

# The EFL Students' Critical Reading Skills across Cognitive Styles

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**Abstract:** This study aims to explore the difference between the field independent (FI) and field dependent (FD) learners in the area of EFL critical reading skills. To this end, 60 undergraduate EFL students who had taken and passed the Critical Reading course involved as the subjects. The Group Embedded Figure Test (GEFT) was administered to classify the students' cognitive styles into FI and FD groups. Furthermore, to measure the students' critical reading skills, the critical reading comprehension test (CRCT) in the form of multiple choice questions was developed and administered. The test items were focused on assessing students' analytical and inferential skills of reading texts, specifically on determining the main idea, the purpose, the tone, making an inference and taking conclusion. The findings indicate that there is a statistically significant difference in the critical reading skills between FI and FD students. More specifically, the differences are in determining the main idea, determining the purpose, making an inference, and taking the conclusion of the texts in the CRCT. Pedagogically, selecting appropriate reading texts to be used in Critical Reading course practice for developing the students' critical reading skills will be beneficial for both of FI and FD students.

**Keywords:** critical reading, cognitive styles, field independent students, field dependent students

## INTRODUCTION

At the university level where English is a foreign language, the teaching of reading is divided into literal, interpretative and critical

reading comprehensions exercising; and these skills are occurring interactively and sequentially (Crawley & Mountain, 1995; Eanes, 1997; Burns et al., 1996). Critical reading requires the readers to go beyond the literal and interpretative comprehension of the reading texts. The readers need to give judgment of the authenticity of the ideas stated by the writers in the writings. They do not necessarily just agree with the opinions of the writers in the text for granted. It is because critical reading refers to reading a passage skeptically and analytically and then judging the value of the version (Douglas, 2000). In the reading activity, the readers need to view the writers' point of view of the passage critically. It is done by investigating the implied main idea, determining the purposes, separating the facts and opinions, recognizing the writers' tone, taking inference and conclusion to grasp the information from the texts effectively (Bowen et al., 1985). In short, in critical reading, the readers are careful, actively, reflectively and analytically having a conversation with the writer through the text to read. With the skills acquired in the critical reading instruction, the students are expected to be judgmental readers. They are required to synthesize, evaluate, interpret and selectively use the information in texts they read to help them become successful students in this digital era (Walz, 2001).

Considering the importance of having critical reading skills for EFL students, the topic of developing of the students' critical reading always has a prominent place among the researchers and educators. Numerous studies have been conducted to investigate the students' critical reading ability in English language teaching (ELT) (Sultan, et al., 2017; Alqatanani, 2017; Karabay, 2015; Zin, Eng, & Rafik-Galea, 2014; Hong & Zhiyuan, 2014; Karadag, 2014; Zin & Eng, 2014; Khodary & Abdallah, 2014; Tsai, et al., 2013; Camp & Camp, 2013; Ellozy & Mostafa, 2010; Tomasek, 2009; Icmez, 2009; Lisa, 2008; and Kobayashi, 2007). All of the studies reveal significant roles of critical reading ability on students' success in academic study and its powerful effect on students' critical thinking. More specifically, a study by Sultan et al. (2017) reveals that critical literacy approach had

a significant effect on the pre-service language teachers' critical reading skills, which include interpretation, analysis, making an inference, evaluation, explanation, and self-regulation. Another study conducted by Alqatanani (2017) employing a program base on multiple intelligence on improving the students' critical reading skills reveal the significant effect of the program to the students' critical reading skills.

Moreover, a study conducted by Karabay (2015) find that when reading texts, critical readers are always analytical while reading texts; especially they take critical notes and underline important information in the texts. Similarly, Kobayashi (2007), far before a study was conducted by Karabay (2015), also indicate that critical readers substantially produce critical notes while reading expository texts, comparing to the less-critical readers who relied much on making a summary of the texts. These two studies indicate that critical reading is a skeptical, careful, active, reflective, and analytical activity to judge the value of the text (Douglas, 2000) which the readers do while reading texts. It is true that when reading texts, critical readers do not only grasp what is explicitly stated in the text but also go far beyond it using their high order thinking skills (HOTs) to tackle and evaluate the content of reading texts. These skeptical and analytical skills are required because of the emergence of the internet and other media of literacy that provides much of information to the students which easily exposed to. This suggests that critical reading should become a part of foreign language teaching and learning. The English teachers or instructors should design appropriate teaching activities which encourage the students to develop their critical skills in reading.

Fortunately, some studies also have been conducted to increase or to develop students' critical reading ability (Sultan et al., 2017; Alqatanani, 2017; Khodary & Abdallah, 2014; Ellozy & Mustafa, 2010; Camp & Camp, 2013; Tsai et al., 2013; and Tomasek, 2009). These studies found that when the students are exposed to certain appropriate strategies, activities, or text types, such as using critical

literacy approach (Sultan et al., 2017), multiple intelligence program (Alqatanani, 2017), WebQuest model (Khodary&Abdallah, 2014), using e-maps (Ellozy& Mustafa, 2010), using content reading assignment (Camp & Camp, 2013), using science news texts (Tsai et al, 2013), and using reading prompts (Tomasek, 2009), they tend to have higher critical reading skills. These studies advocate that the students should be optimally exposed to various activities and texts type in critical reading instruction in order to develop their critical reading skills. The critical reading skills are important for the students because it affects their critical thinking abilities which are required nowadays, and in turn, helping them to be critical citizens and critical readers. A study by Zin & Eng (2014) indicates that critical reading ability can foster the students' critical thinking habits. This is because reading is thinking and one cannot read without thinking. The students' critical thinking will be developed and shaped through critical reading activities.

Nevertheless, it is still difficult for the students to acquire the critical reading ability and it needs big efforts and times to train the students to be critical. It is because the freshmen are sometimes not ready for the college academic tasks which require their critical thinking. A research carried out by Lisa (2008) confirms that many of the freshmen at the university level are not prepared for the demands of college reading, however, their critical reading skills are developed throughout the semester after training them through composition course. It implies that the students need to be explicitly taught critical reading in order to develop their analytical and inferential skills in reading. In line with this, İçmez (2009) in his study reveals that when the students are explicitly taught about critical reading, not only their critical reading ability is developed, but also their motivation in reading is increased. However, the students will have low motivation in critical reading lessons when they are provided with the inadequatepractices which evoke their curiosity in interacting with the authentic text. Moreover, when the students are given to

appropriate reading texts, their critical reading ability is effectively fostered (Tsai et al., 2013).

However, in fact, many students are still low in their critical reading ability. Several studies report that the students have low ability in critical reading. Khodary & AbdAllah (2014) find in their pilot study that the students lack critical reading ability, especially to identify the main ideas of passages in which the main ideas are not directly stated, detect the author's purpose and tone, guess the meaning of words in context, draw conclusions, make comparisons, form personal justified opinions, make inferences, recognize bias, identify cause and effect relationships, recognize contradictions in a text and evaluate arguments. They asserted that the reason behind these weaknesses could be attributed to the inappropriate methods of teaching critical reading provided to them.

Moreover, a study conducted by Zing, Eng, and Rafik-Galea (2014) find that the level of critical reading skills of the students as measured by their analytical and inference skills is poor, indicating that they have not acquired the desirable higher-order thinking skills required for the tertiary level. Similarly, the result of the study conducted by Zin & Eng (2014) confirms the stereotype that the Asian students are typically characterized as non-critical readers and thinkers. In addition, they are described as harmony-seeking and group-oriented while their western counterparts are known for their individualistic, adversarial and critical thinking attitude. However, this claim needs to be supported by sufficient empirical data from different settings, culture, students' language proficiency, students' learning styles, and students' cognitive styles which probably give different results. This is because different students with a different culture, language background, and learning styles might perform different ways of tackling texts while reading which then trigger different critical reading abilities.

Unfortunately, some previous studies focused only on limited micro-skills of critical reading ability. The study by Zing, Eng, and Rafik-Galea (2014) was limited only to determining the identification

of the writer's purpose and main idea on two expository texts between the high and the low English proficiency of the students. Other critical reading micro-skills, such as making an inference, taking a conclusion, and recognizing the writers' tone in the texts are still out of considerations. Similarly, a pilot study conducted by Khodary & AbdAllah (2014) who find that the students are termed as low critical readers need to be further investigated by considering different settings of research, different students' language proficiency level, and different cognitive styles. These factors are triggers which probably lead to different findings.

Besides, examining the students' critical reading ability cannot be only seen from the text variability but also from another variable, like the cognitive style of the students. This is because every student with a different culture, language proficiency, and cognitive styles has a different way of learning and reading. Students who have different cognitive styles will also have a different way of understanding the text when involving in reading activities.

This is true because some studies have shown the relationship between the students' cognitive style with their success in academic study (Witkin, et al., 1977), and more specifically in reading ability (Nozari and Siamian, 2014). Nozari and Siamian (2014) who conducted the research on investigating the relationship between field dependent-independent cognitive styles and understanding of English text reading and academic success find that field independent (FI) cognitive styles determine the change of reading comprehension. It means that the more the FI, the higher the reading comprehension skills and learning English and the more academic achievement will result. It implies that the FI students are more successful in reading comprehension test than the field dependent (FD) students. This is because the students termed as FI are more analytical than the FD (Brown, 2007; Saracho, 1997; Khatib & Hosseinpur, 2011). FI students have more facilities with tasks requiring differentiation and analysis than the FD. Moreover, the FI students tend to enjoy classroom learning or reading activities that involve analysis and attention to

details. On the other hand, the FD students tend to exhibit a social orientation in which they are more perceptive and sensitive to social characteristics such as names. It implies that the FD students tend to enjoy social problems reading topics than those the FI groups. However, the difference of language achievement, especially critical reading achievement between the FI students and FD students need to be supported by the evidence from the research findings. This study, then, is relevant to provide evidence of claiming that the FI students are more analytical than the FD students. With regard to investigating the difference between FI and FD in the area of EFL students' critical reading skills, this study is conducted under the following questions: Is there any significant difference in the critical reading skills between the field dependent and field independent students?

## **LITERATURE REVIEW**

### **Critical Reading**

From the socio-cognitive interactive model, reading is perceived as a meaning construction process (Ruddell & Unrau, 2013, p. 1020). As reading is seen as a social and cognitive process, it is implied that reading is an active process which involves interpretation, reflective inquiry and critical interpretation (Kern, 2000 cited in Zin and Eng, 2014). Thus, reading is an active thinking process which put the reader as an active meaning maker of the texts. Critical reading involves the reader's active involvement to think deeply about the text in revealing and reconstructing its meaning. In a critical reading level, the act of reading is perceived as a meaning construction process which entails higher order thinking abilities about a text. In a critical reading, the reader has right to judge and evaluate the content of the texts. Shortly, critical reading is simply defined as an active process of constructing meaning from the texts by involving interpretation, making inference, analysis, giving judgment, and evaluation.

Being critical reader is urgent and significant in the era where information is easily accessed from printed or electronic media. However, the information contains in the media is not always accurate and reliable. Reading critically is significant due to each text is written to represent certain ideas, each text does not contain a single meaning, each text has its own version/emphasis which is different one from another, and each text provides a way for the readers to accept it as the truth (Morgan, 1997 cited by Sultan et al., 2017). Accordingly, in comprehending the texts, the reader needs to read critically and skeptically and then draw a conclusion and make his/her own decision about the author's message portrayed in the texts. Moreover, Sultan et al., (2017) claim that the importance of critical reading is based on the fact that in the era where information and communication technology has developed rapidly, the number of available reading texts is also increasing. In this era, it is easy to retrieve information from printed and/or electronic media such as newspaper, magazines, television, or social media; however, the information is not always accurate and cannot easily be trusted. Accordingly, readers need to critically and skeptically retrieve and select appropriate information before accepting its content.

### **Cognitive Styles: Field Dependence-Independence**

The comprehensive definition of cognitive styles is provided by Dornyei (2005, p. 124) and Dornyei & Ryan, 2015, p.112) stating that cognitive styles are related to an individual's preferred and habitual modes of perceiving, remembering, organizing, processing, and representing information. Among the cognitive styles identified to date the field dependence and field independence dimension have been the most extensively explored in the studies and the widest application to the educational setting (Witkin, Moore, Goodenough, & Cox, 1977). Being field dependence and independence are originally associated with the visual perception: people could be classified in terms of the degree to which they were dependent on the structure of the prevailing visual field. According to Brown (2005), the field may



be perceptual, or it may be abstract and refer to a set of thoughts, ideas, or feelings from which a task is to perceive specific relevant subsets. Accordingly, field dependent people tend to be dependent on the total field so that the parts embedded within the field are not easily perceived, although that total field is perceived more clearly as a unified whole, meanwhile the independent people tend too easily perceive the parts embedded within the field (Brown, 2005, p. 121). Therefore, some people are highly dependent on this field, meaning that they cannot identify small objects in detail. Field independent people, on the other hand, are free or independent of the influence of the whole field when they look at the parts and thus can notice details (Dornyei, 2005, p. 136; Dornyei& Ryan, 2015, p.124). Shortly, some people (field-independent people) could notice details of certain objects where some people (field-dependent ones) simply cannot see. Accordingly, field independents (FI), as opposed to field dependents (FD), are better at focusing on some aspects of experience or stimulus, separating it from the background, and analyzing it unaffected by distractors (Dornyei, 2005, p. 137).

Relating to social and environmental orientation, the field dependents are more responsive to environmental issues and thus have a stronger interpersonal orientation and greater awareness to social cues than field independents (Dornyei, 2005, p. 137). Moreover, Witkin, Moore, Goodenough, & Cox (1977) argue that while the FD persons are having interpersonal orientation, the FI persons are relatively more impersonal orientation. Thus, the FD persons who are relatively social orientation, as opposed to the FI ones, are taking greater account of external social referents in defining their attitudes and feelings. In addition, Brown (2005) noted that persons who are more predominantly FI tend to be generally more independent, competitive, and self-confident. FD persons tend to be more socialized, to derive their self-identity from persons around them, and are usually more empathic and perceptive of the feelings and thought of others.

In L2 studies, a study conducted by Johnson, Prior, & Artuso (2000) was aimed to investigate the hypothesis that a more field-dependent cognitive style may be adaptive for certain components of second language proficiency. The study found that field dependents, as opposed to field independents, may perform better on L2 tasks that emphasize communicative more than formal aspects of language proficiency. Additionally, a literature review conducted by Nel (2008) as cited by Dornyei & Ryan (2015, p. 124) concluded that FI language learners tend to be more successful at deductive tasks, whereas FD language learners perform better at inductive tasks. Practically, the FI students tend to take advantage of the way they process information but tend to avoid situations in which language is actually going to be used for communication. FD students are comfortable and sensitive in communication situations but tend not to be effective information processors. Accordingly, the FI persons are appropriate for non-communicative tasks, while FD ones are better in more communicative situations where language is actually used for communication. Moreover, Brown (2005, p. 122) state that FI students are closely related to classroom learning that involve analysis, exercises, drills, focus on details, and other focused activities. Meanwhile, the FD persons, by virtue of their association with empathy, social orientation, and perception of other people, yield successful learning of the communicative aspects of a second language.

## **METHOD**

This study was conducted to examine the difference of the critical reading skills between the FI and FD students. The participants of the research were 60 students of Indonesian EFL students who had taken a Critical Reading course. The students were given the Group Embedded Figure Test (GEFT) developed by Witkin and his associates (1971) to determine the students' FI/FD cognitive styles. This GEFT is a standardized test which was widely used by many previous researchers to classify the students' cognitive styles

into FI and FD groups. The GEFT instruction was translated into the Indonesian language, as the second language of the students, to help the students understand the test administration. The procedure for the GEFT administration severely followed the directions included in the manual. There were three parts of the GEFT where the students must finish. The first part of the test consists of 7 items with a time limit 2 minutes. This part of the test was considered as the practice and the scores did not count. The second and third parts consist of 9 and 9 figures respectively with the time allotment 5 minutes. Accordingly, there were 18 items of the GEFT with the students who got 0-9 were termed as FD and 10-18 were FI.

Furthermore, in order to measure the students' critical reading skills, the critical reading comprehension test (CRCT) in the form of multiple choice questions was administered. The tests items focused on measuring the analytical and inferential critical reading skills in determining the main idea, the purpose, the tone, making an inference and taking the conclusion of the texts. The tests items were adapted from the book of *Mastering Critical Reading for the SAT* by Peterson which is this book is also used as an additional reference for the Critical Reading course for the students. The test items were initially tried out to examine the validity and reliability. The result of the piloted test showed that the Cronbach's coefficient alpha value was 0.81. Accordingly, the CRCT as the instrument of the study was highly reliable to be administered for measuring the students' critical reading skills. The result of the test was then analyzed using t-test in order to know the difference critical reading skills between the FI and FD groups. The Statistical Package for the Social Science (SPSS) version 20 was used to compute the data.

## **FINDINGS**

The main aim of the study is to investigate the difference of critical reading ability between the FI and FD students in finding the main idea, determining the purpose, making an inference, recognizing the tone, and taking the conclusion of the English texts in

the Critical Reading Comprehension Test (CRCT). To this end, the independent-samples t-test calculation was used. The output of the t-test computation is presented in Table 1 and Table 2.

Table 1 the Mean Scores of the FI and FD Groups

	Group Statistics				
	Cognitive Style	N	Mean	Std. Deviation	Std. Error Mean
Critical Reading Skills	FI	31	60.48	15.500	2.784
	FD	29	42.90	19.351	3.593

It is obviously presented in table 1 that the number of the FI and FD students were 31 and 29 respectively. Accordingly, the mean score of the FI students was bigger than the FD groups which were 60.48 than 42.90. This is evidently seen that there was a statistical difference means scores of the two groups in critical reading skills. In addition, the difference in mean of critical reading ability between the FI and FD students was 17.58; and the standard deviations were 15.500 and 19.351 which were clustered closely around the mean difference of the two groups. It means that the mean scores of FI and FD students were reliable which showed their critical reading ability. It indicates that the difference of the critical reading ability between the FI and FD students existed.

Furthermore, in order to see the significant difference of critical reading ability between the FI and FD students, Table 2 provides the output of t-test computation which shows the sig. value of the scores.

Table 2 provides the information about the result of the t-test computation using SPSS 20. From the table, it is clearly seen that the sig. value of the Levene's test for equality of variances of the students' critical reading skills with equal variance assumed was .035 which was lesser than .05. It implies that the variability of the two groups' mean scores was significantly different. Furthermore, the sig. (2-tailed) column yields the value of the t-test for equality of means that was .000; this value was smaller than .01 which implies that there

Table 2 the t-test Output of the Independent Samples Test Computation

		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
Critical Reading Skills	Equal variances assumed	4.640	.035	3.898	58	.000	17.587	4.512	8.555	26.619
	Equal variances not assumed			3.869	53.658	.000	17.587	4.546	8.473	6.702

was a statistically significant difference between the two mean scores. Therefore, based on the observed sig. value of the t-test that was .035 which was lesser than the .05, it could be concluded that there was a statistically significant difference in the critical reading skills between the FI and FD students. More specifically, the differences were obviously seen in determining the main idea, determining the purpose, making an inference, recognizing the tone, and taking the conclusion of the texts in the CRCT. The detail information of the critical reading micro-skills of the FI and FD students are presented here.

### *Determining the Main Idea*

Table 3 provides the data about the ability of the students in determining the main idea of the text in the CRCT between the FI and FD groups.

Table 3 the difference between the FI and FD students score in determining the main idea

Cognitive Style	Critical Reading Micro-skill: Main Idea					
	√	x	N	√ (%)	X (%)	Total (%)
FI	18	13	31	58	42	100
FD	13	16	29	45	55	100

Note: √ indicates correct answer; x indicates the wrong answer

Out of 31 students in the FI group, 18 (58%) students were highly skilled to determine the main idea of the text comparing to the 13 (45%) students among the 29 in the FD group. It means that there was a difference (13%) of the number of the students who answered correctly the question of determining the main idea of the text. It indicates that the FI students were better in determining the main idea of the text comparing to the FD group. Overall, only 45% of the 60 students were highly able to determine the main idea of the text. This is revealing that most (55%) of the EFL students were low-skilled readers in identifying the implied main idea of the text.

***Determining the Purpose***

Table 4 provides the information about the difference between the FI and FD students’ percentage in determining the purpose of the text in the CRCT. From the result of the CRCT, the FD student was lesser than the number of students in FI group who were able to correctly determine the writing purpose of the text that was only 11 or 38% out of 29 students compared to 20 or 65% among the 31 FI students. Overall, only 38% out of 60 students were skillful in determining the purpose of the writer in the text in the CRCT, and 62% students are considered as low-ability readers.

Table 4 the difference between the FI/D students score in determining the Purpose

Cognitive Style	Critical Reading Micro-skill: Purpose					
	√	X	N	√ (%)	X (%)	Total (%)
FI	20	11	31	65	35	100
FD	11	18	29	38	62	100

Note: √ indicates correct answer; x indicates the wrong answer

***Making Inference***

The following table, Table 5, presents the data about the FI/D students’ critical reading skill in making an inference of the text. It is seen that the number of students in the FI group was bigger 19% than

the FD groups in making an inference of the reading texts. It implies that 23 students or 74% out of 31 students in the FI were better in inferring the writer's ideas in the text than those who were in the FD team.

Table 5 the difference between the FI/D students score in making inference

Cognitive Style	Critical Reading Micro-skill: Inference					
	√	X	N	√ (%)	X (%)	Total (%)
FI	23	8	31	74	26	100
FD	16	13	29	55	45	100

Note: √ indicates correct answer; x indicates the wrong answer

### *Determining the Tone*

The following table is presented to provide the number of the students in the FI and FD groups who were able to appropriately determine the tone of the texts in the CRCT.

Table 6 the difference between the FI/D students score in determining the tone

Cognitive Style	Critical Reading Micro-skill: Tone					
	√	x	N	√ (%)	X (%)	Total (%)
FI	12	19	31	39	61	100
FD	15	14	29	52	48	100

Note: √ indicates correct answer; x indicates the wrong answer

From the Table 6, it is recognized that the number of the students who were correctly able to determine the tone of the text in the CRCT were different. Clearly, the FD students were greater than the FI students, i.e. 15 or 52% and 12 or 39% respectively. This is implying that the FD students were better than the FI students in determining the tone of the writing in the CRCT. Overall, 52% of students were able to recognize the tone of the writers in the text. It indicates that almost half of the students could not determine the tone of writing.

***Taking Conclusion***

Table 7 shows the result of the critical reading skills of the FI and FD students in taking the conclusion of reading texts.

Table 7 the difference between the FI/D students score in taking conclusion

Cognitive Style	Critical Reading Micro-skill: Taking Conclusion					
	√	x	N	√ (%)	X (%)	Total (%)
FI	16	15	31	52	48	100
FD	16	13	29	55	45	100

Note: √ indicates correct answer; x indicates the wrong answer

Table 7 depicts the data about the students' ability in taking the conclusion from the provided information in the text during the CRCT. Obviously, the number of the students who had good ability in taking conclusion based on the information in the text was same both in FI and FD groups. Totally, there were 32 or 55% out of 60 students in the research subjects could take conclusion about the information in the text. Distinctly, there were 16 students in both of the FI group and FD group correctly answered the questions on taking conclusion in the CRCT. Interestingly, the text type of the test item which measures the students' critical reading ability in taking conclusion based on the amount of information in the text was an explanation. However, the study result shows that both of the students in the FI and FD groups are equally good in determining the tone of the writing.

**DISCUSSION**

This study portrays the EFL students' critical reading ability across the cognitive styles, the FI and FD students. From the result of the study, overall, most of the students have the low critical reading ability, especially the critical reading sub-skills of determining the main idea, purpose, making an inference, recognizing the tone and taking the conclusion of the English reading texts. This result is in line



with the research findings conducted by Zin, Eng, and Rafik-Galea (2014) and Kodary & Abdallah (2014) who assert the similar findings. Still, the students are less able to infer the underlying argument in the text and the tone of the text. This also confirms the previous study conducted by Attaprechakul (2013) which indicates that the students have a limited view of analyzing the tone of the text and proved problematic in inferring the implicit main idea.

One main factor which probably contributes to the students' low skill in critical reading is the fact that the students are not well trained in the critical reading courses. This is because the teachers, when teaching reading, rarely stimulate the students' critical reading skills by asking the high-order level of questions (Sunggingwati and Nguyen, 2013). Another possible factor which contributes to the students' lack ability to apply the analytical and inferential skills in reading is the students' level of the L2 proficiency (Zin, Eng, and Rafik-Galea, 2014). Lacking the lexical knowledge in the target language significantly affects the students' critical reading comprehension.

Further analysis of the study result is the difference between the FI and FD students' critical reading ability. From the research findings, it is obviously seen that there is a significant difference of the FI and FD students' in sub-skills of critical reading, such as identifying the main idea, determining the purpose, making an inference, and recognizing the tone of writing. Interestingly, the micro-skills of critical reading comprehension on identifying the main idea, determining purpose, and making inference are dominantly high performed by the FI students. The students of the FI group are good at the relevant mentioned critical reading subs-kills because they tend to be analytical and sensible to detail of information in the texts, (Brown, 2007; Saracho, 1997; Khatib & Hosseinpur, 2011). Moreover, the genre of the texts can also contribute to the FI students' high critical reading performances, which are the expository and explanatory texts that focus on the explaining and analyzing the events in detail. Unluckily, the FD students fail in such critical

reading micro skills performance because of not familiar with the expository and explanatory text structure features. As Wang (2009) found that when the students are poor in recognizing the text structure (of expository and explanatory text), they will poorly engage in identifying the implicit main idea of the text.

Despite the FD students were low performers in identifying the main idea, purpose, and making an inference of the text, the FD students are good at recognizing the tone of the texts and the report text which mainly discusses the social issues. As the result of the study shows that the FD students won over the FI group in recognizing the tone of the text when the topic of the text is about the factual report of social phenomenon. Indeed, this result yields the main hallmark of the FD students who are termed as social orientation individuals, (Brown, 2007; Saracho, 1997; Khatib & Hosseinpur, 2011). Still, the FD students are more sensitive toward a quality in the voice which expresses the writers' feelings or thoughts in the text. As seen from the findings in determining the tone of the text, the FD students, 15 or 52% out of 29 are highly skilled comparing to only 12 or 39% out of 31 of the FI group in the CRCT. Remarking that the topic of the report text was about farmlands, wetlands, forests, and deserts in the American landscape which have been transforming into mushrooming metropolitan areas; the FD students are really sensitive and able to recognize the tone of writing in the text. However, the FI counterparts who are more analytical cause them low performing in identifying the tone of the writers' feeling or thought in the texts.

An interesting and a new finding of this study indicates that both of the FI and FD students are having equal ability to draw a conclusion of writer's statement in the texts. It shows that 16 students in both of the FI and FD groups were equally able to take a conclusion of the text appropriately. This study indicates that both of the FI and FD students are equally good in critical reading ability when the reading text accommodates the analytical feature of the FI students and the social orientation hallmark of the FD students. This feature of

text exists in one of the texts in the CRCT which explains in detail about how an earthquake happens and gives reasons the way an earthquake occurs which causes significant damage to human's social life. The detail and analytical way of presenting information in the texts about the earthquake are really beneficial for FI students because they tend to be analytical (Brown, 2007; Saracho, 1997; Khatib & Hosseinpur, 2011); moreover, the information of cause of the earthquake which brings significant damage to building and human's social life is favorable for FD students because they tend to exhibit a social orientation in which they are more perceptive and sensitive to social characteristics and issues. Pedagogically, providing such texts types to the students for their critical reading practices in the classroom will accommodate their different cognitive styles characteristics and it is helpful for them to be equally high-performed on critical reading tasks.

## **CONCLUSION**

Despite the limited number of research sample that was only 60 EFL students, some unique and interesting conclusions can be discovered through this research. When the FI students are given the reading texts in genre of exposition which is about to explain and analyze events, phenomena or issues; and genre of explanation which explains how something works and to explain events, they tend to have higher ability in determining the implied main idea, purpose, and making inference of the text comparing, as opposed to their FD counterparts. Noticing that the main issue discussed in the expository text was about the writing style which the writer puts his argument or point of view and analysis in the text, and the explanatory text was about the detail explanation of the causes and effects of earthquakes. These types of texts are really appreciated by the FI students because they tend to be analytical and sensible to details.

Contrary, when the FD students are provided with the report text types telling about factual information about what is or what has happened, they tend to have better ability in critical reading over the

FI individuals. Remarking that the topic of the report text was about farmlands, wetlands, forests, and deserts in the American landscape which have been transforming into mushrooming metropolitan areas; the FD students won over the FI group in recognizing the writer's tone of the writing. As the main hallmark of the FD students that they are highly sensitive about the social issues; accordingly, the FD students will exceedingly enjoy the social problems reading topics when they are provided with such related topics in critical reading activities.

Interestingly, both of the FI and FD individuals are equally good in critical reading when they are offered explanatory texts which provide the explanation of how something works, of how certain events or issues happen or giving reasons why something occurs and possible effects on social life. In short, the detail and analytical cause and effect texts will be beneficial for both of the FI and FD students in their critical reading ability.

Pedagogically, providing appropriate types of texts for the students' practice in critical reading activities will be beneficial for them in developing their critical reading skill. Accordingly, the teachers should be sensitive with the types of the text given to the students for their critical reading practice because each student has his/her cognitive style which differently influences their way of comprehending the text critically.

#### **REFERENCES:**

- Alqatanani, A. K. (2017). Do Multiple Intelligences Improve EFL Students' Critical Reading Skills? *Arab World English Journal*, 8(1): 309-321.
- Attaprechakul, D. (2013). Inference Strategies to Improve Reading Comprehension of Challenging Texts. *English Language Teaching*, 6(3): 82-91.
- Bowen, J. D., Madsen, H. & Hilferty, A. (1985). *TESOL: Techniques and Procedures*. Cambridge: Newbury House.

- Brown, D. H. (2007). *Principles of Language Learning and Teaching* (5<sup>th</sup>edn.). New York: Pearson Education
- Burns, P. C., Roe, B. D. & Ross, E. P. (1996). *Teaching Reading in Today's Elementary School, 6<sup>th</sup> Edition*. Boston: Houghton Mifflin.
- Camp, D. V. & Camp, W. V. (2013). Using Content Reading Assignment in a Psychology Course to Teach Critical Reading Skills. *Journal of the Scholarship of Teaching and Learning*, 13 (1): 86-99.
- Crawley, S. J., & Mountian, L. (1995). *Strategies for Guiding Content Reading*. Boston: Allyn and Bacon.
- Dornyei, Z. (2005). *The Psychology of the Language Learner: Individual Differences in Second Language Acquisition*. London: Lawrence Erlbaum Associates.
- Dornyei, Z. & Ryan, S. (2015). *The Psychology of the Language Learner: Revisited*. New York: Routledge.
- Douglas, N. L. (2000). Enemies of critical thinking: Lessons from Social Psychology Research. *Reading Psychology*, 21, 129-144.
- Eanes, R. (1997). *Content Area Literacy: Teaching for Today and Tomorrow*. New York: Delmar Publishers.
- Ellozy, A. R. & Mostafa, H. M. H. (2010). Making Learning Visible: Using E-maps to Enhance Critical Reading Skills. *MERLOT Journal of Online Learning and Teaching*, 6(3): 634-646.
- Hong, M. & Zhiyuan, P. (2014). Is Critical Reading Indispensable to College English for General Purpose in China? *CSCanada Cross-Cultural Communication*, 10(3): 77-83.
- Icmez, S. (2009). Motivation and Critical Reading in EFL Classrooms: A Case of ELT Preparatory Students. *Journal of Theory and Practice in Education*, 5(2): 123-147.

- Johnson, J., Prior, S., & Artuso, M. (2000). Field Dependence as a Factor in Second Language Communicative Production. *Language Learning*, 50(3): 529-567.
- Karabay, A. (2015). The Guiding Effects of a Critical Reading Program on the Use of External Reading Strategies when Confronting an Ironic Text. *Educational Research Review*, 10, 2297-2304.
- Karadag, R. (2014). Primary School Teacher Candidate's Views towards Critical Reading Skills and Perceptions of Their Competence. *Procedia, Social and Behavioral Sciences*, 152: 889-896.
- Khatib, M. & Hosseinpour, R. M. (2011). On the Validity of the Group Embedded Figure Test. *Journal of Language Teaching and Research*, 2(3): 640-648.
- Khodary, M. M. & Abdallah, M. M. (2014). Using a WebQuest Model to Develop Critical Reading Achievement among Languages and Translation Department Students at Arar College of Education and Arts. *International Interdisciplinary Journal of Education*, 3(1): 246-256.
- Kobayashi, K. (2007). The Influence of Critical Reading Orientation on External Strategy Use during Expository Text Reading. *Educational Psychology*, 27(3): 363-375.
- Lisa, B. (2008). "I Don't Teach Reading": Critical Reading Instruction in Composition Courses. *Literacy Research and Instruction*, 47(4): 285-308.
- Nozari, A. Y. & Siamian, H. (2014). The Relationship between Field Dependent-Independent Cognitive Style and Understanding of English Text Reading and Academic Success. *Mater Sociomed*, 27(1): 39-41.
- Ruddell, R. B. & Unrau, N. J. (2013). Reading as a Motivated Meaning-Construction Process: The reader, the Text, and the Teacher. In D. E. Alvermann, N. K. Unrau, & R. B. Ruddell (Eds.) *Theoretical*

*Models and Processes of Reading (6<sup>th</sup> Ed.)* (pp. 1015-1068). Newark: International Reading Association.

Saracho, O. N. (1997). *Teachers' and Students' Cognitive Styles in Early Childhood Education*. Westport: Greenwood Publishing Group.

Sultan, Rofiuddin, A., Nurhadi, & Prihatni, E. T. (2017). The Effect of the Critical Literacy Approach on Pre-service Language Teachers' Critical Reading Skills. *Eurasian Journal of Educational Research*, 7(1): 159-174.

Sunggingwati, D. & Nguyen, H. T. M. (2013). Teachers' Questioning in Reading Lessons: A Case Study in Indonesia. *Electronic Journal of Foreign Language Teaching*, 10(1): 80-95.

Tomasek, T. (2009). Critical Reading: Using Reading Prompts to Promote Active Engagement with Text. *International Journal of Teaching and Learning in Higher Education*, 21(1): 127-132.

Tsai, P., Chen, S., Chang, H., Chang, W. (2013). Effect of Prompting Critical Reading of Science News on Seventh Graders' Cognitive Development. *International Journal of Environmental & Science Education*, 8 (1): 85-107.

Walz, J. (2001). Critical Reading and the Internet. *The French Review*, 74 (6): 1193-1205.

Wang, D. (2009). Factors Affecting the Comprehension of Global and Local Main Idea. *Journal of College Reading and Learning*, 39 (2): 34-52.

Witkin, H.A., Moore, C.A., Goodenough, D. R. & Cox, P.W. (1977). Field-Dependent and Field-Independent Cognitive Styles and Their Educational Implications. *Review of Educational Research*, 47 (1): 1-64.

Zin, Z. M. & Eng, W. B. (2014). Relationship Between Critical Thinking Dispositions and Critical Reading Skills of Malaysian ESL Learners. *The Asian EFL Journal Quarterly*, 16 (3): 41-68.

Zin, Z. M., Eng, B. E. & Rafik-Galea, S. (2014). Critical Reading Ability and Its Relation to L2 Proficiency of Malaysian ESL Learners. *The Southeast Asian Journal of English Language Studies*, 20(2): 43-54.