An investigation of critical thinking and individual voice in male and female EFL undergraduate university students' writings

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Abstract

The present study aimed to investigate Critical Thinking and Individual Voice in male and female Iranian undergraduate university students' writings. To this end, a set of literary works studied and discussed during the Introduction to English Literature course were assigned to a group of 60 male and female students to write some essays as their term projects. The essays were scored and evaluated independently by two raters in terms of Stapleton (2001) critical thinking elements including: arguments, reasons, evidences, recognition of oppositions and refutations, fallacies and conclusions. The number of agreed-on elements was divided by the total number of agreements and disagreements and multiplied by 100 to get the percent inter-rater reliability. Regarding Individual voice, the total number of T-units−the main clause and all the dependent clauses in a sentence (Larsen-Freeman and Long, 1991) −

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and the number of T-units representing "self" were calculated and compared. By dividing the already scored essays into two groups of 15 males and females, the overall performance of males and females on the essays regarding Critical Thinking and Individual Voice were also compared. The results revealed no significant difference between males' and females' critical thinking level. In almost all cases, there were a vast number of claims unsupported by logical reasons and evidence from the texts, hasty and irrelevant conclusions, and lots of fallacies which suggest students' overall tendency to copy what they read rather than evaluating and judging it themselves through logical reasoning. For Individual voice although there appeared to be a better performance of males over females, still the number of T-units representing self was too low in both groups.

Keywords: critical thinking, individual voice, EFL writing

1. Introduction

The concept of critical thinking has been defined and investigated during recent years by many researchers. As Resnick (1987, p. 2) claims, "thinking skills resist precise forms of definition". But in order to present some definitions and discussions of the term, we may take a look at those such as Beyer (1995, p. 8) who defines critical thinking as "making reasoned judgments'', or that of Norris and Ennis (1989, p. 3) who assume critical thinking as "reasonable and reflective thinking that is focused upon deciding what to believe and do". Siegel (1988, p. 32) describes Critical thinking as "the educational cognate of rationality" and Halpern (2002, p. 6) assumes that critical thinking is

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"the use of those cognitive skills or strategies that increase the probability of a desirable outcome…thinking that is purposeful, reasoned and goal oriented". Levy (1997, p. 236) describes critical thinking as "an active and systematic cognitive strategy to examine, evaluate, understand events, solve problems, and make decisions on the basis of sound reasoning and valid evidence." Bensely (1998, p. 5) describes it as "reflective thinking involving the evaluation of evidence relevant to a claim so that a sound conclusion can be drawn from the evidence." Kress (1985) views critical thinking as a social phenomenon that is in fact language itself. Furthermore, Stapleton (2001, p. 511) in discussing the concept points to Siegel's (1997) "critical spirit" that he believes "encompasses a whole set of dispositions, including attitudes, habits of mind, and character traits, that incline one to seek reasons and evidence carefully while rejecting partiality."

The term "voice" likewise has been defined by many researchers. Elbow (1981, p. 287) assumes it as writing that "captures the sounds of the individual on the page." Ivanic and Camps (2001, p. 7) define self-voice as "expressions of the writer's own views, authoritativeness, and authorial presence." Hirvela and Belcher (2001, pp. 90-91) view the concept "as a process of continually creating, changing, and understanding the internal and external identities that cast us as writers, within the confine of language, discourse, and culture."

Recent studies in the literature of language teaching and voice pay attention to the significance of critical thinking skills and voice in all academic settings in terms of writing. For years, it has been seen that EFL students have so many difficulties whenever they are engaged in writing essays in English because they cannot involve their own critical thinking and ideas. The problem seems to be rooted in the fact that they are more eager to be faithful to the texts provided as their course books. They also lack the power of judging and questioning. It

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seems that both their general English knowledge and lack of critical thinking skills and voice are not well worked within EFL situations (Dahmeroğlu & Vanci-Osman, 2005; Gelen, 1999; Kaya, 1997; Vanci-Osman, 1998). Ramanathan and Atkinson (1999), in their study, found that lack of critical thinking skills and individual voice in a second language writing class might be due to the fact that students have not been taught to think critically and individually in their first language writing classes.

Identification of self-voice in writing has been examined by some researchers although as Alagozlu (2007, p. 121) argues, "the identification of authorial voice in written discourse proves quite difficult as it involves voice appropriation which is not a straightforward citation of other people's ideas, but rather a complex set of linguistic strategies". She insists on the difference that exists between western education and eastern education in terms of critical thinking and voice which should not be viewed as a "deficit". Many researchers have studied Asian learners' self-voice. In an investigation, Le Ha and Viete (2002) looked for the presence of 'self' and discovered sufficient proofs in students' writings. In the same way, Matsuda (2001) studied a number of Japanese students and found the existence of voice in Japanese written discourse. The representation of critical thinking skills and voice in writing was also studied by Stapleton (2002). He found that Japanese students not only had the elements of critical thinking in their writings, but also they didn't have any doubt to voice ideas and thoughts against the authorities.

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2. Literature Review

The theoretical framework used in this study was based on Stapleton's criteria (2001, pp. 536-539):

 (1) *Arguments:* are supposed to be claims supported thoroughly by logical reasons. Claims without reasons are considered to be opinions and could not be classified as arguments. Moreover, those supported claims should not be just the copies of those which had been made in the main text but should involve something more. Arguments might be indicated by some conjunctions or prepositional phrases expressing reasons such as "because", "since", "for that reason",… or could be implied, not directly stated, but anyway each argument should be supported by valid reasons.

(2) *Reasons:* are used as supports to the already made claims. Reasons must be logical in a way that convince the reader that the claim made by the author is logical and worthy of considering.

(3) *Evidence:* are the supporting statements strengthening the arguments. According to Ramage and Bean (1999) forms of evidence could be entitled as personal experience, research studies, statistics, citing authorities, comparisons and analogies, pointing out consequences, facts, logical explanations and precisely defining words.

(4) *Recognition of opposition and refutation:* recognition of opposing statements or some alternative interpretations to those expressed in the claims and refuting them is another criterion which could be identified by some structures like those mentioned by Ramage and Bean (1999, p.117) including: "some people claim that/It is said that/It is believed

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that…however/but". The common flaws made by students here might involve logical flaws, poor support, erroneous assumptions or wrong values.

(5) *Conclusions:* here the writers express their agreements or disagreements with the ideas expressed in the main texts using some sort of arguments or evidence conveying their beliefs. In a statement or a series of statements, the writer tries to bring about the message and his belief to the reader.

(6) *Fallacies:* are flaws and errors in reasoning. Kemerling (2002) believes that fallacies occur when reasons fail to support claims adequately in some ways.

Stapleton asserts that students should feel free to voice their ideas if they are going to display critical thinking skills and that there is a strong relationship between critical thinking and voice (Stapleton 2001, 2002). Individual voice, referred to as "authorial identity" (Ivanic, 1998; Hirvela & Belcher, 2001), or "authorial presence" (Hyland, 2001) is described by Elbow (1981, p. 287) as writing that "captures the sounds of the individual on the page", that "writing with voice is writing into which someone has breathed…writing without voice is wooden or dead because it lacks sounds, rhythm, energy, and individuality". Ramanathan and Atkinson (1999, pp. 46-47), draw a link between the concept of voice and their "ideology of individualism" asserting that "The core notion underlying this social practice seems to be that, as individuals, we all have essentially private and isolated inner selves, which we give outward expression to through the use of a metaphorical 'voice'." Matsuda (2001, p. 40) proposes that "Voice is the amalgamative effect of the use of discursive and non-discursive features that language users choose, deliberately or otherwise, from socially available yet ever-changing

repertoires." According to Donald Murray (1984) it's essential that everybody finds his/her own voice to write in a way that is natural and mirror one's way of thinking and viewpoints. In a practical sense; however, as Alagozlu (2007, p. 121) argues: "The identification of authorial voice in written discourse proves quite difficult as it involves voice appropriation which is not a straightforward citation of other peoples' ideas, but rather a complex set of linguistic strategies" such as those mentioned by Scollon et al. (1998, p. 232) including "the use of first and second person pronouns, vocatives 'hey guy', and explicit voice markers 'in my opinion'."

3. Purpose of the Study

Studying students' essays in L2 literature classes, one could see the difficulties students had in making their own claims which could be related to the lack of 'Voice' in turn. Fearing that their ideas and viewpoints might be humiliated and criticized, they preferred to just report whatever they had read without evaluating and judging the essence of what they read. It seemed as if they were used to receiving the ready-made information and comments without questioning.

Of course the educational system in which the students have been grown up is not less blameworthy in which the learners are just means of receiving and reporting the information the systems provide without being able to think and comment critically or questioning the value and truthfulness of the information they received. The result of such education would be the so-called imitators, skeptics, and disbelievers of their talents and creativities.

Incorporating critical thinking at different levels of education can make up such deficits and would make students aware of their values and importance as individuals capable of expressing their thoughts and beliefs to the audience and to the world.

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In order to gain some insights into the problem just mentioned, the present study with the aim of evaluating students' critical thinking levels was carried out.

This study was carried out to evaluate EFL undergraduate university students' critical thinking and voice -in their writings-which are really significant factors in growing students as individuals possessing their own thoughts and viewpoints in society, those who would question before just accepting anything. Since the current system of education with its traditional emphasis on rote-memorization of ready-made information would diminish students' chances of growing their critical minds, carrying such a study may shed some light on the existing problem and may encourage the educators to perceive the importance and value of fostering students' levels of critical thinking and voice in class and in society as well.

(1) Do EFL students' essays manifest different elements of Critical Thinking and Individual Voice?
(2) Is there any difference between men and women regarding their manifestation of Critical Thinking and Individual Voice?

4. Methodology

4.1 Participants

The subjects participating in this study were sixty male and female EFL Iranian sophomore undergraduate students, majoring in English Translation and English Teaching in Zabol University, passing "An Introduction to English Language Literature" course. Since the subjects had already passed "Essay Writing" courses, they were asked to write some essays on a set of literary works studied and analyzed

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during the term as their term projects. Then the essays were examined by two raters, the authors of the present study, one of whom was the instructor of the same literature course, the other one a college who had experienced teaching literature courses before, in terms of Stapleton (2001) critical thinking criteria to see to what extent the subjects displayed different elements of Critical Thinking and Individual Voice in their writings.

The following table presents the specifications of the students participating in this study in terms of number, field of study, and gender.

Table 1: Participants' specifications

No.	Field of study	Number	Male	Female
1.	Teaching	30	16	14
2.	Translation	30	14	16
3.	Total	60	30	30
4.	Raters	2	1	1

4.2 Instrumentation

In order to evaluate students' writings in terms of critical thinking elements, a set of literary works from students' course book entitled "Literature Structure, Sound, and Sense" (Perrine, 2006), studied and analyzed during "An Introduction to English Literature" course, were

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assigned to the students to write some essays which were thoroughly scrutinized by two raters in terms of Stapleton's critical thinking criteria (2001), i.e., arguments, reasons, evidence, recognition of opposition and refutation, conclusion, and fallacies. Evaluating students' individual voice in the essays was accomplished by calculating and comparing the total number of T-units, i.e., the main clause and all the dependent clauses in a sentence (Larsen-Freeman and Long, 1991), with the number of T-units representing "Self."

Of the essays, 10 were on Lottery by Shirley Jackson, 9 on The Destructors by Graham Greene, 8 on The Enchanted Doll by Paul Gallico, 5 on Defender of the Faith by Philip Roth, and 4 essays were written on The Child by Tiger by Thomas Wolfe.

4.3 Data Collection and Analysis

Participants taking part in this study all had passed essay writing courses based on the process oriented writing approach as it is illustrated in the following diagram offered by White and Arndt (1991, p. 4).
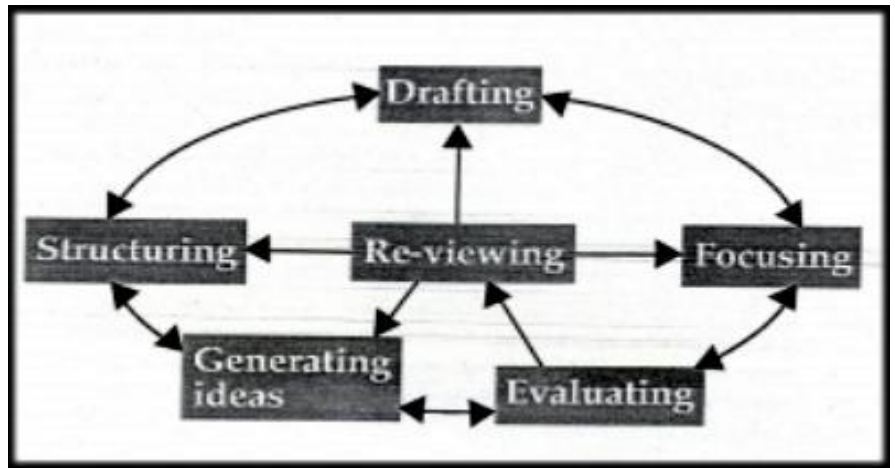
Figure 1: White and Arndt (1991) model of process writing

So, students were asked to write some essays on a set of literary works studied during "An   Introduction to English Language Literature" course which were later analyzed by two raters, in terms of Stapleton's critical thinking criteria (2001, pp. 536-539) which are as follows:

(1) Stapleton describes *arguments* as "claims supported by reasons which can be proposals, definitions and evaluations." For proposals verbs like "indicate", "show", "reveal", "suggest" and the like were taken into account. Definitions were indicated by the verb "to be" and those of simple present tense, and evaluations were identified by subjective judgments and the use of adjectives.
(2) The second criterion known as *reasons* were supposed to be logical support to the claims made by students not "the simple repetition of those found in the original texts without elaboration".

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Conjunctions such as "because", "since", "for",…which indicated cause and effect relationships were considered as reasons.

(3) *Evidence* could be demonstrated through personal experience, research studies, statistics, citing authorities, comparisons and analogies, pointing out consequences, facts, logical explanations, and precisely defining words (Ramage and Bean, 1999).

(4) *Opposing viewpoints and refutations* were demonstrated using conjunctive adverbs like though, although,… and phrases like: "It has been argued that…however/although…but/in spite of the fact that…."

(5) *Conclusions* could be demonstrated both explicitly through using some indicators such as: "finally", "as a result", "at the end", "as a conclusion",… or implicitly. In either case the conclusion must be logical and in accordance with the main idea presented in the essays.

After scoring the essays by two raters, the total number of agreements was divided by the total number of agreements and disagreements and multiplied by 100 to get the inter-rater reliability (as presented in Table 2).

In order to examine voice in the essays, the essays were divided into the smallest terminable units (T-units) defined as a main clause and all the dependent clauses in a sentence (Larsen-Freeman and Long, 1991). The total number of T-units and the number of T-units representing "self" per essay was calculated to see how much students were able to express themselves and bring their own voices in the their writings. The identification of authorial voice could be accomplished by the use of first and second person pronouns "I" and "you", vocatives "hey guy" and explicit voice markers "in my opinion" (Scollon, Tsang, Li, Yung, & Jones, 1998). Moreover, the utterances

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in which the writer is the source of information or the writer expresses ideas or thoughts based on his or her experience making use of "I", could be considered as those utterances reflecting "self" (Cummings, Kantor, Baba, Erdosy, Eouanzoui, & James, 2005).

Finally, in order to investigate the existence of any significant difference between males and females in terms of critical thinking elements and individual voice in the essays, the scored essays were divided into two groups of 15 males and females and were compared regarding critical thinking and individual voice.

5. Results and Discussion

5.1 Results Related to the First Research Question

5.1.1 Critical Thinking

For the first research question, the evaluation of students' writings in terms of Critical Thinking elements was carried out by two raters, based on Stapleton's Critical Thinking criteria (2001, pp. 536-539) including arguments, reasons, evidence, recognition of opposition and refutation, conclusion and fallacies. The number of agreed-on elements were divided by the total number of agreements and disagreements then multiplied by 100 to get the inter-rater reliability (Table 2).

Evaluating students' essays in terms of "arguments", "reasons" and "evidence", both raters concurred that in almost all cases there were a vast number of claims unsupported by logical and efficient reasons and evidence. It seemed that as if they had just memorized the discussions over literary works in terms of conflicts, characters, symbols, themes,…and now they were just reporting whatever they could remember of those commentaries almost in a very hasty and

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insufficient way. Except for very few cases, there were no innovations in the discussions provided. Irrelevant reasons and none or very few evidences were frequent. To clarify the issue, a number of examples from participants' essays have been provided as follows:

"The story of Defender of the Fate is going to teach us we should try to bring justice into our lives which are morally acceptable".
"In the Enchanted Doll we can see the value of true love and its effects on human life".
"In the Lottery the writer tries to bring foreshadowing to say something in advance to readers".

Some examples of "recognizing oppositions and refutations" were apparent but still in those cases there were very few innovative ones and almost all just resembled the pre-discussions in class. Some examples are listed below:

"In the Lottery it is said that the people in the village each year hold the lottery and some were quite careful to keep it in every sense, but some aspects and rituals had already chanced".
"In the Child by Tiger it is written that Dick was always reading the Bible and was a religious man, but killing many people was already against the religious beliefs and against God".

Errors in reasoning or "fallacies" could be identified through a number of common factors committed in different scales by most students among which we can refer to false and inadequate reasoning, overgeneralizations, oversimplifications, lack of conclusions or false and irrelevant ones drawing hastily without enough support provided

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by adequate reasons and evidences. In some cases "straw man fallacy" was also perceived when the direction of the argument was averted by elaborating a topic closely related to the required one. Here, there are some examples:

"Child by Tiger is about a negro who is a good man but suddenly goes mad and kills some people in the city" (oversimplification).
"The Destructors will tell us that all children who have experienced war suffer from some mental emotional problems" (overgeneralization).
"The Destructors is about the post-war Britain around 1956 which was an eight month long bombing of Britain by Germany in world war 2..." (and it continues to talk about the word war 2 which is an example of straw man fallacy).

Table 2 clearly indicates the Critical Thinking elements in students' essays.

Table 2: Critical thinking elements in the essays

	Claims	Reasons	Evidence	Opposing arguments and refutation	Fallacies	Irrelevant conclusions
Rater 1	215	32	26	6	98	28
Rater 2	210	30	24	7	98	28
Percent Interrater Reliability	97	93	92	85	100	100

As represented in the above table, the overall performance of students in terms of Critical Thinking elements was too weak. Analyzing the

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essays, there were a vast number of claims unsupported by logical reasons and sufficient evidences, few oppositions and refutations, but too many fallacies and irrelevant conclusions.

5.1.2 Individual Voice

In order to find some clues representing voice in the essays, the total number of T-units- the main clause and all the dependent clauses in a sentence (Larsen-Freeman & Long, 1991), and the number of T-units representing "self" were counted and compared.

The total number of T-units turned out to be 827 T-units in general out of those only 16 utterances representing "self" could be identified.

5.2 Results Related to the Second Research Question

For the second research question comparing males and females in terms of critical thinking elements and individual voice in their writings, already scored essays were categorized into 30 males' and 30 females' essays and compared to see if there is any significant difference between males and females in this regard. The results are presented in Tables 3 and 4 as follows:

Table 3: Critical thinking elements in males' essays

	Claims	Reasons	Evidence	Opposing arguments and refutation	Fallacies	Irrelevant conclusions
Rater 1	120	12	12	4	43	12
Rater 2	122	10	12	3	43	11
Percent Interrater Reliability	98	83	100	75	100	91

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Table 4: Critical thinking elements in females' essays

	Claims	Reasons	Evidence and refutation	Opposing arguments	Fallacies	Irrelevant conclusions
Rater 1	93	20	14	3	55	16
Rater 2	91	18	14	3	55	15
Percent Interrater Reliability	97	90	100	100	100	93

Analyzing critical thinking elements in males' and females' essays as evident in the above tables revealed no significant difference between males and females in this regard. The only difference that could be elaborated is the overall better performance of females in supporting their claims with logical reasons. In other words the number of unsupported claims in males' writings was much more than females. On the other hand females' essays represented more fallacies and irrelevant conclusions. Generally speaking, although the two groups represented some superiority in some aspects, still the overall level of Critical Thinking representation is too low in both.

Regarding the Individual Voice, the total number of T-units in males' and females' essays was calculated and compared with the number of T-units representing "self" in each group in order to see if there is any difference between males and females in this regard. The total number of T-units in males' essays turned out to be 421 out of which there were 10 representing "self" while in females' essays the total number of T-units was 406 and the units representing self were 6 which can be interpreted as males' superior performance in terms of 'Voice' over females.

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6. Conclusion and Implications

Analyzing students' essays in terms of Stapleton's Critical Thinking criteria (2001) revealed students' overall weak performance on these elements. Although the literary materials had been studied and discussed during the course of study there were almost no innovations on the part of students discussing the stories. In almost all cases they were just repeating what had been heard before reporting claims in the form of definitions and proposals without enough support by logical reasons and sufficient evidences. Hasty and irrelevant conclusions and sometimes the absence of conclusions was another problem. It seemed as if they had just memorized some parts of the discussions and so were unable to logically discuss and support their discussions through sufficient reasons and evidences. Recognizing opposing viewpoints and refutations was also quite limited.

The analysis of essays in terms of individual voice revealed that the number of T-units representing "Self" were quite few comparing with the total number of T-units in the essays. This might suggest that students are rather accustomed to reporting and copying the materials without any effort to think critically and evaluate the discussions as individuals possessing their own beliefs and ideas and "voices" to be expressed. Although the overall performance of males was better than females in this regard, but still it's so limited in general.

Surprisingly, the results of this study resembled those reported by Alagozlu's (2007) in her study of critical thinking and voice in Turkish university students' writings. She also asserted that her study is in line with other studies of learner autonomy and independence in Turkey (Buyukozturk, 1996, 1999; Erdogan, 2003; Iskenderoglu, 1992; Karasar, 1984; Koklu & Buyukozturk, 1999; Öner, 1999; Sert, 2006).

Of course the above-mentioned problems might have been rooted in the educational system in which learners are just required to

memorize and copy the materials without trying to bring their own ideas and reflections in the process. Cokluk-Bokeoglu (2004) asserts that it resembles the didactic approach or concept-based instruction in the classic educational system in which the emphasis is on the retention of previously learned material without any thinking (p.29).

The results of this study could be considered as the revelation of the overall weakness and maybe unfamiliarity of Iranian students with the elements of critical thinking and expressing their own voices in writing which could be one of the weaknesses of the educational system policy. So, it is really essential that critical thinking be integrated in educational system for students to get some kinds of training in part of critical thinking and be encouraged to think critically and express their own ideas freely. As Kökdemir (2003) argues, critical thinking can be integrated into the educational system and taught, since Asian learners are not completely unfamiliar with this thinking style (Matsuda, 2001; Stapleton, 2002).

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