Exploring teachers' perceptions and practices of integrating critical thinking skills in teaching reading

Michael Amale [1,*], Hawasssa University, Hawassa Sidama, Etiopia. E-mail: mikuye2@gmail.com

Abebe Gebre Tsadik [2], Addis Ababa University, Addis Ababa Ethiopia. E'mail: hiwoteabebe9@gmail.com

Corresponding author: Michael Amale E-mail: mikuye2@gmail.com

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ABSTRACT

This study was aimed to explore the teachers' perceptions and practices of infusing critical thinking skills into reading instruction to improve students' reading comprehension. It also identified the perceived challenges that hinder the practices of critical thinking skills in reading classes. The research utilized a descriptive survey design and an explanatory mixed-methods approach to collect data. The study involved 40 out of 52 English instructors and three reading texts teachers used to practice reading comprehension questions were randomly selected. Besides, texts used for quiz, mid-exam and final examination were purposely collected to evaluate the text to which the teachers integrated critical thinking skills classroom reading activities and assessments. Quantitative data was gathered through questionnaires, while qualitative data was obtained through document analysis. Statistical analysis was conducted using SPSS version 24, and content analysis was used for the qualitative data. The survey results revealed that teachers had moderate level of perceptions of integrating critical thinking skills (m=3.59) and identified that student-related challenges (m= 3.76) as significant obstacles to practice critical thinking skills. The results of document analysis indicated that critical thinking skills practiced rarely. It can be concluded that teachers' conceptual perception at moderate level was not adequate to infuse critical thinking skills into reading instruction to enhance students' reading comprehension. Therefore, it is crucial to train teachers in the integration of critical thinking skills into an interactive reading curriculum to motivate and engage students and help them understand the reading skills more deeply. Further research is recommended to explore the impact of teachers' perceptions of critical thinking skills on students' reading comprehension.

1. *Introduction*

In the 21st century, institutions of higher education have placed a significant emphasis on the development of critical thinking skills among students. These days, society requires individuals to possess a new set of competencies, including the ability to arrange, analyze, evaluate and transfer increasingly growing information. From this perspective, the utilization of critical thinking(CT)

skills among students makes independent thinkers, thereby promoting self-directed learning and autonomy, both of which are essential components of higher education (Jasim & Yahya, 2023). In this regard, universities are vital in nurturing CT skills by involving students in advanced learning activities that enable them to express their viewpoints effectively and enhance their deep reading abilities. CT skills are highly valued in higher education due to their positive impact on students' academic achievements, as noted by Ennis (2008). Facione (2013) divides fundamental CT skills into cognitive and disposition categories. Cognitive skills are the foundation of critical thinking and include interpretation, analysis, inference, evaluation, explanation, and self-regulation (Facione, 1990). The expert has defined each of these skills as follows:

Interpretation is the process of understanding and explaining the significance of different experiences, data, beliefs, or rules. Analysis involves identifying relationships between statements and concepts. Evaluation refers to examine the coherence and logical strength of statements and evidence. Inference is about drawing logical conclusions and forming assumptions. Explanation is the ability to articulate concepts clearly and logically. Self-regulation involves monitoring and correcting one's own cognitive activities.

Studies revealed that infusing CT skills have various benefits in the contemporary education system. According to Lai (2009), CT helps individuals to become active and effective life-long learners, and important problem solvers leading to empowerment. Researchers like Tsui, 1998; Giancarlo & Facione, 2001, Moore, 1995) identified CT ability as one of the constructs which has been proven to be a good predictor of academic performance.

Critical thinking skills are also widely recognized as a crucial component in developing language skills, specifically in writing and reading (Elder & Paul, 2006; Shaharom & Abdullah, 2004; Seung-Ryul Shin, 2002; Stapleton, 2001; Moore, 1995). According to Marzban & Barati (2016), "CT skills help students to be skeptical and enable them to analyze and interpret opinions". Besides, the ability of CT skills enables them to make more informed decisions about the accuracy and effectiveness of propositions. Therefore, infusing CT skills in reading lessons and assessment improves students' reading comprehension skills. Enhancing reading comprehension skills enhances focus, attention, observation, identifying key points in text, responding effectively to messages, conveying information clearly, and applying analysis skills in different situations (Cottrell, 2005).

Therefore, philosophers and educators emphasize the significance of CT skills as a fundamental outcome of a successful educational experience. For example, Fahim and Saeepour (2011) demonstrated that the instruction of CT skills can improve students' language learning, especially in the context of English as a Foreign Language (EFL). Integrating these skills into EFL classrooms has been shown to be highly advantageous, as indicated by studies by (Kabilan, 2000; Shirkhani & Fahim, 2011; Karmi & Veisi, 2016). According to Harizaj and Hajrulla (2017), developing CT abilities promotes independent learning and fosters students' autonomy and self-confidence. Alsaleh (2020) recognizes CT as fundamental cognitive skills that significantly influence the quality of student learning. Mirzai (2008) also found that individuals with strong CT skills outperformed others in tasks involving lexical inference.

However, there is a debate among scholars regarding whether CT skills are inherent or can be taught. Some argue that CT cannot be taught and see it as an innate ability influenced by an individual's social and cultural background (Atkinson, 1997). However, others believe that CT skills can indeed be cultivated through practice and are not naturally ingrained in individuals (Yen & Halili (2015); Pucha (2012); Marzano, (1993) and Rajendran, (2000). This may influences the teachers' uses of CT kills in classroom.

Previous studies have indicated that teachers lack perceptions of integrating thinking skills. A review conducted by Rosnani and Suhailah (2003) on thinking skills instruction in Malaysia revealed that the majority of teachers were ill-prepared to teach thinking and lacked the necessary self-efficacy, knowledge, and skills in this area. This sentiment is further supported by Rahil et al. (2004), who argue that many teachers struggle to incorporate thinking skills into their teaching methodologies. Despite efforts to promote CT in the classroom, teachers often prioritize subject matter comprehension over the development of CT skills (Choy & Cheah, 2009 & Lauer, 2005).

Challenges arise in implementing strategies to enhance students' deep reading skills in the classroom due to teachers' varying opinions on CT skills (Abrhami et al., 2015). According to

Dickerson (2005), the teachers' personal views and values may be a preventive factor in integrating CT skills within the classroom. Without a clear understanding of CT, educators may mistakenly believe they are fostering CT skills in their students (Rhoades et al., 2008). Schaber and Shanedling (2012) see lack of obvious goals in course, poor course design, time constraints and large amounts of content as barriers to integrate CT skills in the classroom. Integrating CT skills in the classroom is influenced by obstacles such as learners" motivation, eagerness and enthusiasm to learn, along with personality features, cultural competency, and community background (Broadber & James, 2000).

Since the role of teacher is decisive in implementing any strategy in the classroom, examining the teachers' perceptions of CT skills deemed important to investigate. In the research setting, the experienced EFL teachers have been delivering various reading courses at university, but students' reading comprehension level is below their grade. Besides, the Ethiopian Education development roadmap (MoE, 2018) also highlights that university student in Ethiopia struggle with English proficiency, which serves as the primary medium of instruction in higher education institutions.

Despite some existing studies on this topic, there is a lack of comprehensive investigation into EFL teachers' perceptions and practices of integrating CT skills into teaching reading and assessment. Therefore, this study intended to fill the research gap by exploring the EFL teachers' current perceptions of infusing CT skills into reading activities and incorporating the six domains of CT skills in reading tests. It also, sought to investigate the perceived challenges hindering the practices of CT skills.

Research Questions

The Purpose of this study was to focus on teachers' perceptions and practices of integrating critical thinking skills in reading instruction to improve second-year university students' reading comprehension at Hawassa University. Thus, this study sought the answers to the following questions:

1. What are the teachers' perceptions regarding infusion of critical thinking in teaching reading skills?

2. To what extent do teachers infuse critical thinking skills for classroom practices and testing their students' reading comprehension?

3. What are the potential challenges that hinder the practices of critical thinking skills in reading classes?

2. Method

The study employed a descriptive survey research design to describe problems and offer solutions (Kothari, 2004). To this end, the researchers used a mixed-methods technique to gather data. While the text data was gathered through classroom observations, the quantitative data was gathered through questionnaires. . The mixed-methods explanatory sequential design approach was applied. This study collected quantitative data first, then the qualitative data to analyze it. This approach is further supported by the fact that quantitative data provides an overall picture of the study subject, while qualitative data is needed to clarify, expand, and explain it (Creswell, 2014).

Participants of the study

The participants involved in the study were English teachers who had been teaching English to university students for more than five years. The researchers used formula for sampling technique using Yamane (1967), which was n= N / [1 + N (e)2] in (Amale & Gebretsadik, 2024). Where n is the sample size, N is the population size, and (e=0.05) is the precision level. Using this formula, out of fifty-two instructors, forty instructors participated in the study, but the remaining six participants did not complete the questionnaire and returned it me. Of them, three were associate professors; twenty-nine held a Master's degree and eight had a PhD in teaching English. Eleven of participants were women and twenty-nine were men.

Instruments

Questionnaire

The questionnaires were used to examine EFL teachers' level of awareness of integrating CT skills into reading instruction. Perceived challenges that hinder the exercise of CT skills were also examined. It consists of 15 five-point Likert-scale questions that were used to explore teachers' general perceptions of CT skills and 11 questions to identify the challenges hindering the practices of CT tasks in classes were adapted from pertinent literature sources (Costa, 2001; Facione, 2020; Petek & Bedir, 2015; Nicole, Stedman, & Adams, 2012). Its reliability was indicating satisfactory level of internal consistency because the Cronbach's Alpha analysis revealed that the questionnaire administered to teachers was estimated to be α ≈ 0.85.

Document Analysis

Content analysis is a methodological approach used to examine and analyze the textual content of written materials, such as books, periodicals, newspapers, and any other kind of written or printed communication (Kothari, 2004). This tool assessed how the EFL instructors integrated CT skills into the reading activities to stimulate students' learning process during the Reading Skills (Enla 216) course delivery and evaluate students' reading comprehension. In order to accomplish this, after the researchers collected six reading comprehension questions teachers asked for classroom practices, three reading texts in which reading questions asked were randomly selected. Besides, the reading exam papers were selected purposely. Then, the researchers conducted an analysis of reading questions prepared for classroom practices and assessments, such as quizzes, mid-term exams, and final exams. The purpose of analyzing these questions was to examine how teachers integrated higher-order thinking questions, specifically those related to analysis, interpretation, inference, explanation, evaluation, and self-regulation, in order to practice and evaluate the undergraduate students' reading comprehension. To analyze these activities and questions, the checklist was adapted by making minor modifications to the framework proposed by (Facione, 2020).

Data collection and analysis procedure

To analyze the quantitative data, the descriptive statistics such as frequency, percent, mean, standard deviation and correlation were employed using SPSS version 24. The results were analyzed descriptively. Besides, the researcher adapted the cut-off point from literature (Ustün, 2011; as cited in Amale & Gebretsadik, 2024) that determines the range of strongly disagree=1.00-1.80, disagree=1.81-2.60, neutral=2.61-3.40, agree=3.41-4.20 and strongly agree=4.21-5.00.

Regarding content analysis, the researchers coded, counted, tabulated and analyzed descriptively. This enabled these researchers to describe the extent to which the instructors asked questions that required students' interpretation, analysis, explanation, inference, evaluation and self-regulation skills.

3. Findings and discussion

3.1. Results of teacher questionnaire

3.1.1. Teachers' general perception of critical thinking

Table 1 Teachers' general perceptions about CT skills

	Items	Percentage of response (%)					M	SD
		SD	D	N	A	SA		
1	Incorporating CT skills into my classroom lessons is simple, but it is difficult to use them in assignments and tests	0	2.5	7.5	37.5	52.5	2.55	.959
2	Readable texts are rare to find in the reading skills module, so it is not easy to infuse CT tasks reading activities	12.5	42.5	20	25	0	2.58	1.010
3	When people grow older, they naturally become critical thinkers	7.5	27.5	32.5	32.5	0	2.90	.955
4	Integrating CT skills needs more time, so there are less opportunities for students to practice them in reading skills course	7.5	30	25	32.5	5	2.98	1.074
5	English teachers have to practice critical thinking skills in the reading classroom.	5	25	17.5	50	2.5	3.20	1.018

		SD	D	N	A	SA	Mean	SD
6	It takes time to design questions that help to test students' higher-level of understanding in classroom reading activities and exams	5	25	10	55	5	3.30	1.067
7	It is not the job of an English teacher to infuse CT activities in the reading lessons.	10	15	7.5	32.5	35	3.68	1.366
8	It is not necessary to emphasize the role of critical thinking skills in the reading course/lesson	5	15	10	35	35	3.80	1.224
9	It requires much time to integrate higher-order learning tasks and give feedback in class, so I rarely practice it.	0	15	12.5	47.5	25	3.83	.984
10	If it is required, I could infuse critical thinking skills into my reading lessons	0	2.5	7.5	82.5	7.5	3.95	.504
11	Practicing critical thinking skills is an important part of my job as an English teacher	2.5	20	0	52.5	25	4.00	.751
12	CT is a method of thinking which would help students stimulate the learning process	0	2.5	7.5	62.5	27.5	4.15	.662
13	How to integrate CT skills into ELT should be taught during pre-service English teacher education	0	2.5	7.5	47.5	42.5	4.30	.723
14	There should be a balance between CT skills and lower-level thinking tasks in reading activities and exams	0	0	7.5	55	37.5	4.30	.608
15	The role of critical thinking skills in the ELT curriculum should be more emphasized	0	2.5	7.5	37.5	52.5	4.40	.744
	Overall mean	3.7	15.2	12	45.6	23.5	3.59	

SD=Strongly Disagree, D= Disagree, N=Neutral, A=Agree, SA=Strongly Agree

The mean score of EFL teachers' general perceptions of critical thinking is 3.59 (Table 1). This indicates that participants had moderate level of perceptions about CT skills in general. Even though the mean score indicates teachers had moderate level of perceptions, there were divided understanding among them. For those mean scores higher than four, the items exhibited mostly preferred thought. Based on this measure, it is observed that five items have a mean score above four. For instance, item 15 revealed a mean value of 4.40. On this item, 90% agreed that the role of critical thinking in the ELT curriculum should be more emphasized. The next high exhibited items are Q13 &Q14 that have a mean value of 4.30. On item number 13, majority of the respondents 47.5% agreed and 42.5% strongly agreed on the importance of integrating CT skills in to ELT during pre-service English teacher education and on item 14, 55% of the respondents agreed and 37.5% strongly agreed that there should be a balance between CT skills and lower-level thinking tasks in reading activities and exams. Thirdly, item 12 revealed a mean value of 4.15. On this item, 62.5% of the participants agreed and 27.5% strongly agreed that CT is a method that helps students enjoys the learning process.

Apart from that, 47.5% of the respondents agreed and 25% strongly agreed that integrating CT skills and giving feedback in class takes more time, and they rarely practice it. Besides, 35% of the participants agreed and strongly agreed that it is not necessary to emphasize the role of critical thinking skills in the reading course/lesson.

Table 1 also shows a contrasting perception on item 4 that states integrating CT skills needs more time, so there are fewer opportunities for students to practice CT tasks in reading course. Regarding this item, 7.5% strongly disagreed, 30% disagreed while 32.5% agreed and 5% only strongly agreed on it. Lastly, 37.5% of the instructors agreed and 52.5% of them strongly

agreed that incorporating CT tasks into their classroom lessons is simple, but it is difficult to use them in assignments and tests.

Another contrasting result revealed from item 8 states that it is not necessary to emphasize the role of critical thinking skills in the reading course/lesson. Regarding this, 28 respondents that representing 35% agreed and 35% strongly agreed. Lastly, 35% strongly agreed and 32.5% were agreed that integrating critical thinking activities into reading lessons is not the job of an English teacher.

3.1.2. Teachers' perceptions about barriers hindering the implementation of CT

Table 2 challenges hinder the practices of CT

Student-related challenges			Percentage of response (%)				
	mean	SDV	SD	D	N	A	SA
Q16 Students are impatient with the difficulty of critical thinking activities	3.50	.961	2.5	12.5	30	42.5	12.5
Q17 Students prefer reading activities with simple factual questions and answers	3.73	.905	0	10	5	57.5	27.5
Q18 Students lack the needed background knowledge to practice higher-level learning tasks	3.75	.927	2.5	10	12.5	60	15
Q19 Students have barriers to think critically, regardless of the strategies I use	3.78	.920	0	7.5	32.5	35	25
Q21 Students are concerned about getting a good grade only rather than learning	4.05	.876	0	5	20	40	35
Grand mean	3.76						
Teacher-related challenges							
Q20 Only certain students can perform higher-order thinking tasks	3.85	.864	0	12.5	7.5	62.5	17.5
Q22 I rarely use questions with no obvious answers in reading classes	3.05	1.154	7.5	30	22.5	30	10
Q23 Higher-order thinking exercises rarely incorporated in most of my reading lessons	3.45	1.037	5	15	20	50	10
Q24 To fully implement critical thinking into my courses, I need additional support	3.88	.853	0	10	12.5	57.5	20
Q25 I need to get more training on how to infuse CT tasks into reading lessons	4.00	.716	0	2.5	17.5	57.5	22.5
Grand mean	3.64						
Overall mean	3.70						

Table 2 shows participants perception on student and teacher-related barriers. The grand mean for student-related factors is 3.76. This shows that student-related factor as a barrier in

teaching critical thinking. The items in this category came out with how teachers perceive their students in reading classes. Majority of the participants 57.5% agreed and 27.5% strongly agreed that students prefer reading activities with simple factual questions and answers and 62.5% agreed and 17.5% strongly agreed that only certain students can perform higher-order thinking tasks. Participants representing 60% agreed and 15% strongly agreed that lack of the needed background knowledge to practice CT skills and students' interest to get a good grade only rather than learning as the barriers.

Table 2 also revealed that the participants' perception of teacher-related factors. Its mean score is 3.64. This depicts teacher-related challenges as a barrier in integrating critical thinking skills in the EFL reading classroom. Majority of the respondents 57.5% agreed and 22.5% strongly agreed that they need to get more training on how to infuse CT tasks into reading lessons and participants representing 57.5% agreed and   20% strongly agreed that they need additional support to fully implement CT into their courses. Apart from that, 40% agreed that they rarely use questions with no obvious answers in reading classes whereas, 37.5% disagreed on this statement and the other 22.5% were neutral.

3.1.3. Content analysis
3.1.3.1. Practices of critical thinking skills in reading classrooms

This section analyzes how each question item in the reading tasks and tests embodies the six domains of CT skills in a reasonable way or not. To carry out this, the reading exercises the teachers designed and asked in the classes were identified as lower-order thinking and CT skills based on criteria proposed by Facione (2020).

Table 3 Reading questions asked by the teachers

No	Title of the Text	Text type	Lower order thinking question			Critical thinking skills					
			Recall	Com	App	Ana	Inf	Inter	Exp	Eva	SR
1	Saving	expository	0	1	0	2	2	6	0	0	0
2	Hero of Africa	narrative	15	10	0	0	10	8	0	0	0
3	Teaching Reading	expository	2	1	0	1	0	1	1	0	0
	Total		17	12	0	2	12	15	1	0	0

The number of CT skills in reading activities

Table 3 presents how the reading teachers infused the CT skills into reading tasks to practice in the classroom. The teachers asked 11 questions based on the first passage. Majority of the questions were tasks that require students' analysis (2) like what are the

advantages of saving money at depository institutions? And Why should people save money?, inference (2) such as what does the phrase"… **pay yourself first strategy**…." means? Questions that require students' interpretation skills were six in number. These are questions like *write the main idea of each of the paragraph, which are given under part-2.* Only one question demands students' comprehension skills. For example, *setting goals helps a person choose to _____.*

The table also shows the teachers asked 43 questions based on the second passage. Most of them were vocabulary questions like matching words with their meanings using dictionary that comprises 15 items. The teachers also asked 10 *comprehension* like question number 2, which demands students' recalling from what they read like Mr. Mandela became a president of South Africa at the age of _____. There are 10 reading questions asked that require students' *inference* skills to rearrange the disorganized sentences based on the passage given under "*Instruction-3*". Furthermore, the table shows the teachers asked 8 questions that require students' *interpretation* skills. Questions like *what do you learn from this story*?, given under instruction 1 number 7, and question number 1 "*what is the main idea of paragraph 5*?".

Finally, from the third text, six questions were asked. Among them, three were lower-order thinking questions. For example, "what is the title of the passage?" and "Is it fiction or non-fiction? And the remaining three were CT skills. These are what is it?(interpretation) , why would someone read this?(explanation), and would you read this? Why or why not?(analysis)

3.1.3.2. Practices of integrating CT skills in reading assessment

Table 4 Reading tasks designed for assessment by teachers

Title of the Text	Text type	Used for	Lower-order thinking			Higher-order questions				thinking	
			Recal l	Com	Ap	An	Inf	Int	Exp	Ev	S
Education	Exp.	test	5	3	0	0	4	5	0	0	0
How Kassa saved his brother's house	Na.	mid	3	11	0	0	6	0	0	0	0
The Secret to a Prosperous Longer Life	Exp.	final	1	6	0	0	5	2	0	0	0
Digitalization	Exp.	final	1	1	0	2	3	4	0	0	0

First Author et.al (Title of paper shortly)

| Total | | | 16 | 15 | 0 | 2 | 11 | 12 | 0 | 0 | 0 |

Exp= expository, Na= narrative,

Table 4 reveals the results of reading questions asked for assessment based on the reading text. From the reading text selected for the quiz, teachers constructed 16 questions. The teacher asked 5 questions that required students to recall from question number 7-11 that asks students to find what the pronouns refer in the passage. For example, Q1 ***This act*** (par 9, line 1)____and Q2. *We* (paragraph 1, line 1)_____, given under instruction three. Three comprehension questions are also asked in the quiz. These are the multiple type questions asked under instruction one from number 1-3. For instance, Q3 the reading text is ____. A. A call for action on the subject   C. An account of an action or event.   C. An explanation of a topic.   D. A story of an event

The teachers asked four inference questions. They are Q4 and Q5 under instruction one and Q5&6 under instruction two. For example Q4 asks to infer the intended audience of the text and Q5 asks students to infer what the writer implied in paragraph one. Questions number 5&6 demand students to construct meanings of phrases (*turning out* in paragraph 1 and *Grave risks* in paragraph 8 from the context. Lastly, for classroom quiz the teachers asked 5 interpretation questions based on the passage. These questions require students to write the central idea for each of the paragraphs.

The table shows teachers asked 15 questions based on reading passage used for mid-exam. Among them, six questions requires students' to find meanings of words/phrases and concluding the message the passage. Question number10, which says "From the story, it is possible to understand that__" and the rest are from Q11-15. The table revealed that the teachers asked 3 recalling and 11 comprehension questions.

For the final exam, the teachers selected two passages and asked 25 questions. Based on the first text, 14 questions were asked, and 11 were asked from the second text. Of the questions associated to the first text, 1 tested recall, 6 tested comprehensions, 5 required inferences, and 2 demanded interpretation skills from the students to respond effectively.

Students were asked a range of questions during the final exam to determine their level of reading proficiency. Many of the assessment's questions required lower-order thinking skills, such as memory and understanding. There were noticeably few questions that required the application of knowledge. However, assessment also included some components of CT skills like analysis, inference, and interpretation. Unfortunately, there were no questions that required students to explain, evaluate and self-regulation abilities. In conclusion, there were 31 questions total for recalling, comprehension and application in the final exam, compared to 25

questions for CT skills. This disparity in question item kinds could affect how students' reading abilities are evaluated overall.

3.2 Discussions

The survey results revealed that teachers had divided perceptions on integrating CT skills into reading lessons. Some teachers believe they can incorporate these skills, while others find it time-consuming and struggle with CT skills. This result is in line with the findings of (Fenyi and Jones-Mensah, "Higher Order Thinking Skills in English Language Teaching")which states majority of teachers integrate the CT skills in their reading lessons rarely. This may be due to lack of all the necessary tools to integrate CT skills into their courses (Lauer, 2005). According to Adams and Stedman (2012), this is due to teachers may not have had formal education themselves when it comes to critical thinking. When teachers do not understand critical thinking, it can be quite challenging for them to effectively instill CT skills in their students. This suggests that majority of the teachers lack the necessary knowledge regarding the use of CT skills in reading lessons.

Based on the result of content analysis, the teachers' use of CT skills in the reading activities and tests was disproportional and more content mastery questions were employed. The teachers are expected to integrate all the six skills in the reading comprehension. However, this study revealed that the level of CT skills they incorporated in the reading activities and tests were inconsistent. It showed that inference and interpretation skills used at higher level; analysis and explanation skills were integrated the least, whereas evaluation and self-regulation skills were not employed. This finding is consistent with the findings of (Al-Kindi and AL-Mekhlafi, and Al-Balushi and Osman (2013), which revealed the teachers had limited use of CT skills. This implies that the integration of CT skills into reading comprehension provided by teachers is directly impacted by the amount of training they received.

The study found out that students' preference for obtaining good grades over understanding the material, reading activities with simple factual questions to answer and lack the needed background knowledge to practice CT skills were perceived as a major barrier hindering the integration of CT skills into the reading comprehension. This finding is in line with the findings of (Sparapani, 1998 & Kowalczyk et al, 2012). It also identified he teacher-related factors also hinder the integration of CT skills into reading instruction. This result suggests that EFL teachers may not possess the necessary understanding of CT concepts and skills to effectively integrate them into their teaching practices (Lauer, 2005). Additionally, Kowalczyk, et al. (2012) argues that teachers' inadequate knowledge of CT skills could impede their ability to foster CT among their students. The challenges associated with infusing CT

skills stem from the need for educators to possess the necessary skills and training to effectively incorporate higher-order thinking into their teaching practices.

3.3. Conclusion

Integrating critical thinking skills into reading instructions enhances students' reading comprehension skills. To do so, the teachers' perceptions about CT skills play great role to incorporate them into reading activities and assessments. Besides, CT skills are essential for students to effectively engage in CT skills such as interpretation, analysis, inference, explanation, evaluation and self-regulation, all of which can be developed through EFL reading comprehension. The cultivation of critical thinking is a fundamental cognitive skill that should be integrated into the curriculum. It is important to recognize that CT skills do not exist in isolation, and therefore should be incorporated into language skills, particularly in the context of reading. The moderate level of teachers' perceptions of CT skills towards this integration, as demonstrated by the current study influenced the practices of them found to be insufficient. Factors influencing the execution of CT skills in university reading classes include the students' desire for obtaining good grades over learning, reading activities with simple factual questions and poor language background and teachers' insufficient training. Therefore, providing training for teachers to incorporate CT skills into interactive reading courses is essential. Further research is recommended to explore the impacts of CT skills on students' reading comprehension.

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