EXPLORING HIGHER ORDER THINKING SKILLS IN THE TEACHING OF READING SKILLS AT ETHIOPIAN HIGHER EDUCATION: A STUDY ON READING EXERCISES AND LEARNERS' PERCEPTIONS

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ABSTRACT

Boosting learners' higher cognitive skills has become a priority in modern education. Language teachers' responsibilities in modern language teaching have expanded to include improving students' thinking skills. In line with this idea, this study was aimed at examining the role teaching reading skills at a higher education institution has in enhancing learners' higher-order thinking skills. In order to achieve the main objective of the study, an analysis was carried out on the levels of thinking that questions in reading exercises aim to elicit from the learners and how the students perceive the reading exercises from the perspective of enhancing higher-order thinking skills. The findings of the study show that the reading exercises are dominated by lower-order questions; there are fewer higher-order questions in the exercises. Thus, the reading exercises are not capable of enhancing learners' higher-order thinking skills. The students also have the perception that the reading exercises are not meant to develop their higher-order thinking skills.

Keywords: Higher Order Thinking Skills (HOTS), Reading, Reading Exercises/Questions

INTRODUCTION

In discussing educational aims, the development of learners' cognitive domain is usually prioritized. Education should seek to improve students' cognitive skills, which are the foundation of a thinking engine (Brown, 2004; Bloom, 1956; Freire, 1970). Enhancing learners' thinking abilities and developing them into autonomous, confident, independent problem solvers and decision makers is stressed in an education system that focuses learners' intellectual growth (Cruz, 2003; Dong, 2015; Gelder, 2005).

An educational system aimed toward students' intellectual growth is strongly promoted in this twenty-first century, which is defined by technological innovation and mass distribution of knowledge (Hove, 2011; Kennedy, 2016; Rezaei, 2011; Collins, C., & Mangieri, 1992). As a result, various countries throughout the world have been forced to reconsider their educational objectives in order to meet the demands of the twenty-first century. Equipping learners with 21st-century skills in order to make their citizens globally and locally competent has become an important part of such countries' teaching and learning processes (Collins & Mangieri, 1992; Fisher, 2001; Shaila, and Trudell, 2010).

Modern teaching approaches aiming at integrating 21st century skills and assisting learners construct their own knowledge and transfer it to the real world are highly encouraged. Teachers are required to make their learners cognitively engaged and challenged by learning activities undertaken in the classroom (Anderson, 2001; Cruz, 2003; Ennis, 1992). Teachers are also expected to play a facilitating role, which is quite different from their roles in traditional approaches to teaching. In traditional approaches to teaching, teachers are the sole sources of knowledge, and they are expected to impart that knowledge and fill learners with facts (Anderson, 2001; Mayer, 2002). Students are viewed as passive recipients of the knowledge they are given. Such instructional approaches have been criticized for leaving little room for students to develop higher-order thinking skills (Ibid).

Scholars advocate for instructors to use teaching methodologies that engage learners in meaningful learning and equip them with 21st-century skills in modern language teaching (Boroditsky, 2009; Dong, 2006; Elfatihi, 2017).This is because the twenty-first century demands language teachers teach beyond language skills and language items. For instance, equipping learners with thinking skills has become one of the major roles of teachers of English as a Foreign Language (Ibid).

Thinking has become the fifth language competency in today's modern language teaching and learning process (Elfatihi, 2017; Ervina, 2020; Ghanizadeh, eta'l 2012; Lourdes, and Gaibisso, 2013; Qing, 2013). The language classroom has been demonstrated to be a significant backdrop for stimulating learners' thinking and improving their cognitive

skills (Hughes, 2014; Qing, 2013). As a result, incorporating thinking skills in the teaching of English language skills (speaking, reading, writing, and listening) has become critical to contributing to the intellectual growth of learners (Elfatihi, 2017; Halvorsen, 2005; Karimi and Veisi, 2006).

There are a number of theoretical and empirical evidences indicating that reading classes offer learners better opportunities to practice higher-order thinking skills (Karimi, and Veisi, ; 2006; Nur, 2014; Pourghasemian, and Hosseini, 2017;). This is mainly due to reading is a cognitive process, and it is thinking by itself, and effective teaching reading, in which teachers intentionally apply various higher-order thinking strategies and reading tasks aimed at stimulating learners' various levels of thinking skills, increases the likelihood of learners developing higher-order thinking skills (Nur, 2014; Hosseini, eta'l. 2012). Such an approach to the teaching of reading makes learners process information using higher level thinking skills, and in turn creates better opportunities for the learners to practice thinking at higher levels (Ervina, 2020; Jantrasakul, 2012).

A variety of theoretical and empirical evidences suggest that reading programs provide learners with more opportunity to exercise higher-order thinking abilities (Karimi and Veisi, 2006; Nur, 2014; Pourghasemian and Hosseini, 2017). This is primarily due to the fact that reading is a cognitive process that requires thinking, and effective teaching reading, in which teachers intentionally use various higher-order thinking strategies and reading tasks aimed at stimulating learners' various levels of thinking skills, increases the likelihood of learners developing higher-order thinking skills (Nur, 2014; Hosseini, eta'l. 2012). This approach to reading instruction requires students to process material using higher level thinking abilities, which provides more opportunity for students to practice thinking at higher levels (Ervina, 2020; Jantrasakul, 2012).

Ethiopia's Education and Training Policy was established in 1994. As clearly stated in the policy, producing active citizens equipped with cognitive skills that enable them to be effective and efficient problem solvers and decision makers is among the major goals of the policy. More specifically, the policy aims at preparing a well-rounded workforce capable of contributing to the country's development progress (EFDRGE, 1994). To

achieve these and other aims, the policy emphasizes the necessity of designing and implementing learner-centered school curriculum that encourage active participation and meaningful teaching and learning processes at all levels of the country's educational system (Ibid).

However, after 15 years of policy implementation, the results of a curriculum review conducted in 2009 revealed that the policy was unable to achieve the above-mentioned purpose (MoE, 2009). This was largely owing to the persistence of the traditional approach to teaching and learning, which emphasized rote learning and memorization while leaving little room for active participation among students (Ibid). This appraisal was concluded with the necessity for curriculum reform and the creation of a Curriculum Framework for Ethiopian Education (KG–Grade 12), a document that would serve as a roadmap for the intended reform of school curricular. The document pointed out the need to make revisions to curriculum materials, notably syllabi, textbooks, and overall teaching and learning activities across the grade levels. For instance, the need for teachers to employ modern teaching methods was described as follows:

> *Modern teaching methods recognize that there is a need to give students the chance to think about what they are being taught or what they are learning. This means that it is essential that teachers do not spend whole lessons talking, but plan in opportunities for class discussions in which students can exchange ideas, resolve misunderstandings and make sense out of what they are listening to, or engage in a variety of different activities which give them the opportunity to construct meaning for themselves out of the information they are receiving. This approach is based on the constructivist theory of teaching and learning, which underpins the concept of competency-based education* (MoE, 2009: p.2)

The ideas in the preceding statements clearly demonstrate the need for school curricula to be revised based on constructivist theory and competence-based learning principles, which promote learners' active participation and knowledge construction with the goal of improving learners' cognitive skills at various grade levels.

Developing learners' critical thinking abilities, innovative skills, decision-making skills, problem-solving skills, and leadership skills in the country's education system has been stressed in many educational policy documents in order to develop citizens who meet the needs of the century. For example, the current Ethiopian Education Development Roadmap (2018-30) clearly indicates the need to prioritize such skills in the proposed educational sector reform, as the country's education system over the last 25-30 years has failed to produce the desired innovative, job-creating, and globally competent graduate workforces (MoE, 2018). This may be observed in the present high unemployment rate among young people of various educational levels who are waiting for the government to give jobs rather than creating their own (Ibid).

Enhancing learners' higher-order thinking capacities in the teaching and learning process at all educational levels is a significant focus of the roadmap's proposed change. This roadmap's reform has already resulted in certain improvements to higher education in the country. Among the modifications undertaken in higher education include the addition of new courses such as Logic and Critical Thinking, Communicative English Language Skills I and II, Geography, History, and others. It is critical to analyze the course material as well as how it is delivered in the classroom. Do the course materials, activities, and teaching approach used to teach the courses encourage students' thinking and strive to build learners' higher-order thinking skills? This is a crucial question and needs to be empirically explored. Thus, this study aims to explore the role of teaching reading in contributing towards the enhancement of learners' higher-order thinking skills at higher education.

Higher-order thinking, often known as critical or strategic thinking, is the capacity to use information to make decisions, solve issues, analyze arguments, negotiate difficulties, or develop arguments (Ervina, 2020; Keshta and Seif, 2013). It also involves the ability to challenge assumptions and ideas, draw inferences, analyze evidence, and evaluate conclusions (Ibid). Higher order thinking is the act of processing information using higher cognitive abilities. It is the process of applying higher-order cognitive talents to process information (Anderson, 2001; Bloom, 1956). This way of thinking goes beyond

simple knowledge memory and recognition to information manipulation, allowing pupils to solve issues, develop comprehension, and uncover meaning (Ibid).

Higher-order thinking is usually defined as the three top end of Bloom's cognitive domain: analyzing, evaluating, and creating. These are also known as critical thinking skills involving the ability to (a) identify and clarify problems, issues, conclusions, reasons, and assumptions; (b) judge the credibility, relevance, and consistency of information; and (c) infer or solve problems, as well as draw fair conclusions (Hughes, 2014; Hove, 2011 Lai, 2011).

The main objective of the study is to explore higher order thinking skills in the instruction of reading skills at Addis Ababa Science and Technology University, one of the higher education institutions in Ethiopia. More specifically, the study aims at:

a) Analyzing the levels of thinking skills demonstrated in the questions given in the reading exercises

b) Identifying how the students perceive the reading exercises from the perspective of enhancing higher order thinking skills

c) Checking whether there is statistically significant difference among male and female students regarding how they perceive the reading exercises from the perspective of enhancing higher order thinking skills

The following are the research questions aim at guiding the study:

a) What are the levels of thinking skills demonstrated in the questions given in the reading exercises?

b) How do the students perceive the reading exercises from the perspective of enhancing higher order thinking skills?

Is there a statistically significant difference between male and female students regarding how they perceive the reading exercises from the perspective of enhancing higher order thinking skills?

METHODOLOGY

Research Design

For this study, mixed methods research is employed. Mixed methods research is a research design in which qualitative and quantitative approaches are used in types of questions, research methods, data collection and analysis procedures and inferences. Johnson and Onwuegbuzie (2004:17) define mixed methods research as "a research method where the research mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study".

Among the four existing typologies of mixed methods, the design employed for this study is Concurrent Triangulation Design. It is a mixed methods design in which two or more methods are used to confirm, cross-validate or corroborate findings within a study. It is also a single- phase design because it involves simultaneous collection of qualitative and quantitative data (Hesse-Biber, 2010; Creswell, 2002). Both QUNT and QUAL methods are used to overcome a weakness in using one method with the strengths of another. In this design, after QUAL and QUANT data are concurrently collected, separate analyses are conducted. Triangulation occurs once all findings/results are in, whereby one can compare and contrast for similarities and incongruences.

Instruments of Data Collection

Questionnaire, Document Review and Focus Group Discussion were data gathering tools employed in this study. Questionnaire was used to gather data from the student participants of the study. The questionnaire was prepared based on the research questions and review of related literatures. Many of the items in the questionnaire were adapted from Madden & Almasi (2006) cited in Yenus (2017), Al Sereidi (2019) and Keshta and Seif (2013). The pilot test for the questionnaire was carried using 40 randomly selected students from the target population of the study. Then, reliability test using Cronbach alpha was calculated for the question items in the questionnaire. The reliability test result is 0.903. This coefficient indicates high internal consistency and an excellent indicator for reliability of the questionnaire.

Document analysis is the major data gathering tool employed to answer the above research question. Thus, content analysis was employed to identify the thinking levels demonstrated in the questions in reading exercises presented in the course material used to

teach English language at university. Reading exercises in unit one, unit three and unit five of *Communicative English Language Skills I* were subjected to content analysis. These units were randomly taken. An Analysis Card and a Checklist which were prepared based on Bloom's Taxonomy of Cognitive Domain were employed to identify the levels of thinking skills incorporated in reading question items of the selected reading exercises. Prior to employing, the analysis Card and a Checklist were presented to the panel of experts for comments and necessary feedbacks were obtained.

The analysis was carried out by two analyzers: the researcher and the co-data collector. This is to mean that the researcher and one English teacher who was facilitator during undertaking conducting focus group discussions participated in analyzing the thinking skills in questions in reading exercises. Prior to the analysis, the researcher explained the objective of the analysis, and discussed the analysis card and the checklist to the analyzer. The researcher believes that employing this analyzer has contributed a lot to the reliability of the analysis accomplished. Finally, test for inter-rater reliability was conducted in order to know the level of consistency between the findings of analysis of the reading exercises done by the two analyzers. The following table shows the level of consistency between the results of the two analyzers.

Table 1: Coefficient Correlation among Analyzers: Reliability through Persons

	Analyzers	Number of Items	Points of Agreement	Points of Difference	Correlation Coefficient
Reading Exercises	First Analyzer	53	50	3	95.6
	Second Analyzer	53			

Focus Group Discussion was also used to collect data from the students. This tool had two major roles: to collect further data and also cross check data obtained through questionnaire. Two focus group discussions with 8 participants each were conducted. 16 students, 8 male and 8 female students were the participants of the conducted focus group discussion. The discussions were audio-recorded and transcribed for the data analysis.

FINDINGS AND DISCUSSION

This part deals with the findings of the study. The findings have been presented based on the research questions of the study. Accordingly, the following is the presentation of the finding for the research question: What are the levels of thinking skills demonstrated in the question items of the reading tasks?

Table 2: Frequencies and Percentages of thinking skills in the selected reading exercises

Cognitive Process			
Lower Order Thinking Skills (LOTS)	**Frequency(n)**	**Percentage (%)**	**Test Item Examples**
Remember (C1)	13	24.52	Why may reading be the most demanding work at university or college? What books or texts did you read when you were in high school?
Understand (C2)	30	56.60	What do the writers mean by ―Reading is a skill which is often taken for granted? …in **their** everyday lives… in (paragraph 7) **their** refers to_____
Apply (C3)	1	1.89	Have you ever been to a place where there was no one else around who is the same age as you were? Were most of the people younger than you? Were most of the people older? How does it feel to be in a social context where you cannot find people of your age group?
Higher Order Thinking Skills (HOTS)			
Analyze (C4)	5	9.43	How did you read them? Did you read them all in similar ways? Did you use different ways of reading? If different, what were the ways? Read through paragraph 4 again. If you **decide** to engage in team sports, which one(s) **will** you choose? Why?
Evaluate (C5)	2	3.77	What would happen if a country had only very young people or very old people?
Create (C6)	2	3.77	Write a short paragraph explaining all that you

			have learned from the passage.
Total	**53**	**100**	

As different scholars clearly put, questions in reading exercises are required to engage learners in different cognitive processes in order to facilitate learners' better comprehension of the text being read. Questions with various levels give learners opportunities to think at different levels. This is to mean that higher order questions initiate higher order thinking skills whereas lower order questions initiate lower order thinking skills. Lower order questions are questions that encourage students to remember, understand and apply the presented information/material. In contrast, higher order questions are questions of analyzing, evaluating and creating that require the learners employ higher cognitive levels in answering the questions.

As depicted in table 2 above, the analysis of questions in the selected reading exercises has resulted in 13(24.52%) questions that require students to remember, 30 (56.6%) questions that require the students to understand the information presented in the texts and 1(1.89%) question of application. Out of 53 questions, 44 are lower order questions that aim at initiating lower thinking skills, mainly remembering and understanding, in the students, but it has been found only one question that helps students engage in the cognitive process of applying.

However, there are fewer higher order questions identified in the analysis of the reading exercises. 5(9.43%) questions are questions of analysis, 2(3.77%) are question of evaluation and 2(3.77%) are questions of creating. Among 53 questions, only 9 are questions that promote higher order thinking skills. This figure is very small as compared to the distribution of lower order questions demonstrated in the exercises subjected to the analysis. From the information, it is possible to conclude that lower order questions are dominating the selected reading exercises. These questions are questions that encourage learners deal with information explicitly put in the texts, and they have little role in promoting learners' higher order thinking skills and deep comprehension of the texts.

The following are the results presented on the second research question: How do the students perceive the reading tasks in terms of enhancing their higher order thinking skills?

Table 3: Students' Responses on how they view the reading exercises from the perspective of contributing towards enhancing their analyzing skill

No.	Questions in the reading exercises require me to…	1 N or %	2 N or %	3 N or %	4 N or %	5 N or %	Mean	SD
	Analyzing Skill							
1.	distinguish facts from opinions.	40	55	10	5	5	1.96	0.882
		34.78%	47.82%	8.69%	4.34%	4.34%		
2.	infer the mood, attitudes, or tones of the authors.	60	38	12	5		1.66	0.733
		52.17%	33.04%	10.43%	4.35%			
3.	explain relationships among ideas in texts.	32	45	20	28		2.55	1.062
		27.82%	39.13%	17.4%	24.3%			
4.	investigate other possible and alternatives ideas in texts.	6	67	32	10		2.4	0.723
		5.2%	58.3%	27.8%	8.7%			
5.	find relevant arguments to support the view of the texts	21	44	26	23	1	2.47	1.037
		18.3%	38.3%	22.6%	20%	9%		
6.	distinguish main ideas from the supporting ones.	36	44	20	10	5	2.17	0.985
		31.3%	38.26%	17.4%	8.7%	4.3%		
7.	compare and contrast information from reading texts	32	55	24	4		2	0.94
		27.82%	47.8%	20.9%	3.49%			
8.	categorize information in texts.	39	45	21	10		2.01	0.871
		33.91%	39.13%	18.26%	8.7%			
	Total number of Participants	115						

Strongly Disagree =1, Disagree=2, Uncertain =3, Agree=4, Strongly Agree=5

Table 3 above contains statements describing one of the sub-skills of the higher order thinking skills: Analyzing Skill. The statements are aimed to gather data on how the participants view the reading exercises from the perspective of enhancing their analyzing skill. As can be seen from the table, figure of data obtained on each statement clearly shows participants' disagreeing with the idea expressed in each statement. Above 80% of the respondents disagree that the reading exercise given in the material do not require them

distinguish facts from opinions, infer the mood, attitudes, or tones of the authors, explain relationships among ideas in texts, distinguish main ideas from the supporting ones, compare and contrast information from reading texts, and categorize information in texts. The remaining respondents 60% to 75% disagree that the reading exercises require them investigate other possible and alternatives ideas in text and find relevant arguments to support the view of the texts. The obtained figures clearly depict that the participants agree the reading tasks provided in the teaching material are not contributing towards developing their analyzing skill.

Table 4: Students' Responses on how they view reading exercises from the perspective of contributing towards enhancing their evaluating skill

No.	Questions in the reading exercises require me to…	1	2	3	4	5		
		N or %	N or %	N or %	N or %	N or %	Mean	SD
	Evaluating Skill							
1	compare your opinion with that of the authors in the texts	23	51	26	15		2.29	0.934
		20%	44.3%	22.6%	13%			
2	conclude themes of texts	16	49	32	18		2.45	0.92
		13.9%	42.6%	27.8%	15.7%			
3	recognize and judge the rationality, subjectivity and objectivity of the view in the texts from the previous knowledge	19	49	33	14		2.37	0.902
		16.5%	42.6%	28.7%	12.2%			
4	make choices based on reasoned argument	15	35	34	29	2	2.72	1.039
		13%	30.4%	29.6%	25.7%	1.7%		
5	express your opinions towards situations in the target texts.	31	51	20	13		2.13	0.925
		26.95%	44.34%	17.39%	11.3%			
6	justify and come up with evidences to support your argument	19	40	41	15		2.45	0.92
		16.5%	34.8%	35.7%	13%			
7	deliberate and discuss issues/opinions in texts to find solutions.	41	31	25	18		2.17	0.889
		35.65%	26.95%	21.73%	15.65%			
	Total number of Participants	115						

Strongly Disagree =1, Disagree=2, Uncertain =3, Agree=4, Strongly Agree=5

Similar to the data obtained in table 2 above, the responses of the majority of respondents in table 3 above also show that participants disagreeing with each of the idea expressed in each of the given statement; as it can be seen from the table about 50% to 75% of the respondents disagree with the ideas expressed in the given statements. This is to mean that the participants agree that the reading exercises given in the teaching material do not help students enhance their evaluating skill because the exercises do not give the learners to practice such skill in the reading classes. Thus, it is possible to deduce that the students perceive that the reading exercises   in the teaching material do not have the capacity to make them enhance their evaluating skill.

Table 5: Students' Responses on how they view reading exercises from the perspective of contributing towards enhancing their creating skill

No .	Questions in the reading exercises require me to…	1	2	3	4	5		
		N or %	N or %	N or %	N or %	N or %	Mean	SD
	Creating Skill							
1	generate information related to the texts.	17	37	38	23		2.58	0.973
		14.8%	32.2%	33%	20%			
2	combine your own information with the information in the texts	9	35	54	17		2.69	0.82
		7.8%	30.4%	47%	14.8%			
3	connect knowledge from different sources	16	37	25	28	9	2.8	1.186
		13.9%	32.2%	21.7%	24.3%	7.8%		
4	design creative writing based on reading texts	24	52	39			2.13	0.732
		20.9%	45.2%	33.9%				
5	juxtapose (put together) ideas or information in text to form a major concept.	16	44	34	20	1	2.53	0.967
		13.9%	38.3%	29.6%	17.4%	0.9%		
6	formulate a creative or innovative concept of reading materials.	22	40	31	18	4	2.5	1.079
		19.1%	34.8%	27%	15.7%	3.5%		
	Total number of Participants	115						

Strongly Disagree =1, Disagree=2, Uncertain =3, Agree=4, Strongly Agree=5

The statements in the table 5 above aim at eliciting respondents' responses on how they view the reading exercises in the teaching material in terms contributing towards enhancing creating skill. The obtained data in the table indicate that all of the respondents disagreeing with each of the given sentence. The figures clearly show that the respondents perceiving the reading exercises provided in the teaching material are not reading exercises that help them develop creating skill.

From the data put in table 3, 4 and 5, it is possible to conclude that the respondents have the views that the reading exercises in *Communicative English Language Skills I* are not aiming to enhance learners' analyzing skill, evaluating skill and creating skill respectively. It is possible to conclude that the students have the perceptions that the reading exercises are meant not to enhance their higher order thinking skills.

The responses obtained from the focus group discussions also support the above conclusion. The students uttered that reading activities practiced in the reading classroom are less challenging.

Frankly speaking the reading activities we are required to do in the classroom are simple one; when I was at high school the teacher was making us to make book review. We were given a book every two or three weeks to read it and review the content. It was really amazing task; we were highly enjoying doing that. Here, what were expected to accomplish in reading class is below our ability. Reading exercises are simple and their answers are explicitly there on the texts read.(ST1)

As indicated in the quote, the reading activities at university level are easy as compared to the reading activities undertaken at high school. To support the above quote, one of the discussants also expressed the following ideas:

Questions we are doing in the reading classes are not this much challenging for me. I do them for the sake of doing just because I am ordered to do so. The passages are not interesting and motivating to read. I used to read more complex and interesting texts while I was at school. My high school English language

teachers were teaching us literature as there was learning literature at my high school English classes. Now, I do not think the texts and the questions encouraging students think differently as the texts are simple and the questions are straightforward.(ST7)

In general, the data obtained from the focus group discussion clearly tell that the participants have the view that reading tasks are not based on the levels of the learners and they in are not capable enough to enhance thinking skills. The following quote vividly shows this conclusion:

The reading questions/ activities in the material are not based on the students' level of reading. As I understand, there are different kinds of students in a class; there are students with good experience of reading; there are students we poor reading ability as they did not have good attention to reading at previous school. The passages and the questions are not considering such students. The questions are not the one which makes investigate. I prefer historical passage and questions that make to discuss and debate on the content. Such activity, up on my past experience, helps students to present their views and take and react to the views of other students in the class. (ST3)

The following is the presentation of the result of the third research question of the study: Is there a statistically significant difference between male and female students how they perceive the reading tasks from the perspective of enhancing their HOTS?

Table 6: Result of Independent Sample Test

Group Statistics					
	Gender of Respondents	N	Mean	Std. Deviation	Std. Error Mean
Perceptions to reading Tasks	Female	55	2.6306	.46594	.06283
	Male	60	2.5583	.45663	.05895

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Perceptions to reading Tasks	Equal variances assumed	.014	.905	.839	113	.403	.07225	.08608	-.09829	.24278
	Equal variances not assumed			.839	111.69	.404	.07225	.08615	-.09846	.24295

In this study data were collected from 55 female and 60 male students. Independent sample t-test was conducted in order to know any statistical difference between male and female students how they view reading tasks in terms of enhancing their higher order thinking skills. As the table clearly shows the p value for the independent sample t-test obtained is above 0.05 which is to mean there is no statistically significance difference between the perceptions of the male and female participants of the study. Both the male and female participants of the study have the views that the reading exercises provided in the teaching material, *Communicative English Language Skills I*, are not intended to enhance higher order thinking skills.

Discussion

In addition to assisting students in comprehending the texts being read, questions in reading exercises play an important part in strengthening learners' thinking skills. Mainly, higher order questions that stimulate higher level thinking skills have tremendous benefit in enhancing learners' higher order thinking skills. Such inquiries assist pupils in reading critically and processing material at a higher cognitive level (Liaw, 2007, Nur, 2014).

Questions that require students employ the thinking skills like analyzing, evaluating and creating are referred to as higher order thinking skills. They are questions that demand learners to go beyond literal understanding and have deeper comprehension of what they

read. Being divergent questions they are, they give learners chances to see things from different perspectives, elicit wider responses and process the information at higher cognitive skills (Nur, 2014; Pourghasemian and Hosseini, 2017; Sano, 2014).

Lower order questions are those which focus on literal comprehension of a given text and engage learners in processing information using lower cognitive levels such as remember, understand and apply. They are questions that stimulate lower thinking skills in learners as they do not give learners to explore ideas from different perspectives in the process of offering answers (Nur, 2014; Pourghasemian and Hosseini, 2017; Williams, 1996). Lower order questions are those which focus on literal comprehension of a given text and engage learners in processing information using lower cognitive levels such as remembering, understanding, and applying. They are questions that stimulate lower thinking skills in learners as they do not give learners the opportunity to explore ideas from different perspectives in the process of offering answers (Nur, 2014; Pourghasemian and Hosseini, 2017; Williams, 1996).

Offering students the chances to work on the questions with various cognitive levels in reading exercises helps students initiate different levels of cognitive domain (Ibid). Different scholars recommend balanced mix of both types of questions in order to help learners enhance their critical thinking skills. In reading activities, giving pupils the opportunity to work on questions with varied cognitive levels helps them initiate different degrees of cognitive domain (Ibid). To help learners improve their critical thinking skills, several experts advocate a balanced mix of both types of questions.

With the above notions in mind, questions from the selected reading exercises were analyzed to answer the study's first research question. The thinking abilities included into each question appearing in the selected reading exercises exposed to the analysis were effectively identified using an Analysis Card and a Checklist constructed based on Bloom's Taxonomy ideas.

As the result of the analysis made on Table 2 (Frequencies and Percentages of thinking skills in the selected reading exercises) shows, the thinking skills demonstrated in the majority of the questions in the sampled reading exercises are lower-order thinking

skills. Among 53 questions subjected to the analysis, it was identified that 44 (83.01%) questions are lower order questions, whereas only 9 (16.98%) questions are higher order questions. The result clearly shows lower-order questions are dominating the reading exercises. This result corresponds to the findings of researchers conducted by Muchlis (2015), Esra (2019), and Fatma (2015)

It is obvious that students are one of the major actors in the teaching and learning process. They are target clients that mainly teachers' activities and instructional materials should center on in order to satisfy their needs. Tables 3, 4, and 5 provide data collected from students on how they see reading exercises in terms of helping to the development of higher-order thinking skills. The results of the data analysis suggest that the majority of students disagree with the beliefs expressed in the bulk of the statements. It was deduced that the students thought the reading tasks contributed less to their ability to think. The bulk of questions in the exercises are easy ones that foster literal comprehension, which can be performed by using lower cognitive levels like remembering and comprehending, according to the students' replies during focus group discussions. The responses of the students during focus group discussions also support this conclusion stating that the majority of questions in the exercises are simple ones that encourage literal comprehension which can be achieved employing lower cognitive levels like remembering and understanding.

The data gathered to address the third research question also demonstrated that there is no statistically significant difference in how male and female students see reading exercises in terms of improving their higher-order thinking skills. As the result of data analysis in table 6 clearly shows the p value for the independent sample t-test obtained is above 0.05 which is to mean there is no statistically significance difference between the perceptions of the male and female participants of the study. Both the male and female participants of the study have the views that the reading exercises provided in the teaching material, *Communicative English Language Skills I*, are not intended to enhance higher order thinking skills.

CONCLUSION

As the results of this study indicate, the majority of the reading questions students required to exercise in the reading classes are lower order questions. Such questions have little value to enhance learners' higher order thinking skills. The finding on the perception of the students also shows that learners have the views that the reading exercises they are currently practicing in the reading classroom are less effective in enhancing higher order thinking skills.

In this modern era, developing learners' higher order thinking skills/critical thinking ability has been considered as a central learning outcome of education; developing learners' higher order thinking skills/critical thinking ability has become an important theme in order to produce learners who ably compete and properly function in this 21st century. There is a consensus that language education creates conducive environment for enhancing learners thinking abilities. Mainly, learners get a lot of opportunities to practice higher order thinking strategies in the reading classrooms. Well-designed reading exercises can assist learners stimulate different cognitive levels in creating responses to the questions.

This study is limited to only one higher education in the country; it would be very interesting to have similar study incorporating more higher education institutions in the country to come with generalizable results. However, based on the above conclusion, it is important to give the following recommendations: At higher education learners need to be well challenged in order to make them ready for the real life challenges; tasks students required to undertake at this grade level need to create cognitive challenge on them. So, it is important to revise the reading exercises in *Communicative English Language Skills I* and make them fit to the level of the students. Teachers of English at higher education need to critical see at the reading exercises given in the material currently used. They need to adapt the exercises and also design additional reading tasks that can stimulate different cognitive levels the learners.

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