir Dar General Secondary School. The school was selected lottery method from the total of general secondary schools in Bahir Dar where the researchers had some acquaintance with the area. All participants were aged 16 to 19, had Amharic as their native language, and had gained their English proficiency solely in formal education. Three out of ten sections were randomly chosen using a lottery method and assigned as control, simplified or elaborated groups. In response to concerns raised by teachers and school principals during preliminary discussions, this study targets grade ten students in a general secondary school. Informal observations suggest that a majority of students, particularly those in grade ten, struggle with reading comprehension and lack motivation to engage with reading tasks. This highlights a need for further investigation into the specific challenges faced by this grade level

### Data Collection Instruments Tests

A pre-test and post-test design was employed to assess the impact of the intervention on reading comprehension. Both tests consisted of 30 multiple-choice items designed to evaluate students' ability to identify main ideas, locate details, understand references, and infer meaning from a

reading passage. This format was chosen due to its familiarity to students, ease of administration, and efficient scoring. The pre-test established a baseline of reading comprehension skills, while the post-test measured any changes attributable to the intervention.

**Questionnaire**

The researchers use reading motivation questionnaire developed by Wigfield and Guthrie (1997) to assess the effects of an intervention on students' reading motivation. The 28-item survey used a 4-point Likert scale and was given to students before and after the intervention. It aimed to capture changes in motivation across six categories: how confident students felt (efficacy), their desire for difficulty (challenge), their curiosity about reading, competitiveness, pressure to read (involvement), and avoidance of reading tasks (work avoidance). By comparing pre- and post-test results, the researchers hoped to understand how the intervention influenced these different aspects of students' reading motivation.

**Reliability and Validity of tests**

The tests face and content validity were assessed by the education experts. To assess whether the tests matched their intended purpose and content, experts in education, teachers, and colleagues reviewed the tests for face and content validity. They provided feedback on usefulness of the passages, questions, and the value of the tests, ensuring they measured what they were supposed to. Internal consistency was checked using item difficulty analysis and Cronbach's alpha. The results revealed that both the pre-test and post-test had an alpha of .78 and .76, respectively. This indicates a relatively high level of reliability, exceeding the typical "acceptable" threshold of .70. To ensure the validity of the Reading Motivation Questionnaire (MRQ), feedback was sought from two EFL teachers who evaluated its content and face validity. These university lecturers specifically assessed the relevance, adequacy, and suitability of the items within the six primary categories of motivation. Guided by their feedback, the reliability of the MRQ was then examined. The resulting coefficient alpha reliability of .72 demonstrates that the items within the scale possess a satisfactory level of reliability.

**Data Analysis**

The study employed a mixed-methods approach, utilizing both quantitative and qualitative data analysis. One-way ANOVA was used to analyze the quantitative data on comprehension and motivation scores due to its suitability

for testing the effects of a single independent variable (text modification) on two dependent variables. This approach reduced Type I error and allowed for examining the potential relationship between comprehension and motivation. Qualitative analysis of student interviews explored their perceptions of the intervention through thematic coding and interpretation. Thematic analysis focused on student perceptions identified through interview questions. The quantitative findings were further supported by the qualitative data, specifically student interview scores, to identify potential relationships between the quantitative and qualitative results.

**The material**

The researcher prepared the intervention material based on the viewpoint of text modification approach to carry out the experiment. The material that was prepared for the intervention was based on the pedagogical importance of modified texts on reading comprehension and motivation to read. The texts used in the study were taken from the current English text book of grade 10. This text consists of 12 units and, 21 passages. From this book, 3 texts were selected (chapter 1-3) and three documents (baseline, simplified and elaborated) were prepared.

**Unmodified Form:** The reading texts in the current grade 10 English text book were taken without modification.

**Simplified Form:** The simplified versions of the texts contained shorter sentences and high frequency words. It was also aimed to eliminate complex syntax structures such as embedded clauses (Oh, 2001). In addition, , passive verbs were changed into active ones, pronouns were replaced with their referents, the topic of the sentence was fronted for clarity and complex sentences were shortened or broken down into simple sentences. It should be noted that each of the three texts received roughly equal amounts of each type of simplification technique.

**Elaborated Form:** Texts were elaborated by adding in definitions and synonyms for the low frequency words used in the unmodified text, the researcher increased the amount of redundancy to explicitly signal the main themes within the text, and the researcher paraphrased and repeated the information to ensure clarity (Oh, 2001). Each elaborated text received modifications in nearly equal amounts.

**RESULTS AND DISCUSSION**

**Results**

**Effects of text modification on students reading comprehension**

Table 1: Descriptive Statistics of the reading comprehension pre-test Results

	Descriptive							
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Pretest score								
Control	40	13.00	3.442	.544	11.90	14.10	7	20
Elaborated	40	13.75	3.828	.605	12.53	14.97	6	21

Simplified	40	13.68	3.141	.497	12.67	14.68	9	22
Total	120	13.48	3.469	.317	12.85	14.10	6	22

In Table 1, descriptive statistics was done to check the performance of students' reading performance in the pre-test. The result indicates that the three classes obtained almost similar scores. The mean score and standard deviation is 13.00, and 3.442, 13.25 and 3.828, 13.48 and

3.141 for the control, elaborated, and simplified groups respectively. This reveals that the students in all the three groups had almost similar background in their levels of reading comprehension.

Table 2: Results of one way ANOVA analysis of the reading comprehension pre- test

**ANOVA**

Pretest score						
	Sum of Squares	Df	Mean Square	F	Sig.	
Between Groups	13.650	2	6.825	.563	.571	
Within Groups	1418.275	117	12.122			
Total	1431.925	119				

One way ANOVA was also computed to check if there was a statistically significant difference between the experimental and the control groups on their reading comprehension The test result on the table revealed no statistically significant difference in learners' reading

comprehension in their pretest which was indicated by (DF, 2, F=5.63 and P=.571) meaning that no statistically significant differences were found in the learners' reading comprehension scores among Bahir Dar secondary school students before the intervention was made

Table 3: Descriptive statistics of the reading comprehension post-test results

**Descriptive**

Posttest score								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Control	40	14.95	4.302	.680	13.57	16.33	6	22
Elaborated	40	17.95	2.342	.370	17.20	18.70	12	23
Simplified	40	16.48	2.846	.450	15.56	17.39	11	21
Total	120	16.46	3.469	.317	15.83	17.09	6	23

In Table 3, a descriptive statistics was made to check the mean difference between the control and experimental groups. The mean score and standard deviation of the post reading comprehension test was 14.95 and 4.302, 17.95 and 2.342, 16.48 and 2.846 for control, elaborated and simplified

groups respectively. This shows that there is a difference between the mean scores of the control and experimental groups in the post-testing reading comprehension. The difference might be because of the treatment whereby the experimental groups learned through text modification.

Table 4: Results of ANOVA analysis of the reading comprehension post- test

**ANOVA**

Posttest score					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	180.017	2	90.008	8.413	.000
Within Groups	1251.775	117	10.699		
Total	1431.792	119			

In table 4, One-way ANOVA result reflects that (DF=2; F=8.413) and the significance value is .000 which is lower

than the alpha level  $p > 0.05$ . Hence, the one-way ANOVA result shows that there is a significant difference between the control and the experimental groups in the post-test reading scores favoring the experimental group. Therefore, it may be noted that the experimental group who learned with text

modification performed significantly better than the control group in the post-test

**Effects of text modification on students reading motivation**

Table 5: Descriptive Statistics of reading efficacy pretest and post test results

		Descriptive							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Efficacy_PRT	Control	40	8.10	1.780	.281	7.53	8.67	3	11
	Simplified	40	8.32	1.774	.281	7.53	8.67	5	12
	Elaborated	40	8.05	1.501	.229	7.53	8.67	4	11
	Total	120	8.16	1.680	.153	7.85	8.46	3	12
Efficacy_POS	Control	40	9.95	1.280	.202	9.54	10.36	7	12
	Simplified	40	11.60	2.394	.379	10.83	12.37	8	17
	Elaborated	40	13.55	2.287	.362	12.82	14.28	10	19
	Total	120	11.70	2.512	.229	11.25	12.15	7	19

Table 5 shows the comparison of the mean scores of the control and experimental groups with regard to reading efficacy on pre MRQ results. The mean scores for the three groups are almost similar in the pre-test at (M=8.10, SD=1.780; M=8.32, SD=1.774 and M=8.05, SD=1.501) for control, simplified and elaborated groups respectively. This indicates that they are not different in their reading efficacy at the beginning of the treatment. As can be seen from the

above table, the mean score and standard deviation of reading self-efficacy for control, elaborated and simplified group in the posttest was M=9.95, SD=1.280, M=11.60, SD=2.394 and M=13.55, SD=2.287. This shows that the students' achievement in feeling efficacious for learning or performing reading task in the experimental group significantly improved as a result of using text modification strategies.

Table 6: Results of ANOVA Analysis of the reading efficacy pre and posttest result

		ANOVA				
		Sum of Squares	Df	Mean Square	F	Sig.
Efficacy_PRT	Between Groups	1.717	2	.858	.300	.741
	Within Groups	334.275	117	2.857		
	Total	335.992	119			
Efficacy_POS	Between Groups	259.800	2	129.900	30.929	.000
	Within Groups	491.400	117	4.200		
	Total	751.200	119			

The study investigated if teaching reading through modified text improves students' reading efficacy. Before the intervention (pre-test), there was no significant difference between the groups (DF=2, P=.741). However, after the

intervention (post-test), a significant difference emerged (DF=2, P=000) with the experimental group outscoring the control group. This suggests that text modification could be a beneficial approach to improve reading efficacy.

Table 7: Descriptive Statistics of reading challenge pretest and post test results

		Descriptive							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Challenge_PRT	Control	40	11.30	1.911	.302	10.69	11.91	5	15
	Simplified	40	10.93	2.055	.325	10.27	11.58	5	15
	Elaborated	40	11.33	1.886	.298	10.72	11.93	5	15

	Total	120	11.18	1.945	.178	10.83	11.53	5	15
Challenge_POS	Control	40	11.65	2.131	.337	10.97	12.33	5	15
	Simplified	40	12.63	2.488	.393	11.83	13.42	8	18
	Elaborated	40	14.20	1.539	.243	13.71	14.69	11	18
	Total	120	12.83	2.325	.212	12.40	13.25	5	18

In Table 7, how modifying text affects reading difficulty was investigated. All three groups (control, simplified, elaborated) scored similar results on a pre-test reading challenge (around 11.30). After reading modified texts, both the simplified (10.93) and elaborated groups (11.33) showed nearly similar scores to the control group. However, on a

post-test, the control group only showed a small improvement (11.65), whereas students who read modified texts improved significantly. The simplified group increased their score to 12.63 and the elaborated group jumped to 14.20, suggesting that text modification can substantially improve reading ability

Table 8: Results of ANOVA Analysis of the reading challenge pre and posttest result

**ANOVA**

		Sum of Squares	Df	Mean Square	F	Sig.
Challenge_PRT	Between Groups	4.017	2	2.008	.527	.592
	Within Groups	445.950	117	3.812		
	Total	449.967	119			
Challenge_POS	Between Groups	132.450	2	66.225	15.167	.000
	Within Groups	510.875	117	4.366		
	Total	643.325	119			

The results of the one-way ANOVA in table 8 depict that the comparison of the means score of the control and experimental groups is found to be insignificant on the pre-test at  $P=0.592$ , while the comparison of the mean scores

obtained by the control and experimental groups in the post-testing was  $P= 000$ . This indicates that there is a significant difference between the two groups at (0.05) level.

Table 9: Descriptive Statistics of reading curiosity pretest and post test results

**Descriptive**

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean			
						Lower Bound	Upper Bound	Minimum	Maximum
Curiosity_PRT	Control	40	14.03	2.878	.455	13.10	14.95	8	19
	Simplified	40	13.75	2.216	.350	13.04	14.46	9	18
	Elaborated	40	14.30	2.911	.460	13.37	15.23	8	19
	Total	120	14.03	2.674	.244	13.54	14.51	8	19
Curiosity_POS	Control	40	14.40	2.977	.471	13.45	15.35	8	19
	Simplified	40	15.65	1.688	.267	15.11	16.19	13	19
	Elaborated	40	16.95	1.825	.289	16.37	17.53	13	19
	Total	120	15.67	2.454	.224	15.22	16.11	8	19

The mean score and standard deviation of reading curiosity on Table 9 shows that  $M=14.03$ ,  $Std. = .986$  for control group,  $M= 14.30$ ,  $SD. = .876$  for elaborated group and  $M=13.751$ ,  $SD. = .862$  for simplified group. This result shows that the three groups had almost similar reading ability on reading out of the desire to learn about a topic before intervention. However, the mean score and standard

deviation of the control, simplified and elaborated group were 14.40 and 2.977, 15.65, and 1.688, 16.95 and 1.825 respectively for the post-test reading curiosity. The difference between the three scores was found to be statistically significant indicating that the experimental group made a significant improvement compared to that of the control group.

Table 10: Results of ANOVA Analysis of the reading curiosity pre and posttest result

**ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
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Curiosity_PRT	Between Groups	6.050	2	3.025	.419	.659
	Within Groups	844.875	117	7.221		
	Total	850.925	119			
Curiosity_POS	Between Groups	130.067	2	65.033	12.971	.000
	Within Groups	586.600	117	5.014		
	Total	716.667	119			

One way ANOVA was computed to check whether there was statistically significant difference on students reading curiosity before and after intervention. The result was found  $F=.419$  and  $P=.569$  in the pretest which indicates that the differences among the groups were not statistically

significant. On the other hand, the posttest result was also compared through a one-way ANOVA and the results  $F=12.971$  and  $P=.000$  indicated that there was significant difference among the groups in terms of reading curiosity after intervention.

Table 11: Descriptive Statistics of reading competition pretest and post test results

		Descriptive							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Competition_PRT	Control	40	15.78	2.939	.465	14.83	16.72	9	20
	Simplified	40	15.25	2.619	.414	14.41	16.09	9	20
	Elaborated	40	15.78	2.655	.420	14.93	16.62	9	20
	Total	120	15.60	2.730	.249	15.11	16.09	9	20
Competition_POS	Control	40	14.80	2.747	.434	13.92	15.68	9	20
	Simplified	40	15.95	2.679	.424	15.09	16.81	10	22
	Elaborated	40	17.90	2.285	.361	17.17	18.63	13	23
	Total	120	16.22	2.861	.261	15.70	16.73	9	23

The study investigated the effects of different reading materials on students' desire to compete and performance in a reading competition. The analysis focused on three groups: control, elaborated, and simplified. Before the intervention, all groups had similar scores (around 15.8) on a pre-test measuring motivation to outperform others. However, after

the intervention, the control group's score on the reading competition dropped to 14.8, while the elaborated group's score jumped to 17.9. This suggests that the simplified material did not improve students' reading competition compared to the control group, but the elaborated material led to a significant improvement.

Table 12: Results of ANOVA Analysis of the reading competition pre and posttest result

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Competition_PRT	Between Groups	7.350	2	3.675	.489	.615
	Within Groups	879.450	117	7.517		
	Total	886.800	119			
Competition_POS	Between Groups	196.467	2	98.233	14.775	.000
	Within Groups	777.900	117	6.649		
	Total	974.367	119			

To check whether the difference is statistically significant or not, one way ANOVA was computed. The pretest result denotes that there is no a statistically significant difference between the three groups on reading competition as ( $P=.615$ ). As can be seen in the table above, the participants in the experimental group had shown improvements in their reading competition towards reading after the intervention. The value ( $F=14.75$ ,  $P=.000$ ) indicates that there is a statistically significant difference on the students

'competition towards reading after the intervention which might result from the application of text modification.



Table 13: Descriptive Statistics of reading involvement pretest and post test results

		Descriptive							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
involvement_PRT	Control	40	13.98	2.315	.366	13.23	14.72	8	19
	Simplified	40	13.35	2.597	.411	12.52	14.18	8	18
	Elaborated	40	14.28	2.592	.410	13.45	15.10	8	19
	Total	120	13.87	2.514	.229	13.41	14.32	8	19
involvement_POS	Control	40	14.15	2.315	.366	13.41	14.89	11	19
	Simplified	40	15.55	2.640	.417	14.71	16.39	7	19
	Elaborated	40	16.65	2.225	.352	15.94	17.36	12	20
	Total	120	15.45	2.592	.237	14.98	15.92	7	20

The mean score and standard deviation of reading involvement of the control and experimental groups in the pretest were also compared in Table 13. The result is found M=13.98, SD =2.315 for control group, M= 13.35, SD =2.597 for simplified group and M=14.28, SD = 2.592 for elaborated group. This reveals that the students in all groups had the almost similar background in their levels of reading involvement. Whereas the posttest result showed that there

was a difference on the students' post-test involvement on reading at M=14.15, SD =2.315, M= 15.55, SD =2.640 and M=16.65, SD= 2.592 for control, simplified and elaborated groups respectively. There was a significant increase on the students' involvement on reading after the intervention and this result could be attributed to the implementation of text modification.

Table 14: Results of ANOVA Analysis of the reading involvement pre and posttest result

		Sum of Squares	df	Mean Square	F	Sig.
Involvement_PRT	Between Groups	17.817	2	8.908	1.420	.246
	Within Groups	734.050	117	6.274		
	Total	751.867	119			
Involvement_POS	Between Groups	125.600	2	62.800	10.900	.000
	Within Groups	674.100	117	5.762		
	Total	799.700	119			

One way ANOVA was run to check the three groups of their reading involvement before the intervention was carried out. As indicated in table 14 above,  $F=1.420$  and  $P=.246$  which suggests that the three sections were homogeneous in terms of their reading involvement. In table 14 above, there was a statistically significant difference between the three groups

of students in terms of their scores on the reading involvement post-test measured after the instructional intervention. In this regard,  $F=10.900$  and  $P=.000$  which indicates that the experimental group outperformed the control group.

Table 15: Descriptive Statistics of reading work avoidance pretest and post test results

		Descriptive							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Work_Avoidance_PRT	Control	40	10.18	2.500	.395	9.38	10.97	5	14
	Simplified	40	9.55	2.995	.474	8.59	10.51	4	16
	Elaborated	40	10.05	2.531	.400	9.24	10.86	6	14
	Total	120	9.93	2.676	.244	9.44	10.41	4	16
Work_Avoidanc_POS	Control	40	10.85	2.587	.409	10.02	11.68	6	15
	Simplified	40	15.53	3.389	.536	14.44	16.61	9	22
	Elaborated	40	17.08	3.157	.499	16.07	18.08	9	23

Total	120	14.48	4.036	.368	13.75	15.21	6	23
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Table 15 indicates the mean scores and standard deviation of reading work avoidance obtained by the control and experimental group. The result indicates  $M=10.18$ ,  $SD=2.500$ ;  $M=9.55$ ,  $SD=2.995$  and  $M=10.05$ ,  $SD=2.531$  for control, simplified and elaborated groups respectively. This indicates that all the three groups had almost similar scores in reading work avoidance at the entry level. As can be seen from the table, the posttest mean score of the control group was  $M=10.85$  and  $SD=2.587$  while the mean score of the

experimental simplified group was  $M=15.53$  and  $SD=3.389$  and the experimental elaborated group was  $M=17.08$  and  $SD=3.157$ . This shows that there is a difference between the mean scores of the control compared to both experimental groups in the post-testing reading work avoidance and this might be because of the treatment whereby the experimental group learned through simplification and elaboration.

Table 16: Results of ANOVA Analysis of the reading work avoidance pre and posttest result

		Sum of Squares	Df	Mean Square	F	Sig.
Work_Avoidance_PRT	Between Groups	8.750	2	4.375	.607	.547
	Within Groups	843.575	117	7.210		
	Total	852.325	119			
Work_Avoidance_POS	Between Groups	840.117	2	420.058	44.766	.000
	Within Groups	1097.850	117	9.383		
	Total	1937.967	119			

The data in table 16 on the one way ANOVA of the pretest reading work avoidance reflect that the  $F$  value is .607 and the  $p$  value .547 which is higher than 0.05 alpha level. Hence, we can say that there is no significant difference between the subjects of the control and the experimental groups' reading work avoidance at the beginning of the study. In table 16, the one way ANOVA result reflects again that the significance value was .000, and the  $F$  value is 44.76. Hence, the result shows that there is a significant difference between the subjects of the control and the experimental groups in the post-test reading work avoidance favoring the experimental group.

### Discussion

This study investigated the impact of text modification on reading comprehension and motivation. The findings revealed that both simplified and elaborated texts led to significantly higher comprehension scores compared to unmodified texts (Table 2). However, a significant difference emerged between the comprehension outcomes of simplified and elaborated text readers (Table 3). These results align with previous research. Studies by Kim (2003) suggest that elaborated input is beneficial in Second Language Acquisition (SLA) as it retains the core content, allowing learners to build their interlanguage. Similarly, Urano (2002) found that both simplification and elaboration techniques facilitate L2 reading comprehension. Furthermore, Yano et al. (1994), Oh (2001), and Keshavarz & Mobarra (2003) support the notion that these modifications can maintain the text's lexical and syntactic complexity. However, contrasting findings exist. Maxwell (2011) examined the effects of simplification and elaboration on elementary ESL learners' reading comprehension. Their study did not reveal a significant impact of text modification on comprehension for simplified,

elaborated, or unmodified passages. This current study additionally explored the influence of text modification on reading motivation. One-way ANOVA results indicated significant differences in most motivational dimensions (efficacy, curiosity, challenge, involvement, and reading work avoidance) between the control group and both the elaborated and simplified groups. Notably, student reading competition scores showed minimal differences between the control and simplified groups after the intervention

### CONCLUSION AND RECOMMENDATION

This research investigated the effects of text modification on reading comprehension and motivation among EFL students in Ethiopian general secondary schools. The study found that students who learned with modified texts showed significant improvement in reading comprehension compared to those who learned with unmodified texts. This suggests that text modification is a successful strategy for enhancing reading comprehension in this context. Furthermore, the study revealed that text modification led to a significant increase in students' reading motivation across various dimensions, including reading efficacy, challenge, curiosity, and compliance. However, there was no improvement in reading competition. Both the statistical analysis and student interviews supported the conclusion that text modification is an effective strategy for boosting reading motivation among EFL learners. In conclusion, the study demonstrates that text modification is a feasible teaching approach that can significantly improve students' reading comprehension and motivation in EFL classrooms of Ethiopian general secondary schools.

Based on the findings, it is recommended that EFL materials developers incorporate both elaborative and simplifying techniques in text preparation and materials development. Teachers are advised to select materials that exhibit

appropriate lexical and syntactic complexity. Additionally, language educators can adapt authentic texts by simplifying them to align with students' proficiency levels.

## REFERENCES

- Abebe, M. (2011). Extensive Reading: Perception and Practice. Preparatory program in Focus. *Institutional Repository*, AAU: Addis Ababa.
- Allen D. (2019). A study of the role of relative clauses in the simplification of news texts for learners of English. *System*, 37 (4):585-599
- Alyousef, H. (2005). Teaching Reading Comprehension to ESL/EFL Learners. *The Reading Matrix*, 5 ((2): 143-154.
- Anani, Sarab, M. R., & Karimi, M. (2008). The impact of simplified and interactionally modified input on reading comprehension of Iranian EFL learners. *Journal of Human Sciences*, (56): 29 - 42.
- Berardo, S. A. (2006). The use of authentic materials in the teaching of reading. *The Reading Matrix*, (62): 60- 69.
- Brewer, B. (2008). "Effects of lexical simplification and modification on ESL readers' local level perceived comprehension" Unpublished M.A. thesis. Brigham Young University.
- Brown, D. (2003). *Language assessment: Principles and classroom practice*. Longman.
- Brummitt, Y.J. (2012). K12 Reader. *What is Reading Comprehension?* <http://www.k12reader.com/what-is-reading-comprehension/>
- Burns, R., & Smith, F. (2002). *Teaching reading in today's elementary schools* (8th ed.). Boston: Houghton Mifflin Company.
- Caldwell, J.S. (2008). *Comprehension assessment: A classroom guide*. New York: The Guilford Press
- Carroll, S. (1999). Putting "input" in its proper place. *Second Language Research*, 15, 337-388.
- Catrysse, L., Gijbels, D., & Donche, V. (2018). It is not only about the depth of processing: What if eye am not interested in the text? *Learning and Instruction*, 58: 284-294.
- Chaudron, C. (1985). Intake: On models and methods for discovering learners' processing of input. *Studies in Second Language Acquisition*, (7) 1-14. *Journal of Research in Reading*, 13: 38-54.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approach* (3rd ed.).
- Creswell, J. W. (2012). *Educational research: planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). USA: Edwards Brothers, Inc.
- Crossley, S. A., & McNamara, D. S. (2016). Text-based recall and extra textual generations resulting from simplified and authentic texts. *Reading in a Foreign Language*, (1), 1-19.
- Davison, A & Green, G.M., (eds.) (1988). *Linguistic Complexity and Text Comprehension: Readability issues reconsidered*. New Jersey, Lawrence & Erlbaum Associates, Inc.
- Dornyei, Z. (2007). *Research Methods in Applied Linguistics*. Oxford: Oxford University Press.
- Ellis, R. (2008). *The study of second language acquisition*. 2nd ed., Oxford: Oxford university press
- Erling, E. J., Adinolfi, L., & Hultgren, A. K. (2017). Multilingual classrooms: opportunities and challenges for English Medium Instruction in low- and middle-income contexts. Education Development Trust. Retrieved July 16, 2020, from <https://files.eric.ed.gov/fulltext/ED586989.pdf>
- Esfandiari, A & Zoghi, M. (2016). The Effect of Elaborative Text Modification on Iranian EFL Learners' Reading Comprehension. *Report and Opinion*; 8(4).
- Eshetie, A. B. (2010). Language Policies and the Role of English in Ethiopia. A Paper Presented at the 23rd Annual Conference of IATEFL/BESIG.
- Ethiopia Early Grade Reading Assessment (2021). Ethiopia early grade reading assessment data analytic report: Language and early learning. USAID Ethiopia. Evidence from individual differences,
- Genene, G. (2011). *Some Factors that Affect Students Reading Comprehension in EFL Learning at Primary Schools Second Cycle*. Unpublished MA Thesis: Addis Ababa University. Addis Ababa.
- Gilmore, A. (2007). Authentic materials and authenticity in foreign language learning. *Language Teaching*, 40: 97-118. doi:10.1017/S0261444807004144
- Hasan, A. S. (2008). Making Input Comprehensible for Foreign Language Acquisition. *Damascus University Journal*, 24/2: 31-53.
- Keshavarz, M. H. & Mobarra, M. K. (2003). The effect of simplification and elaboration on reading comprehension of Iranian EFL learners. *IJAL*, 6(1), 101-117.
- Kim, Y. (2003). Effects of input elaboration and enhancement on second language vocabulary acquisition through reading by Korean learners of English. *University of Hawai'i Working Papers*.
- Lee, J. & VanPatten, B. (2003). *Making communicative language teaching happen*, 2<sup>nd</sup> ed. New York, NY: McGraw-Hill.
- Long, M. H., & Ross, S. (1993). Modifications that preserve language and content. In M. L. Tickoo (Ed.), *Simplification: Theory and application*. Singapore: SEAMEO Regional Language Center.
- Maxwell, S. (2011). *The effects of two types of text modification on English language learners' reading comprehension: simplification vs. elaboration*. (Unpublished M.A. thesis), Hamline University.
- Mendida .B. (2001). *Teacher Behavior in ESL Large class in Bahir Dar Senior Secondary Schools*. Unpublished PhD Thesis, Addis Ababa University: Addis Ababa.
- Ministry of Education. (2005). Guidelines for English language enhancement in our teacher education institutions: A set of practical guidelines to help promote the use of English. *The ELIP Cascade*
- Misganaw Tilahun (2017). The reading habits of University students in Ethiopia. *Journal of Community Positive Practices*, Vol (3): 67-77.
- Mulligan, D., & Kirkpatrick, A. (2000). How much do they understand? Lectures, students and comprehension. *Higher Education Research & Development*, 19(3), 311-335.
- Nation, K. and Nurbury, F. (2005). Why reading comprehension fails: Insight from developmental disorders: *Topics in language disorders*, 25: 21-32

- National Agency for Examinations. (2010). Ethiopian First National Learning Assessment of Grades 10 and 12 Students. Addis Ababa. Retrieved from: <http://www.nae.gov.et>
- Nunan, D. (2005) *language teaching methodology*. Hertfordshire: prentice hall international
- O'Donnell.M (2005). *Use of textual elaboration with literary texts in intermediate Spanish*. Unpublished PhD Thesis, University of Iowa.
- Oh, S. (2001). Two types of input modification and EFL reading comprehension: simplification versus elaboration. *TESOL Quarterly*, 35(1): 69–96.
- Ohata, K. (2005). Potential Sources of Anxiety for Japanese Learners of English: Preliminary Case Interviews with Five Japanese College Students in the U.S. *TESL-EJ*, 9/3: 1-21.
- Pardo, L.S., (2004) 'What every teacher needs to know about comprehension', *The Reading Teacher* 58(3), 272–280. <https://doi.org/10.1598/RT.58.3.5>
- Parker, K., & Chaudron, C. (1987). The effects of linguistic simplifications and elaborative modifications on L2 comprehension. *University of Hawaii Working Papers in ESL*, 6,107-133.
- Ragan, A. (2006). Using adapted texts in ELL classrooms. *The ELL Outlook*, 5(2). Reading Association Sage Publications.
- Samuel Moges (2011). *Factors that affect students reading comprehension in two Government schools*. Unpublished MA thesis. Addis Ababa University.
- Siddharthan, A. (2014). A survey of research on text simplification. *International Journal of Applied Linguistics*, 165(2): 259–298.
- Sona, B. D. (2018). The effects of a cognitive foundation of learning to read on the reading skills of grade 3 learners Ethiopia, Ph.D.thesis, University of South Africa, Pretoria,
- Sonmez, S. (2007). An overview of studies on the use of authentic texts in language classrooms. Proceedings of the third international online conference on second and foreign language teaching and research. *The Reading Matrix Inc*: 51-62.
- Sualih. M & Gebeyehu. F. (2020). The Appropriateness of Literary Texts in Teaching Reading Skills: The Case of Some Selected High Schools in Ethiopia. *Theory and Practice in Language Studies*, 10(10).
- Tekalign Mamo (2019). A Comparative study of achievements in reading comprehension between male and female students. Algie Sachi Woreda Ilubabor zone, Ethiopia
- Tekle Ferede. (2016). A Study of independent reading in English as a foreign language in Ethiopian Classes. Unpublished M.A thesis. Jimma University. Ethiopia.
- Temesgen Atnafu. (2015). An investigation into motivational techniques teachers use in reading schools. The University of South Africa.
- Tiono, N. I. & Sylvia, A. (2004). The Types of Communication Strategies Used by Speaking Class Students with Different Communication Apprehension Levels in English Department of Petra Christian University, Surabaya. *Petra Journal*, 6/1: 30-46.
- Tomlinson, B. & Masuhara, H. (2013). Review of adult EFL courses. *ELT Journal*, 67(2): 233-249.
- Uljin, J. & Strother, J. (1990). The effect of syntactic simplification on reading EST texts as L1 and L2.
- Urano, K. (2002). Effects of simplification and elaboration on L2 comprehension and acquisition. Retrieved June, 27, 2011. <http://www.Urano-ken.com>
- Vincent, M. (1986). Simple text and reading text. Part 1: Some general issues. In C. J. Brumfit & R. Carter (Eds.), *Literature and language teaching* (pp. 208–215). Oxford, England: Oxford University Press.
- Wade, S. E., Buxton, W. M., & Kelly, M. (1999). Using think-aloud to examine reader-text interest. *Reading Research Quarterly*, 34(2): 194–216. <https://doi.org/10.1598/RRQ.34.2.4>
- Wigfield, A., & Guthrie, J. T. (1997). Relations of children's motivation for reading to the amount and breadth of their reading. *Journal of educational psychology*, 89(3), 420.
- Yano, Y., Long, M., & Ross, S. (1994). The effects of simplified and elaborated texts on foreign language reading comprehension. *Language Learning*, 44, 189- 219.
- Young, D. J. (1991). Creating a Low-Anxiety Classroom Environment: What Does Anxiety Research Suggest? *Modern Language Journal*, 75/4: 426-439.