

## On Gender Perspective of Nature and Instruction of Critical Thinking among EFL Teachers: Language Teacher Education Implication<sup>1</sup>

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### ABSTRACT

*Advocated by literature the crucial role of Critical Thinking can not be repudiated, though more studies should be carried out to divulge its mysterious nature. The present study points to investigate EFL teachers' perceptions of Critical Thinking and their opinion toward the necessity of teacher training on Critical Thinking in respect to their gender. For this purpose, a total 116 EFL teachers, 56 females and 60 males, contributed in this survey. A 12 item 5 Likert questionnaire was employed to collect the required data. The analysis of the data by SPSS software indicated that there was a significant difference between male and female language teachers' perceptions toward critical thinking nature. However, as upheld by both male and females, the results of the study put emphasis on the integration of Critical Thinking training into language teacher education curriculum as long as providing on going support for in service teachers. The findings of the present study canvass valuable and thought-provoking recommendations for teacher educators, material developers and syllabus designers.*

*Keywords: Critical thinking, instruction, in-service teachers, Gender, teacher education*

### Introduction

The term Critical thinking (CT) has been applied in numerous disciplines and it has been widely assumed as one of the fundamental issues in general education. Walters (1989) asserted that education and critical thinking could be compatible partners only if the proper nature and scope of critical thinking are detected. However, not adequate effort has been done to scrutinize its role in respect to other pivotal issues. Initially, the term 'critical thinking' refers to what Dewey called 'reflective thinking' as active, persistent and careful consideration of any beliefs (Hitchcock 2020). Moon (2008) looked attentively at critical thinking and she presented a constructive foundation to disclose the nature of the term. In her idea the heart of critical thinking is assuming critical thinking as a capacity to work with and express complex ideas, whereby a person can make effective provision of evidence to justify a reasonable judgement. The evidence, and therefore the judgement, will pay appropriate attention to context. She claimed that:

Critical thinking is, itself, an aspect of the activity of thinking. It is a form of learning, in that it is a means of generating new knowledge by processing existing knowledge and ideas using what we have called the tools of manipulation of knowledge (e.g. analysis, understanding, synthesis). We might call critical thinking, itself, a 'multiple' tool for the manipulation of knowledge. (p.94)

Defining critical thinking requires specifying relevant domain and scope for it along with clarifying the possible interactive components which play a significant role in developing the concept. Paul (2005) conceptualized critical thinking as "the art of thinking about thinking in an intellectually disciplined

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manner". Based on his belief, this type of thinking involves three essential components, (1) analyzing (2) assessing and (3) improving. Previously in the same path, Ennis (1996) claimed that critical thinking could be best described in the following statement: "Critical thinking is reasonable reflective thinking focused on deciding what to believe or do. The emphasis is on reasonableness, reflection, and the process of making decisions". In his consideration there are various dispositions which should be monitored in the process of clarification of critical thinking. The dispositions defined as the tendency to do something have been blended inextricably with critical thinking conceptions. Ennis (1996) developed a system having basic broad dispositions:

- (1) to "get it right" to the extent possible
- (2) to represent a position honestly and clearly
- (3) to care about the dignity and worth of every person.

The first two dispositions are constitutive and the third is correlative, however, he claimed that multiple factors impact the function of this system, among which gender is significant. Gender has been one of the thought-provoking influential elements in the realm of education specifically in language teaching and learning. Although there have been plenty of studies on the role of gender in language teaching and learning, not sufficient investigations have been done to explicate the contribution of gender in respect to critical thinking manipulation primarily by language teachers. In addition, to equip the language teachers with appropriate perception of critical thinking, it is required to investigate whether to include critical thinking training in teacher practicum or not. In spite of the ample number of researches regarding the perception of critical thinking, there haven't been significant studies to evaluate the possibility and necessity of inserting the instruction of critical thinking in the curriculum of language teacher education programs. Thereby, this study makes an effort to clarify those circumstances and provide some recommendations.

### **Literature Review**

Due to the ongoing development of teacher education, the crucial role of critical thinking skills in this field turned to be indisputable. Various studies have been done to reveal at least one aspect of the effective role of CT. The fundamental base of all studies is the belief that Critical thinking involves discerning truth and error, accordingly a good critical thinker is supposed to learn how to identify claims that are true, simultaneously, to be able to recognize and avoid claims that are best judged false. Moreover, the person is capable to comprehend and sincerely confess the issues they can't claim whether they are true or false (Foresman, Fosl & Watson 2017).

First and foremost, identifying to what extent the teachers have an unerring sense of the nature of CT is needed. Stapleton (2011) claimed that although the necessity to engender CT in students and teachers seems to be self-evident, proper understanding the term, how to acquire it, how to manipulate it specifically in classroom setting, as well as the necessity to instruct it to both learners and teachers require more practice and investigation. Some studies aimed to investigate the teachers' perceptions of the nature of critical thinking. Pertinent to that purpose, we can refer to Qing, Jing and Yan's study in 2010 worked on clarification of chemical pre service teachers' perceptions of CT and how to improve CT skills.

In the same path, Zhang, Yuan and He in 2020 investigated 336 teachers' CT perceptions. The results of their study declared that, the teachers lacked professional knowledge of CT and how to implement it in their classes. They found out that EFL teachers indeed acknowledged integrating the CT into EFL curriculum and classroom teaching.

Smetanová, Drbalová and Vitáková (2015) conducted a research that its outcome represented that the term "critical thinking" was perceived differently by various teachers. They claimed that lack of clear definition of CT concepts and not familiarity with appropriate CT teaching methods provoked such a result. The same postulation had been proposed by Kadir (2007) and it pointed that this lack of consensus in defining the concept of critical thinking had been associated with different philosophical and psychological viewpoints. As a whole, theorists focus on the concept of critical thinking, whereas psychologists mainly focus on the concept of critical thinking abilities. Similarly, Aliakbari and Sadeghdaghighi in 2013 scrutinized teachers' CT perceptions and they met inadequacy of accurate

perception of CT concepts and skills .They concluded that teachers' lack of CT knowledge could be one of the obstacles of implementing CT in the process of teaching and learning.

Another probe into teachers' perceptions of CT revealed that the faculty's knowledge of perceptions and concepts of critical thinking was severely lacking( Stedman & Brittany 2012). However, contrary result was obtained by Kavanoz and Akbaş (2017). Their study indicated that the participating in-service teachers had adequate knowledge about CT. The other study carried out by Asgharheidari and Tahriri in 2015, signified that most of the teachers in the research had a clear understanding of CT concepts , at the same time they had a great desire for being trained in how to teach CT.

As it is broadly reaffirmed, the perception of the nature of CT concepts could be shaped by multiple variables among which gender assumed to be the cornerstone .The impact of gender on pre- service teachers' perceptions was investigated by Çakıcı ( 2018) . The outcome of the study revealed no significant difference among male and female pre-service EFL teachers' perceptions of CT. The same result was obtained by Salahshoor and Rafiee's effort in 2016 ,while regarding EFL learners. However, no significant effort has been made to consider the probability of the relationship between gender and in-service teachers' perceptions of CT ,particularly language teachers. In the literature, mostly , the pre-service teachers' ideas are examined not in-service teachers. Therefore , this study tries to provide some light on the vague aspect of that possible relationship ,by observing the in-service language teachers' opinions. Being familiar with the nature of CT would not guarantee the appropriate instruction of CT by EFL teachers. In addition, it would not make CT training in teacher education redundant. As the outcome of the research conducted by Strakova and Cimermanova ( 2018) proved teacher education institutes should incorporate in the process of CT development. Furthermore, Birjandi and Bagherkazemi (2010) by considering the relationship between EFL teachers' CT ability and their professional success came to conclusion that there was an absolute need to accommodate 'critical thinking' in EFL teacher education and teacher evaluation programs. In the study done by Ghaemi and Taherian in 2011, the relationship between teachers' CT and their teaching success was investigated . 70 teachers took part in the study and the result produced significant relationship between teachers' CT and their success.

Looking through literature makes it obvious that various studies, like Crenshaw, Hale, and Harper ( 2011) aimed at providing some models and rationalizations to infuse CT instruction in classes to equip learners with CT skills. In a similar line of inquiry, Yuretich 2004, Solon 2003, conducted studies indicated the significant of CT instruction among students.

A comprehensive review of the existed literature to 2011, highly recommended that teachers assist their students to become effective critical thinkers regarding CT skills and their attitudes towards CT(Rezai, Derakhshan, and Bagherkazemi 2011). Ketabi, Zabihi and Ghadiri ( 2012) by conducting a survey which was oriented towards spotting EFL teachers' attitudes to including CT into English language teaching curriculum , supported CT instruction intention. They allocated a questionnaire accompanied by face-to-face interviews to collect the data . The teachability of CT skills in EFL classes was discussed by Wang and Zheng (2016).

Petek and Bedir ( 2018) conducted a research aimed at analysis of the impact of a 14-week action plan implementation on pre service English teachers' awareness and teaching practices in respect to the integration of CT into language teaching . Participants in the study who were 8 pre service language teachers were not sufficiently familiar with CT concepts and skills . However, by explicit training of CT they managed to make language teachers get appropriate perception of CT constructs and capable of embedding CT into their own teaching .

As the mentioned studies focused on elaboration of the necessity of inserting CT instruction in teacher education programs, some other studies move one step further and investigate various models of CT instruction in teacher education. In this regard , we can refer to the recent research done by Bayram, Kurt and Atay (2019) in which they aimed to compare the effectiveness of WebQuest-supported CT instructions with traditional text-only instructions. The findings of their study were in favor of WebQuest instruction which led to enhance the teachers' awareness of CT.

There are some other studies which look differently at CT , as an example, some seek to clarify the role of CT in teachers' success. According to the findings of the study done by Ashraf, Garmabi and Fayendari

(2017), EFL teachers' success was correlated by their CT skills, as it was observed teachers having higher CT skills had been more successful in respect to their students' opinions. Formerly, similar experience had been done by Khodabakhshzadeh and Ghaemi in 2011, concerning the correlation between IELTS teachers' success and their CT skills and their attempt revealed that almost 84 percent of those teachers benefited from CT abilities were successful in their teaching career.

In a nutshell, as Leu and Kinzer (2000) argued a vital element of preparing children for future is helping them to acquire and develop the capacity for critical thought and creative thinking. In this respect there is a high burden on any education system. To achieve the desired goal, primarily the teachers should be equipped with the necessary tools. As mentioned in advance, there is ample research with the purpose to unearth the mysterious dimensions of CT role in education. However, not adequate research has been done to investigate to what extent teachers specifically experienced language ones have accurate perceptions of CT considering the effect of their gender. Moreover, the relationship between teachers' opinion toward blending teacher training with CT instruction and their gender requires more investigations. Therefore, the present study has been carried out to reply to those inadequacies. To fulfill the existed insufficiencies and provide satisfactory responses the following questions have been proposed to pave the way:

1. Is there any significant difference between male and female EFL in-service teachers' perceptions of Critical Thinking?
2. What are the perceptions of male and female EFL in-service teacher towards Critical Thinking?
3. What are the attitudes of male and female EFL in-service teacher towards the instruction of Critical Thinking during teacher preparation courses?

### **Methodology**

By appealing to a quantitative method, this survey points to explore the instructors' attitudes toward CT perceptions and instruction in respect to their gender. To answer the first research question, a null hypothesis was provided and teachers' opinions towards the other questions were analyzed. Participants, instrument and procedures are mentioned in the following part.

### **Participants**

The participants in this study were 116 in-service EFL teachers, 56 female and 60 males. They all were between 27 – 45 years old with average 8 years teaching experience in different language institutes. None of the teachers had been exposed to CT training regarding acquiring the knowledge about the nature of CT and its instruction and all participated in this survey voluntarily.

### **Instrument**

The instrument in this survey was the researcher-made questionnaire comprising 12 Likert-type closed-ended items which explored the teachers' attitudes toward the meaning of CT and the necessity of its instruction in language teacher education. The questionnaire was adapted to a five-point scale ranging from 'Strongly disagree' to 'Strongly agree' (1 = strongly disagree, 2 = disagree, 3 = fairly agree, 4 = agree, and 5 = strongly agree). The reliability of the questionnaire was estimated through Cronbach's alpha which was found to be .72.

### **Procedure**

To prove the reliability of the questionnaire, a pilot study was administrated preceding the real survey. Achieving the satisfactory result by pilot study, legitimized conducting the study. The questionnaire was sent to a number of EFL in-service teachers asking them to choose one item that best suited their personal beliefs. Consequently, the collected data was analyzed by SPSS software and the results were discussed.

## Results and Discussion

In order to provide an answer to the research questions, several statistical analyses were performed, the results of which are reported and discussed below.

### Quantitative Analysis of the Data

#### *Questionnaire on Teachers' Perceptions of Critical Thinking*

In-service teachers' attitude towards critical thinking was evaluated based on a questionnaire. The questionnaire consisted of 12 items. 60 of the participants were male and 56 were female. The answers to this questionnaire were structured in the form of statements. 5-point Likert Scale was used to rate the items, in which 5 stands for *strongly agree*, 4 for *agree*, 3 for *neutral*, 2 for *disagree*, and 1 for *strongly disagree*.

#### *Cronbach Alpha Reliability of the Questionnaire*

At the beginning of this study, the questionnaire was administered to 30 teachers of both genders to check its reliability. The Cronbach Alpha reliability index was calculated as index of reliability for the questionnaire. The Cronbach Alpha reliability of the 12 items of the questionnaire was 0.72 (Table 1). Therefore, it can be concluded that the questionnaire enjoys reliability.

**Table 1: Cronbach Alpha Reliability of the Questionnaire**

Cronbach's Alpha	N of Items
.72	12

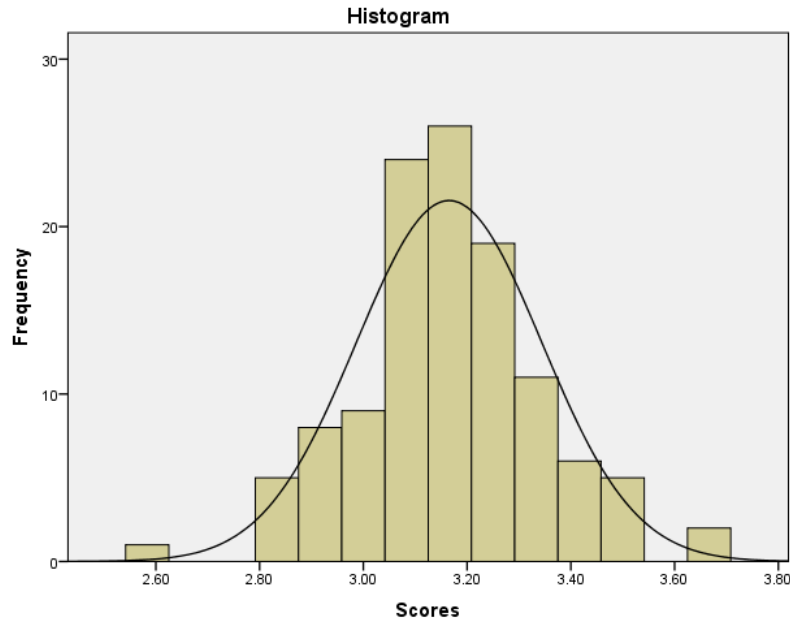
#### **Analysis of the First Research Question**

In order to answer the first research question as "Is there any significant difference between male and female EFL in-service teachers' perceptions of Critical Thinking?", the scores of the two groups were compared by means of an independent t-test. The mean scores, standard deviation, and the normality of the scores are reported for the two groups in Table 2.

**Table 2: Descriptive Statistics of the Questionnaire Scores**

	N	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Std. Error
Female	56	3.20	.18	.490	.319
Male	60	3.12	.16	-.529	.309

Dividing the statistic of skewness by its standard error, the researcher found that the assumption of normality was observed in the distribution of the scores of the two groups (1.53 for the female group and -1.71 for the male group, all falling within the range of -1.96 and +1.96). Figure 1 displays the normality of the questionnaire scores.



**Figure 1:** Histogram of the questionnaire scores

An independent t-test was run to compare the mean scores of the female group and the male one on the questionnaire scores.

As it is evident in the Table 3, the probability associated with the F-observed value (.572) was higher than the significant level of .05, so two groups were homogenous in terms of their variances. Since the probability associated with the t-observed value (.012) was lower than the significant level of .05, it can be concluded that there was a significant difference between the mean scores of the two groups on the questionnaire scores.

**Table 3: 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
Scores	Equal variances assumed	.321	.572	2.56	114	.012	.083	.032	.019	.147
	Equal variances not assumed			2.56	111.73	.012	.083	.032	.018	.147

Based on these results, it can be concluded that there was a significant difference between the mean scores of the two groups' perceptions of the critical thinking. And the first null hypothesis pertinent to the first question, there is no significant difference between male and female EFL in-service teachers' perceptions of Critical Thinking, was rejected.

**Analysis of the Second Research Question**

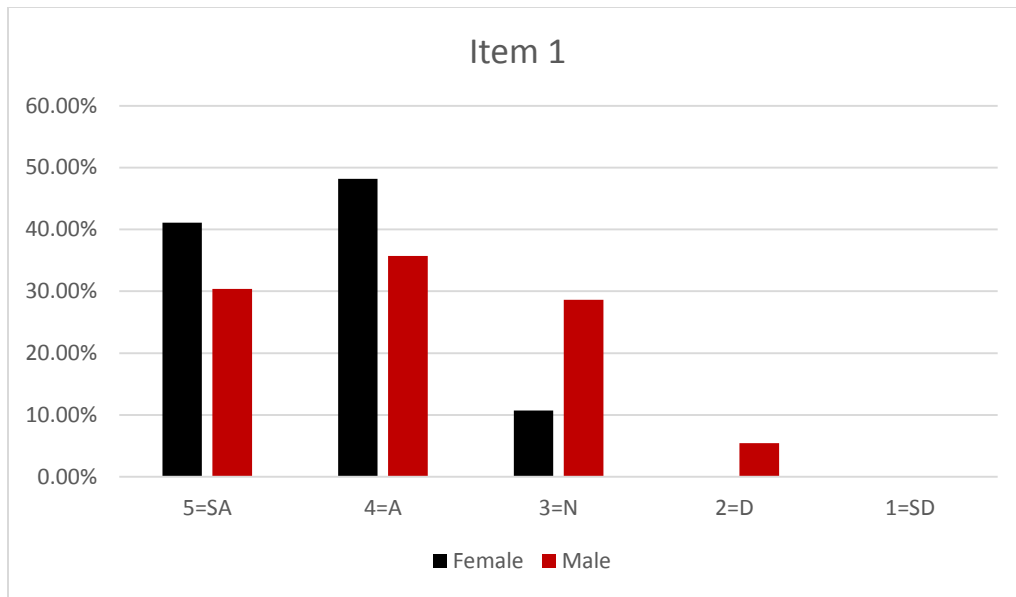
In order to answer the second research question as “What are the perceptions of male and female EFL in-service teacher towards Critical Thinking? "Table 4 includes all the items of the questionnaire with the respective obtained percentages.

**Table 4: The Result of the Questionnaire on Critical Thinking**

Items		5=SA	4=A	3=N	2=D	1=SD
1: I have a clear idea of what the term ‘critical thinking’ means.	Female	41.1%	48.2%	10.7%	0%	0%
	Male	30.4%	35.7%	28.6%	5.4%	0%
2: Critical thinking engages our higher thinking (analysis, synthesis, and evaluation)	Female	17.9%	78.6%	3.6%	0%	0%
	Male	0%	78.6%	21.4%	0%	0%
3: Critical thinkers learn to ignore their emotions when making important decisions.	Female	16.1%	46.4%	37.5%	0%	0%
	Male	0%	78.6%	21.4%	0%	0%
4: Teaching critical thinking skills is an important part of my job as a teacher.	Female	0%	5.4%	62.5%	32.1%	0%
	Male	0%	5.4%	76.8%	17.9%	0%
5: I build critical thinking explanations and exercises into most of my lessons.	Female	0%	0%	16.1%	83.9%	0%
	Male	0%	5.4%	19.6%	75%	0%
6: It is not necessary to increase the role of critical thinking into the curriculum.	Female	0%	0%	28.6%	44.6%	26.8%
	Male	0%	7.1%	42.9%	50%	0%
7: It is not the job of the teacher to teach critical thinking in the classroom.	Female	0%	0%	28.6%	71.4%	0%
	Male	0%	3.6%	35.7%	60.7%	0%
8: Critical thinking is especially important in language teaching.	Female	0%	3.6%	76.8%	19.6%	0%
	Male	0%	0%	76.8%	23.2%	0%
9: Critical thinkers use subjective standards to assess thinking.	Female	0%	0%	25%	75%	0%
	Male	0%	0%	3.6%	96.4%	0%
10: As people grow older, they naturally develop as critical thinkers.	Female	0%	8.9%	17.9%	73.2%	0%
	Male	0%	3.6%	30.4%	66.1%	0%
11: Iranian teachers need more training about how to teach critical thinking skills specifically during teacher preparation period.	Female	91.1%	8.9%	0%	0%	0%
	Male	53.6%	46.4%	0%	0%	0%
12: In order for me to fully implement critical thinking into my courses I would need additional support.	Female	69.6%	30.4%	0%	0%	0%
	Male	5.4%	91.1%	1.8%	0%	0%

**Item 1:**

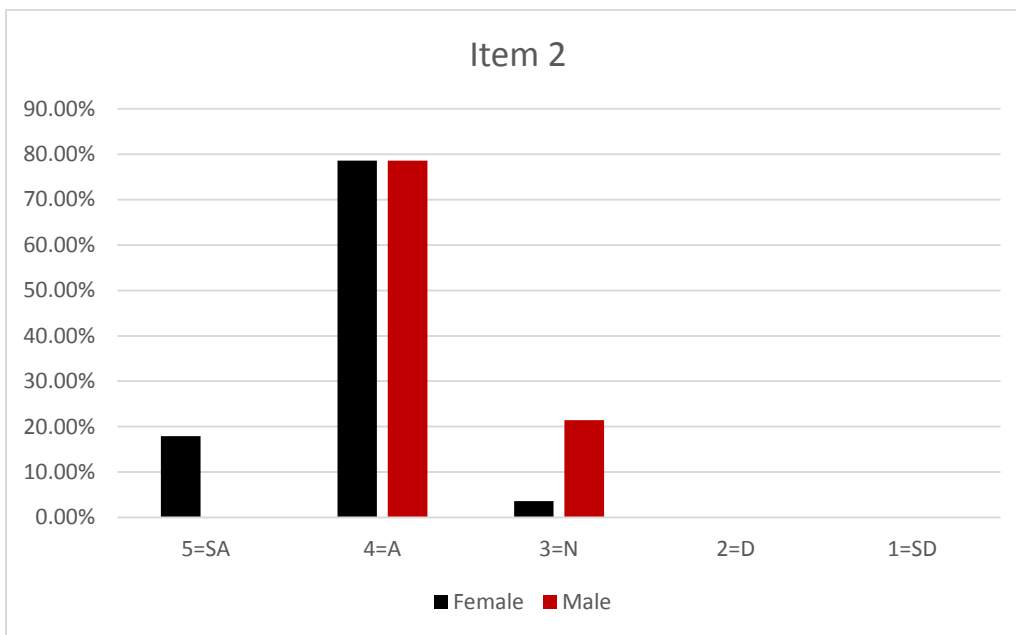
According to the obtained data from Table 4, 89.3% of the participants in the female group believe that they have a clear idea of what the term critical thinking means in comparison to 66.1% of the male participants. 28.6% of the male participants neither agreed nor disagreed in comparison to 10.7% of the female group. And 5.4% of the male group disagreed with item 1. Figure 2 shows the item 1 percentages in both groups.



**Figure 2: Percentages of the item 1 in each group**

**Item 2:**

96.5% of the participants in the female group believe that critical thinking engages higher thinking like analysis, synthesis, and evaluation; in comparison to 78.6% of the male members. 21.4% of the male group neither agreed nor disagreed in comparison to 3.6% of the female ones. Figure 3 shows the percentages of item 2 in both groups.



**Figure 3: Percentages of the item 2**

**Item 3:**

62.5% of the female participants considered that critical thinkers learn to ignore their emotions when making important decisions in comparison to 78.6% of male participants. 37.5% of the female group neither agreed nor disagreed in comparison to 21.4% of the male group.



Figure 4 shows the obtained percentages of item 3 in both groups.

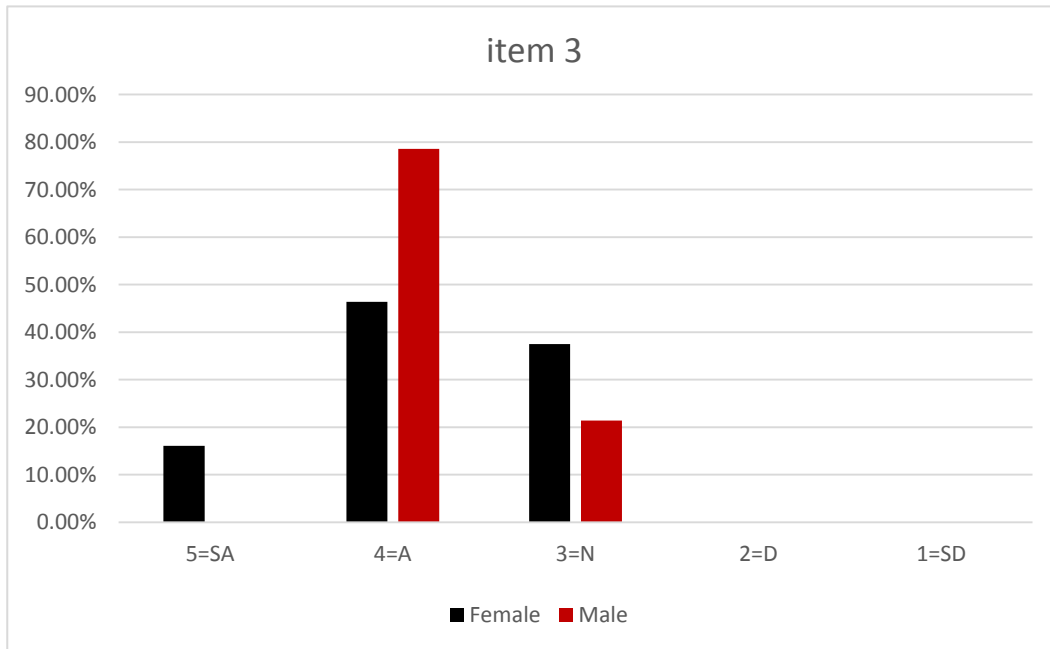


Figure 4: Percentages of the item 3

**Item 4:**

About the importance of teaching critical thinking skills as an important part of a teacher's job mentioned in item 4, 62.5% of the females neither agreed nor disagreed in comparison to 76.8% of the males. 32.1% of the females disagreed about the importance of critical thinking in teaching in comparison to 17.9% of the males. 5.4% of both groups agreed with the concept of item 4. Figure 5 presents both groups' item four percentages.

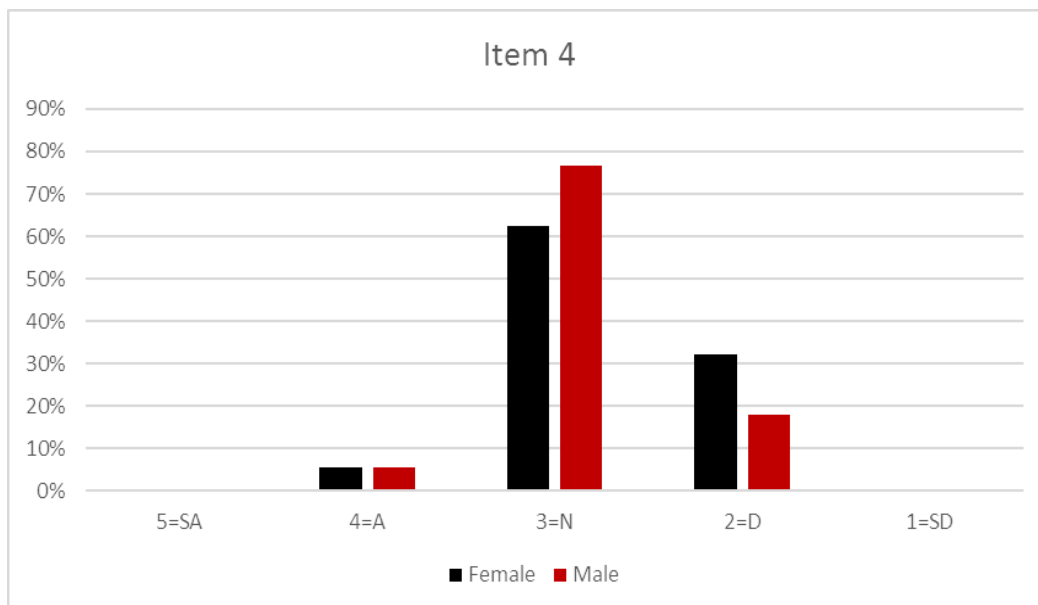
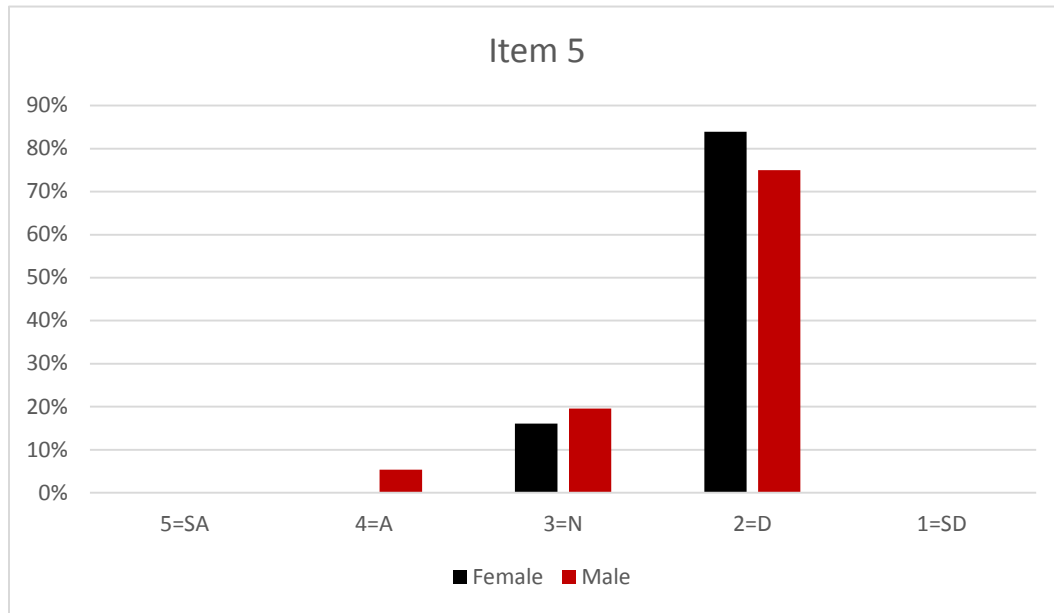


Figure 5: Percentages of the item 4

**Item 5:**

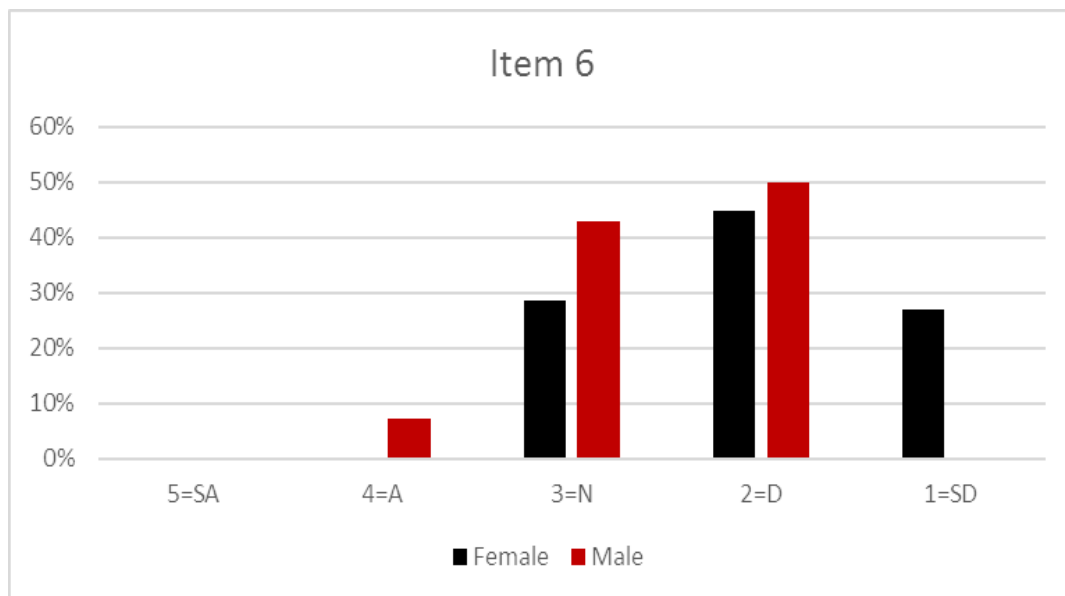
83.9% of the female group don't build critical thinking explanations and exercises into most of their lessons in comparison to 75% of the male group. 16.1% of the females neither agreed nor disagreed with item 5 in comparison to 19.6% of the males. 5.4% of the male participants agreed. Figure 6 presents two groups' percentages of item 5.



**Figure 6: Percentage of the item 5**

**Item 6:**

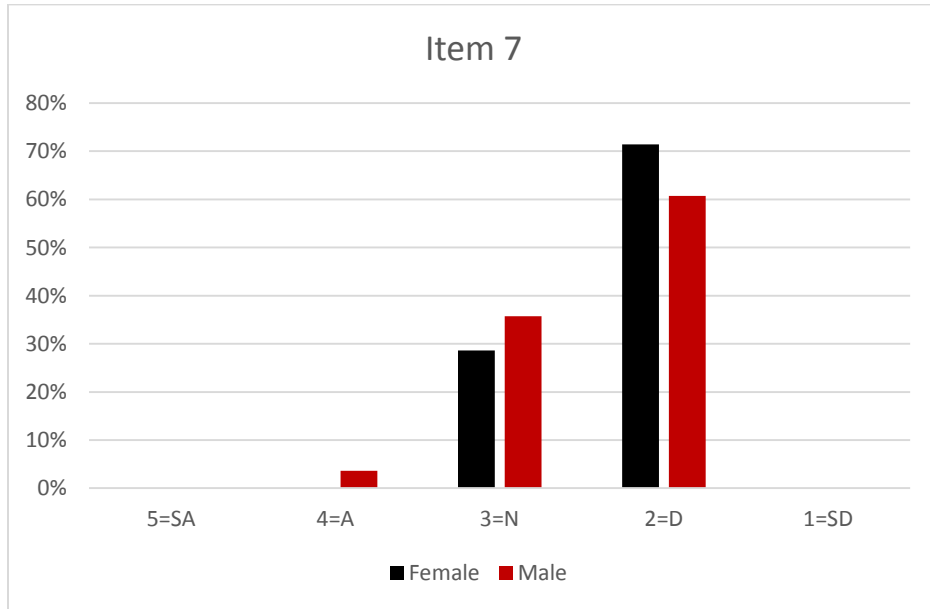
71.4% of the female participants disagreed or strongly disagreed that it is not necessary to increase the role of critical thinking into the curriculum in comparison to 50% of the male members who disagreed with item 6. 28.6% of the females neither agreed nor disagreed in comparison to 42.9% of the males. 7.1% of the male group agreed. Figure 7 presents the obtained percentages of item 6.



**Figure 7 Percentage of the item 6**

**Item 7:**

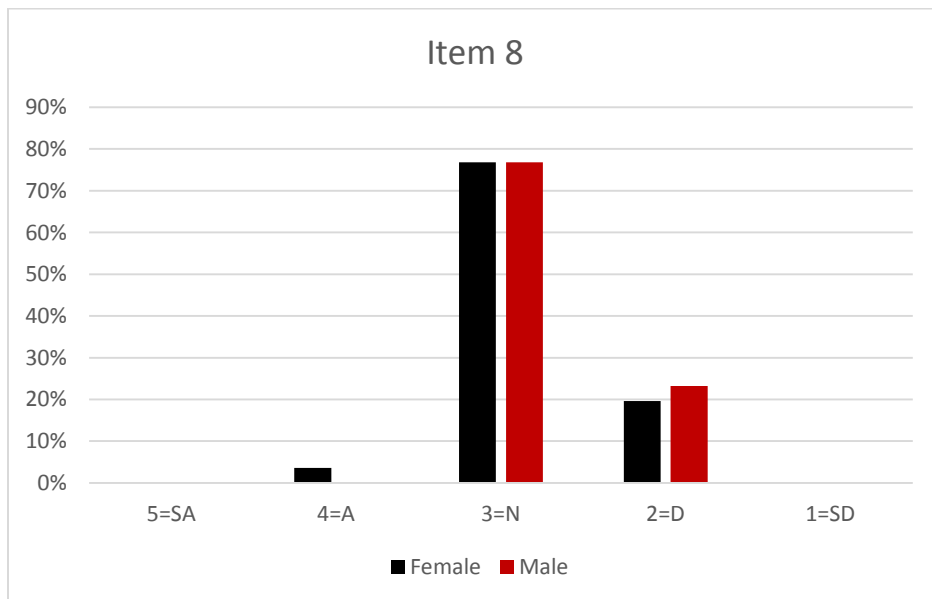
71.4% of the female group disagreed with the idea of item 7, as it is not the job of the teacher to teach critical thinking in the classroom in comparison to 60.7% of the male group. 28.6% of the female members neither agreed nor disagreed with this item in comparison to 35.7% of the male members. 3.6% of males agreed. Figure 8 shows the obtained percentages of each group in item 7.



**Figure 8: Percentage of the item 7**

**Item 8:**

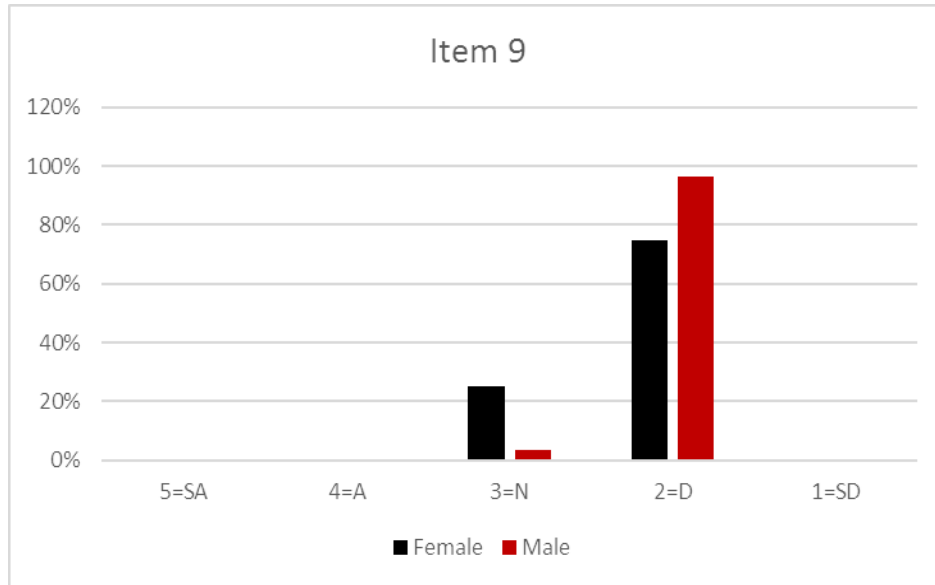
76.8% of both groups neither agreed nor disagreed with item 8, as critical thinking is especially important in language teaching. 19.6% of female participants disagreed in comparison to 23.2% of male participants. 3.6% of females agreed. Figure 9 shows the obtained percentages of each group in item 8.



**Figure 9: Percentage of the item 8**

**Item 9:**

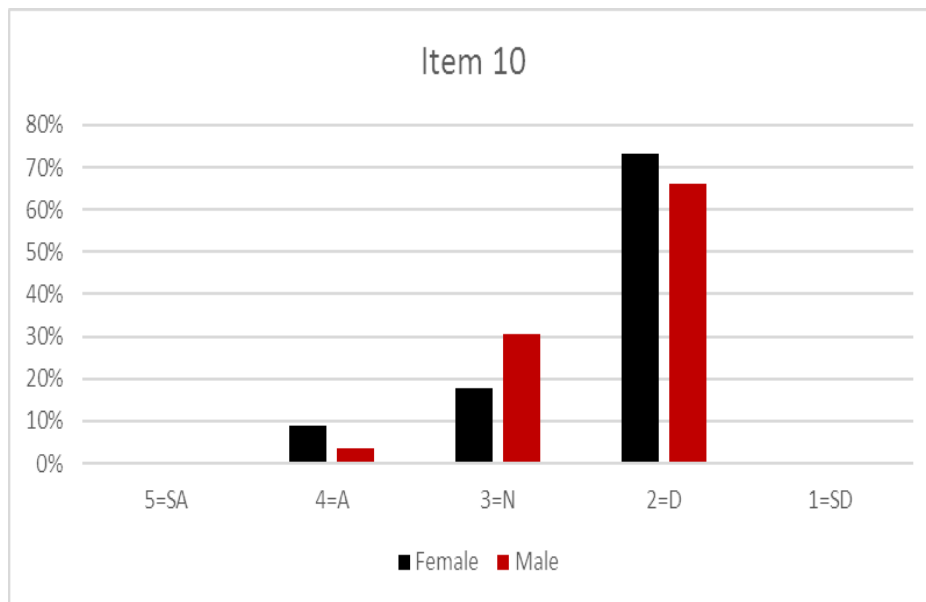
75% of the female participants disagreed with the idea of item 9, as critical thinkers use subjective standards to assess thinking in compare to 96.4% of the male participants. 25% of the females neither agreed nor disagreed in comparison to 3.6% of the males. Figure 10 shows the percentages of the groups in item 9.



**Figure 10: Percentage of the item 9**

**Item 10:**

73.2% of the female group disagreed with item 10, as people grow older, they naturally develop as critical thinkers in comparison to 66.1% of the male group. 17.9% of the females neither agreed nor disagreed in comparison to 30.4% of the males. 8.9% of the female participants agreed in comparison to 3.6% of the male participants. Figure 11 shows the obtained percentages of each group in item 10.



**Figure 11 Percentage of the item 10**

### Analysis of the Third Research Question

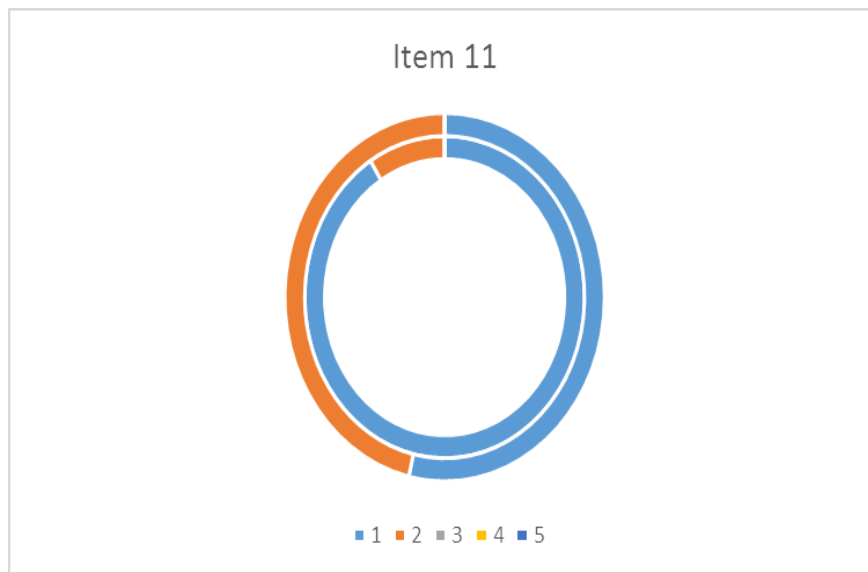
In order to answer the third research question as "What are the attitudes of male and female EFL in-service teacher towards the instruction of Critical Thinking during teacher preparation courses?" Table 5 includes the obtained percentages of the two items of 11 and 12 of the questionnaire which aim to clarify the last question.

**Table 5: The Result of the Questionnaire items 11 & 12 on Critical Thinking instructions**

Items		5=SA	4=A	3=NI	2=D	1=SD
11: Iranian teachers need more training about how to teach critical thinking skills specifically during teacher preparation period.	Female	91.1%	8.9%	0%	0%	0%
	Male	53.6%	46.4%	0%	0%	0%
12: In order for me to fully implement critical thinking into my courses I would need additional support.	Female	69.6%	30.4%	0%	0%	0%
	Male	5.4%	91.1%	1.8%	1.8%	0%

#### Item 11:

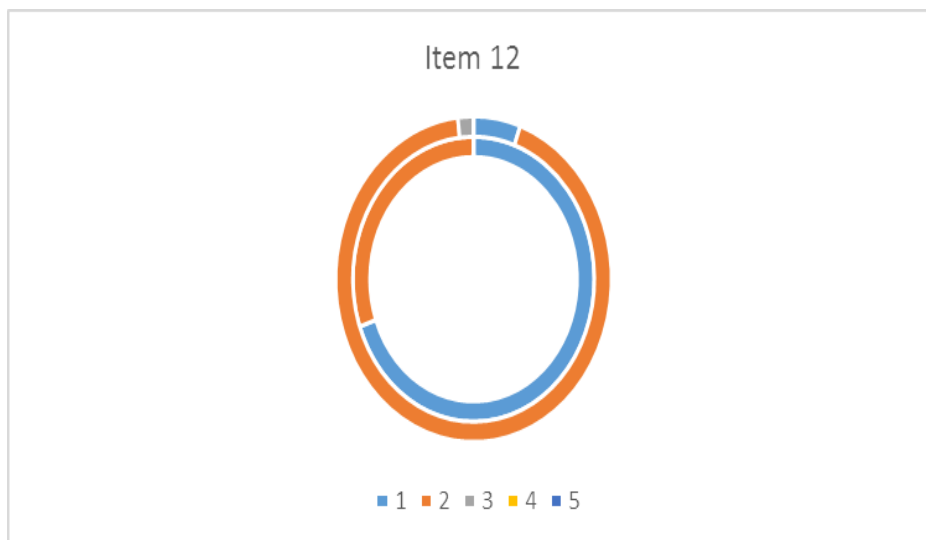
100% of both groups show their agreement over item 11. They believe that Iranian teachers need more training about how to teach critical thinking skills during preparation period. 91.1% of female and 53.6% of the male teachers strongly agreed with the idea of more training about critical thinking skills. 8.9% of female and 46.4% of the male teachers agreed with the idea of item 11. Figure 12 presents the obtained percentages of both groups in item 11.



**Figure 12 Both groups' pie chart of the item 11**

#### Item 12:

About item 12, both groups of male and female show their agreement again. 69.6% of the female participants strongly agreed in comparison to 5.4% of the male participants as to fully implement critical thinking into courses they would need additional support. 30.4% of the female group and 91.1% of the male group agreed . 1.8% of the male members neither agreed nor disagreed . 1.8% of the same group also agreed . Figure 13 presents the obtained percentages of both groups in item 12.



**Figure 13 Both groups' pie chart of the item 12**

### Conclusion and Implications

The advent of rewarding assumptions about critical thinking skills in education era has compelled researchers, educators as long as teachers to explore the role of CT from multiple dimensions. In spite of too much incoming information about the role of CT, there is a common consensus that more practice should be done to unveil the mysterious nature of CT particularly, in respect to language teaching and learning. To address the desired demand, this study pointed to smooth the path of language teacher education by investigating the role of gender, as one of the significant variables in all disciplines, in teachers' perceptions of CT and their tendencies toward being informed and trained on CT concepts and skills.

Analysis of the collected data in respect to the perception of the nature of CT provoked the idea that male and female in service language teachers had perceived CT concepts differently. However, startling enough, as mentioned earlier, almost all participants, both male and female, either agree or strongly agree about integrating the instruction of CT in language teacher preparation courses. Furthermore, the majority of teachers showed high determination of being provided by additional support while implementing CT. The findings of the present study would be of high value for specifically language teacher educators. As Young (1980) stated one way to help students develop their CT skills, was appealing to suitable instructional methods by their teachers, which could not be met only if the teachers had been trained and assisted with the needed information about CT. Needless to mention that a trained, well-informed teacher will successfully encourage the learners to acquire and improve their CT skills (Shangarfam & Maminpour, 2011). Consequently, merging CT instruction into language teacher preparation courses as well as ongoing support would be beneficial and productive for language teachers, meanwhile to achieve a satisfactory outcome, it is recommended to reflect gender differences in this process. It is worth to claim that the result of the study indicated that in service language teachers are in need of some assistance in implication of CT.

Along with the language teacher educators, syllabus designers and material developers would be benefited from the result of this study since, in general, textbooks which have the power to inspire CT and to help improve it are the rudimentary elements for both learners and teachers to progress (Kablin 2000). Due to the enigmatic nature of CT, facing some limitations which prevent us from generalization is inevitable. In the present study, number of participants, their teaching contexts could be considered as limitations. It is suggested that by enlarging the sample of participants, the result would be more authentic. On the other side, conducting experimental research aimed at analyzing the impact of CT training for both pre service as well as in service language teachers will be advantageous.

## References

- [1] Aliakbaria, M. & Sadeghdaghghi, A. (2013). Teachers' perception of the barriers to critical thinking. *Procedia - Social and Behavioral Sciences*. 70. 1 – 5. Doi: 10.1016/j.sbspro.2013.01.031
- [2] Asgharheidari, F. & Tahiri, A. (2015). A Survey of EFL Teachers' Attitudes towards Critical Thinking Instruction. *Journal of Language Teaching and Research*. 6(2). 388-396. DOI: <http://dx.doi.org/10.17507/jltr.0602.20>
- [3] Ashraf, H. Garmabi, H. & Bakhtiari Fayendari , M. (2017). Do Critical Thinking Lead to Success in Language Teaching? A Case of Iranian EFL Teachers based on Their Gender and Degree of Education. *The Journal of English Language Pedagogy and Practice*. 10. (0). 17-28.
- [4] Bayram, D. Kurt, G. & Atay , D. (2019). The Implementation of WebQuest Critical Thinking Instruction in Pre-service English Teacher Education: The Turkish Context. *Participatory Educational Research (PER)*. 6 (2). 144-157. Doi: <http://dx.doi.org/10.17275/per.19.18.6.2>
- [5] Birjandi , P.& Bagherkazemi, M. ( 2010). The Relationship between Iranian EFL Teachers' Critical Thinking Ability and their Professional Success. *English Language Teaching*. 3.(2). 135-144.
- [6] Çakıcı , D. ( 2018) . Metacognitive Awareness and Critical Thinking Abilities of Pre-service EFL Teachers. *Journal of Education and Learning*. 7(5) . doi:10.5539/jel.v7n5p116 .
- [7] Crenshaw,P. Hale, E. & Harper, S.L. ( 2011). Producing Intellectual Labor In The Classroom: The Utilization Of A Critical Thinking Model To Help Students Take Command Of Their Thinking. *Journal of College Teaching & Learning* . 8( 7). 13-26.
- [8] Ennis, R. ( 1996). Critical Thinking Dispositions: Their Nature and Assessability . *Informal Logic* . 18( 2& 3). 165-182.
- [9] Foresman G.A, Fosl, P.S, & Watson ,J.C.( 2017) . THE CRITICAL THINKING TOOLKIT. WILEY Blackwell.
- [10] Ghaemi, H. & Taherian, R. ( 2011). The Role of Critical Thinking in EFL Teachers' Teaching Success. *MJAL*. 3 (1).
- [11] Hitchcock, D. ( 2020). "Critical Thinking", *The Stanford Encyclopedia of Philosophy*. Edward N. Zalta (ed.), forthcoming URL = <https://plato.stanford.edu/archives/fall2020/entries/critical-thinking/>.
- [12] Kabilan, M. K. (2000).Creative and critical thinking in language classroom. *The Internet TESL journal*. 6.(6). <http://iteslj.org/Teaching/>.
- [13] Kadir, M. A. A. (2007). Critical thinking: A family resemblance in conceptions. *Journal of Education and Human Development*. 1(2). 1-11.
- [14] Kavanoz, S., & Akbaş S. (2017). EFL teachers' conceptualizations and instructional practices of critical thinking. *International Online Journal of Education and Teaching (IOJET)*. 4(4). 418-433. <http://iojet.org/index.php/IOJET/article/view/251/180>
- [15] Ketabi, S. Zabihi, R. & Ghadir, M. ( 2012). Critical Thinking across the ELT Curriculum: A Mixed method approach to analyzing L2 teachers' attitudes towards critical thinking instruction. *International Journal of Research Studies in Education*. 1 (1). Doi: 10.5861/ijrse.2012.189
- [16] Khodabakhshzade , H. & Ghaemi, H. (2011). The role of Critical Thinking in IELTS Instructors' Teaching Success. *World Journal of English Language*. 1.(2). <http://dx.doi.org/10.5430/wjel.v1n2p52>
- [17] Leu, D.J. Jr, & Kinder, C. K. (2000). The convergence of literacy instruction with network technologies for information and communication. *Reading Research Quarterly*. 35 (1). 108-127. <http://doi:10.1598/PRQ.35.1.8>
- [18] Moon, J. ( 2008). *Critical Thinking: An exploration of theory and practice*. Routledge.
- [19] Paul, R. (2005). The state of critical thinking today. *New Directions for Community Colleges*. 130. 27–38.
- [20] Petek, E. & Bedir, H. ( 2018). An adaptable Teacher Education Framework for Critical Thinking in Language Teaching. *Thinking Skills and Creativity* . Accepted Manuscript <https://doi.org/10.1016/j.tsc.2018.02.008>
- [21] Qing, Z. Jing, G. & Yan, W. ( 2010). Promoting preservice teachers' critical thinking skills by inquiry- based chemical experiment. *Procedia Social and Behavioral Sciences* .2. 4597–4603. Available online at [www.sciencedirect.com](http://www.sciencedirect.com)
- [22] Rezaei, S. Derakhshan, A. Bagherkazemi, M. (2011). Critical Thinking in Language Education. *Journal of Language Teaching and Research* . 2.( 4). 769- 777. <http://doi:10.4304/jltr.2.4.769-777>
- [23] Salahshoor, N. & Rafiee , M.( 2016) . The Relationship between Critical Thinking and Gender: A Case of Iranian EFL Learners. *Journal of Applied Linguistics and Language Research*. 3.( 2). 117-123. Available online at [www.jallr.com](http://www.jallr.com)
- [24] Shangarffam, N. & Mamipour, M. (2011). The impact of teaching critical thinking on intermediate EFL learners' writing skill. *American Journal of Scientific Research*. 40. 119-125.
- [25] Smetanová,V. Drbalová, A.& Dáša Vitáková,D. ( 2015). Implicit theories of critical thinking in teachers and future teachers. *Procedia - Social and Behavioral Sciences*.171. 724 – 732. <http://doi:10.1016/j.sbspro.2015.01.184>
- [26] Solon, T. (2003). Teaching Critical thinking : the more , the better! *The Community College Enterprise*. 9 (2). 25-38.
- [27] Stapleton, P.( 2011). A survey of attitudes towards critical thinking among Hong Kong secondary school teachers: Implications for policy change. *Thinking Skills and Creativity*. 6 . 4–23
- [28] Stedman, N.L.P. & Brittany, L. A. ( 2012). Identifying Faculty's Knowledge of Critical Thinking Concepts and Perceptions of Critical Thinking Instruction in Higher Education. *NACTA Journal* . June. 9-14 .
- [29] Straková , Z. & Cimermanová , I.( 2018) .Critical Thinking Development—A Necessary Step in Higher Education Transformation towards Sustainability. *Sustainability*. 10. 3366. <http://doi:10.3390/su10103366>
- [30] Wang , X. & Zheng, H. ( 2016). Reasoning Critical Thinking: Is it born or made? *Theory and Practice in Language Studies*. 6(6). 1323-1331. <http://dx.doi.org/10.17507/tp1s.0606.25>
- [31] Young, R.E. (1980). Testing for critical thinking: Issues and resources. *Journal of New Directions for Teaching and Learning*. 3. 77–89.
- [32] Yuretich,F. R. (2004). Encouraging critical thinking: measuring skills in large introductory science classes. *Journal of college science teaching*. 33 (3). 40- 46.
- [33] Zhang, H. , Yuan, R. & He, X. ( 2020). Investigating University EFL Teachers' Perceptions of Critical Thinking and Its Teaching: Voices from China. *Asia-Pacific Edu Res*. <https://doi.org/10.1007/s40299-020-00500-6>.