

Corpus-Based Materials and Learning Non-Congruent Idioms by Iranian EFL Learners: Enhanced and Unenhanced Input

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Abstract

The current study aimed at probing the impact of using enhanced and unenhanced corpus-based material on non-congruent idiom learning by Iranian female intermediate EFL learners. Initially, via adopting a quasi-experimental design, 120 participants from an English institute in Sanandaj were chosen conveniently from among different classes. They were given a Nelson Proficiency Test, the results of which were used to select 90 participants based on the standard deviation and the mean of the scores. These participants were then divided into three groups each consisting of 30. Prior to the treatment, the participants were given a researcher-made non-congruent idiom test. As for the treatment, the first experimental group received enhanced corpus-based materials while the second experimental group received unenhanced corpus-based materials.

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The control group received no treatment in terms of enhanced and unenhanced corpus-based materials and followed the regular syllabus of the institute. At the end of the treatment, the same pretest of non-congruent idioms was administered to the participants in the three groups as the posttest. The results of ANCOVA indicated that both enhanced and unenhanced corpus-based instruction had significant effects on learning non-congruent idioms. However, there was a significant difference between the effects of unenhanced and enhanced corpus-based instruction on learning non-congruent idioms, in favor of the second. Based on the findings of the present study, EFL teachers are encouraged to employ corpus-based materials in teaching L2 in general and in particular when it comes to teaching non-congruent idioms.

Keywords: Non-congruent idioms, corpus-based materials, input enhancement, enhanced corpus-based materials, unenhanced corpus-based materials.

Introduction

Nowadays technology plays a pivotal role in the learning process and currently almost all language classes employ some form of technology in one way or another (Ahmadi, 2018). Since the use of technology has become so widespread, technology is used in various forms in all learning contexts in general and language learning settings in particular (Li & Cummins, 2019). As Gao and Ma (2019) maintain, different technological innovations including computers and the Internet are nowadays being used vastly in the field of L2 instruction and learning. Uçar and Yükselir (2015) note that, the contributions of technology to the development of learning cannot be disregarded. Since the use of technology has become so conventional in learning contexts, many investigations (e.g., Abrams, 2019; Gao & Ma, 2019; Gass et al., 2019; Lan et al., 2019; Li & Cummins, 2019; Ramezani & Faez, 2019; Tseng & Yeh, 2019; Wong et al., 2018; Zhao & MacWhinney, 2018) have quite recently been done exploring the effects of different forms of technology on different language skills and components.

When it comes to second language (L2) learning, the application of the Internet has made access to L2 materials and their use easier, providing the learners with an opportunity to come in contact with the authentic target language (Vyatkina & Boulton, 2017). The developments in technology has resulted in the design of new ways for streamlining learning and teaching languages (Römer, 2010) including the application of corpora in language learning contexts (Vyatkina & Boulton, 2017). As Boulton and Cobb (2017) suggest, the use of corpora is a new approach replacing the conventional methods of instruction. Accordingly, teachers have become more inclined to employ traditional techniques less frequently than before, tending to apply current technological innovations such as corpora in language learning instruction (Boulton & Cobb, 2017). Yet, although idioms pose many challenges for language learners (Grant & Bauer, 2004), it seems that idioms have not been adequately investigated (Tabatabaei, 2012). Moreover, no study, to the best of the researcher's knowledge, has probed the effects of using technological innovations, enhanced

and unenhanced corpus-based materials on learning non-congruent idioms to date, which will be the focus of the present study.

In line with previous empirical investigations (e.g., Akbari et al., 2015; Ashkan & Sayyedrezaei, 2016; Ashouri et al., 2014; Fenik & Dikilitas, 2014; Jafarpour et al., 2013; Uçar & Yükselir, 2015; Vyatkina & Boulton, 2017), the findings of the present study are of significance as they contribute to enriching the literature regarding the effectiveness of using corpus-based materials in learning different language skills and components. Additionally, the results of the current study are likely to highlight the efficacy of employing input enhancement in learning different language skills and components in congruence with the findings of previous studies (e.g., Birjandi et al., 2015; Fahim & Vaezi, 2011; Goudarzi & Raouf, 2012; Loewen & Inceoglu, 2016; Mayén, 2013; Rashtchi et al., 2012; Seyedtajaddini, 2014; Winke, 2013) in this regard. Thus, the results of the present study can provide EFL researchers and practitioners with more awareness concerning the possible contributions of using modified corpus-based materials to teaching and learning non-congruent idioms.

Literature Review

Corpus-based Instruction

In the field of language learning, many researchers have contended the value of using technological innovations in general (e.g., Gao & Ma, 2019; Gass et al., 2019; Lan et al., 2019; Ramezanalil & Faez, 2019) and corpus-based instruction (e.g., Boulton & Cobb, 2017; Uçar & Yükselir, 2015; Vyatkina & Boulton, 2017) in acquiring a second language. According to Varley (2009), corpus-based learning has recently drawn attention in ESL and EFL education fields because of its use of authentic texts and the accessibility of words and contexts. Corpus linguistics can be considered as a methodology within the field of linguistics that has been developing quickly since 1964 when the first computerized corpus, The Brown Corpus¹, was accomplished (Boulton & Cobb, 2017). Corpus linguists are primarily interested in descriptive or useful understandings of language and study linguistic occurrences through the empirical analysis of large computerized records of language called corpora (Vyatkina & Boulton, 2017). According to Uçar and Yükselir (2015), a corpus is a large and principled group of natural texts which is collected so that it is demonstrative of the language in general, a dialect, or other subcategories of the language. Corpora may contain language which is based on written texts, recorded speech, or both of them together (Fenik & Dikilitas, 2014).

Since corpus-based materials have the potential to improve different language skills and components, numerous studies have so far been conducted in this regard. For instance, Akbari et al. (2015) examined the extent to which corpus-based tools can serve as an instruction tool in teaching collocations to Iranian university students studying in different specialized fields. The results of the study showed that the instruction of collocations, using corpus-based tools, played a significant role in helping the learners recall and learn the collo-

cations. Ashkan and Sayyedrezaei (2016) investigated the impact of corpus-based materials on the Iranian L2 learners' performance on vocabulary learning as well as recall. The findings of the study indicated that using corpus-based materials was effective in improving both the vocabulary learning and retention of the participants in the experimental group.

Input Enhancement

As Ellis (1993) states, input enhancement is an influential option in language teaching and learning, as it makes language learners aware of some specific target forms in the learning situation as draws the learners' attention to them. Other researchers, including Lee and Benati (2007), claimed that input enhancement is useful for language development; nevertheless, input enhancement does not ensure that input is transformed into intake unless language learners are able to notice the input they are exposed to. As a teaching technique, input enhancement is used by teachers in the process of second language (L2) learning for the purpose of drawing L2 learners' attention to different components of language (e.g., lexical and grammatical morphemes and structures) (Schmidt, 1990). Smith (1993) notes that, directing L2 learners' attention to structures and lexical aspects does not have to do with their natural tendency to consider L2 meaning regardless of the structure. Noticing hypothesis, put forward by Gass (1997), provides the theoretical underpinning for input enhancement. Drawing on this hypothesis, Gass elaborated on noticing the cognitive-linguistic elements of L2 input as being helpful to better learning. In the same vein, noticing the input paves the way for the transformation of input into intake. This, in turn, leads to the formation of structure-meaning associations and the ultimate integration of associations into the L2 learner's developmental system, and general acquisition processes (Gass, 1997).

As input-enhancement offers potentials in improving language learning, some researchers have explored the impact of this technique on learning different language skills and components. For instance, Goudarzi and Raouf (2012) examined the impact of highlighted (bold), non-highlighted, and L1 glossed forms on learning collocations. The findings of this study indicated that the students in the L1 glossed group outperformed the students in the other two groups and participants in the highlighted group outperformed the non-highlighted (text only) group. In another study, Karbalaei et al. (2013) investigated the effect of visual input enhancement on vocabulary and grammar learning. The findings revealed the positive effects of visual enhancement on learning vocabulary and grammar. Similarly, Birjandi et al. (2015) investigated the effects of unenhanced, enhanced, and elaborated input on phrasal verbs, observing that input enhancement and elaborated input had significant effects on L2 learners' ability to learn English phrasal verbs compared to the unenhanced input.

Idioms

As an element of language, idioms cannot be learned and used easily by L2 learners (Grant & Bauer, 2004). In Grant and Bauer's view, learning idiomatic expressions lead to some challenges for EFL learners. There are some reasons behind such tricky endeavor. For example, idioms cannot be literally translated into the first language. Furthermore, one often cannot infer the whole meaning of idiomatic expressions from the literal meaning of their individual words. Both listeners and readers are likely to suspect the use of an idiom in what they read or listen. However, it is necessary for the L2 learner to replace one word for another and give a translation into non-idiomatic English (Tabatabaei, 2012). As a result, unless the L2 learner has access to a dictionary containing some examples of the idiom, the learner fails to assign meaning to the idiom in the first language.

As pointed out by many researchers in the field (e.g., Fotovatnia & Khaki, 2012; Grant & Bauer, 2004), L2 learners find idioms as one of the biggest challenges related to foreign language learning. In fact, learners usually complain about the complexity concerning the idiomatic expressions as the main difficulty in learning them (Tabatabaei, 2012). Clearly, compound entries are very important in acquiring another language (Grant & Bauer, 2004). The acquisition of idiomatic expressions has been a matter of controversy among language educators over the past years. Idiomatic expressions are often troublesome for learners in both written and oral contexts. Furthermore, material developers and L2 instructors struggle to develop effective materials in order to present idioms effectively. Therefore, they reduce the significance of idioms by assigning them a supplementary role in curriculum (Tabatabaei, 2012). On the other hand, the corpus-based language instruction has proved to be effective and promising when it comes to L2 instruction and learning. However, the studies carried out so far have not been able to indicate how effective the use of corpus-based materials has been with respect to learning idioms (Nam, 2010).

As a review of the previous empirical studies on corpus-based materials (e.g., Akbari et al., 2015; Ashkan & Sayyedrezaei, 2016; Ashouri et al., 2014; Boulton & Cobb, 2017; Fenik & Dikilitas, 2014; Jafarpour et al., 2013; Uçar & Yükselir, 2015; Vyatkina & Boulton, 2017), input enhancement (e.g., Birjandi et al., 2015; Fahim & Vaezi, 2011; Goudarzi & Raouf, 2012; Loewen & Inceoglu, 2016; Mayén, 2013; Rashtchi et al., 2012; Seyedtajaddini, 2014) and idioms (e.g., Fotovatnia & Khaki, 2012; Grant & Bauer, 2004; Rodriguez, 2010; Tabatabaei, 2012) indicates, no study has so far explored the impacts of using enhanced and unenhanced corpus-based materials on learning idioms in general and non-congruent idioms in particular. Therefore, in an attempt to fill the gap in the literature, this study aimed at offering a possible solution for teaching and learning non-congruent idioms, through using enhanced and unenhanced corpus-based materials. In line with the purposes of the present study, the following research questions were formulated:

RQ1: Does the use of enhanced corpus-based materials have a significant impact on learning non-congruent idioms by Iranian EFL learners?

RQ2: Does the use of unenhanced-corpus-based materials have a significant impact on learning non-congruent idioms by Iranian EFL learners?

RQ3: Is there a significant difference between the impacts of the use of enhanced and unenhanced corpus-based materials on learning non-congruent idioms by Iranian EFL learners?

Method

Participants and Setting

Initially, students of different classes at the intermediate level in three English language institutes in Sanandaj were invited to participate in the study, and finally the researcher won the approval of 120 learners studying at these classes to take part in the project. The participants were female language learners within the age range of 21 to 33. Since the study was carried out in Sanandaj and most of the population in this city are Kurdish speakers, the researcher included only those learners whose first language was Persian. To this aim, the researcher talked to 33 available classes including 456 learners and was able to identify 120 learners whose L1 was Persian. Following that, Nelson Test was administered to these 120 participants and those whose scores fell within the range of +/- one standard deviation from the mean were chosen as the main participants of this study. In effect, 90 learners were selected and randomly divided into three groups. Two of these groups were considered as the experimental groups of the study and one as the control group.

Materials

English Idioms in Use (Intermediate)

This book by McCarthy and O'Dell (2005), which contains sixty units covering different topics through which a lot of idioms are presented, was used as a source for selecting the non-congruent idioms chosen for the purposes of this study. There were two reasons behind choosing this book. Firstly, the book, as indicated by the authors, offers idioms tailored to the intermediate level participants. Secondly, the book covers many topic areas which were found suitable for the purposes of this study. In the present study, five of the units of *English Idioms in use* were covered and 30 idioms were selected as the target idioms in the current study. In fact, the book was considered as a source for selecting the idioms in the current study; however, to have enhanced corpus-based materials, examples for the idioms were extracted from the Corpus of Contemporary American English (COCA), and these examples were subsequently provided to the participants in the enhanced corpus-based group. It is noteworthy that, since the original examples were not enhanced in the corpus, the researcher made modifications to the idioms used in the examples in line with Norris and Ortega's (2000) guidelines. As for the corpus-based instruction group, the materials taken from the corpus were presented to the learners without making any modifications.

Corpus of Contemporary American English (COCA)

The Corpus of Contemporary American English (COCA) is the largest freely-available corpus of English, and the only large and balanced corpus of American English. COCA is probably the most widely-used corpus of English, and it is related to many other corpora of English that have been created, which offers unparalleled insight into variations in English. The corpus contains more than 560 million words of text (20 million words each year 1990-2017) and is equally divided into spoken, fiction, popular magazines, newspapers, and academic texts (<https://corpus.byu.edu/coca/>). This corpus was utilized to obtain the corpus-based materials in the present study.

Instrumentation

The instruments employed in the current study included the Nelson Proficiency Test and a non-congruent idiom test the details of which are provided below.

Nelson Proficiency Test

Nelson Proficiency Test (300 B) was administered to the participants in both groups to make sure that they were homogeneous in terms of their overall language proficiency. The test contained 45 items measuring both vocabulary and grammar knowledge of the participants. The test included 20 items on vocabulary and 25 items on grammar and was initially taken by all the 120 students. The mean and standard deviation were calculated and finally, based on their scores and standard deviations, 90 students were selected to participate in this investigation. They were then divided randomly into 3 classes composed of 30 students each. Since reliability is sample-dependent, the Nelson Proficiency Test was administered to 30 participants and the Cronbach's alpha was calculated. The reliability index obtained was .78 which is a satisfactory level of reliability (Brown, 2007).

Non-congruent Idioms Test (Pretest and Post-test)

A non-congruent idiom test was also devised by the researcher. To this end, initially, 30 non-congruent idioms were selected from ten units of *Idioms in Use* intermediate. Non-congruent idioms were selected in line with the definition proposed by Nesselhauf (2003). According to Nesselhauf, non-congruent idioms are those which do not have an exact word by word equivalent in the language under investigation and do not sound natural when they are translated into the learners' L1. Non-congruent idioms in the present study were operationally defined in terms of the scores of the learners on the test of non-congruent idioms whose items were selected in accordance with Nesselhauf's (2003) definition. To establish the content validity of the constructed test, the researcher appealed to expert opinion (Brown, 2007). To this aim, two MA holders in the field of TEFL reviewed the test items and commented on the faulty ones. Due revisions

were carried out on the items identified as inappropriate. The test was then piloted on 30 participants having similar characteristics to the main participants and the Kr 21 formula was used to assure its reliability. Table 1 shows the descriptive statistics for the test piloting results.

Table 1.

Descriptive Statistics of the Non-congruent Idiom Test for Piloting Purposes

	N	Range	Minimum	Maximum	Mean	Std. Error	Std. Deviation	Variance
Idiom Test	30	10.00	18.00	28.00	22.1333	.47157	2.58288	6.671
Valid N (listwise)	30							

The reliability of the test turned out to be .85, which is considered satisfactory (Brown, 2007). The test was used as both pretest and posttest for the three groups of participants in this study.

Procedure

Initially, 120 female participants at the intermediate level from an English institute in Sanandaj were chosen conveniently from among different classes. They were given a Nelson Proficiency Test, the results of which were used to select 90 participants based on the standard deviation and the mean of the scores gained through computing the related descriptive statistics. These participants were then divided into three groups each consisting of 30 participants. Two of these groups were considered as the experimental groups and one group served as the control group. Prior to the implementation of the treatment, the participants in the three groups were also given a non-congruent idiom test devised by the researcher. Next, the treatment started. As for the first experimental group, the participants received enhanced corpus-based materials. The procedure was implemented in this group as follows:

In the first session, the learners were introduced to the enhanced corpus-based materials. To do so, the teacher gave them a sample of the materials. The materials consisted of a reading comprehension text in which 5 of the idiomatic expressions chosen for the purposes of this study had been highlighted, *italicized* or **bold-faced**, as suggested by Norris and Ortega (2000). The texts were selected from the book *English Idioms in use*; however, they were modified using the input enhancement techniques proposed by Norris and Ortega. To ensure that the materials were appropriate for the purposes of the present study in terms of content, the texts were reviewed by two MA holders in TEFL with more than 15 years of teaching experience at the intermediate level and due revisions were made on the texts based on the reviewers' comments. The texts were followed by a list of examples from the COCA and a list of comprehension questions. In the following five sessions, every session, six of the idioms were worked on. The idioms were taught in the following manner:

- Initially, the texts including the highlighted, *italicized* or **bold-faced** idioms for each unit under instruction were distributed to the participants. In *English Idioms in use*, the idioms appear on the left pages. Therefore, first the left pages were handed out.
- About ten minutes was assigned to the learners to study this page.
- Next, the exercise sections on the right hand pages were given to the learners.
- Since there were several exercises following each unit, the exercises were presented to the participants one at a time.
- The teacher used instruction check questions to assure that they were on the right track.
- Ample time was allowed for the participants to complete each exercise.
- The teacher asked one of the learners to read the answer to the first item in the exercise section.
- The learners were then asked to use each of the idioms under instruction in a sentence.

As for the second experimental group, the participants received exactly the same corpus-based materials as the first experimental group and followed the same instructional steps; however, the idioms were not enhanced for this group. Moreover, the participants in the two experimental groups were asked to use the COCA at home every session after the treatment and find five examples for each of the idioms under instruction and take it to class the next session. Each session, 6 of the idioms were worked on through reading texts and comprehension questions.

As for the control group, the participants received no treatment terms of corpus-based or enhanced corpus-based materials and followed the regular syllabus of the institute. At the end of the treatment, the test of non-congruent idioms was again administered to the participants in the three groups as the posttest.

Design

In this study, due to the difficulty in selecting the participants randomly, a quasi-experimental pretest and posttest design was used. In fact, the initial participants of the study were chosen non-randomly and further divided non-randomly into three groups, yet the three groups of the study were assigned as experimental one, experimental two and control groups randomly.

Results

Selecting a Homogenized Sample of Participants

In this section, the result of the Nelson Proficiency Test administered at the outset of the study is reported. The main purpose of this proficiency test was to homogenize the participants in terms of language proficiency. The test was giv-

en to all the population of 120 accessible students studying at the intermediate level to participate in the present study. Then, the students whose scores were between one standard deviation below and above the mean were selected and randomly assigned to three groups of 30 students. Table 2 displays the descriptive statistics for the Nelson test scores.

Table 2.
Descriptive statistics for the Proficiency Test

	N	MINIMUM	MAXIMUM	MEAN	STD. DEVIATION
GP	120	18	45	37.14	5.155
VALID N (LISTWISE)	120				

Following that, based on the standard deviation and means of the scores, those participants whose scores fell within the range of ± 1 standard deviation were selected and the rest of the participants were excluded. Eventually, a number of 90 participants were chosen, who were divided into three equal groups of 30 each.

Descriptive Statistics

Initially, descriptive measures of normality (Kurtosis and Skewness) were checked to see if the obtained data were normal. However, to obtain a higher degree of certainty, Kolmogorov-Smirnov and Shapiro-Wilk's test of normality were also conducted. According to Tabachnick and Fidell (2007), to compare a variable in two or more groups and considering that groups are not similar in terms of an important background variable that is likely to affect the target variable, that variable can be specified as a "covariate" and an ANCOVA can be run to test the differences of the groups while controlling for the covariate. In other words, by removing the effects of certain background variables, ANCOVA, in effect, produces a level playing field for the purpose of comparison. To perform the ANCOVA, some assumptions needed to be met including 1) using interval data, which has already been observed, 2) the normality of the data, 3) the equality of error variances, and 4) the equality of slope of regression lines between groups.

Assumptions of ANCOVA

To analyze the obtained data of this study, as mentioned above, the 4 assumptions needed to be checked. Descriptive statistics of normality (Kurtosis & Skewness) were checked along with inferential tests of normality to see if the obtained data were normal. According to Tabachnick and Fidell (2007), if Kurtosis and Skewness are between -2 and +2, the obtained data are assumed normal.

Table 3.
Descriptive statistic for Kurtosis and Skewness

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Std. Error	Kurtosis	Std. Error
Pre	90	5.00	17.00	11.2778	2.84043	-.123	.254	-.683	.503
Post	90	5.00	27.00	15.8667	5.66916	.229	.254	-.971	.503
Valid N (listwise)	90								

The values of Kurtosis and Skewness reported in Table 3 for the pretest were, respectively, -.123 and -.683 and for the post-test .229 and -.971, respectively. Since these values are between -2 and +2 and the data seem to be distributed normally (Tabachnick & Fidell, 2007), the normal curve histograms for the three groups' pretest and posttest similarly indicated that the data were normally distributed.

However, to obtain a higher level of certainty, inferential statistics of Kolmogorov-Smirnov and Shapiro-Wilk's test of normality were also conducted to check the obtained data. The Kolmogorov-Smirnov and Shapiro-Wilk's test of normality (Table 4) revealed that the data were normally distributed as well.

Table 4.
Kolmogorov-Smirnov and Shapiro-Wilk's test of Normality for Three Groups

Group	Kolmogorov-Smirnov ^a			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
Pre	Enhanced Corpus Group	.171	30	.025	.943	30	.109
	Unenhanced-Corpus Group	.107	30	.200*	.967	30	.451
	Control Group	.140	30	.141	.955	30	.223
Post	Enhanced Corpus Group	.126	30	.200*	.968	30	.485
	Unenhanced-Corpus Group	.114	30	.200*	.945	30	.121
	Control Group	.164	30	.038	.939	30	.084

The significance value of $P > .05$ revealed that the data were normal. As shown in Table 4, the P values for the enhanced corpus group, the corpus group, and the control group were, respectively, .109, .451, and .223 on the pretest, and .458, .121, and .084 on the posttest. Therefore, the results showed that the data were normally distributed.

Another assumption to be met before running the ANCOVA is the homogeneity of variance, checked through Levene's Test of Equality of Error Variance, as reported below in Table 5.

Table 5.
Levene's Test of Equality of Error Variance for the Groups

F	df1	df2	Sig.
1.591	2	87	.210

In Table 5, the evidence showed the significance value of $P > .05$, indicating that the assumption of the equality of error variances for the enhanced corpus group and corpus group was observed.

Another assumption to be checked was the homogeneity of regression slopes which concerned the relationship between the covariate and the dependent variable for each of the groups. This involved checking to see whether there was a statistically significant interaction between the covariate and the dependent variable. If the interaction is significant at an alpha level of .05, this assumption is subject to violation. Table 6 below depicts this.

Table 6.
Test of Between-Subject Effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1886.889 ^a	5	377.378	32.562	.000	.660
Intercept	742.584	1	742.584	64.074	.000	.433
Group	86.257	2	43.129	3.721	.028	.081
Pretest	5.898	1	5.898	.509	.478	.006
Group * Pretest	2.275	2	1.138	.098	.907	.002
Error	973.511	84	11.589			
Total	25518.000	90				
Corrected Total	2860.400	89				

a. R Squared = .660 (Adjusted R Squared = .639)

As it is displayed in Table 6, the significance value ($p = .907$) for the interaction of grouping and covariate exceeds the significant value of .05. Thus, the conclusion can be drawn that the assumption of homogeneity of regression slopes was not violated.

The linearity of the slopes of regression lines is shown in Figure 1 below. To check the assumption of linearity, the straight-line relationship between dependent variable and covariate for the three groups had to be checked (Figure 1).

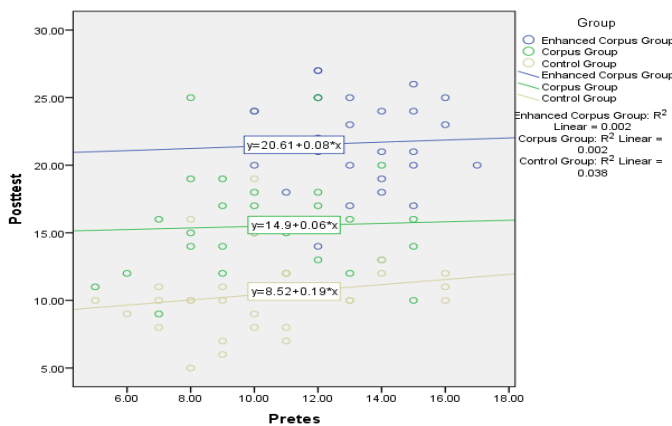


Figure 1. The linear relationship between dependent and covariate variables

As shown in Figure 1, there was a linear relationship between the dependent variable (posttest) and covariate (pretest) for the three groups, indicating that there was no sign of curvilinear relationship. Thus, the assumption of linearity was met.

Checking the Null Hypotheses

Having established the prerequisite assumptions, the ANCOVA was run to test the null hypotheses. Table 7 displays the results of ANCOVA.

Table 7.
Test of Between-Subject effect

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1884.613 ^a	3	628.204	55.366	.000	.659
Intercept	914.292	1	914.292	80.580	.000	.484
Pretest	8.147	1	8.147	.718	.399	.008
Group	1479.519	2	739.759	65.198	.000	.603
Error	975.787	86	11.346			
Total	25518.000	90				
Corrected Total	2860.400	89				

a. R Squared = .659 (Adjusted R Squared = .647)

From Table 7, it can be seen that the significance value corresponding to the Groups turned out to be higher than the critical value of .05 ($F = 8.147$) and the significance level is higher than critical level of 0.05 and partial eta squared =.603. Therefore, it can be concluded that the three groups were significantly different on the posttest scores of idioms. To check which one of the groups outperformed the others, the means of the posttest scores were compared. Table 8 illustrates the means of the scores for the posttests of the three groups.

Table 8.
Pairwise Comparisons

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
Enhanced Corpus Group	Unenhanced-Corpus Group	5.833*	.939	.000	3.966	7.700
	Control Group	10.842*	.950	.000	8.953	12.731
Unenhanced-Corpus Group	Enhanced Corpus Group	-5.833*	.939	.000	-7.700	-3.966
	Control Group	5.010*	.870	.000	3.280	6.739
Control Group	Enhanced Corpus Group	-10.842*	.950	.000	-12.731	-8.953
	Unenhanced-Corpus Group	-5.010*	.870	.000	-6.739	-3.280

After running the pairwise comparisons, the researcher used the results to check the null hypotheses of the study one by one.

The First Null Hypothesis

The first null hypothesis of the current study stated that the enhanced corpus-based instruction does not have any significant effect on learning non-congruent idioms by Iranian intermediate EFL learners. To test this null hypothesis, as presented in Table 8, the mean difference of the enhanced corpus-based instruction and control group is 10.842 ($p < 0.05$) with the enhanced corpus-based group outperforming the control group. Therefore, it can be inferred that the first null hypothesis of the study is rejected and thus enhanced corpus-based instruction has had a significant effect on learning non-congruent idioms by Iranian intermediate EFL learners.

The Second Null Hypothesis

The second null hypothesis of the present study was that the unenhanced corpus-based idiom instruction does not have any significant effect on learning non-congruent idioms by Iranian intermediate EFL learners. To investigate this null hypothesis, as noticed in Table 8, the mean difference of the corpus-based instruction and control group is 5.010 ($p < 0.05$) with the corpus-based group outperforming the control group. Therefore, the second null hypothesis of the study is rejected as well indicating that unenhanced corpus-based instruction has had a significant effect on learning non-congruent idioms by Iranian intermediate EFL learners.

The Third Null Hypothesis

The third null hypothesis of the present study stated that there is no significant difference between the effects of corpus-based and enhanced corpus-based instruction on learning non-congruent idioms by Iranian intermediate EFL learners. As viewed in Table 8, the mean difference between the enhanced corpus-based instruction and the corpus-based instruction is 5.833 ($p < 0.05$), leading to the conclusion that the enhanced corpus-based group has outperformed the unenhanced corpus-based group and therefore the third null hypothesis of the study is rejected, meaning that there is a significant difference between the effects of unenhanced corpus-based and enhanced corpus-based instruction on learning non-congruent idioms by Iranian intermediate EFL learners.

Discussion

The current study attempted to explore the effect of enhanced corpus-based vs. unenhanced corpus-based material on learning non-congruent idioms by Iranian intermediate EFL learners. Additionally, the study sought to probe any significant difference between the effects of enhanced corpus-based and unenhanced corpus-based material on learning non-congruent idioms. The results of the statistical analyses indicated that enhanced corpus-based instruction had a significant effect on learning non-congruent idioms by Iranian intermediate

EFL learners. Furthermore, the findings of the study revealed that unenhanced corpus-based instruction had a significant effect on learning non-congruent idioms by Iranian intermediate EFL learners as well. The findings also showed that there was a significant difference between the effects of unenhanced corpus-based and enhanced corpus-based instruction on learning non-congruent idioms by Iranian intermediate EFL learners in favor of the latter.

With respect to the positive effect of enhanced corpus-based materials on learning non-congruent idioms, the findings of the current study are in line with the findings of a study by Fahim and Vaezi (2011). In their study, these researchers examined the extent to which visual/textual input-based enhancement can improve learning collocations by EFL learners. The findings of their study showed that the enhanced input had a statistically significant impact on learning collocations. The results of the present study are also consistent with the findings of a study conducted by Mayen (2013). Mayen examined the effect of visual prompts as an example of input enhancement technique on learning verbal morphology among L2 learners. The findings of the study revealed that the application of input enhancement techniques through visual aids was helpful to second language learners to notice and recall the verbal morphology. Moreover, the findings of this study are in accordance with the results of a study by Birjandi et al. (2015) in which they investigated the effects of three independent variables of unenhanced, enhanced, and elaborated input on EFL Learners' English phrasal verbs. The findings of their study revealed that typographical input enhancement, as one of the independent variables, had a better effect on L2 learners' ability to learn English phrasal verbs than the unenhanced input.

Concerning the significant effect of corpus-based instruction on learning non-congruent idioms, the findings of the present study are in line with those of a study conducted by Rodriguez (2010) in which he sought to offer a strategy for the instruction of idioms to EFL learners through the use of a corpus, based on Disney movies. The findings of Rodriguez's study indicated that the use of corpus was effective in learning idioms. The results of the current study are also in accordance with the findings of a study carried out by Akbari et al. (2015). They examined the extent to which corpus-based tools can serve as an instruction tool in the teaching of collocations to Iranian university students studying in different specialized fields. The results of the study indicated that the instruction of collocations using corpus-based tools played a significant role in helping the learners to recall and learn the collocations. The observations made in the present study are also in line with Ashkan and Sayedrezaei's (2016) study in which they sought to explore the impact of corpus-based teaching on the Iranian L2 learners' performance on vocabulary learning and recall. The results indicated that corpus-based instruction had a significant impact on EFL learners' vocabulary retention.

Regarding the efficacy of enhanced materials on improving non-congruent idioms, the findings of this study can be justified based on the noticing hypothesis. According to this hypothesis (Schmidt, 1995), attracting L2 learners' attention to target language forms in meaning- and communication-oriented situa-

tions is required to help learners see the crevice between their present inter-language and the target language. According to Schmidt, seeing L2 highlights in the written or spoken input to which L2 learners are exposed through reading or listening is “the necessary condition for the conversion of input into intake for learning to take place” (p. 1). As Leow (2001) maintains, enhanced materials bring the content under instruction to the learner’s attention and the learner can notice the content more easily which leads to better learning. Similarly, as Lee and Benati (2007) observe, with enhanced materials, the learners have the chance to get salient exposure to the content or forms under instruction. Accordingly, learners will have higher chances of noticing the input and converting it into intake and, therefore, learning is boosted.

Regarding the positive effect of corpus-based materials on learning idioms, the findings of the current study can be attributed to the benefits this type of materials can offer to the learning process. The most salient advantage of using corpora is to motivate the learners to learn independently and thus learning may become more learner-centered (Vyatkina & Boulton, 2017). Moreover, the application of technology in using corpus-based materials can give learners easy access to learning materials compared to conventional methods of instruction (Boulton & Cobb, 2017). Therefore, corpus-based materials used in the current study are likely to have increased learners’ motivation, independence, and involvement in learning and accordingly more learning has transpired.

Conclusion

In the present study, it was concluded that access to corpus-based and enhanced materials can provide opportunities to improve learning idioms, as it provides easy access to online sources and enables learners to learn independently. As the results of the present study indicate, technology can facilitate this by making it easier for students to learn more. Moreover, learning a language in general and learning idioms in particular can also be viewed from the perspective of learning theories such as the noticing hypothesis. In the present study, learning idioms was approached from an input manipulation perspective and it can be concluded that changes in input can lead to better performance.

Based on the findings of the present study, teacher trainers may devise and plan courses through which teacher trainees become familiar with how to provide input enhancement to the learners. The results of this research can make both students and teachers aware of the fact that there are differences between the effects of input which is enhanced and the input which is not. In addition, curriculum developers, by including materials with enriched input can provide learners with more effective learning conditions. Therefore, different types of input enhancement could be employed pedagogically in our teaching to contribute as much as possible to the learning process. Since new technology tools have turned out to be part of the daily life of people all around the world, these facilities might help learners perform better in educating themselves. They might help material developers consider this potential while developing mate-

rials for different courses. Material developers, by considering Virtual Learning Environments (VLEs) like corpus-based teaching, can help develop the learning ability. Using VLEs like a corpus seems to be useful for syllabus designers as these tools can engage learners more in learning. In addition, including a corpus in courses like L2 idioms can provide an attractive environment for learners and can, thus, be more motivating. Using modern technologies like corpus, teachers can employ various strategies and techniques of teaching idioms, and thus help improve some of the traditional ways of teaching idioms. Also, class environment may shift from teacher-centered to learner-centered, which may in turn increase students' autonomy.

The present study, like most empirical investigations, had a number of limitations which can be addressed in future studies. Initially, the researcher had to select intermediate learners as it was not manageable to have access to advanced EFL learners. The main reason was the insufficient number of advanced participants for the present study. Thus, future researchers may replicate the present study with advanced EFL learners to increase the generalizability of the findings. Moreover, the participants of the study were all female students, as the researcher could not include male learners due to institutional constraints. Thus, the same study can be carried out with male learners to reach more conclusive results. The researcher restricted the focus of the study only to idioms and from among idioms, only non-congruent ones were the focus of the current study. It is recommended that future studies be conducted on phrasal verbs, collocations and other components of the language to further enrich the literature concerning the effects of corpus-based enhanced and unenhanced materials on different aspect of the language.

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