Revising Low-level and High-level Issues in Iranian EFL Learners' Writings across Proficiency Levels, Age, and Gender

Leyla Shami

Department of English Language, Ardabil Science and Research Branch, Islamic Azad University, Ardabil, Iran

Asgar Mahmoudi

Department of English Language, Ardabil Branch, Islamic Azad University, Ardabil, Iran

Abstract—The present study was intended to investigate differences in the kinds of higher-order and lower-order revising practices employed by less proficient and more proficient Iranian EFL learners using an ex post facto design. Moreover, it was aimed at examining if (and how) these learners' age and gender affected their revising practices. To do so, 70 EFL learners studying in Foreign Language Institutions were selected. The participants had attended language learning classes at least for two years; therefore they possessed the minimum proficiency level required for the purposes of this study. The ESL Composition Profile was used to analytically score the learners' writings, even though the writings were also holistically scored. The collected data were then submitted to SPSS for analysis. Some statistical procedures such as MANOVA, ANCOVA, and SPANOVA were used to test the hypotheses of the study. The obtained results revealed that there were significant differences in the kinds of higher-order and lower-order revising practices employed by the students with high and low writing ability. It was also revealed that the amount of differences between high-level and low-level students' revising practices did not change significantly after controlling for the effects of age and gender. The results of this study might have implications for teaching writing.

Index Terms—writing ability, higher-order revision, lower-order revision

I. INTRODUCTION

As a major skill, writing includes a number of sub-processes in which the writer goes from global to local issues: from planning the outline of the text, to choosing ideas, selecting forms to convey meaning, monitoring the text, and revising according to both audience and goals of the writing. As a result, mastering writing skill necessitates "a set of abilities which include both 'lower-order' skills, such as the automation of handwriting and spelling, and 'higher-order' competencies, such as problem-solving strategies and manipulation of abstract thought" (Forrester 1996, p. 171). Writers should be concerned with both local and global issues and employ writing as an intellectual tool; however, it is not possible for them to give enough attention to local and global issues unless they revise their writings (Krashen 1989). The present study was an attempt to investigate differences in the kinds of higher-order and lower-order revising practices employed by less proficient and more proficient Iranian EFL learners. It also examined if these learners' age and gender affected their revising practices.

Since revision plays an important role in increasing writing quality, researchers have investigated L1 and L2 writers' revising practices. Some researchers like Beach (1976), Bridwell (1980), Faigley and Witte (1981), and Zamel (1983) have explored the relationship between revision and writing quality by examining the quantity and kinds of revisions employed by various groups of L1 writers. Other observations have attended to the way writers employ different revising practices (e.g., Gosden, 1996; Kobayashi, 1991; Matsumoto, 1995; Porte, 1996; Raimes, 1994). Most of such observations have discovered that unskilled writers are mostly concerned with surface characteristics, while skilled writers focus on deep-level segments, attending both to global and local issues.

Although differences in the kinds of revisions applied by expert and novice L2 learners is not dealt with adequately, the few studies done imply that L2 proficiency is associated with L2 writers' revising performance. For example, according to Raimes (1994) high proficiency students of ESL tended to revise and edit more frequently than low proficiency students; Aoki (1992), likewise, discovered that L2 learners' grammar scores correlated with correction of surface-level errors like misspelling, but not with high-level problems like content. Also it is proved that as L2 writers "learn more English and develop more fluency, concern about options sets in" (Rairnes, 1994, p. 160). There is still dispute over what other aspects of L2 writers' revising practices are related to second language proficiency. On the other hand, this issue is not investigated adequately in relation to age and gender of the second language learners. These are important issues because anything done to clarify these relationships can have a direct effect on the teaching methodology employed by EFL teachers. Teachers' enhanced understanding of the processes involved in writing may also help them set realistic goals for their students.

The present study was an attempt to test the following research hypotheses:

H0₁: There are no differences in the kinds of lower-order and higher-order revising practices employed by EFL learners with low and high writing ability.

H0₂: The amount of difference in revising practices of the high-level and low-level EFL learners will not change if the effect of age is controlled for.

H0₃: The amount of difference in revising practices of the high-level and low-level students will not change if the effect of gender is controlled for.

II. REVIEW OF THE RELATED LITERATURE

A. Importance of Writing

According to Jalaluddin (2011), writing is a system for interpersonal communication using various styles of language. It is of utmost importance in our daily lives. It allows us to interchange ideas and information with far away people. The significance of writing skill becomes evident when you see that it is almost an essential part of every teaching course (Ahmadi, Maftoon, & Gholami Mahrdad, 2012). In the academic world, too, the importance of writing is visible in journals, conference presentations, and publications through which the new concepts and ideas are transmitted (Fatemi, 2008). Writing is also vital for TEFL students since these students must acquire sufficient skill to write specific genres. In this matter, these days writing has gained even more importance because it is largely through this medium that ideas and information are transmitted in global networks. As a result, as Halliday (2003) and Hyland (2003) highlight, the ability to write is one of the most important skills that L2 learners must acquire.

According to Haiwen Mo (2012), writing is as an integral part of English language learning and an essential skill not only for post-graduate but also for undergraduate non-English students. A direct result of this belief is that teachers should help students develop their competence in writing throughout their schooling and enhance language development from multiple perspectives through building the foundations of written literacy from the early years of EFL learning.

B. Writing in L1 and L2

Some of the recent studies have found that the processes involved in second language writing differ from those of first language writing. Silva (1993) compared L1 and L2 writing processes by comparing 72 different studies and came up with remarkable differences between the first and second language writings with regard to both writing processes (transcribing, planning, and reviewing) and characteristics of final written products (quality, accuracy, fluency, and structure).

According to Bardovi-Harlig (1995) and Cumming (1989), the writer's proficiency level in the second language can be another source of differences between L1 and L2 writing, as is the writer's familiarity with the target language genres and associated sociocultural expectations of the discourse community (Cope & Kalantzis 1993; Silva 1997; Swales 1990).

The ways writers write in their first and second languages are clearly different (Manchón, Roca de Larios & Murphy 2000). This difference is quite obvious for low-proficiency second language writers who mainly rely on their L1 knowledge (Zimmerman 2000). Weissberg (2000) implies that writing is of crucial value in L2 learning for knowledgeable adults; therefore, such people write quite differently in their second language compared with those for whom writing in their first language plays a less important role. These differences may be less for writers who are more experienced in both their first and second languages. Matsumoto (1995) and Beare (2002) believe that skilled bilingual writers tend to use the same trends when writing in both L1 and L2.

C. Revision

Reid (1993) defines revision literally as "seeing again" (p. 233), reseeing or revisioning the text, but Piolat (1997) defines revision technically as modification or change made at "any point in the writing process" (p. 189).

As Faigley and Witte (1981) suggest revising is a recursive, ongoing, and problem-solving process. Skilled writers try to discover and approximate intended meanings at all stages of generating, reshaping, evaluating, and improving their goals, plans, concepts, and texts (Sommers, 1996; Witte, 1985; Zamel, 1982). Reynold and Bonk (1996) contend that the ability to revise is important since it enables writers to reform their thoughts, reconstruct and change content, and enhance their texts' quality. Consequently, almost all writing models and theories stress the essential role of revising in boosting the product and process of writing (Bartlett, 1982; Huot, 2002; Reynolds & Bonk, 1996; Van Gelderen, 1997).

D. Revising Practices of Skilled and Unskilled Writers

Bridwell (1980) found significant differences in the revising behavior of skilled and unskilled writers and attributed them to 'developmental differences' between the writers. He studied the revising practices of twelfth-grade students and found that the quality of texts which were revised between drafts were high compared with those which were revised only in the first drafts. He believed that the "mid-draft revisions were mainly at surface-level, as the writers were "mired

in spelling and mechanical problems during drafting" (p. 219); in contrast, between-drafts revisions seemed to lead to higher-order revisions.

Birnbaum (1982) in his protocol analysis investigated fourth and seventh grade writers revising strategies and discovered that good writers suspended more often to reread and reshape their texts. He believed that proficient writers possessed a larger repertoire of revising practices and were able to explain what they were reflecting during the writing task. Whereas, the poor writers were "enmeshed at the surface level of the task" (pp. 253–255) and it was difficult for them to explain what they were doing during writing. They were mainly concerned with checking the accuracy of their text and writing neatly without surface-level errors. Similarly, Faigley and Witte (1984), suggested that proficient writers modified their first drafts more than non-proficient writers and that poor writers revised very little at surface level.

The same patterns have been found to exist in EFL learners' writing processes. Many researchers have reported that novice and expert EFL learners employ revising and composing strategies similar to their L1 counterparts. Zamel (1983), for example, has noted that poor EFL writers spend less time on revision than skilled writers. Also, good EFL writers make substantial meaning-based changes on first drafts and delayed surface level changes at the end of the writing process. Phooi (1986), too, noted that the Chinese university students in his study frequently focused on cognitively easier word level changes like deletions, additions, and substitutions. Also, Hall (1990) reported that advanced EFL writers either made revisions that did not change the meaning of sentences or local changes that were restricted to word and phrase level. And finally, Moon (2000) conducted a research with EFL learners aged between ten and twelve and reported that addition at word and sentence level was the most common revising practice, though adding new sentences did not lead to inclusion of new ideas to the previous meaning.

To explain the revising practices of less-skilled EFL writers, Kellogg (1996) pointed out that novice writers usually make more grammatical and local errors when they are creating text because writing requires a large amount of operating memory. This limitation makes it rather difficult for them to draw on their specific knowledge to control their output as they begin to generate the text.

E. Revision and Age

Answers to issues like what kinds of revisions are made, how much revision occurs, and when it occurs mostly depend on writers' age and expertise. Some young students begin revising as they begin writing, but, generally speaking, children do not revise frequently (Calkins, 1980; Graves, 1975, 1979; Graves & Murray, 1980; Smith, 1982). Younger students, and even many older students, do not revise or revise to a small extent without teacher feedback or peer support (Butler-Nalin, 1984; Emig, 1971; Gould, 1980; Graves, 1979; Nold, 1981; Scardamalia & Bereiter, 1986). The findings of these studies are all indicative of the effect that age might have on the second language or foreign language learners' revising practices in addition to their proficiency level. Therefore, although there are marked individual differences (Faigley & Witte, 1981; Freedman & Pringle, 1980; Markham, 1983), revising practices tend to change with competence and age.

F. Gender and Writing

Since learner-centered education has been the dominant adopted standpoint in pedagogical systems recently, teachers must take students' characteristics into account in order to meet their needs. One of the characteristics which is related to learners' performance in language learning is gender. Gender is a socio-cultural construct. Some social classifications like age, gender, ethnicity, social class, education etc. determine the kind of language used by individuals (Kamiar, Gorjian, & Pazhakh, 2012; Muto-Humphrey, 2005). Although gender was viewed as an individual phenomenon previously, today it is considered as a social concept (Aslan, 2009; Block, 2002). As Kamiar et al. (2012) observe, gender displays the social and contextual behavior which society expects from each gender (male or female) in a clear manner.

Most research shows that in general females are better in language learning than males (e.g., Camarata & Woodcock, 2006; Gibb, Fergusson, & Horwood, 2008; Marks, 2008; Pajares & Valiante, 2001). The question, however, is if this finding can be extended to writing or if any significant differences can be found between males and females' revising practices. Peterson (2000) conducted a study on fourth and eighth-grade students' writing competence and noted the superiority of girls' writings over boys'; females' texts were more descriptive, detailed and greatly in conformity with writing rules and conventions. Also, a number of studies have indicated that females are more confident in writing than males (Pajares & Valiante, 2001; Peterson, 2000).

III. METHODOLOGY

A. Participants

The participants of this study were 70 male and female Iranian EFL learners whose ages ranged from 17 to 35. They were studying in English language institutes in the northwest city of Ardabil. These participants had been learning English for more than two years prior to the beginning of the study. The initial number of the students stood at 80 but since 10 of the students either did not write anything fitting the study in length or their handwritings were not legible enough, the number of the students included in the study dropped to 70.

B. Instruments

The instruments used in this study were of two types. First the researchers used ESL Composition Profile proposed by Jacobs, et al. (1981) to rate the participants' written texts analytically. This ESL Composition Profile comprises the five components of Organization and Content (global revisions) and Vocabulary, Language Use, and Mechanics (local revisions). The next instrument used was the participants' first and second drafts to determine their errors and the kind of revising practices they had engaged in. In addition, the learners' revised-samples were utilized to divide them into high- and low-proficiency students based on the mean of their holistic scores.

C. Procedure

First of all, the students were asked to go about a descriptive writing task on a conceptually familiar topic in 100 words and in about thirty minutes. The length of the text was kept short to allow the students to write attentively. The next day, the students were asked to read their first drafts and try to rewrite better drafts of them without receiving any feedback or specific instruction on the part of the teachers on the kind of revisions.

In the next step, the researchers rated all of the texts written by the students holistically; then they used ESL Composition Profile proposed by Jacobs, et al. (1980) to score the texts again but this time analytically. Subsequently, 20% of the texts were scored holistically and analytically by another experienced rater. This was done to establish inter-rater reliability. The inter-rater reliability was afterwards calculated between the averages of the pairs of scores given by the two researchers and the scores given by the other rater. Then, the students were divided into the two groups of low-proficiency and high-proficiency EFL writers based on the average of their holistic scores on the revised drafts.

At the hypothesis testing stage, first, the significance of the differences between the different lower-order and higher-order revising practices employed by the low- and high-proficiency EFL writers was examined using the MANOVA test without controlling for any moderator variable. After that, an ANCOVA test was run to investigate the significance of the differences between the high-level and low-level students' revising practices after controlling for the effect of age. Finally, a SPANOVA test was used to see if the differences between the two groups remained significant after controlling for the effect of gender.

D. Design of the Study

This study involved no instruction or any other intervention. That is, the independent variables of the study (writing proficiency, age, gender) were not manipulated to create a particular kind of effect; therefore the design of the study was ex post facto.

IV. DATA ANALYSIS AND RESULTS

A. Examining the First Research Hypothesis

As mentioned earlier, another rater rescored 20% of the written samples both holistically and analytically. The correlations between the averages of the pairs of scores given by the researchers and the other raters' scores were all above .76 and in some cases close to perfect. Consequently, inter-rater reliabilities in both analytic and holistic scorings were established.

Hypothesis one stated that there are no differences in the kinds of lower-order and higher-order revising practices employed by the students with low and high writing ability. To test this hypothesis we needed a One-way MANOVA to be run. Applied to this study, MANOVA would incorporate information about all kinds of revising practices. Before running MANOVA, however, it was necessary to check for the assumptions of this test.

The first assumption of MANOVA is sample size, that is, the number of cases in each cell should be more than the number of dependent variables. A large sample size also avoids violations of other important assumptions like normality. Since the number of dependent variables in our study was five and the number of students was 70, this assumption of MANOVA was met. That is, we had many more cases than this number in each cell.

Multivariate normality is another essential assumption of MANOVA which refers to the normality of distribution of all scores of dependent variables by measuring their distances from a centroid. According to Pallant (2013) multivariate normality can be checked by calculating the maximum Mahalanobis distance. To meet the multivariate normality, the maximum Mahal distance should not overtake the critical Mahal value calculated for the same number of dependent variables. A Mahal distance which is smaller than the critical value also puts us on a firm ground to reject the existence of outliers. This value is calculated using the regression menu in SPSS. Cooks' distance also indicates the overall influence that a case exerts on the model and should not exceed 2.

TABLE 1.
TESTS OF MULTIVARIATE NORMALITY AND LACK OF OUTLIERS

	Minimum	Maximum	Mean	Std. Deviation	N
Mahal. Distance	1.119	19.599	4.929	3.298	70
Cook's Distance	.000	.125	.018	.026	70
Centered Leverage Value	.016	.284	.071	.048	70

In this analysis, Maximum Mahal distance was 19.599 which did not exceed the critical value of 20.52 for five dependent variables. The maximum Cooks' Distance was also .125. Therefore, multivariate normality was not violated and there was no outlier in the sample.

The other assumption to be checked was linearity. The Matrix of scatter plots generated below displays the existence of a straight-line correlation between each pair of dependent variables. The graph only indicates lack of correlation between high-level students' use of mechanics and their ability. Of course, mechanics is the least important component of writing ability and slight deviations from linearity are acceptable.
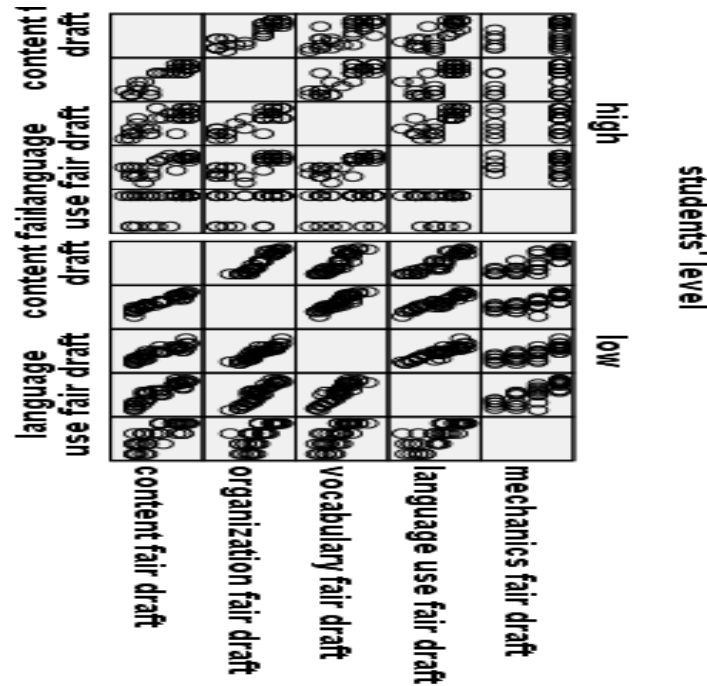

Figure 1. Linearity Matrix Of Scatter Plots

Examining the homogeneity of the variance covariance matrices is the next step in checking MANOVA's applicability. Obtaining Box's Test can tell us whether the data violated the assumption of homogeneity of variance covariance matrices or not. This statistic either accepts or rejects the null hypothesis of covariance matrices equality in the two groups. If the statistic is non-significant, it can be inferred that the matrices are the same. In this table our reference level of probability should be .001. The following table shows that the assumption of homogeneity was met since the Sig. value is larger than .001.

TABLE 2.
HOMOGENEITY OF VARIANCE COVARIANCE MATRICES

Box's M	58.963
F	3.616
df1	15
df2	17439.981
Sig.	.331

The last important assumption of MANOVA to be checked is the equality of error variances. This assumption is verified by looking at the Leven's Test of Equality of Error Variances table. In the *Sig.* column in this table we should look for values that are smaller than .05. Any value smaller than .05 will indicate that the assumption of equality of variance for the related variable is violated. If we violate this assumption we should set a more conservative alpha level for determining the significance for that variable. As it can be seen in Table 3, the *Sig* values for two of the dependent variables are smaller than .05 meaning that we have to look at these variables' significance values in the Tests of Between-Subjects Effects or ANOVA Summary table to judge if the differences have been significant.

TABLE 3.
LEVENE'S TEST OF EQUALITY OF ERROR VARIANCES

	F	df1	df2	Sig.
content fair draft	15.068	1	68	.303
organization fair draft	6.341	1	68	.014
vocabulary fair draft	13.218	1	68	.016
language use fair draft	21.330	1	68	.264
mechanics fair draft	34.535	1	68	.151

Of course, there are some other general assumptions of MANOVA, such as independence and linearity that we did not talk about here. This is because these assumptions were met by the way the data were collected.

There are two very important tables in the output of the MANOVA test in SPSS. The first of these tables is the Multivariate Tests table which shows if the difference as a whole is significant. The second table is the table of Tests of Between-Subjects Effects which tells us where the difference, if any, lies.

In the Multivariate Tests table statistics are quoted for the intercept of the model (which is not important for us) and for the group variable, in the case of our study high-level vs. low-level learners. The group effects are important because they tell us whether or not writing ability had an effect on revising practices. SPSS lists four multivariate test statistics. In the next column the F-ratios are given with degrees of freedom. The column we are interested in, however, is the one containing significance values of F-ratios. If all of the four multivariate test statistics reached the criterion for significance, we could confidently reject the null hypothesis that there was no significant difference in revising practices of the students in terms of their writing ability.

TABLE 4.
MULTIVARIATE TESTS OF THE GROUPS' DIFFERENCES IN TERMS OF THEIR REVISING PRACTICES

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.972	439.067[b]	5.000	64.000	.000	.972
	Wilks' Lambda	.028	439.067[b]	5.000	64.000	.000	.972
	Hotelling's Trace	34.302	439.067[b]	5.000	64.000	.000	.972
	Roy's Largest Root	34.302	439.067[b]	5.000	64.000	.000	.972
Students' level	Pillai's Trace	.294	5.332[b]	5.000	64.000	.000	.294
	Wilks' Lambda	.706	5.332[b]	5.000	64.000	.000	.294
	Hotelling's Trace	.417	5.332[b]	5.000	64.000	.000	.294
	Roy's Largest Root	.417	5.332[b]	5.000	64.000	.000	.294

As it can be seen in Table 4, all four multivariate test statistics are significant, but still we do not know whether the effect of writing ability was on content, organization, language use, vocabulary, or mechanics. To determine the nature of the effect we have to look at the univariate test results in Table 5.

TABLE 5.
ANOVA SUMMARY FOR DEPENDENT VARIABLES (TESTS OF BETWEEN-SUBJECTS EFFECTS)

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Students' level	content fair draft	529.264	1	529.264	21.492	.000	.240
	organization fair draft	268.426	1	268.426	21.121	.000	.237
	vocabulary fair draft	232.433	1	232.433	22.481	.000	.248
	language use fair draft	585.237	1	585.237	25.307	.000	.271
	mechanics fair draft	16.358	1	16.358	22.279	.000	.247

As a matter of fact, Table 5 is the ANOVA summary for the dependent variables and shows the *F* and *Sig* values for each dependent variable. Values in the students' level row will be the same as those obtained if a One-way ANOVA was run on each dependent variable with writing ability having the two levels of high and low as our independent variable. Any significant result means that proficiency level has really had a significant effect on the revising practice as the dependent variable, but a non-significant result would compel us to conclude that writing ability has had no meaningful effect on the revising practices of the students. Some unnecessary parts of the table are deleted for saving the space.

It is clear that all components of the students' revising practices differed significantly between the low-level and high-level students. This finding rejects our first null hypothesis stating that no difference exists in the kind of revising practices between the lower-order and higher-order groups. In fact, our findings show significant differences between these two groups in terms of all elements of their revisions. Also, since the Sig values are equal to .001, our violation of Equality of Error Variances in Table 3 (Levene's Test of Equality of Error Variances) should not concern us. A descriptive analysis of the groups' statistics in relation to the dependent variables before running MANOVA is given in table 6.

TABLE 6.
DESCRIPTIVE STATISTICS OF THE LOW- AND HIGH-LEVEL GROUPS BEFORE RUNNING MANOVA

Dependent Variable	students' level	Mean	Std. Error	99% Confidence Interval	
				Lower Bound	Upper Bound
content fair draft	low	20.605	.805	18.472	22.739
	high	26.125	.877	23.800	28.450
organization fair draft	low	13.132	.578	11.599	14.664
	high	17.063	.630	15.392	18.733
vocabulary fair draft	low	13.842	.522	12.460	15.224
	high	17.500	.568	15.994	19.006
language use fair draft	low	16.289	.780	14.222	18.357
	high	22.094	.850	19.841	24.347
mechanics fair draft	low	3.842	.139	3.474	4.210
	high	4.812	.151	4.411	5.214

B. Examining the Second Research Hypothesis

The second null hypothesis was formulated to see if the amount of difference in revising practices between the high and low ability students change after the effect of age is controlled for. This hypothesis was examined by running an ANCOVA test. ANCOVA or Analysis of covariance is an extension of analysis of variance that investigates differences between groups while statistically controlling for effect of the covariate, another continuous independent variable that we suspect may be affecting scores on the dependent variable (Pallant, 2013). SPSS uses hierarchical regression methods by entering the data in blocks to remove the covariate's effect and then performs the usual analysis of variance on the corrected scores.

There are a number of requirements and issues associated with ANCOVA. ANCOVA assumes that the relationship between the dependent variable and the covariate is straight-line. Scatterplots are checked separately for each of the groups (high-level and low-level students in the case of this study) to check linearity. Violations of this assumption may reduce the sensitivity of the test. Figure 2 illustrates the scatterplot that checks this assumption in this study. In the figure below the relationships are clearly linear, so the assumption of a linear relationship was met.
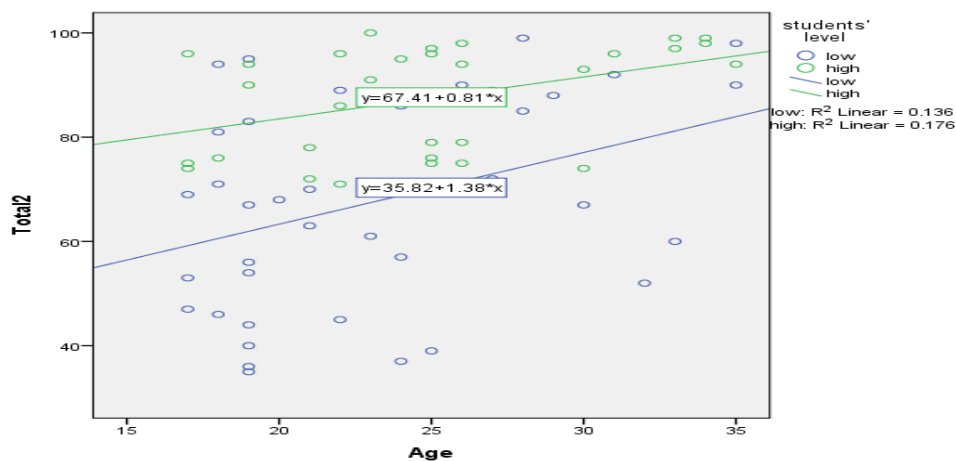

Figure 2. Linear Relationships of the Levels Dependent Variable and Covariate

Another assumption of ANCOVA is homogeneity of regression slopes. According to this assumption, the relationship between the covariate and the dependent variable for each of the groups must almost be the same. In figure 2 the two lines are very similar in slopes, so it does not seem that this assumption was violated either.

Information in the table labeled Levene's Test of Equality of Error Variances (Table 7 below) also proves that the assumption of equality of variances was satisfied because the *Sig* value is greater than .05.

TABLE 7.
LEVENE'S TEST OF EQUALITY OF ERROR VARIANCES

F	df1	df2	Sig.
1.668	32	37	.067

The main ANCOVA results are presented in the table of Test of Between-Subjects Effects. In this table we can figure out if the amount of difference between our groups changes significantly if we control for the effect of age. Table 8 shows that this has not been the case.

TABLE 8.
CHANGE IN DIFFERENCE BETWEEN THE GROUPS AFTER THE EFFECT OF AGE IS REMOVED

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	Hypothesis	302631.938	1	302631.938	1028.684	.000
	Error	6757.927	22.971	294.193[a]		
Students' level	Hypothesis	3923.139	1	3923.139	19.193	.000
	Error	3485.244	17.051	204.400[b]		
Age	Hypothesis	5441.902	18	302.328	1.501	.216
	Error	3017.339	14.977	201.467[c]		
Students' level * Age	Hypothesis	2577.115	13	198.240	.769	.686
	Error	9542.700	37	257.911[d]		

In this table the *Sig* value for the students' level and its interaction with age is .686. The effect of age is also non-significant. These values mean that difference in age did not affect difference in revising practices and that this difference could only be attributed to the students' difference in their writing ability. Therefore, our second null hypothesis was confirmed.

C. Examining the Third Research Hypothesis

To test the third research hypothesis, namely that, there are no differences between the high and low level students' revising practices if the effect of gender is controlled for, a split plot ANOVA (SPANOVA) test was run, with gender being the between-subjects independent variable and writing ability the within-subjects independent variable. SPANOVA tests whether the main effect of each of the independent variables is significant. It also measures the significance of the interaction between the two variables. This test supplies outputs for univariate and also multivariate ANOVA results. According to Pallant (2013) it is safer to explore the multivariate statistics provided in the output since univariate statistics requires the assumption of sphericity, that is, sameness of the variance of the samples difference scores for any two conditions with difference scores for any other two conditions which is mainly violated. Multivariate statistics do not make this assumption.

As in the case of other statistical procedures, before running SPANOVA we should have checked its assumption, i.e., homogeneity of inter-correlations. This assumption requires the same inter-correlations among the levels of the within-subjects variable for each of the levels of the between-subjects variable. We use Box's M statistic to test this assumption. This statistic should exceed the alpha level of .001 for the assumption to be met. As can be seen in the following Box's M table this assumption was tenable.

TABLE 9.
HOMOGENEITY OF INTER-CORRELATIONS

Box's M	3.927
F	1.267
df1	3
df2	2879047.111
Sig.	.284

In the first output box provided by SPSS, we are presented with the descriptive statistics (Mean, Standard deviation, N) for our two sets of scores. In this table we see that the means of females' first drafts and revised drafts have been larger than the means of males for the same drafts. This implies that females' writing ability has been somehow higher than males.

TABLE 10.
DESCRIPTIVE STATISTICS OF MALE AND FEMALE PARTICIPANTS

	Gender	Mean	Std. Deviation	N
Total first draft	Male	67.16	16.361	32
	Female	72.89	17.500	38
	Total	70.27	17.111	70
Total revised draft	Male	72.94	19.026	32
	Female	79.87	18.732	38
	Total	76.70	19.049	70

In order to assess the interaction effect (Students' level*Gender), that is, to see if there has been the same change in revising practices for males and females in the two different groups (high-level/low-level), we should look at the second set of rows in Table 11 or Multivariate Tests table. The values of interest to us are Wilks' Lambda and its associated probability value given in the *Sig.* column. Although, for two independent variables, the values will be the same for all tests, Wilks' Lambda is the statistic that is commonly reported. In Table 12 the interaction effect is not significant statistically ($P = .348 > .05$). This finding is a nice one because it saves us from the trouble of interpreting difference as a result of one independent variable's influence in terms of the other independent variables' influence. That is, we have to

look only at the main effects of the independent variables, specifically the main effect of gender which was the subject of our third hypothesis.

TABLE 11.
MAIN EFFECT OF STUDENTS' LEVEL AND ITS INTERACTION WITH GENDER

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Students' level	Pillai's Trace	.600	102.089[b]	1.000	68.000	.000	.600
	Wilks' Lambda	.400	102.089[b]	1.000	68.000	.000	.600
	Hotelling's Trace	1.501	102.089[b]	1.000	68.000	.000	.600
	Roy's Largest Root	1.501	102.089[b]	1.000	68.000	.000	.600
Students' level * Gender	Pillai's Trace	.013	.892[b]	1.000	68.000	.348	.013
	Wilks' Lambda	.98	.892[b]	1.000	68.000	.348	.013
	Hotelling's Trace	.013	.892[b]	1.000	68.000	.348	.013
	Roy's Largest Root	.013	.892[b]	1.000	68.000	.348	.013

After exploring the within-subjects effects, we need to consider the main effect of our between-subjects variable (gender) in the table below which is called Tests of Between-Subjects Effects.

TABLE 12.
MAIN EFFECT OF GENDER

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	744931.749	1	744931.749	1180.976	.000	.946
Gender	1394.178	1	1394.178	2.210	.142	.031
Error	42892.794	68	630.776			

In Table 12 the probability value for gender is .142. This is not less than .05, so we cannot conclude that the main effect for gender has been significant. Put differently, there was no significant difference between revising practices of the high and low ability students' arising from their gender. The partial eta-squared value for gender is also .031 which is a very small effect size; therefore, it is not surprising that it did not reach statistical significance.

V. DISCUSSION AND CONCLUSIONS

Our results from analyzing the data compelled us to reject the first null hypothesis. $H0_1$ stated that there are no differences in the kinds of lower-order and higher-order revising practices employed by students with low and high writing ability. The MANOVA we ran on the data revealed that the revising practices and components of writing had been affected by students' writing ability differently. This is logical since novice writers commonly find it difficult to revise their texts with their writing goals and audience in mind and so many studies agree with this finding (e.g., Bartlett, 1982; Daiute, 1985; Faigley & Witte, 1981; Hayes et al., 1987; Matsuhashi & Gordon, 1985). Unlike the less skilled writers, whose attentional resources are consumed by surface-level issues, skilled writers do global changes to their first draft (Schriver, 1990; Sommers, 1996; van Gelderen, 1997; Wallace & Hayes, 1991; Witte, 1985). The findings also agree with the results of studies carried out on second language writers revising strategies (e.g., Hall, 1990; Krashen, 1984; Roca De Larios et al., 2002; Porte, 1997; Victori, 1999). Bridwell (1980) also noted significant differences in the revising practices of skilled and unskilled writers; she reported that good writers revised more while writing their initial drafts and mainly revised at the deep level.

The second hypothesis was posed to see if there were any differences between the high and low level students' revising practices after controlling for the effect of age. Statistical results revealed that difference in the students revising practices did not change after controlling for the effect of age. That is, the found difference should entirely be attributed to their writing ability. The finding of this study in this regard disagrees with the finding of Graves and Murray (1980) who confirmed that younger writers do not revise frequently. The finding is also in conflict with Faigley and Witte's (1981) finding who examined the effect of age on revising practices of students and reported that there is marked individual variation which tends to change with age.

The next issue which was considered important in the study was investigating differences between the students' revising practices at the two levels of high and low after controlling for the effect of gender. According to the obtained results, like the effect of age, the effect of gender was not significant. The findings of this study also proved that mean scores of the females' first drafts and revised drafts were higher than those of males. This implies that females' writing ability may somehow be superior to males. The first finding, that the effect of gender on the students' revising practices was negligible, is consistent with Soori and Zamani (2012) who concluded that most language characteristics are employed equally by male and female writers. However, the second finding pointing to the slight superiority of females over males in writing is in conformity with Peterson's (2000) finding that reported an advantage for girls' texts over boys' texts. Peterson's study discovered that girls' writings are more descriptive and detailed than boys' writings.

REFERENCES

[1]   Ahmadi, D., Maftoon, P., & Gholami Mahrdad, A. (2012). Investigating the effects of two types of feedback on EFL students' writing. *Procedia Social and Behavioral Sciences, 46*, 2590–2595.
[2]   Aoki, N. (1992). Planted errors in revising: Nihonjin daigakusei iio eigosakubuiiryoku, tiihoiigosakubuiiryoku, eibuiipou no kannkei [Relations between revisions of planted errors and Japanese college students' English composition ability, Japanese composition ability and English graining competence]. *Language and Culture Studies, 11*(2), 137–156.
[3]   Aslan, O. (2009). The role of gender and language learning strategies in learning English. (Unpublished Master's thesis).
[4]   Bardovi-Harlig, K. (1995). A narrative perspective on the development of the tense/aspect system in second language acquisition. *Studies in Second Language Acquisition, 17(*2), 91–263.
[5]   Bartlett, E. J. (1982). Learning to revise: Some component processes. In M. Nystrand (Ed.), *What writers know: The language, process, and structure of written discourse* (pp. 345–363). New York: Academic Press.
[6]   Beach, R. (1976). The effects of between-draft teacher evaluation versus student self-evaluation on high school students' revising of rough drafts. *Research in the Teaching of English, 13*(2), 111–119.
[7]   Beare, S. (2002). Writing Strategies: Differences in L1 and L2 Writing. *Proceedings of the Languages, Linguistics and Area Studies in Higher Education Conference,* 24–26, June 2002, Manchester Conference Centre, UMIST.
[8]   Birnbaum, J. C. (1982). The Reading and Composing Behavior of Selected Fourth- and Seventh-grade Students. *Research in the Teaching of English, 1*6, 241–60.
[9]   Block, D. (2002). Language & Gender and SLA. [Electronic version] *Quaderns de Filologia. Estudis Linguistics, 7,* 49–73.
[10] Bridwell, L. (1980). Revising strategies in twelfth grade students' transactional writing. *Research in the Teaching of English*, *14*, 197–222.
[11] Butler-Nalin, K. (1984). Revision patterns in students' writing. In Arthur N. Applebee (Ed.), *Contexts for learning to write: Studies for secondary school instruction* (pp. 121–215).
[12] Calkins, L. M. (1980). Notes and comments: Children's rewriting strategies. *Research in the Teaching of English*, *14*, 331–341.
[13] Camarata, S., & Woodcock, R. (2006). Sex differences in processing speed: Developmental effects in males and females. *Intelligence*, *34*(3), 231–252. http://dx.doi.org/10.1016/j.intell.2005.12.001.
[14] Cope, B., & Kalantzis, M. (Eds.). (1993). The Powers of Literacy: A Genre Approach to Teaching Writing. London: Falmer Press.
[15] Cumming, A. (1989). Writing expertise and second-language proficiency. *Language Learning, 39*(1), 81–141.
[16] Daiute, C. (1985). Do writers talk to themselves? In S. W. Freedman (Ed.), *The acquisition of written language: Response and revision* (pp. 133–159). Norwood, NJ: Ablex.
[17] Emig, J. (1971). The composing processes of twelfth graders. (NCTE Research Report No. 13.X). Urbana, IL: National Council of Teachers of English.
[18] Faigley, L., & Witte, S. (1984). Measuring the effects of revisions on text structure. In R. Beach, & L. S. Bridwell (Eds.), *New directions in composition research* (pp. 95–108). New York: Guilford Press.
[19] Faigley, L., & Witte, S. P. (1981). Analyzing revision. *College Composition and Communication, 32*(4), 15–40.
[20] Fatemi, M. A. (2008). The relationship between writing competence, language performance and grammatical errors in the writing of Iranian TEFL sophomores. Published Ph.D. Thesis, University Sains Malaysia.
[21] Forrester, M. A. (1996). Psychology of Language: A Critical Introduction. London: Sage Publications.
[22] Freedman, A., & Pringle, I. (1980*).* The writing abilities of a representative sample of grade 5, 8, and 12 students: The Carleton Writing Project, Part II (Final Report). Carleton (Ontario) Board of Education. (ERIC Document Reproduction Service No. ED 217 413).
[23] Gibb, S. J., Fergusson, D. M., & Horwood, L. J. (2008). Gender differences in educational achievement to age 25. *Australian Journal of Education, 52*(1), 63–80. http://dx.doi.org/10.1177/000494410805200105.
[24] Gosden, H. (1996). Verbal reports of Japanese novices' research writing practices in English. *Journal of Second Language Writing, 5*(2), 109–128.
[25] Gould, J. D. (1980). Experiments on composing letters: Some facts, some myths, and some observations. In L. W. Gregg & E. R. Steinberg (Eds.), *Cognitive process in writing* (pp. 97–127). Hillsdale, NJ: Erlbaum.
[26] Graves, D. H. (1975). An examination of the writing processes of seven year old children. *Research in the Teaching of English*, *9*, 227–241.
[27] Graves, D. H. (1979, March). What children show us about revision. *Language Arts*, *56*, 312–319.
[28] Graves, D. H., & Murray, D. M. (1980). Revision: In the writer's workshop and in the classroom. *Journal of Education*, *162*, 38–56.
[29] Haiwen, M. (2012). A study of the teaching of ESL writing in colleges in China. *International Journal of English Linguistics*, *2*(1), 118–127. http://dx.doi.org/10.5539/ijel.v2n1p118.
[30] Hall, C. (1990). Managing the complexity of revising across languages. *TESOL Quarterly, 24*, 43–60.
[31] Halliday, M. A. K. (2003). Written language standard language, global language. *World Englishes, 22*(4), 405–418. http://dx.doi.org/10.1111/j.1467-971X.2003.00309.x.
[32] Hayes, J. R., Flower. L., Shriver, K. A., Stratman, J. F., & Carey, L. (1987). Cognitive process in revision. In S. Rosenberg (Ed.), *Advances in applied psycholinguistics,* Vol. 2: (pp. 176–240). New York: Cambridge University Press.
[33] Huot, B. (2002). (Re)Articulating writing assessment for teaching and learning. Logan, UT: Utah University Press.
[34] Hyland, K. (2003). Second language writing. Cambridge: Cambridge University Press.
[35] Jacobs, H., Zingraf, S., Wormuth, D., Hartfiel, V., & Hughey, J. (1981). Testing ESL Composition: A practical approach. Rowley, MA: Newbury House.
[36] Jalaluddin, I. (2011). Teacher's assistance in developing rural learners' writing skills and writing self-efficacy: A case study. Unpublished Ph.D. Thesis. University Kebangsaan Malaysia.

[37] Kamiar, E., Gorjian, B., & Pazhakh, A. (2012). Examining the effects of gender on second language writing proficiency of Iranian EFL students: Descriptive vs. opinion one-paragraph essay. *Advances in Asian Social Sciences (AASS), 3*(4).

[38] Kellogg, R. (1996). A model of working memory in writing. In C. M. Levy & S. Ransdell (Eds.), *The science of writing: Theories, methods, individual differences, and applications* (pp. 57–91). Mahwah, New Jersey: Laurence Erlbaum Associates.

[39] Kobayashi, H. (1991). Revisions by EFL college writers in Japan: Text quality and revision strategies. *Studies in Language and Culture, 17*, 50–65.

[40] Krashen, S. D. (1989). Language Acquisition and Language Education. California: Prentice -Hall International.

[41] Krashen, S.D. (1984). Writing: Research, theory and applications. New York: Pergamon Institute of English.

[42] Manchón, R., J., Roca de Larios, & Murphy, E. (2000). An approximation to the study of backtracking in L2 writing. *Learning and Instruction, 10*(1), 13–35.

[43] Markham, L. R. (1983, November). Revision in first graders' writing: Learning to communicate with yourself. Paper presented at the annual meeting of the National Council of Teachers of English, Denver.

[44] Marks, G.N. (2008). Accounting for the gender gaps in student performance in reading and mathematics: evidence from 31 countries. *Oxford Review of Education, 34*(1), 89–109. http://dx.doi.org/10.1080/03054980701565279.

[45] Matsuhashi, A., & Gordon, E. (1985). Revision, addition, and the power of the unseen text. In S. W. Freedman (Ed.), *The acquisition of written language: Response and revision* (pp. 226–249). Norwood, NJ: Ablex.

[46] Matsumoto, K. (1995). Research paper writing strategies of professional Japanese EFL writers. *TESL Canada Journal, 13*(l), 17–27.

[47] Moon, J. (2000). Exploring the Effects of Drafting on Bhutanese Children's L2 Story Writing in Year 3 and 4 of Schooling. In J. Moon, & M. Nikolov (Eds.), *Research into teaching to young learners* (pp. 386–415).

[48] Muto-Humphrey, K. (2005). Gender balance in EFL textbooks: Graded readers. Retrieved March 14, 2012, textbooks: Graded readers. Retrieved March 14, 2012, from www. library. nakanishi.ac.jp/kiyou/gaidai.

[49] Nold, E. W. (1981). Revising. In C. H. Frederiksen & J. F. Dominic (Eds.), *Writing*: *The nature, development and teaching of written communication* (pp. 67–79). Hillsdale, NJ: Erlbaum.

[50] Pajares, F., & Valiante, G. (2001). Gender differences in writing motivation and achievement of middle school students: A function of gender orientation? *Contemporary Educational Psychology, 26*(3), 366–381. http://dx.doi.org/10.1006/ceps.2000.1069.

[51] Pallant, J. (2013). SPSS survival manual. New York: Open University Press.

[52] Phooi, C. L. (1986). The Revision Processes of First-Year Students at the National University of Singapore. *RELC Journal, 17*(1), pp. 71–84.

[53] Piolat, A. (1997) Writers' assessment and evaluation of their texts. In C. Clapham & D. Corson (Eds.), *Encyclopaedia of language and education. Vol. 7: Language testing and assessment* (pp. 189–198). Dordrecht, Netherlands: Kluwer Academic.

[54] Porte, G. (1996). When writing fails: How academic context and past learning experiences shape revision. *System, 24*(l), 107–116.

[55] Porte, G. (1997). The etiology of poor second language writing: The influence of perceived teacher preferences on second language revision strategies. *Journal of Second Language Writing, 24*(1), 61–78.

[56] Raimes, A. (1994). Language proficiency, writing ability, and composing strategies: A study of ESL college student writers. In A. Cumrning (Ed.), *Bilingual performance in reading and writing* (139–172). Ann Arbor: Jolin Benjamins.

[57] Reid, J.M. (1993). Teaching ESL writing. Englewood Cliffs, NJ: Prentice Hall Regents.

[58] Roca De Larios, J., Murphy, L., & Marin, J. (2002). A critical examination of L2 writing process research. In S. Ransdell & M.L. Barbier (Eds.), *New directions for research in L2 writing* (pp. 11–47). Dordrecht, Netherlands: Kluwer Academic.

[59] Scardamalia, M., & Bereiter, C. (1983). The development of evaluative, diagnostic, and remedial capabilities in children's composing. In M. Martlew (Ed.), *The psychology of written language: A developmental approach* (pp. 67–95). London: Wiley.

[60] Schriver, K. A. (1990). Evaluating text quality: The continuum from text-focused to reader-focused methods. Technical Report No. 41. Berkley, CA: University of California Centre for the Study of Writing.

[61] Silva, T. (1993). Toward an understanding of the distinct nature of L2 writing: The ESL research and its implications. *TESOL Quarterly, 27*(4), 77–657.

[62] Smith, G. L. (1982). Revision and improvement: Making the connection. In R. A. Sudol (Ed.), *Revising: New essays for teachers of writing* (pp. 132–139). Urbana, IL: ERIC Clearinghouse on Reading and Communication Skills, National Institute of Education, and National Council of Teachers of English.

[63] Sommers, N. (1996). Revision strategies of student writers and experienced adult writers. In B. Leeds (Ed.), *Writing in a second language: Insights from first and second language teaching and research* (pp. 128–136). New York: Longman.

[64] Soori, A., & Zamani, A. A. (2012). Language features in the writing of male and female students in English and Persian. *European Journal of Social Sciences, 33*(2), 324–329.

[65] Swales, J. M. (1990). Genre Analysis. Cambridge: Cambridge University Press.

[66] Van Gelderen, A. (1997). Elementary students' skills in revising: Integrating quantitative and qualitative analysis. *Written Communication, 14*(3), 360–397.

[67] Victori, M. (1999). An analysis of writing knowledge in EFL composing: A case study of two effective and two less effective writers. *System, 27*, 537–555.

[68] Wallace, D. L., & Hayes, J. R. (1991). Redefining revision for freshmen. *Research in the Teaching of English, 25*(1), 54–66.

[69] Weissberg, B. (2000). Developmental relationships in the acquisition of English syntax: Writing vs. speech. *Learning and Instruction, 10*(1), 37–53.

[70] Witte, S.P. (1985). Revising, composing theory, and research design. In S.W. Freedman (Ed.), *The acquisition of written language: Response and revision* (pp. 250–284). Norwood, NJ: Ablex.

[71] Zamel, V. (1982). Writing: The process of discovering meaning. *TESOL Quarterly, 16*, 195–209.

[72] Zamel, V. (1983). The Composing Processes of Advanced ESL Students: Six Case Studies. *TESOL Quarterly, 17*(2), 165–187.

[73] Zimmerman, R. (2000). L2 writing: Subprocesses, a model of formulating and empirical findings. *Learning and Instruction*, *10*(1), 73–99.

Leyla Shami is an MA graduate of ELT from IAU Ardabil Branch in Iran. She is has been teaching in English language institutes in Ardabil since 2012. Leyla Shami at the same time has been extensively studying writing. Her areas of interest are teaching methodology and psycholinguistics.

Asgar Mahmoudi is an assistant professor of ELT at IAU Ardabil Branch in Iran. He teaches different courses for MA and PhD students at this university. His areas of interest are research methodology, theories of language teaching and learning, testing and oral fluency and naturalness.