The Effect of EFL Learners' Critical Thinking on their Skill of Interpreting Information as Reflected in their Writing

* Dr. Muhammad Din, Assistant Professor

** Dr. Riaz Hussain, Assistant Professor

*** Sana Tahir, Lecturer (Corresponding Author)

Abstract
A good thinker distinguishes his interpretations from evidence, considers alternative interpretations, and reconsiders them under following the changed conditions and new evidence. Critical thinking enables and helps students to evaluate, judge, and make choices regarding everyday information so that they may obtain, believe and use the information to take action accordingly. This quantitative study aims to know EFL learners' attitude towards critical thinking skills of interpreting information and the effect of EFL learners' critical thinking on their skill of interpreting information with specific reference to their critical writing. The present study also aims to explore how m and universities any universities foreign language learners reflect critical thinking ability in writing skills while interpreting information. The researcher has used three research tools to this end. These research tools include critical thinking inventory (CTI), Watson-Glazer's (2002) critical thinking test for interpreting information (CTII), and critical writing test (CWT). The subjects of the present study are the B.Sc. (Bachelor Level) students from different colleges. The results of this study demonstrate that university students have a very positive attitude towards critical thinking skills interpreting information but their performance in reflecting critical thinking in the critical writing test does not match with the attitude towards critical thinking skills of interpreting information. This study also makes some academic implications for the development of EFL learners' critical thinking particularly in the context of Pakistan.
Keywords: Critical Thinking, Interpreting Information, Critical Writing, University Students, Tentative Language, Analysing Data

Introduction
Critical thinking has never been more necessary than in the present age of information when the devices like tablets, cell phones, and laptops have made access to information all the more convenient. Critical thinking enables and helps students to evaluate, judge, and make choices regarding everyday information so that they may obtain, believe and use the information to take action accordingly (Cano, 2006).

Interpreting information and critical thinking
All learning is an act of interpretation as whatever we learn we integrate it into our thinking and action (Paul et al., 1995). Interpretation means developing and providing a conception of specific ideas or issues in the light of previous perspectives, points of view, and experiences. A good thinker distinguishes his interpretations from evidence, considers alternative interpretations, and reconsiders them under the changed conditions and new evidence (Paul et al., 1995). Meyer (2007) maintains that the growth of students' mental skills is a must so that their critical thinking may keep pace with the information output. The ultimate goal of the educational process is thinking (Atabaki et al., 2015) as thinking enables students to follow others with the investigation (Kadivar, 2002) and make decisions on the rapid changes in society (Dewey, 1993). In this regard, Brow (2004) also posits that apart from limited linguistic factors, the development of the art and skill of critical thinking should also be the objectives of the curriculum. Critical thinking is one of the cherished objectives of the present-day curricula as it is "reflective decision making and thoughtful problem-solving about what to believe and do" (Facione and Facione, 2007; Facione, 2011). The knowledge of the origin of ideas and

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*   Department of English, Government Postgraduate College Burewala Email: mduaau@gmail.com

**   Department of English Linguistics, Islamia University of Bahahwalpur Email: dr.riazhussain@iub.edu.pk

*** Center for English Language, Iqra University Karachi. Email: sana.tahir@iqra.edu.pk

information and the skill of assessing sources of fact and opinion are the core skills of information literacy (McMillan & Weyers, 2013). Information literacy has been defined as: "knowing when and why you need information, where to find it, how to evaluate, use and communicate it ethically" (CILIP, 2012 as cited in McMillan & Weyers, 2013). According to McMillan and Weyers (2013), there are seven core thinking skills of information literacy. These key skills of information literacy include the ability to identify, scope, plan, gather, evaluating, managing and presenting information. The present study also intends to know EFL learners' attitudes towards interpreting information and evaluate and understand to what extent these learners reflect their critical thinking in their writing while interpreting the given information. These aspects constitute the basis of the research objectives of this study.

Research objectives

The present study strives to achieve the research objectives given below;

1.   To know EFL learners' attitude towards critical thinking skills in interpreting information.
2.   To know the effect of EFL learners' critical thinking on their skill of interpreting information as has been reflected in their critical writing.

Statement of the problem

In the age of information explosion, it has become the need of the time not only to educate students on how to filter and accept information but also caution them against accepting information at the face value. The explicit development of students' critical thinking ability is the prime requisite so that they may be able to evaluate and analyze information for validity, bias, and accuracy. The problem that confronts the researcher is that EFL learners face difficulty in interpreting any piece of information using their skill of writing. This is why the present study aims to highlight the problem that Pakistani EFL learners critical thinking skill particularly their skill of interpreting information is not being developed. These students remain unable to challenge and question the given content and evaluate it and interpret information because of their poor critical thinking skills for they remain unequipped with such tools as can enable them to find, analyze and interpret information.

Literature review

Critical thinking is one of the cherished objectives of the present-day curricula as it is "reflective decision making and thoughtful problem-solving about what to believe and do" (Facione & Facione, 2007; Facione, 2011). The knowledge of the origin of ideas and information and the skill of assessing sources of fact and opinion are the core skills of information literacy (McMillan & Weyers, 2013). The researcher has divided the section of the literature review into two sections i.e., the theoretical framework of the study and the conceptual framework of the present study.

Theoretical framework of the study

Critical thinking is a quite complex concept as it involves such activities and mental processes as are not easy to measure and describe (Vacek, 2009). This concept of critical thinking has been defined by different scholars, philosophers, and psychologists in different ways. For instance, the philosophers like Socrates, Plato, and Aristotle maintain that critical thinking is an ability to ask questions and think about values and ideas (McConnell, 2008). , The review of the literature on critical thinking brings to light the fact that there is no denying the importance of critical thinking particularly in the educational system. Critical thinking "is the intellectually disciplined process of actively and skilfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning or communication, as a guide to belief and action" (Scriven & Paul, 1996).

The critical thinking model presented by Facione (1990) consists of six skills of interpretation, "analysis, inference, evaluation, explanation, and self-regulation". These skills are further broken down into subskills. For instance, the skill of interpretation consists of three subskills which include categorization, decoding significance, and clarifying meaning. According to Ricketts (2006), categorization means the identification of themes, categories, or distinctions to render information, beliefs, and experience meaningful. The subskill of decoding significance involves the detection and description of the most important parts of information. It also means identifying hidden content, motive, or viewpoint of information. Whereas clarifying meaning involves paraphrasing to remove the confusion of a given content to make it understandable. These subskills of interpretation of information can be illustrated with the help the figure 1 given below.
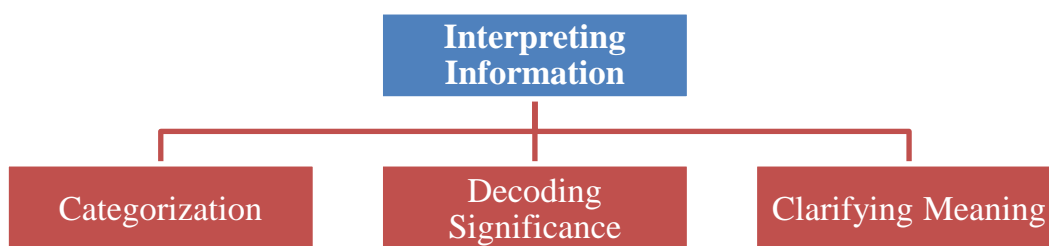
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Figure. 1   Theoretical Framework (Facione, 1990)

Figure 1: Visual representation of subskills of interpreting information

It is the teachers who can play a pivotal role in initiating their students' critical thinking skills especially the skill of interpreting information by providing them such a conducive environment as can foster their thinking skills (Ricketts, 2006). According to Gough (1991), teachers can create a congenial atmosphere for the development of critical thinking skills by setting "ground rules, providing well-planned activities, showing respect for students, providing non-threatening activities, being flexible, accepting individual differences and demonstrating positive attitude". It can also be done if a teacher acknowledges every response, allows students to be active participants, creates such experiences as can ensure students' success, and uses a wide variety of modalities. In this regard, Ricketts (2006) throws light on the techniques to develop students' skills of interpretation. For instance, silence provides students time to think to interpret information. Secondly, the discussion is another useful method for developing students' skills in interpreting information (Gohkale, 1995). Socratic Discussion and Fish-bowling are such methods as can help students to interpret information by categorizing, decoding significance, and clarifying meaning.

Critical reading and writing can be termed as the most crucial skills which are essential for the interpretation of information. Ricketts (2006) maintains that critical reading is such an active and intellectual process as enables a reader to engage himself in a dialogue with the writer. Critical reading helps a reader to look for what is significant and clarify meanings of a given text while going through it (Paul et al., 1995). Reading is a highly constructive activity as it involves extracting and internalizing implicit meanings of a text through some intellectual discipline which is based on the close reading (Paul & Elder, 2014). According to Paul and Elder (2014), reading a paragraph means finding that idea or question that is its driving force. Asking questions about the most important idea in a paragraph and how the important ideas are connected in it can help a reader to reach the gist of a given passage. Reading also means to identify an author's most important question, problem or issue, significant information, basic conclusion, basic concepts, fundamental assumptions, and significant implications so that that text can be evaluated and assessed concerning its clarity, fairness, accuracy, logic, precision, significance, depth, relevance and breadth (Paul & Elder, 2014).

Writing is also one of the teaching tools for developing students' critical thinking because in writing students learn how to develop, support, and elaborate a thesis in a way the others can understand. While doing the writing, students learn what objections can be raised to their thesis or point of view by appreciating and acknowledging the limitations of their point of view. Good thinking is a prime requisite for good writing and good thinking can be fostered and developed by making students accomplish writing assignments so that the level of grammar and the content presented by students can be evaluated to determine the areas where their thinking lacks. Writing is an evaluative, analytical and creative set of acts that are quite fundamental to learning. Skilled writers write for different purposes, in different situations, and in different ways (Paul & Elder, 2013). According to Paul and Elder (2013), critical writing requires a writer to go beyond impressionistic writing. This is so because impressionistic writers lack the realization of the importance of knowing how meanings are created in mind and how reflective writers evaluate and monitor when they write. Whereas a reflective writer writes purposely, interrelates ideas, assesses what he writes, and values new ideas. A reflective write knows how the mind functions when one writes. Paul and Elder (2013) also claim that writing is a sort of intellectual work and most of the students remain unable to understand how this intellectual work is related to writing. According to Paul and Elder (2014) there lies an intimate relationship between reading and writing as any deficiency in one entails an equal deficiency in the other. If students remain unable to distinguish clear writing from unclear, this inability will cause a problem in their reading. In the same vein, if students are unable to detect any ambiguity vagueness in

a text, this inability, too, will pose a challenge for them to formulate significant concepts as they write. Bringing ideas from a text into one's mind and arranging them logically in a written form is the must to write substantively. Superficial and uncritical reading makes students forget and distort whatever they read. Likewise, superficial writing does not let learners take ownership they write. Close reading and substantive writing require thinking from multiple perspectives, good use of the elements of reasoning, and intellectual ability on the part of critical thinkers as close reading and substantive writing are mutualistic and symbiotic skills of disciplined thought.

Cognitive Process Model

Writing is a cognitive process that consists of "a series of decisions and choices" (Flower & Hayes, 1981). Regarding the involvement of decisions and choices in the cognitive process of composition, Flower and Hayes (1981) have introduced a theory in the form of a cognitive process model to discuss the thinking processes in writing. This cognitive process model presented in "A Cognitive Process Theory of Writing" constitutes the theoretical framework of the present study. In this model, "elementary mental processes" constitute its major units, and these processes are put in "hierarchical structures". This cognitive process model contains three major elements which include "task environment, the writer's long-term memory, and the writing processes". These constituent elements have been discussed briefly as follows;

The Task Environment

In composing, the task environment consists of the rhetorical problem. This problem is so complex that it involves rhetorical situation, audience, and writer's goals in composition, and all of these aspects characterize a good writer. The second element of the task environment is "the written text" which puts a constraint on the choices of a writer as does the rhetorical problem.

The Long-Term Memory

The second element of the cognitive process model is the long-term memory which can be termed as the storehouse of the writer's knowledge of the audience, topic, writing plans, and problem representations. But finding a cue that helps a writer "retrieve a network of useful knowledge" and reorganizing the information that meets the demands of rhetorical problems are the challenges that beset long-term memory.

The Writing Processes

The writing processes constitute the third element of the cognitive process model of writing. Planning is the sub-process of the writing processes. The formation of an internal representation of the knowledge used in writing is planning. Generating ideas that help writers retrieve information from long-term memory in a well-organized manner is one of the sub-processes of planning. But when the retrieved information is an unconnected, fragmentary, and contradictory, organization which is another sub-process of planning intervenes. The organization plays an important role in creative thinking through "grouping ideas and forming new concepts". Goal-setting is also another process of planning in composition. This process is not related to the pre-writing stage rather it is intimately tied with the continuous and ongoing process of writing. Another sub-process of planning is translating. It means to translate meaning by embodying them in keywords and organizing them in a complex network of writing to fulfill the cognitive demands of writing. Reviewing is also one of the sub-processes of planning and it further consists of evaluating and revising. Reviewing serves the purposes of further translating and systematic evaluation of a text. All these cognitive processes of writing are monitored by the monitor which acts as a "writing strategist" and monitors the writer's move from one process to the next. This cognitive process model of writing can be illustrated in figure 2 as follows;
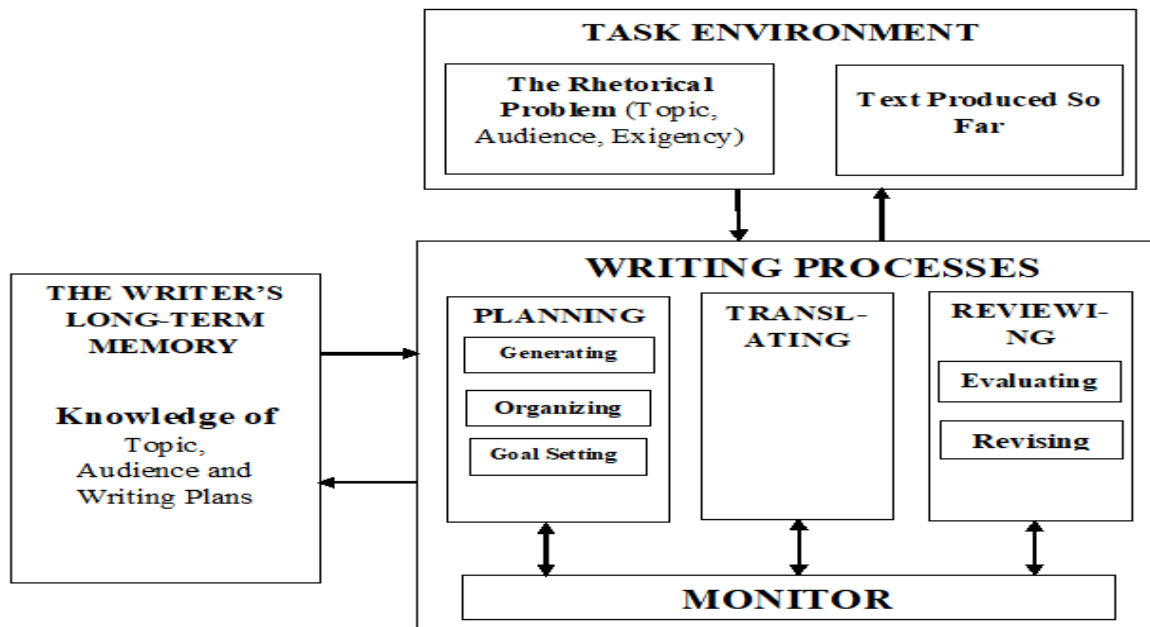
Figure 2: Structure of the writing model
Adopted from: Flower and Hayes (1981). A Cognitive Process Theory of Writing

Conceptual framework of the study

Critical thinking is such an ability as can ensure successful learning. Critical thinking also involves cognitive processes like evaluation, analysis, application, interpretation, and synthesis. These cognitive processes make all kinds of learning including language learning possible. Critical thinking helps learners develop their performance not only in receptive (listening and reading) and productive (speaking and writing) skills but also in affective, cognitive, and metacognitive strategies. Thus, critical thinking plays a vital role in teaching and learning English as a second language. The present study has strived to know the effect of university students' critical thinking ability on their skill of interpreting information with specific reference to their writing skills. In other words, this study aims to know how much university students reflect their ability of critical thinking in their writing skills while interpreting information. The fundamental concept behind the carrying out of this study is that interpretation is also one of the cognitive skills of critical thinking and it involves both language skills i.e. receptive (reading) and productive (writing). Critical reading and writing are termed symbiotic skills. Recognizing the paramount importance of critical thinking in second language learning and its core relation with reading and writing, the researcher has conducted this study with a specific focus on university students' writing skills. The conceptual framework of this study has been illustrated with the help of figure 3 as follows;
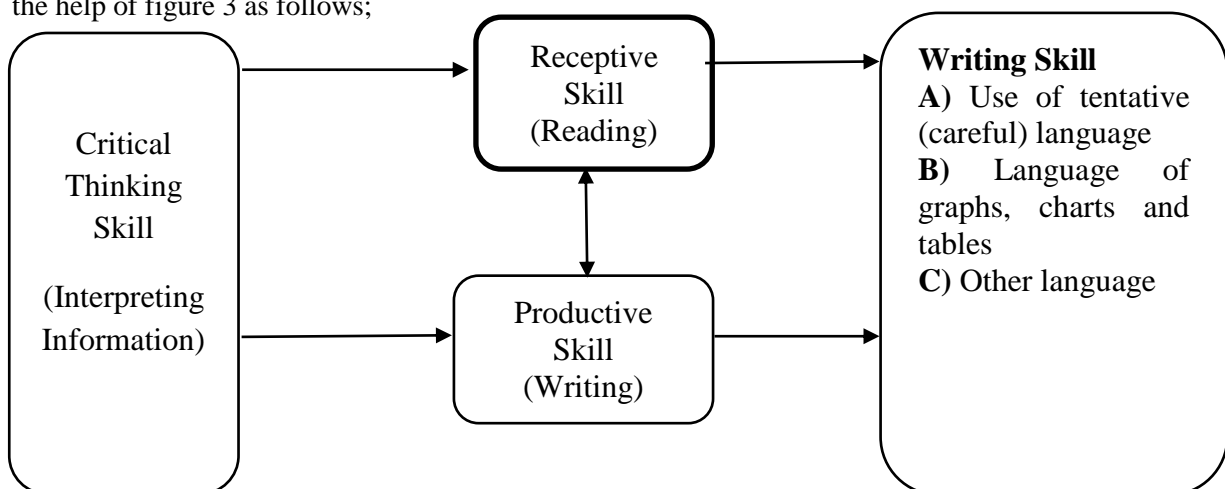

Figure 3: Visual representation of the conceptual framework of the study

Methodology

This quantitative study aims to know EFL learners' attitude towards critical thinking skills in interpreting information and the effect of EFL learners' critical thinking on their skill of interpreting information with specific reference to their critical writing. The sample of the present study comprises 550 EFL learners of bachelor level of different state-run colleges. To achieve the set objectives of the study, the researcher has used three research tools. These tools include an inventory of critical thinking (CTI), Watson-Glazer's (2002) critical thinking test of interpreting information (CTII), and critical writing test (CWT). The first research tool (CTI) was designed on 5-point Likert-scale in consultation with two experts. The computed Alpha value of this research tool was .709. The second research tool of this study is the critical thinking test of interpreting information (CTII) and it comprises 20 marks. This test was conducted to know the university EFL learners' critical thinking ability to interpret information. Whereas the third research instrument of the study is the critical writing test (CWT). This test was administered to the participants of the study to know to what extent these EFL learners reflect their critical thinking ability in their writing while interpreting information. In the process of designing a critical writing test (CWT) for this study, the researcher resorted to 'Student's Book' titled 'Academic Writing and Critical Thinking' compiled by Richard Harrison (2015) and published by Canford Publishing, UK. This CWT comprises four areas of writing task, thinking skill, writing skill, and language focus and carries 12 marks. The core contents of the writing test which include writing task, thinking skill, writing skill and language focus have been presented in the table 1 given as follows;

Table 1: Writing tasks, thinking skills, writing skills, and language focus

Writing Task	Thinking Skill	Writing Skill	Language Focus
Interpreting Information	Commenting on data/Being careful with data	Describing a bar chart	Use of tentative language/Language of graphs and charts **A)** Use of tentative (careful) language **B)** Language of graphs, charts, and tables **C)** another language

The researcher used a 3-point scoring scale i.e. unskilled, beginning skills, and highly skilled as grading rubrics and points guideline for CWT. The unskilled students got zero scores; the students having beginning skills were awarded half score while the highly skilled students were credited with full score. The students whose answer was inaccurate and unclear were given zero marks for their answers and the students whose answers were not perfectly accurate rather partially correct and partially incorrect were awarded half credit. Full credit was given to those answers which were accurate, insightful, and clearly and precisely stated. The following table (table 2) illustrates the grading rubrics and points guidelines for this test.

Table 2: Grading rubric and point's guideline for CWT

Level of Skill	Key Skills	Sore
Unskilled	• Inaccurate • Unclear	Zero Score
Beginning Skills	• Partially Correct • Partially Incorrect	Half Score
Skilled/High Skilled	• Accurate • Clear • Precise • Insightful	Full Score

To evaluate the EFL learners' performance in CTI, CTII, and CWT, the researcher categorized their obtained score into four categories of excellent, very good, average, and poor. This study has set the "above average" score of the subjects of this as a benchmark for their performance in CTI, CTII, and CWT.

Results and Discussion

The research objectives of the present study were to know university students' attitudes towards critical thinking skills in interpreting information and to find out the effect of university students' critical thinking on their skill of interpreting information with specific reference to critical writing. To this end, the results of the study have been presented and discussed under different heads as follows;

EFL Learners' response towards critical thinking

The attitude of the university students towards the critical thinking skill of interpreting information has been presented in table 3 as follows;

Table 3: University students' attitude towards interpreting information

S. No.	Questionnaire Items	SA	A	NO	DA	SDA	M	STD
1	I reflect as I interpret information.	121	390	1	33	5	4.07	.735
2	I routinely give examples from my experience as I interpret information.	123	348	3	72	4	3.93	.903
3	I can explicate in writing the thesis I am developing and defending.	82	403	4	60	1	3.92	.777
4	I can create analogies and metaphors that help readers understand what I mean.	67	366	16	96	5	3.72	.923
5	I consistently use universal intellectual standards to interpret information.	85	331	8	122	4	3.67	1.009
6	I can sum up the main point of a passage with my critical thinking ability.	101	372	5	68	4	3.91	.863
7	I analyze the general theme of a text before thinking about its interpretation.	103	363	3	80	1	3.89	.883
8	I can organize thoughts and articulate them concisely and coherently.	91	329	10	115	5	3.70	1.007
9	I feel at ease in expressing my own opinion with reasonable arguments.	92	345	12	95	6	3.77	.962
10	I can write logical comments on the information embodied in a text.	57	300	12	117	4	3.42	1.068
11	I find myself able to present the results of my reasoning in a cogent and coherent way.	65	346	16	120	3	3.64	.969
12	I take great care to avoid lapsing into direct speech while writing.	92	277	1	169	11	3.49	1.150

The results of this study demonstrate that university students have a very positive attitude towards critical thinking skills in interpreting information. For instance, of the participants, this 22% strongly agree and 70.9% agree that they reflect when they interpret information. Regarding giving examples during interpreting information, 22.4% strongly agree and 63.3% agree with this claim. Among the participants of the study, 14.9% strongly agree and 73.3% agree to the questionnaire item that they can explicate the thesis they develop. Likewise, 81.2% of the subjects of this study claim that they can create analogies and metaphors, use universal intellectual standards, sum up the point of a passage by using their critical thinking ability, and analyze the general theme of a text before thinking about its interpretation. Moreover, 73.6% of the students have claimed that they can organize thoughts and articulate them concisely and coherently, feel ease in expressing their own opinion with reasonable arguments, and write logical comments on the information embodied in a text. So far as presenting the results of their reasoning in a cogent and coherent way and taking care to avoid lapsing into direct speech while interpreting information are concerned, 70.6% of the participants have maintained that they resort to these writing skills. All these statistics reveal that university students have a highly positive attitude towards interpreting information and using critical writing skills.

Regression analysis

To know if the overall score of the test of interpreting information (CTII) is a positive predictor for the critical writing test (CWT), the present study has computed simple linear regression analysis. The present study has also computed multiple linear regression to know if the critical thinking skill of interpreting information acts as a positive predictor for the overall score of the critical writing test. The results of these regression analyses have been presented (tables 4-6) below.

Table 4: R Square value for score of overall TIIT

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.059	.004	.002	2.445

a. Predictors: (Constant), TIIT

Table 5: ANOVA table of regression

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.514	1	11.514	1.927	.166
	Residual	3275.039	548	5.976		
	Total	3286.553	549			

a. Dependent Variable: TCWT
b. Predictors: (Constant), TIIT

Table 6: Results of regression analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.711	.310		21.653	.000
	TIIT	.030	.022	.059	1.388	.166

a. Dependent Variable: TCWT

The results of the regression analysis shown in tables 4, 5 and 6 reveal that the correlation coefficient between the overall score of the test for interpreting information (CTII) and the overall critical writing test (CWT) is .059 and the overall regression model is not significant (F (1, 548) =1.927, p = .166 (p > .05)). Table 6 shows that the correlation between CTII and CWT is not statistically significant (r (.059) = .166, p > .05).

EFL Learners' performance

The evaluation of university students' performance in critical thinking inventory (CTI), critical thinking test of interpreting information (CTII), and critical writing test (CWT) is one of the major objectives of this study. The performance of university students has been categorized into four categories of excellent, very good, average, and poor. This study has also set a benchmark of "above average" for students' score in different tests which have been administered to them during the present study. In this regard, students' performance in these three tests has been presented and discussed as follows;

Performance in CTI

The performance of university students has been categorized into four categories of excellent, very good, average, and poor. The results of the present study reveal that there is 34.4% (189) students who score is excellent, 62.4% (343) who have scored very good score and 3.3% (18) students' score is average in CTI. In other words, 96.7% (532) university students' score is "above average" which has been set as a benchmark in this study. These results have been presented in table 7 and further illustrated visually in figure 4 given as follows;

Table 7: University students' performance in CTI

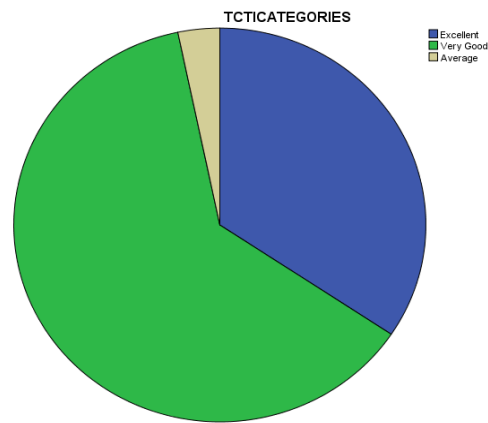|		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	189	34.4	34.4	34.4
	Very Good	343	62.4	62.4	96.7
	Average	18	3.3	3.3	100.0
	Total	550	100.0	100.0	

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Figure 4: Visual representation of university students' performance in CTI

Performance in CTII

According to the results of the critical thinking test of interpreting information, there are 51.6% (284) students' who have scored excellent score, 24.4% (134) students have got a very good score, 14.2% (78) participants have achieved average score and 9.8% (54) students' score is poor in CTII. The present study has found that 76% (418) university students' score is "above average" in CTII. These results have been shown in table 8 and visually illustrated in figure 5 given as follows;

Table 8: University students' performance in TIIT

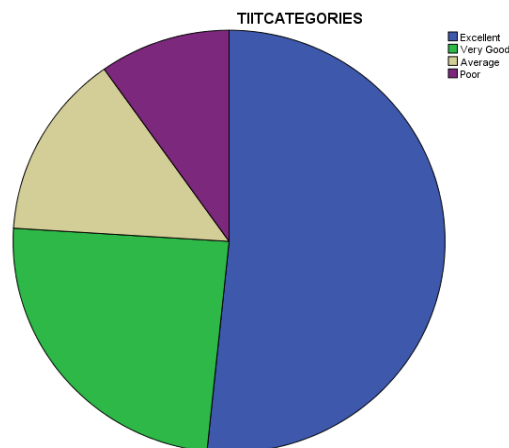|		**Frequency**	**Percent**	**Valid Percent**	**Cumulative Percent**
	Excellent	284	51.6	51.6	51.6
	Very Good	134	24.4	24.4	76.0
Valid	Average	78	14.2	14.2	90.2
	Poor	54	9.8	9.8	100.0
	Total	550	100.0	100.0	

Figure 5: Visual representation of university students' performance in critical thinking test of interpreting information (TIIT)

Performance in CWT

In consonance with the research objectives, the present study has found that 22.2% (122) university students' score is excellent, 31.8% (175) students have got a very good score, and 43.1% (237) students have got average score whereas 2.9% (16) participants' score is poor in CWT. In other words, there are 54% (297) university students who have reached the benchmark of "above average" in reflecting their critical thinking ability in the critical writing test (CWT) while interpreting information. The results of CWT have been presented in table 9 and illustrated visually in figure 6 given below;

Table 9: University students' performance in CWT

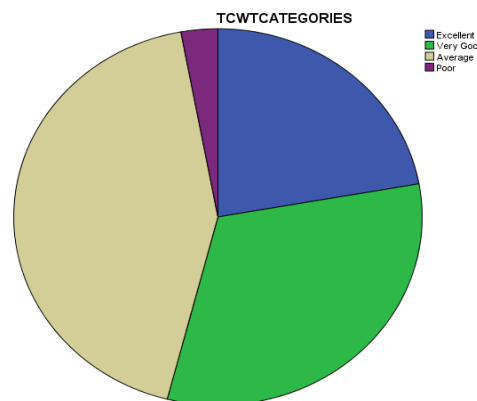|		Frequency	Percent	Valid Percent	Cumulative Percent
	Excellent	122	22.2	22.2	22.2
	Very Good	175	31.8	31.8	54.0
Valid	Average	237	43.1	43.1	97.1
	Poor	16	2.9	2.9	100.0
	Total	550	100.0	100.0	

Figure 6: Visual representation of university students' performance in critical writing test (CWT)

University students' performance level in CWT

The present has also categorized university students' critical writing skills into three categories by following the grading rubric and point's guideline for critical writing test (CWT) as has been shown in table 3. In this respect, this study has found that there are 22.2% (122) university students who are skilled in their writing skills. In other words, these students (22.2%) are those whose answer was accurate, insightful and clearly and precisely stated in doing an interpretation of information. The results of the present study also revealed that 56.5% (311) students have been found with beginning skill so far as their writing skill is concerned. It means that more than fifty percent of the participants of the present study have not developed their writing skills to perform and accomplish a given writing task accurately. On the other hand, this study has also found that 21.3% (117) are unskilled and they are unable to write accurately and clearly. The results of the study also demonstrate that only 22.2% of the university students have developed writing skills and they can reflect their critical thinking ability in their writing. These results have been presented in table 10 and illustrated visually with the help of figure 7 given as follows;

Table 10: University students' level in CWT

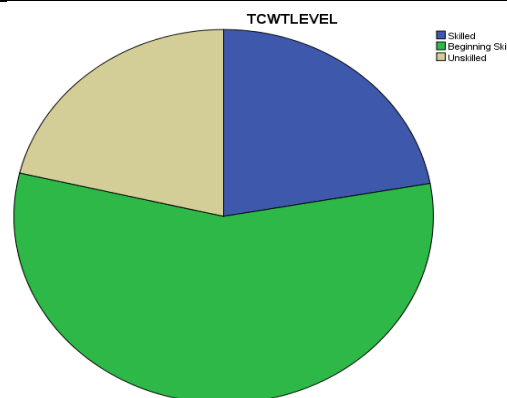|		Frequency	Percent	Valid Percent	Cumulative Percent
	Skilled	122	22.2	22.2	22.2
Valid	Beginning Skill	311	56.5	56.5	78.7
	Unskilled	117	21.3	21.3	100.0
	Total	550	100.0	100.0	

Figure 7: Visual representation of level of university students' performance in critical writing test (CWT)

The findings of the study reveal that university students have a highly positive attitude towards critical thinking skill of interpreting information as 34.4% students have demonstrated excellent, 62.4% very good and 96.7% university students' score is "above average" which has been set as the benchmark for the student's performance in this study. So far as university students' performance in critical thinking test of interpreting information (CTII) is concerned, it has been found that 51.6% students have performed excellently and 24.4% students' score is very good. There are 76% of students whose score is "above average" in this test (CTII). When we have a look at how much university students have been successful in reflecting their critical thinking ability in their writing skill while interpreting information, we come to know that 22.2% of students have got the excellent score, 31.8% have scored very good score and 54% of the university students have been able to hit the benchmark of "above average" in the critical writing test (CWT). This study has also noted a decrease in university students' performance. For instance, there is a decrease of 21.4% in their performance in the critical thinking test of interpreting information (CTII) in comparison with their attitude towards the interpretation of information. On the other hand, a decrease of 44.2% has been noted in the performance of the university students when attempted a test of critical writing for interpreting information in comparison with their attitude towards the skill of interpreting information. According to these findings of the study, 44.2% of university students remain unable to come up with their expressed attitude through their performance in critical writing tests. It can also be inferred from these findings that 44.2% of university students are unable to use tentative (careful) language and the language of graphs, charts, and tables. This inability of the university students can be ascribed to their less developed skills of critical thinking. Many factors contribute to this end. For instance, the habit of rote learning, large classes, the requirement of the system of examination, and the lack of the use of such classroom activities can develop the EFL learners' critical thinking skills particularly the skill of comprehending and interpreting information which is couched in the textbooks which they read. The findings of the study conducted by Chouari and Nachit (2016) also report that the prevailing culture and system of education pose major challenges for the Moroccan university students to their critical thinking skills. Apart from this, big classes and time pressure are also among the formidable obstacles in teaching the skills of critical thinking. O'Brian (2013) contends that building a deeper connection to information through asking questions and deducing information is a very important skill in students' education. The findings of the action research carried out by O'Brian (2013) demonstrate that students' critical thinking skills improved to a great proportion (70%) through the use of minute papers in the classroom. Likewise, Miller, (2015) reports that "higher education is in crisis" because university students lack critical thinking skills and the skills of applying knowledge in real life. Therefore, the researcher believes that critical thinking should be taught in first-year composition (FYC) class. The present has also found that teachers remain unable to act as "transformative intellectual" (Giroux, 1985) to provide students a framework to construct their knowledge and actively participate in the process of learning (Zivkovic, 2016). In this regard, Paul and Elder (2004) suggest that students' skill of creativity, critical and analytical thinking, decision making, and finding solutions to the problems of the real world be encouraged and promoted in a classroom environment so that they may be prepared for global competitiveness and become good critical thinkers. Elder (2007) also contends that traditional education does not help students nourish those "intellectual capabilities" which are the prime requisites for their academic and personal growth. She has also pointed out that students remain unable to reflect on and ask questions about what they read and thus they cannot draw inferences just because of the traditional approaches being resorted to in the classroom. Halpern (2007) also seconds the view that critical thinking develops learners' cognitive skills and strategies that consequently ensures desirable outcomes. In the same vein, Atkinson (1997) argues that critical thinking has got dominance in the effective teaching and learning of the second language as critical thinking contributes a lot to develop EFL learners' skills of problem-solving, evaluation, interpretation, self-regulation, and self-appraisal (Stroup, 2006; Foster & Pikkert, 1996; Ra0, 1990; Nagaraju, 2008; Ruggiero, 1988).

Conclusion

This study has found out the effect of university EFL learners' critical thinking ability on their writing skill with specific reference to critical thinking skill of interpreting information. The findings of the present study reveal that in the critical thinking test of interpreting information, 51.6% of university EFL learners' performance is excellent and 24.4% of EFL learners' performance is very good. But in

the critical writing tests, there are 22.2% of university students' performance is excellent and 31.8% of EFL learners' performance is very good. It means the number of students who scored excellent and very good in CTII has decreased in CWT when they come to reflect their critical thinking in their writing. In other words, these university EFL learners have been found able to meet the cognitive demands of writing.

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