The Iranian EFL Journal Quarterly

October 2008

Volume 2

2

Editors:

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and

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Iranian EFL Journal

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Foreword: Profs. Askarzadeh and Robertson.

Welcome to second edition of the Iranian EFL Journal. This journal is the sister journal to the long established Asian EFL Journal and Linguistics Journal. 2008 was a wonderful year for the Asian EFL Journal group, with the rapid growth of the Iranian EFL Journal, and with numerous SLA & ESP conferences planned for 2009 in China, Korea, India and the Philippines.

In this second edition of the Iranian EFL Journal we publish 7 articles. We thank the authors for their dedicated work and also to our Editorial team who helped bring this edition together.

The first article by Purya Baghaei who is an assistant professor in the English Department of Islamic Azad University, Mashad. In this study three analyses are applied to a C-Test to demonstrate its construct validity. The results show that the C-Test deviated from unidimensionality principal. It is therefore concluded that every C-Test battery requires rigorous empirical research for construct validity before it is used for practical testing purposes. The second article by Mohammad Mehdi Soleimani   reports the results of an investigation into Iranian EFL learners' perceived use of language learning strategies (LLSs) and the impact of strategies instruction on the learners' performance on reading comprehension tasks. In the third article by Behzad Ghonsooli, Reza Pishghadam and Fatemeh Mohaghegh Mahjoobi, the authors attempt to investigate the effect of collocational instruction, on Iranian EFL learners' English writings through quantitative as well as qualitative methods in two phases: product phase and process phase.

The fourth article by Mohammad Reza Ghorbani examined the impact of the University Entrance Examination (UEE) on pre-university English teachers' (PETs) teaching and curricular planning in six dimensions. The next study by Abdolmehdi Riazi & Mohammad Ali Mansoorian. investigated the preferred learning style(s) of Iranian EFL students who were studying English at EFL institutes in different cities in Iran. The implication of the study is that students should be introduced to different learning styles so that this familiarity can ease their way of learning a foreign language.

The sixth article by A. Majid Hayati & Ehsan Ghassemi aimed at investigating the relationship between anxiety and reading comprehension, on the one hand, and the role of gender in the amount of anxiety experienced when reading an English text, on the other. Finally S.A. Razmjoo & M. Shaban investigate the relationship between Introversion/Extroversion and English grammaticality judgment among the Iranian EFL learners currently studying in domestic colleges.

We look forward to your continued support through 2009 and onwards. The readership of this journal has grown considerably since its inception this year. Within a few years we expect to grow four editions per year, with an ultimate goal of holding an Iranian EFL Journal International Conference

Title
An Attempt to Fit the Rasch Model to a C-Test

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Abstract

There are a number of powerful statistical techniques and analyses within the Rasch model that provide evidence for test validity. The quality control fit statistics, principal component analysis of residuals and differential item functioning (DIF) are among the techniques offered by Rasch measurement for test validation. In this study these three analyses are applied to a C-Test to demonstrate its construct validity. The results show that the C-Test deviated from unidimensionality principal. It is therefore concluded that every C-Test battery requires rigorous empirical research for construct validity before it is used for practical testing purposes.

Key words: Rasch model, construct validity, probability of a right answer,

1. Introduction

1.1 The Rasch model

The Rasch model is a probabilistic model which solves the problems of the classical test theory (CTT). Dependence of ability scores on the difficulty of tests and the difficulty estimates of items on the ability of the sample on which the items are

calibrated are among the most serious disadvantages of the CTT. The Rasch model solves this problem by separating person ability estimates from item difficulty estimates. That is, item difficulty estimates are formulated in such a way that they do not depend on the ability distribution of the sample and person ability estimates are freed from the difficulty level of the test items.

The Rasch model states that the outcome of a person's encounter with an item is governed by two factors: (1) the person's ability and (2) the item's difficulty. In other words the probability of a right answer is a function of person ability and item difficulty. In other words, the probability of a correct reply is a function of ability minus difficulty:

P(X=1)=f(b-d)

Where *P(X=1)* is the probability of a correct reply (the reply of a person to an item is shown by *X*; a correct reply by1 and an incorrect reply by 0),
f indicates function,
b is person ability and *d* is item difficulty.

This is the simplest form of the model from which the parameters of the model, i.e., test-free person ability estimates and sample-free item difficulty estimates are derived. The most significant advantage that Rasch-driven person ability and item difficulty measures have over classical raw counts of persons and items is the property of *invariance*. That is, person ability estimates and item difficulty estimates are invariant (within error) across samples of items and persons.

As mentioned above, in the classical true score model where the ability of persons is estimated by counting the number of items the person has replied correctly, the person's ability is dependant on the difficulty of the items the person has encountered. By the same token, the difficulty of the items which are the ratio of right answers depends on the ability of the sample which is used for item analysis. In other words, with a harder test the person becomes less able; with an easier test s/he becomes more able. The same thing is true for the items. If the sample which is used for item analysis is smart the items appear easy if the sample is poor the items appear difficult. Rasch-driven person and item estimates do not suffer from this drawback. Person

ability and item difficulty estimates are test and person free. This property of the Rasch model is referred to as invariance.

1.2 Unidimensionality

When we start developing an instrument to measure a latent trait we need to have an idea or a theory of the nature of the latent trait. That is, the theory of the construct leads our instrument development process. Our construct theory or our understanding of the construct tells us what questions to put in our questionnaire or test. In measurement whether physical or psychological we expect one single variable to account for the observed variance. This is a basic universal principal in measurement. If more than one variable accounts for the performance on items the scores we give to test-takers become vague and uninterpretable. Because the score does not 'purely' reflect the construct or dimension that we intend to measure. The score is contaminated with knowledge of a second dimension which was not the focus of the test developer. So in fact we are not measuring the intended construct purely. Consider a situation where we are measuring people's weights. Further suppose that our measuring instrument departed from unidimensionality and an unwanted variable, say, computer literacy has crept into our measurement (this is a very far-fetched illustration but serves well to explain the point). Then, when we read reports of people's weights, we cannot be really sure whether the heavier ones are really heavy or their high level of computer literacy has resulted in a higher weight reports (assuming that there is positive correlation between the two variables). Or whether light ones are really thin or their lack of computer knowledge has resulted in lower weight reports. An instrument that claims to measure the levels of a construct should not be influenced by varying levels of another construct. If unidimensionality does not hold we cannot compare individuals in terms of the construct and identify their differences. If we want to consider two persons with the same score as similar, the assessment has to be unidimensional. Even under the classical true score model unidimensionality must hold so that we can calculate a total score. If a measure is not unidimensional adding up scores is not warranted.

Having said all this, we know that in reality no measurement is purely unidimensional. There are always some other unwanted factors that contaminate the measurement. Therefore, complete unidimensionality does not exist. Measurement

should be unidimensional to the extent that the interpretation of measures is not threatened. That is to say, a dominant dimension should exist in the data with a number of some minor dimensions but the main dimension is so strong that the minor dimensions are negligible and the measure are not seriously affected by these minor dimensions. Consider a test of reading comprehension in which some unwanted constructs such as cognitive and personality factors have entered. However, if reading comprehension is the dominant dimension and accounts for a substantial portion of the variance then the test is unidimensional enough for practical purposes. But if the unwanted dimensions of cognitive and personality factors are as strong as the reading dimension then the instrument constructed to measure reading is in fact measuring reading and cognitive and personality factors. This makes students scores incomparable. Here the two dimensions are so distinct that we do not know which dimension or construct the Rasch model is defining, reading ability or cognitive and personality factors? Here the test actually lacks construct validity. So establishing unidimensionality is a method of demonstrating construct validity. In mainstream psychometrics factor analysis is used to show unidimensionality or construct validity. Even under IRT models ascertaining unidimesionality is external to the model, i.e. factor analysis is first employed to make sure that the data are unidimensional and then IRT is employed. But investigating unidimensionality under Rasch modeling is internal. This means that there are some techniques within the Rasch model which shows whether the data are unidimensional or not.

1.3 Factor analysis

Factor analysis has been criticized by a number of researchers as being sensitive to the difficulty of the items (Ferguson, 1941; Wright, 1994; Bond, 1994; Van der Ven & Ellis, 2000; Duncan, 1984). Guilford (1941) mentions that for interpreting factors the difficulty level of test items should be taken into consideration. Ferguson (1941) argues that if we have a wide range of difficulty in the items in a test or sub-test in a battery, these difficulty differences affect the factorial structure of the test and may emerge as new factors. Van der Ven & Ellis (2000) report that the skewness of sub-set scores could result in the emergence of additional factors. Duncan (1984) states that item difficulty affects loadings. He writes if a set of items which has easy and difficult items, factor analysed two factors will emerge even if all items are tapping one single

construct. Therefore, factor structures are sometimes merely representations of different levels of item difficulties in the tests. Wright (1994) states that even when the sample changes the factorial structure of the test changes. Old items from new data show different factor sizes, loadings and number of factors. If this is really the case, then it should not be surprising to get different factorial structure for the C-Tests when they are separately factor analysed for the high and low-proficiency groups. Coming up with different factorial structures for tests in different samples does not necessarily mean that the construct changes as a result of changes in a specific characteristic of the sample; it might only be an artefact of the technique.

Rasch advocates argue that Rasch analysis does not suffer from "this predicament by constructing one latent variable that spans all difficulty levels. Since the analysts motivation is to span the data set with one meaning, rather than to stratify it, Rasch analysis is the method of choice" (Bond, 1994: 347). Because of the instability of factor analytic techniques due to sample and item distributional forms, Rasch analysis is used in this study to check the dimensionality of the C-Test.

Apart from solving an old problem in measurement in human sciences, the Rasch model offers some techniques which are essential in test validation. The quality control fit statistics, principal component analysis of residuals and differential item functioning (DIF) analysis are among the techniques offered by Rasch measurement for test validation. In this study these three analyses are applied to a C-Test to demonstrate its construct validity.

2. Procedures

A C-Test battery comprised of 4 passages of differing difficulty level was administered to160 Iranian English major students. The students were at different stages of their studies, the sample comprised first-year students to final-year students. The difficulty of the C-Test passages were known since they had previously been used by Klein-Braley in numerous studies before. Each passage had a p-value index which had been discovered by Klein-Braley. There were 23 such passages with known difficulty levels. For the purposes of this study the easiest and the most difficult passages with p-values of 0.83 and 0.39 respectively, were chosen as the first and last super-item in the battery. Two other passages with p-values of 0.76 and 0.65

were selected as the second and third super-items. For avoiding the problem of local dependence of items in C-Tests, passages were treated as super items, i.e., each passage was entered into the analysis as a single item. The items (passages) were named SUPERC1-SUPERC4. Each passage had 25 gaps, i.e., 25 micro-items.

Table 1 shows the fit statistics for the four C-Test passages. As the data indicate SUPERC4 is a misfitting item. The infit z standardized index for this item is 2.5 which is outside the acceptable range of-2 to +2 (Bond & Fox, 2001). Misfitting items in Rasch analysis indicate noise in measurement, that is, contamination of the construct by irrelevant unwanted dimensions. The other fit statistics in the table are evidence that the other three items are working together towards the definition of the intended latent trait or the variable.

Table 1: Fit statistics for the C-Test items

Item	Measure	SE	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD
SUPERC1	−.29	.3	1.06	.6	1.08	.7
SUPERC2	−.50	.3	.86	−1.3	.85	−1.4
SUPERC3	.06	.3	.91	−.8	.94	−.5
SUPERC4	.74	.3	1.32	2.5	1.30	2.5

By way of comparison with the results of Rasch analysis above, the dimensionality of the C-Test battery was examined with factor analysis. As Table 2 shows, factor analysis yields a unifactorial solution. The maximum likelihood method with varimax rotation was used to extract the factors. The minimum Eigenvalue was set at 1 for factor extraction.

Table 2: Factor matrix for the C-Test items

Items	Factor 1
SUPERC1	0.879
SUPERC2	0.890
SUPERC3	0.880
SUPERC4	0.783

As we observe here the results of factor analysis are different from the results of Rasch analysis. Rasch analysis showed that SUPERC4 is a misfitting item which does not agree with the other three items. In fact this item measures a different dimension and threatens the construct validity of the test by introducing construct irrelevant variance. While, in factor analysis all four items construct a unidimenisonal variable on which all four items heavily load, although the misfitting item four has a smaller loading compared to other three items.

2.1 Invariance

Stability of measures across population of persons and items, although one of the properties of the Rasch model, is not automatically achieved. It depends on the fit of the data to the model. One validation activity that substantiates the generalizability component of validity (Messick, 1989) is to check if invariance sustains. The difficulty estimates of items should remain the same if they are calibrated on a sub-section of the population and the ability measures of persons should remain the same on different sub-sets of the test.

Under Rasch model, if the data fit the model, estimates of person measures should be equal regardless of the subset of items used to measure persons. That is, if we divide a test into two subsets and measure a person separately by the two subsets his two ability estimates based on the two subsets should be equivalent within measurement error. If they are not, then the test is not unidimensional. This means that the level of the construct changes in individuals depending on the set of items that they answer. That is the two subsets do not define a single variable, hence, the test is not unidimensional.

"Constant item parameters imply a constant construct. Different item parameters across samples of the relevant population imply that the construct has changed. Then measures can't be compared across samples, and we are reduced to a vague notion of what we are measuring (Linacre, 1996: 513).

In this section the sample was divided into two groups of high and low ability. The four C-Test items were separately calibrated in the two samples and their difficulty measures were compared using differential item analysis (DIF).

Table 3: Invariance analysis for the C-Test items

Person Class	DIF Measure	Person Class	DIF Measure	DIF Contrast	df	t	Prob.	Item
1	-.26	2	-.34	.08	158	1.21	.579	SUPERC 1
1	-.49	2	-.51	.03	158	.42	.375	SUPERC 2
1	.09	2	.01	.08	158	1.21	.120	SUPERC 3
1	.63	2	.86	-.22	158	-3.22	.024	SUPERC 4

The first and third columns in the table indicate the two groups of test-takers which were chosen for this study, 1 indicating the low-ability group and 2 the high-ability group. Columns 2 and 4, DIF Measure, show the difficulty of each C-Test item (passage) for each group. And DIF Contrast is the difference between the difficulty measures for each group. The 7th column, t, indicates the significance of the difference between the measures obtained from the two calibrations. The null hypothesis is that there is no difference between the two measures except for measurement error. The 8th column indicates the probability of the reported t. As we can see in the table the difference between the two estimates is significant (p<0.05) only for item 4. The t test, in the case of this item, shows that this item manifests DIF.

Figure 1, the DIF plot for the C-Test items below, shows that the only item which manifests DIF is SUPERC4. This is evident by deviations of the points which indicate calibrations of the items in each person class.

DIF Plot For The C-Test
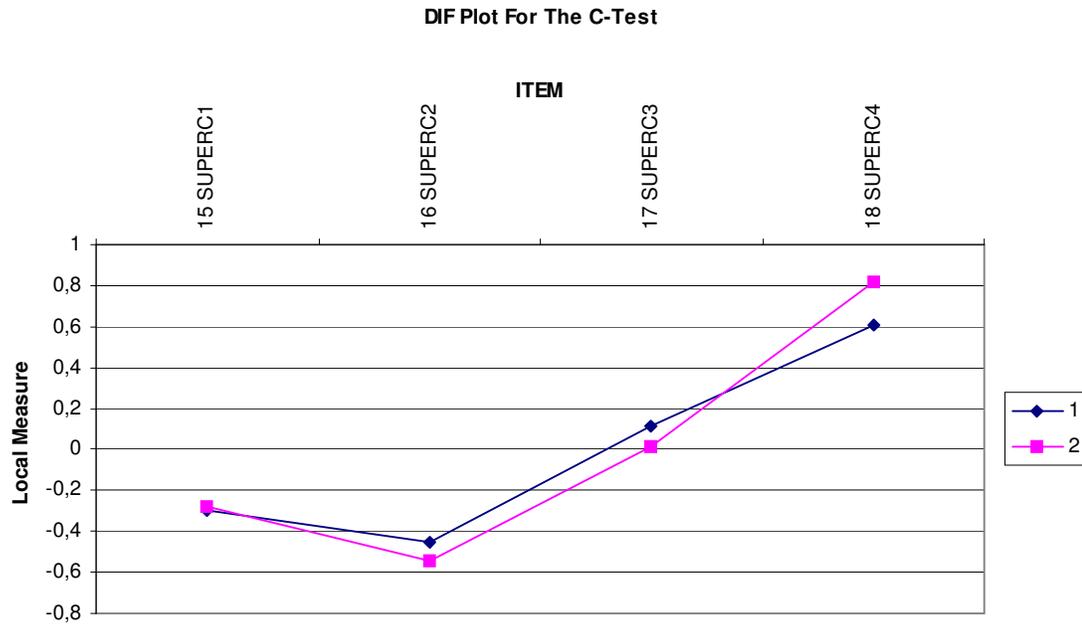
Figure 1: DIF Plot for the C-Test

2.2 Principal component analysis of residuals

Principal component analysis of residuals is quite a new technique in Rasch model to detect unidimensionality. Residuals are the differences between the observations and the probabilities of correct responses which are computed for test-takers of given ability levels to items with given difficulty levels. If the probability of correct response for a respondent with ability *b* to an item with difficulty *d* is computed to be say, 0.80 and the respondent gets the item right then the residual would be 1-0.80 = 0.20 if he gets the item wrong then it is 0-0.80 = -0.80. The smaller the residuals the better the data tend to fit the Rasch model.

The residuals are in fact the unexplained part of the data or random noise in the measurement system. When the residuals are standardized by dividing them by their model standard deviation, they should be normally distributed. Further more, the residual of one item should be independent of the residual of another item, i.e., local independence of items. Since the Rasch residuals are modelled to be independent of each other and the result of only random noise, in factor analysing the Rasch residuals we expect not to find a structure. No structure in the residuals means that most of the variance in the data is explained by the main Rasch dimension that we intend to

measure. However, if we can extract a factor or factors which are large and above noise level then it means that a secondary dimension has crept into the measurement.

To do the analysis, the correlation between the standardized residuals for each pair of items across all examinees are computed. Then principle component analysis is performed on the correlation matrixes, i.e., they are decomposed. The hypothesis is that the residuals are uncorrelated. However, if items correlate beyond the Rasch model expectations it results in components with eigenvalues larger than 1 (Linacre, 2005). The size of the eigenvalue is equivalent to the strength of the sub-dimension in terms of number of items. For instance, if the eigenvlue size of the unexplained variance in the first contrast is 2, it means that it has the strength of two items in the test which is negligible in a regular test with 30-40 items.

Each item (or person) conceptually contributes one unit of information toward the construction of the measurement framework. This information is in the randomness associated with their responses. The non-randomness in their responses (the expected values) positions them within the framework. Ideally, each item's random contribution (its residuals) is unique to that item. This is called "local independence", so that its randomness (residuals) would have effectively zero correlation with the randomness (residuals) of any other item. Of course, this never happens perfectly. We can examine it by means of a correlation matrix, correlating all the residuals of all pairs of items. We can then do a Principal Components decomposition of the correlation matrix to see how the randomness partitions across items (or persons). Conceptually each item should have its own component, so that the size of its component should have an eigenvalue of 1. But when two items share their randomness, then the eigenvalue has a value of 2. So that an eigenvalue of 2 has the strength of 2 items.

The standardized residuals for the four C-Test items were factor analyzed (with Winsteps) separately for the low-ability group, high-ability group and the entire group. Afterwards the reading items and then the whole battery, that is, reading plus C-Test items were analysed using the PCAR for each group separately. The results of these analyses are presented below.

Table 3.1.21 table of Standardized residual variance (in Eigenvalue units) for the C-Test in the entire group

	Empirical		Modelled
Total variance in observations =	28.7	100.0%	100.0%
Variance explained by measures =	24.7	86.1%	86.8%
Unexplained variance (total) =	4.0	13.9%	13.2%
Unexplained variance in 1st contrast =	1.7	6.0%	
Unexplained variance in 2nd contrast =	1.1	4.0%	
Unexplained variance in 3rd contrast =	1.1	3.9%	
Unexplained variance in 4th contrast =	.0	.0%	
Unexplained variance in 5th contrast =	.0	.0%	

The first column shows the sizes of the variances in eigenvalue units. The second column is the percentage sizes of the variances in log unit and the third column is the Rasch model expectations, i.e., how the situation would be if the data fit the Rasch model perfectly. The Rasch dimension explains 86.1% of the variance in the data. It is very close to the model expectation of 86.8%. In answer to the question that how big the variance explained by the measures should be to be considered really big Linacre (2005) states that it very much depends on your purposes. If the instrument is intended to have a wide spread of items and a wide spread of persons, then the measure should explain most of the variance. If the items have nearly the same difficulty and the persons are nearly the same ability level then the measures explain a small amount of the variance. The C-Test is considered a test of general language proficiency, therefore, it should contain a wide range of difficulty and also be sensitive to ability levels. That is, we want the C-Test to explain most of the variance because it is intended to be a comprehensive proficiency test and that is what it does here in this experiment by explaining 86% of the variance. It is an indication of C-Test sensitivity to minute ability differences. As we see here the unexplained variance in the data is 13.9%, this includes the Rasch-predicted randomness and any departures from Rasch criteria, e.g., multidimensionality (Linacre, 2005). The first contrast found in the residuals explains 8.8% of the variance. The eigenvalue for this residual

contrast is 1.8. This means that it has the strength of around 1.8 or 2 items which is huge in the case of these data where there are only four items in the test. According to Linacre (2005), if variance explained by measures is larger than 60% it is good. The size of unexplained variance (in eigenvalue units) explained by first contrast smaller than 3 is good (first column) and if the unexplained variance explained by first contrast is smaller than 5% it is good (second column). As we see here in these data the unexplained variance in the first contrast is 6%, larger than the tolerable 5%. This means that the first contrast is above noise level and these data are most probably not unidimensional. The measures explain 86% f the variance. The first contrast explains 6% of the variance, i.e., it is large enough to make a sub-dimension. The test departures from unidimensionality principle.

Figure 2 is the standardized residuals contrast 1 plot. The X axis is the Rasch dimension. The plot shows the loadings of the items on the contrast. It also shows the contrasts between items, that is, those at the top vs. those at the bottom.

Figure 2: STANDARDIZED RESIDUAL CONTRAST 1 PLOT for the C-Test

```
 -1                                    0                                 1
      ++-------------------------------+---------------------------------
----++ COUNT
      |                          A            |
| 1
     .7 +                                      |
+
        |                                      |
|
     .6 +                B                     |
+ 1
        |                                      |
|
     .5 +                                      |
+
C       |                                      |
|
O    .4 +                                      |
+
N       |                                      |
|
T    .3 +                                      |
+
R       |                                      |
|
A    .2 +                                      |
+
S       |                                      |
|
T    .1 +                                      |
+
        |                                      |
|
1   .0 +---------------------------------|---------------------------------
-----+
        |                                      |
|
L  -.1 +                                      |
+
O       |                                      |
|
A  -.2 +                                      |
+
D       |                                      |
|
I  -.3 +                                      |
+
N       |                                      |
|
G  -.4 +                                      |
+
        |                                      |
|
```

```
  -.5 +                              |
+
       |                             |
|
  -.6 +                             | a
+ 1
       |                             |
|
  -.7 +                             |                              b
+ 1
       ++-------------------------------+---------------------------
----++
       -1                             0
1
```
ITEM MEASURE
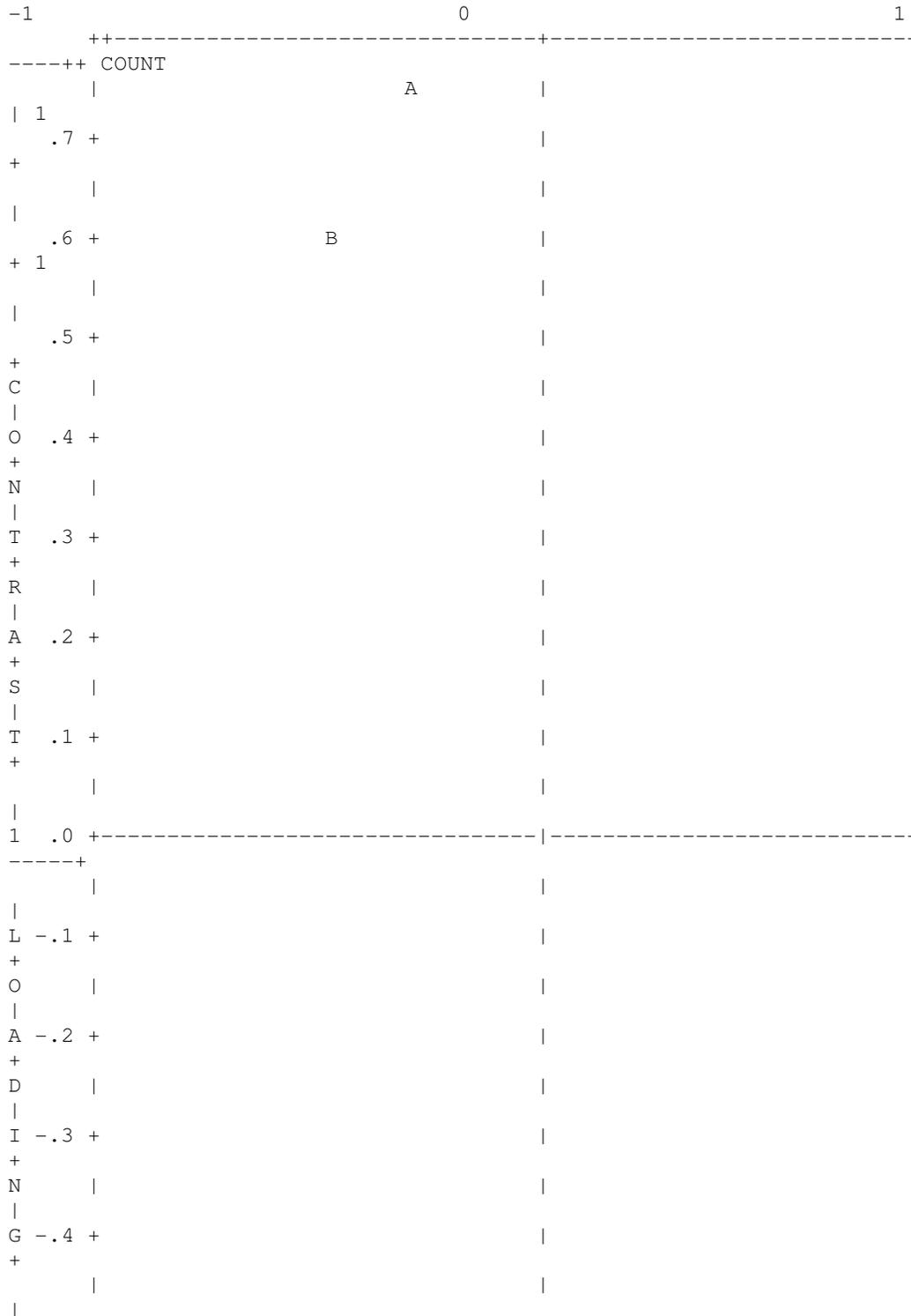
Lower case letters and capital letters indicate items with most opposed loadings on the first contrast. As the plot and the tables below show, the first contrast partitions the items into two clusters, *A* and *B* vs. *a* and *b*. The tables below identify these clusters, SUPERC1 and SUPERC2 vs. SUPERC3 and SUPERC4. Positive and negative loadings are arbitrary here and only show the direction. SUPERC3 and SUPERC4 which have the highest positive loading on the contrast form one end and SUPERC1 and SUPERC2 which have the highest negative loading on the contrast form the other end. In tests where there are more items the loadings in both direction get smaller as we go down the loading column. The two ends of the contrast are the first few items in each direction which have the highest loadings. We do not know which direction the contrast goes; this requires substantive content analysis of the items. However, we do know that one end is more the dimension that we intend to measure. "The convention is that the majority cluster sets the standard, i.e., the majority cluster is the intended Rasch dimension and the minority cluster is the secondary dimension" (Linacre, personal communication). Here we have two items in both clusters. SUPERC4 misfits, so the cluster of SUPERC3 and SUPERC4 must be the cluster that opposes the Rasch dimension.

Table 3.1.22 Contrast 1 table sorted by loading for the C-Test[1]

Contrast	loading	Measure	Infit MNSQ	Outfit MNSQ	Label	Item
1	.73	-.29	1.06	1.08	A	SUPERC1
1	.58	-.50	.86	.85	B	SUPERC2

Contrast	loading	Measure	Infit MNSQ	Outfit MNSQ	Label	Item
1	-.69	.74	1.32	1.30	a	SUPERC4
1	-.61	.06	.91	.94	b	SUPERC3

3. Conclusion

In this study three different Rasch measurement validation techniques are applied to a C-Test battery. These techniques are studies of fit statistics, differential item functioning analysis and principal component analysis of residuals. All three techniques unanimously indicated that the C-Test is not unidimensional. Fit statistics showed that one of the passages was misfitting.

Differential item functioning showed that the difficulty estimates for one of the items (the misfitting item)   does not remain equivalent when calibrated in the two cohorts of the sample, i.e., invariance for this item does not hold. And finally principal component analysis of residual showed that the strength of the second dimension is above the critical point. All these are evidence that unidimensionality, and by implication construct validity, of C-Tests cannot be taken for granted. Application of C-Tests to practical language assessment problems entails rigorous empirical research for construct validity and revision and moderation of the test in the light of validation study findings.

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[1] There are two tables as Contrast 1 table and they should be considered together. One for negatively loading items and one for positively loading ones.

4. References

Baghaei, P. (2007). C-Test construct validation: A Rasch modeling approach. Unpublished Ph.D Dissertation. Klagenfurt University.

Bond, T.G. (1994). Too many factors? *Rasch Measurement Transactions*, 8:1, 347. Available : http://www.rasch.org/rmt/rmt81p.htm.

Bond, T.G. & Fox, C.M. (2001). *Applying the Rasch model: fundamental measurement in the human sciences*. Lawrence Erlbaum.

Bond, T.G. (2003). Validity and assessment: a Rasch measurement perspective. *Metodología de las Ciencias del Comportamiento* 5:2, 179–194.

Duncan, O.D. (1984). *Notes on social measurement: historical and critical*. New York: Russell Sage Foundation.

Ferguson, G.A. (1941). The factorial interpretation of test difficulty. *Psychometrika*, 6:5, 323-329.

Guilford, J.P. (1941). The difficulty of a test and its factor composition. *Psychometrik*, 6:2, 67-77.

Guilford, J.P. (1946). New standards for test evaluation. *Educational and Psychological Measurement,* 6, 427-439.

Grotjahn, R. (1987). How to construct and evaluate a C-Test: a discussion of some problems and some statistical analyses. In R. Grotjahn, C. Klein-Braley & D.K. Stevenson (eds.) *Taking their measures: the validity and validation of language tests*. Bochum: Brockmeyer.

Grotjahn, R., Klein-Braley, C. & Stevenson, D.K. (eds.) (1987). *Taking their measures: the validity and validation of language tests*. Bochum: Brockmeyer.

Klein-Braley, C. & Raatz, U. (1984). A survey of research on the C-Test. *Language Testing*, 1 ,134-146.

Linacre, J.M. (1996). The Rasch model cannot be "Disproved"! *Rasch Measurement Transactions* 10:3, 512-514. Available: http://www.rasch.org/rmt/rmt103e.htm.

Linacre, J.M. (2005). *A user's guide to WINSTEPS-MINISTEP: Rasch-model computer programs*. Chicago, IL: winsteps.com.

Messick, S. (1989). Validity. In R.L. Linn (ed.) *Educational measurement*. New York: Macmillan.

Raatz, U. (1984). The factorial validity of C-Tests. In T. Culhane, C. Klein-Braley& D.K. Stevenson (eds.) *Practice and problems in language testing. Proceedings of the seventh International Language Testing Symposium of the IUS, Colchester, October, 1983*. Colchester: University of Essex.

Van der Ven, A.H.G.S., & Ellis, J.L. (2000). A Rasch analysis of Raven's Standard Progressive Matrices. *Personality and Individual Differences*, 29:1, 45-64.

Wright, B. D. (1994). Rasch factor analysis. *Rasch Measurement Transactions* 8: 1, 348-349. Available: http://www.rasch.org/rmt/rmt81p.htm.

Iranian EFL Journal

Title
Strategy teaching and its impact on reading comprehension in an EFL setting

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Abstract

This article reports the results of an investigation into Iranian EFL learners' perceived use of language learning strategies (LLSs) and the impact of strategies instruction on the learners' performance on reading comprehension tasks. Participants were 97 male and female English major university students of the Islamic Azad University. The results of the study showed that the Iranian EFL learners were "medium" strategy users overall. Pertaining to strategy categories, the learners used Metacognitive strategies with a high frequency compared to medium use of Compensation, Affective, Social, Cognitive, and Memory strategies. The study also indicated that the learners benefited from the strategy instruction as the reading comprehension was concerned.

Key words: perceived use of language learning strategies, impact of strategies instruction, Metacognitive strategies, Compensation, Affective, Social, Cognitive, and Memory strategies

1. **Introduction**

Second language acquisition (SLA) research has constantly confirmed the substantial role of learners in the process of learning languages. The research has also shown deliberate shifts from teachers and teaching methods towards learners and learning techniques to accommodate this fundamental aspect during the past decade (Reiss, 1985). Harlow (1988) exhibits the current shift in research direction by disparaging the research tradition that overlooks the role of learners. He proposes that the instructional process involves both teachers and learners and criticizes research efforts that blindly focus on the teachers and teaching methods at the expense of learners and learning techniques.

As learners gain a more prominent place in second language acquisition research, so does the employed techniques and strategies they use to overcome learning difficulties. From among these techniques, language learning strategies have received much attention since the late 1980s and their investigation has advanced our understanding of the processes that learners use to develop their skills while learning a second or a foreign language. The most inclusive finding of the research on language learning strategies is that the use of appropriate strategies leads to improved proficiency or overall achievement in most of the second language skill areas (Wenden & Rubin, 1987; Chamot & Kupper, 1989; Oxford & Crookall, 1989; Cohen, 1990; O'Malley & Chamot, 1990). The research findings also suggest that the use of appropriate learning strategies enables learners to take responsibility for their own learning by enhancing learner autonomy, independence, and self-direction (Oxford & Nyikos, 1989; O'Malley, Stewner-Manzanares, Kupper, & Russo, 1985). In this regard, it appears to be extremely important that language teachers get to know the strategies that learners use in order to enhance their own teaching method and as a result the whole profession.

Considering these points in mind, this study hinges upon the idea that "an understanding and awareness of learning strategies on the part of teachers as well as students may provide valuable insights into the processes of language teaching and learning" (Fleming & Walls, 1998, p.14). Therefore, the study opts for finding answers to the following research questions:

1. What is the pattern of Iranian students' language learning strategies use; overall and in terms of strategy categories.
2. Is there any relationship between learners' proficiency and the reported use of language learning strategies?
3. Does strategy instruction affect learners' performance on reading comprehension tasks?

2. Review of the Related Literature

The available literature on the use of language learning strategies is rather bulky and extensive, and it is not possible to present the readers with a detailed chronological report on the research findings in a short paper like this. Therefore, only a selection of available research is treated here to satisfy the purpose of this study.

National origin or ethnicity has been shown to have a strong influence on language learning strategy use. For instance, Politzer and McGroarty (1985) found in their study of Asian and Hispanic ESL students that the Asian students were less likely to engage in certain communication strategies than Hispanic students. The authors speculated that some strategies may be rooted in the learners' ethnic origin. Cultural background has also been reported to play a part in the ease or difficulty with which new strategies are learned. O'Malley et al. (1985) found that Asian students were resistant to using imagery and grouping strategies to learn vocabulary, while Hispanic students seemed to enjoy learning the new strategies and performed better on the post-test than the Hispanic students in the control group. Interestingly, the Asian control group who had preferred to use rote repetition outperformed the Asian experimental group. In a similar vein, Phillips (1991), Mullins (1992) and Yang (1992) conducted several studies to identify students' use of language learning strategies in terms of national origin. Mullins (1992) reported that Thai EFL university students used all six categories of language learning strategies; these categories were measured by Oxford's (1990) Strategies Inventory for Language Learning (SILL). According to Mullins, students used Compensation, Cognitive, and Metacognitive strategies with a high frequency. Phillips (1991) also found that Asian ESL students at the university level reported using more Metacognitive, Social, and Compensation strategies. Yang (1992) also investigated language learning strategies of Taiwanese

university students and found that these students used formal oral practice and compensation strategies more than other types of strategies.

Many researchers have investigated the correlation between language learning strategies use and the learners' proficiency. Many of these researchers have reported a strong relationship between the use of language learning strategies and the learners' language proficiency (Politzer, 1983; O'Malley, 1985; Oxford & Nyikos 1989; Green, 1991; Phillips, 1991; Oxford & Burry-stock, 1995; Green & Oxford, 1995; Park, 1997; Wharton, 2000; Akbari, 2000; Chou, 2002; Akbari & Talebinezhad, 2003; Tahmasebi, 2006).

Politzer (1983) reported that the more proficient students used more positive strategies than less proficient ones. Oxford & Nyikos (1989) explored the relationship between the learners' use of language learning strategies and their reading, speaking and listening proficiency. The researchers confirmed that learners' proficiency was highly correlated to their reported use of learning strategies. They concluded that higher proficiency was accompanied by greater strategy use. In other words, students with higher proficiencies in each of the three skills of reading, speaking and listening showed more frequent and more effective use of strategies. Using standardized English proficiency tests, Park (1997) found that Korean university students chose learning strategies differently according to their language proficiency. The findings revealed that all six categories of strategies measured by the SILL were significantly correlated with the participants' TOEFL scores. The study reported a linear relationship between strategy use and English proficiency. Moreover, the study by Green and Oxford (1995) revealed significant differences in students' use of strategies based on their language proficiency. The researchers found that successful language learners engaged in four types of strategy use during language learning with greater frequency than less successful learners.

Similar findings have also been reported in other studies that address Asian EFL learners' pattern of LLS use. Chou (2002), for instance, looked into English scores of Taiwanese students who took the entrance exam of Technology-Based College and compared it with their strategy use. In so doing, Chou found a strong linear correlation between the learners' proficiency and strategy use in favor of more proficient language learners. Tahmasebi (2006) addressed Iranian EFL learners' vocabulary learning strategies; he found that among language learning strategies that were measured by the SILL, Metacognitive strategies stood out to be the most

indicative factor in predicting learners' proficiency. In a detailed study, Akbari (2000) found that more proficient Iranian EFL learners made more extensive use of Metacognitive strategies, followed by Social strategies. Wharton (2000) also looked into the relationship between strategy use and self-rated language proficiency of bilingual university students; the researcher uncovered a strong correlation between the students' strategy use and their self-rated proficiency. While many researchers found a linear correlation between language proficiency and language learning strategy use, Green (1991) and Phillips (1991) found a curvilinear correlation. The researchers reported that average students displayed more learning strategies than either high or low proficient learners.

Several SLA studies have indicated that the instruction of language learning strategies bring about the intended outcomes and result in greater proficiency on the learners' part. From the long list of researchers who have tackled the issue, Cohen and Aphek (1987) trained learners of Hebrew on how to recall new words by using paired associations; the researchers found that better performance in recall tasks occurred when learners formed associations. In an investigation by Weinstein (1978), 9th grade students were taught how to use a variety of elaboration strategies in reading comprehension and memory tasks. The results of the study showed that the students who received elaboration training outperformed others. In a training project to develop self-evaluation and monitoring strategies, Wenden and Rubin (1987) found that providing students with a checklist of criteria to self-evaluate their oral production resulted in higher scores. Effectiveness of strategy instruction appears to relate to the learners' cultural background and their beliefs (O'Malley et al., 1985) as well as to the content and presentation of the instruction. According to research, strategy instruction should be authentic and relevant to the learners' needs and it should be woven in to regular language instruction (Ehrman, 1999; Chamot & O'Malley, 1996; Oxford & Leaver, 1996; Cohen & Weaver, 1998).

3. Method

3.1. Participants

A total of ninety seven English majors of the Islamic Azad University participated in this study. The selection of the participants was done at a random basis to ensure that it represented a wide range of different proficiency levels. The majority of the participants were senior university students (31 BA students of English

literature and 35 BA students of English translation), and the rest of the subjects were junior students majoring in English literature. Table (1) displays participant distribution based on independent variables.

Table 1. Participant distribution according to independent variables (N=97)						
Gender		Level		Listening Proficiency		
Male	*Female*	*Junior*	*Senior*	*High*	*Mid*	*Low*
22	75	31	66	19	58	20

3.2. Instrumentation

The following research instruments were used to measure the intended variables in this study:

1. In order to measure language learning strategy use, Oxford's (1990) Strategy Inventory for Language Learning (SILL) was used. The 50-item version, which is devised for learners of English as a foreign language, was employed in this study. There are fifty Likert-type statements in this questionnaire; each of these statements deals with one strategic aspect of the participants' behavior.

2. In order to measure participants' proficiency level, a retired version of TOEFL test was administered. The reliability of the instrument for the sample, using KR-21, was found to be 0.82. The participants' scores on TOEFL test were also used as the pre-test score indication. At the final stage of this research project, a post-test of TOEFL was also administered to both experimental and control groups to make out the effect of language learning strategies instruction on the reading performance of the participants.

3.3. Procedures

All the participating subjects were first administered the SILL questionnaire and TOEFL test. Based on the mean and standard deviation of obtained TOEFL test scores, the participants were divided into three proficiency levels of: Low (lower than one standard deviation below the mean), Mid (scores falling in the range of ± 1 standard deviations above and below the mean), and High (higher than one standard deviation above the mean).

To observe the outcome of language learning strategy instruction, a pretest-posttest control group design was used, i.e. the participants were randomly assigned to either one of the experimental or control groups. The experimental group received five training sessions on language learning strategies in general, and reading strategies in particular. The training sessions were conducted in two phases. For the first phase, an "awareness training" instructional model for language learning strategy instruction based on Oxford, Crookall, Cohen, Lavine, Nyikos, and Sutter (1990) was developed and implemented by the researcher. The model outlines a useful sequence for the introduction of strategies that emphasizes explicit strategy awareness, discussion of the benefits of strategy use, functional and contextualized practice with the strategies, self-evaluation and monitoring of language performance, and suggestions for or demonstrations of the transferability of the strategies to new tasks. This sequence is not prescriptive of strategies that the learners are supposed to use, but rather descriptive of the various strategies that they could use for a broad range of learning tasks. To this end, a mini-lecture based on Oxford's (1990) seminal work for language teachers was prepared to highlight the major goals of language learning strategies.

For the second phase of the treatment procedure, a "one-time strategy training model" was utilized. One-time strategy training as Oxford (1990) has asserted "involves learning and practicing one or more strategies with actual language tasks" (p.203). This kind of training offers the learners some information on the value of the strategy, when it can be used, how to use it, and how to evaluate the success of strategy. The model is especially useful when students become familiar with a broad range of strategies in a variety of contexts. To this end, the following reading strategies were opted for: 1) setting a goal, 2) activating background knowledge, 3) guessing intelligently, 4) reading for the main idea, 5) attending selectively, 6) making inferences, 7) summarizing.

To give the participants an opportunities to practice language learning strategies, the researcher employed Chamot and O'Malley's (1994) Cognitive Academic Language Learning Approach (CALLA) along with Cohen's (1998) Strategies-Based Instruction. CALLA provides a useful framework for language learning strategies instruction that incorporates a five-phase recursive cycle for introducing, teaching, practicing, evaluating, and applying learning strategies. The five phases are as follows: 1) Preparation phase, 2) Presentation phase, 3) Practice phase, 4) Evaluation phase, and 5) Expansion phase. Cohen's (1998) Strategies-Based

Instruction (SBI) integrates both explicit and implicit instruction of strategies into the course content. The SBI is a learner centered approach to language learning strategies instruction that has two major components: 1) students are explicitly taught how, when, and why strategies can be used to facilitate language learning and language use tasks, and 2) strategies are integrated into everyday class materials to help achieve better results.

4. Results and Discussion

Table (2) displays the frequency of language learning strategies use as reported by Iranian EFL learners. The table shows that Metacognitive strategies enjoy the highest mean of (3.69) followed by Compensation, Social, Cognitive, and Memory strategies, while Affective strategies indicating the lowest mean.

To answer the first research question, the means of the separate strategy categories that were used by the learners were subjected to one-way ANOVA to determine whether there were significant differences in strategy applications by the subjects. Table (3) displays the results.

Table 2. Means and percentages of strategy categories				
Strategies	**Mean**	**Percent**	**Degree**	**Rank**
Metacognitive	3.69	73.8	High	1
Compensation	3.32	66.4	Medium	2
Social	3.27	65.44	Medium	3
Cognitive	3.23	64.58	Medium	4
Memory	2.96	59.22	Medium	5
Affective	2.92	58.4	Medium	6
Total score	3.36	67.2	Medium	

Table 3. Results of ANOVA test

Statistics	Value	F value	df	Error	Sig.
ANOVA	0.46	18.009	6	93	0.000

The results indicated significant differences in the use of strategies by Iranian learners. To find out which strategies were more frequently used, the ANOVA results were further subjected to Scheffe post-hoc test. The examination of the results indicated that the subjects used Metacognitive and Affective strategies respectively with the highest and lowest frequency.

The results related to strategy category use approximately resemble those of other similar studies conducted with Asian students. For instance, the reported high use of Metacognitive strategies in this study is also endorsed by Phillips (1991), Sheorey (1999), Bremner (1999), Mochoizuki (1999), Akbari (2000), Tahmasebi (1999), and Lachini (1997) in Asian EFL contexts. Correspondingly, the reported low use of Affective strategies in this study is also supported by Chang (1991), Oh (1992), Tahmasebi (1999), Arabizanjani (2000) and Akbari (2000). The findings of the current study, however, challenge the common belief that Asian students prefer strategies involving memorization as opposed to more social strategies (Politzer & McGroarty, 1985; O'Malley & Chamot, 1990). A rationale for the learners' awareness of Metacognitive strategies can be attributed to the study skills courses that Iranian EFL learners take at university. Nonetheless, the students' lack of sensitivity toward Affective strategies may stem from the fact that they do not receive any training on affective sides of learning. This can partly be due to current Iranian educational system that sets sights on bringing about cognitive change in the learners at the expense of affective learning dimensions.

The researcher conducted a statistical one-way ANOVA test to uncover possible impact of proficiency on the learners' use of language learning strategies. The results of ANOVA test (see Table. 4) indicated no meaningful statistical significance for Memory, Cognitive, Metacognitive, Affective, and Social strategies. The results, however, showed a significant statistical difference on the use of Compensation strategies among the three proficiency levels.

Table 4. Results of ANOVA test for the differences in strategy use based on proficiency						
Strategies		**Sum**	**df**	**Mean**	**F**	**Sig.**
Memory strategies	Between Groups	.660	2	.330	.958	.387
	Within Groups	32.407	94	.345		
	Total	33.068	96			
Cognitive Strategies	Between Groups	.679	2	.340	1.312	.274
	Within Groups	24.344	94	.259		
	Total	25.023	96			
Compensation Strategies	Between Groups	3.276	2	1.638	4.372	.015
	Within Groups	35.222	94	.375		
	Total	38.499	96			
Metacognitive Strategies	Between Groups	1.144	2	.572	1.124	.329
	Within Groups	47.858	94	.509		
	Total	49.002	96			
Affective Strategies	Between Groups	1.187	2	.593	1.158	.319
	Within Groups	48.172	94	.512		
	Total	49.359	96			
Social Strategies	Between Groups	.314	2	.157	.234	.792
	Within Groups	62.921	94	.669		
	Total	63.235	96			
Total score	Between Groups	.675	2	.343	1.321	.247
	Within Groups	24.348	94	.295		
	Total	25.032	96			

As it is shown in Table (5), the results of Scheffe's post-hoc test indicated a significant statistical difference among the means of Compensation strategies across three proficiency levels in favor of more proficient learners. Considering the data, it can be assumed that the more proficient students used more Compensation strategies as compared to less proficient ones.

Table 5. Scheffe's post-hoc test for compensation strategies						
Proficiency		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
(I) PROF	(J) PROF				Lower Bound	Upper Bound
Low	Mid	-.3614	.1563	.074	-.7501	2.726
	High	-.5526(*)	.1938	.020	-1.0347	-7.055
Mid	Low	.3614	.1563	.074	-2.7256	.7501
	High	-.1912	.1622	.501	-.5946	.2121
High	Low	.5526(*)	.1938	.020	7.056	1.0347
	Mid	.1912	.1622	.501	-.2121	.5946

With regard to this finding, it is plausible to state that less proficient learners may not have the confidence or necessary language knowledge to make informed guesses when they need to do so. Therefore, Compensation strategies will be more readily available to learners who have reached higher proficiency levels.

To determine the effect of language learning strategy instruction on the

learners' reading comprehension, the researcher used a statistical t-test to

Table 6. Results of the t-test on treatment effect						
t-test for Equality of Means						
t	df	Sig	Mean differ	Std. error	95% Confidence Interval of the Differences	
					Lower	Upper
3.7	95	000	-2.2268	.5907	-3.3994	-1.0542

identify differences in the performance of the control and experimental groups in pre- and post-tests. As it is displayed in Table (6), the results indicated a significant statistical difference in favor of experimental group.

The present finding suggested that language learning strategy instruction was effective and it helped learners improve language skills. This result corroborates with

the findings of several other studies on language learning strategy instruction. The main objective of undertaking such in depth sessions on language learning strategy instruction is to allow students to become more aware of their preferred learning strategies and to help them become more responsible for meeting their own objectives. Such objectives can only be achieved when students are trained in strategy use so that they become more independent and effective. However, before teaching students how to use strategies effectively, teachers themselves should be trained on strategy instruction.

Conclusion

The results of the present study showed that Iranian EFL learners were medium strategy users. However, one strategy category, i.e., Metacognitive category, was used at a high frequency as the most frequently used strategy category. Memory and Affective strategies were used as the least frequently used categories by the participants of the study. The results related to strategy category use approximately resemble those of other similar studies conducted with Asian students. The results of the study also indicated that that the more proficient students used Compensation strategies more frequently than the less proficient students. Furthermore, strategy instruction turned out to be effective. The present findings have some implications for the teaching and learning of English as a foreign language. The findings suggested the importance of including language learning strategies into language courses in order to provide learners with greater opportunity to make language learning an autonomous process. The focus should be on helping learners to learn how to learn by equipping them with tools they can use after formal education. Thus, it is the teacher's role to capitalize the use of language learning strategies in their teaching and to find out if it can help students improve their language proficiency.

References

Arabizanjani, B. (2000). *On language learning strategies and listening comprehension*. Unpublished MA thesis, Tehran: Tehran University.
Akbari, R. (2000). *The relationship between the use of language learning strategies by Iranian learners of English, their foreign language proficiency, and the learners' IQ score*. Unpublished Ph.D. dissertation, Isfahan: Isfahan University.

Akbari, R., & Talebinezhad, R. (2003). The relationship between the use of language learning strategies by Iranian learners of English, their foreign language proficiency, and the learners' IQ score. *Iranian Journal of Applied Linguistics, 6* (1), 1-20.

Bremner, S. (1999). Language learning strategies and language proficiency: Investigating the relationship in Hong Kong. *The Canadian Modern Language Review, 55*(4), 490-514.

Chamot, A.U. & Kupper, L. (1989). Learning strategies in foreign language instruction. *Foreign Language Annals, 22*(1), 13-24.

Chamot, A. U., & O'Malley, J. M. (1994). *The CALLA handbook: Implementing the cognitive academic language learning approach.* Reading, MA: Addison-Wesley.

Chamot, A.U, & O'Malley, J.M. (1996). The cognitive academic language learning approach (CALLA). In R.Oxford (Ed.), *Language learning strategies around the world: Cross cultural perspectives (pp. 167-184).* Manoa: University of Hawaii Press.

Chang, S. J. (1991). A study of language learning behaviors of Chinese students at the University of Georgia and the relation of those behaviors to the oral proficiency. *Applied Linguistics, 12*(2), 287-312.

Chou,Y.(2002). An exploratory study of language learning strategies and the relationships of the strategies to motivation and language proficiency among EFL Taiwanese technological and vocational college students. *Dissertation Abstracts International, 63* (07), 2481. (UMI No. 3058397).

Cohen, A. D. (1998). *Strategies in learning and using a second language.* Essex: Longman.

Cohen, A. (1990). *Language learning: Insights for learners, teachers, and researchers*. New York. Newbury House.

Cohen, A. D. & Aphek, E. (1987). Retention of second language vocabulary over time: Investigating the role of mnemonic associations. *System, 8*(2), 221-35.

Fleming, F., & Walls, J. (1998). What pupils do: The role of strategic planning in modern foreign language learning. *Language Learning,18*(1), 14-21.

Green, J. (1991). *Language learning strategies of Puerto Rican university students.* Paper presented at the annual meeting of Puerto Rico TESOL. San Juan, PR.

Green, J. M., & Oxford, R. (1995). A closer look at learning strategies, L2 proficiency, and gender. *TESOL Quarterly*, *29*(2), 261-297.

Harlow, L. L. (1988). The effects of the yellow highlighter- second-language learner strategies and their effectiveness: A research update. *The Canadian Modern Language Review*, *45*(1), 91-102.

Lachini, K. (1997). The impact of language proficiency on language communication and learning strategies. *Iranian Journal of Applied Linguistics, 2*(1)*, 35-90.*

Mochizuki, A. (1999). Language learning strategies used by Japanese university students. *RELC Journal, 30*(1), 101-113.

Mullins, P. (1992). Successful English language learning strategies of students enrolled at the faculty of arts. Chulalongkorn University, Bangkok, Thailand. *Dissertation Abstracts International, 53* (06), 1829. (UMI No. 9223758).

Oh, J. I. (1992). Learner strategies used by university EFL students in Korea. *Language Teaching*, *10*(1), 23-52.

O'Malley , J. M., & Chamot, A. U. (1990). *Learning strategies in second language acquisition.* Cambridge: Cambridge University Press.

O'Malley, J. M., Chamot, A. U., Stewner-Manzanares, G., Kupper, L.J. & Russo, R.P. (1985). Learning strategies used by beginning and intermediate ESL students. *Language Learning, 35*(1), 21-36.

Oxford, R. L. (1990). *Language learning strategies: What every teacher should know*. New York: Newbury House.

Oxford, R.L. (1992). Language learning strategies in a nutshell: Update and ESL suggestion. *TESOL Journal*, *10*(1), 18-22.

Oxford, R.L. (2001). Language learning strategies. In R. Carter, & D. Nunan (Eds.), *The Cambridge guide to teaching English to speakers of other languages* (pp. 166-172). Cambridge: Cambridge University Press.

Oxford, R. L. & Burry-Stock, J. (1995). Assessing the use of language learning strategies worldwide with ESL/EFL version of the Strategy Inventory of Language Learning (SILL). *System, 23(1)*, 1-23.

Oxford, R. L., Crookall, D., Cohen, A., Lavine, R., Nyikos, M., & Sutter, W. (1990). Strategy training for language learners: Six situational case studies and a training model. *Foreign Language Annals, 22*(3), 197-216.

Oxford, R.L., & Leaver, B.L. (1996). A synthesis of strategy instruction for language learners. In R.Oxford (Ed.), *Language learning strategies around the world: Cross cultural perspectives* (pp. 227-246). Manoa: University of Hawaii Press.

Oxford R. L. & Nyikos, M. (1989). Variables affecting choice of language learning strategies by university students. *Modern Language Journal, 73*(3), 291-300.

Park, Y. (1999). An analysis of interrelationships among language learning strategies, learning styles, and learner variables on university students. *English Teaching*, *54*(2), 281-308.

Phillips, V. (1991). A look at learner strategy use and EFL proficiency. *TESOL Quarterly*, *3*(1), 57-67.

Politzer, R. (1983). An exploratory study of self-reported language learning behaviors and their relation to achievement. *Studies in Second Language Acquisition, 6*(1), 54-65.

Politzer, R. L. & McGroarty, M. (1985). An exploratory study of learning behaviors and their relationship to gains in linguistic and communicative competence. *TESOL Quarterly, 19*(1), 103-123.

Reiss, M. A. (1985). The good language learner: Another look. *Canadian Modern Language Review, 41*(4), 511-523.

Sheorey, R. J. (1999). An examination of language learning strategy use in the setting of an indigenized variety of English. *System, 27*(1), 173-190.

Tahmasebi, A. (2006). *Vocabulary learning strategies and the level of language proficiency.* Unpublished MA thesis, Tehran: Tarbiat Modares University.

Weinstein, C. (1978). Direct instruction of comprehension strategies. In C.E. Weinstein, & E. T. Goetz (Eds.), *Learning and study strategies: Issues in assessment instruction and evaluations* (pp. 121-139). San Diego:Academic Press.

Wenden, A., & Rubin, J. (1987). *Learner strategies in language learning*. Englewood Cliffs, NJ: Prentice Hall.

Wharton, G. (2000). Language learning strategy use of bilingual foreign language learners in Singapore. *Language Learning, 50*(3), 203-243.

Yang, N. D. (1992). Second language learners' beliefs about language leaning and their use of learning strategies: A study of college students of English in Taiwan. *Dissertation Abstracts International, 53* (08), 2722. (UMI No. 9225771).

Title

The Impact of Collocational Instruction on the Writing Skill of
Iranian EFL Learners: A Case of Product and Process Study

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Abstract

This study attempts to investigate the effect of collocational instruction, on
Iranian EFL learners' English writings through quantitative as well as qualitative
methods in two phases: product phase and process phase. Thirty participants from
the English Department of College of Ferdowsi University (in Iran) were involved
in this study. Over the course of 21 teaching sessions, they were exposed to their

course materials including audio, video and textual input. During exploration of those materials, the experimental students (N= 17) were made aware of word combinations, specifically, collocations through different techniques while in the control group (N=13), the conventional slot and filler approach was upheld. According to the results demonstrated by the statistical program, at the product phase, the experimental subjects got higher mean score in their collocation achievement test as well as test of written English (post test stage) after collocational instruction and at the process phase, the graphic comparisons of subjects' mean scores at each writing component showed vocabulary and fluency considerable promotion as a result of collocational instruction.

Key words: collocation, collocational instruction, consciousness-raising activities, writing

Introduction

Many applied and educational linguists have emphasized the importance of drawing second language learners' attention to standardized multiword expressions (such as collocations and idioms).The recognition of the importance of these word groups is related with a concept introduced in the 1970s, according to which language is learned in a series of pre-fabricated blocks or chunks, defined by Lewis (1994) as unanalyzed wholes. These chunks are said to be the basic data, by which learners identify patterns in a language and are reflected in Lewis's (1993) 'Lexical Approach' and Sinclair's (1991) 'idiom principle'. These theories focus on the fact that recurrent and ready-made word combinations are the integral elements of a learner's lexis and produce most of the learner's texts. Thus, collocation being a category of such chunks called 'multi-word' units or 'prefabricated chunks' plays a crucial role in acquiring foreign language.

It is argued that the problem for advanced learners is not so much with encountering vast numbers of new words as with working with already half-known words and exploring their collocational fields (Hill, 1999).

As for English language teaching in Iran, although many Iranian EFL learners have a good knowledge of English grammar and vocabulary, they still seem to have serious problems with acquiring the ability to use English. The majority of

communication relies on the numerous combinations of quite limited word bank rather than a vast number of individual items.

This inefficiency seems to be, to some extent, due to the lack of collocational knowledge among Iranian EFL students, and to a large extent, the inadequate emphasis given to collocational patterns in their textbooks, and the type of instructions they receive. Moreover, collocations have not usually been a major focus of teaching and research in our country.

In order to enhance EFL learners' writing competence, English teachers have been making lots of efforts, spending lots of time devoting themselves to correcting students' writings and trying to find out the difficult areas in students' English compositions. However, the same errors keep happening. In fact, as Bahn and Eldaw (1993) state it is usually the case that the majority of EFL learners have different problems in their oral and written production. According to Hill, "Students with good ideas often lose marks because they don't know the four or five most important collocations of a key word that is central to what they are writing about." (Hill, 1999, p. 5). As a result, longer, wordier ways of defining or discussing the issue increase the chance of further errors. These problems are due to inadequate or lack of knowledge about the companies that words keep, that is., collocation.

The fact that L2 learners have problem with lexical collocations is widely accepted. (Biskup, 1992; Bahns & Eldaw, 1993; Howarth, 1996; Granger, 1998; Nesselhauf, 2005). In a study on 58 German university students of English, Bahn and Eldaw aimed at testing advanced German learners' productive knowledge of 15 verb + noun collocations and found that the translation of verbs that are part of collocations poses many more problems than the collocations of other lexical items. They also concluded that collocation knowledge does not develop alongside general lexical knowledge. Zhang (1993) also conducted a study to explore the possible correlations between the knowledge and use of English collocations and the quality of college freshmen's writing. Sixty freshmen (30 native and 30 nonnative speakers of English) in Indiana University of Pennsylvania were involved in this research. In terms of results, Zhang drew two conclusions. The first one is that "collocational knowledge is a source of fluency in written communication among college freshmen". The second is that, "quantity, but more importantly, quality of collocational use distinguish between Good and Poor college freshmen writing as well as between native and non native college freshmen writing".

In another study, Farghal and Obiedat (1995) analysed the collocations actually provided by the learners who were 57 Arabic university students of English. The conclusion drawn in the study is that L2 learners cannot cope with collocations. This is because "they are not being made aware of collocations as a fundamental genre of multi-word units". Gitsaki (1999) investigated the acquisition of collocations by L2 learners and found that L2 learners' knowledge of collocations developed with their overall language proficiency.

A conclusion reached by most of these studies is that collocation production presents a problem for second language learners and that learners use overall fewer collocations than native speakers. Since lexical elements are infinite and it is impossible to teach all that EFL learners need, they should be made aware of the fact that all words have their own, unique collocational fields; that is to say, words, in Thornbury's phrase, "hunt in packs" (Thornbury, 1998, p. 8). Therefore, the most useful role of the teacher is in consciousness-raising and in encouraging noticing on the part of the learners.

Purpose of the Study

The implementation of the present study at the product phase sets itself the goal to shed some lights on the following research questions**:**

1) *Does an instructional method, emphasizing noticing of l2 collocation have any effect on learners' writings?*

For doing this research, the afore-mentioned question was then formulated into the following null hypothesis:

H_0: Instruction on collocation has no effect on learners' writings.

The current study is also an attempt to seek a justifiable answer to the following question qualitatively at the process phase of the study:

2) *What are the kinds of changes in students' writings if there are any during the treatment period?*

The Research Methodology

 Participants and Setting

Thirty-nine students from the English Department of College of Ferdowsi University (in Iran) were involved in this study. Among these participants, twenty of them were males and the other nineteen students were females. All students were enrolled in classes during the winter quarter of 2007, a period of 10 weeks. Their proficiency in English was upper-intermediate to advanced level (as they had been classified by the authorities of College of Ferdowsi University). However, nine participants were excluded from the data analysis due to the following reasons: 1) they missed one of the writing tests either pretest or post test. 2) they were absent from class for a long time (more than three sessions). Hence, there were only thirty participants altogether at the end of the experiment. Among them, 15 were males and 15 were females.

The experimental group consisted of 17 and the control group of 13 young adult Iranian students, majoring in different fields such as engineering, biology, medicine and ranging from 20 to 30 years old. They had studied English for approximately six years in junior and senior high school.

Instrumentation

Two similar sets of Test of Written English taken from computer-based practice tests of TOEFL (2006) were employed first in pretesting to ensure the homogeneity of the groups at the very beginning of the course and second in posttesting to measure the final achievements of the learners. Great care was taken to choose writing samples which were similar not identical in pretesting as well as posttesting.

To closely analyze the process of learning, 6 topics from selected from computer-based practice tests of TOEFL (2006) (see Appendix A).

Self-designed achievement test of collocation was designed by the researchers to measure the gain scores of learners in collocation specifically. KR20 was used to measure the reliability coefficient of the test, which was found to be r= .73 (see Appendix B).

A Likert questionnaire consisting of 6 questions was designed by the researchers just to elicit the learners ` attitudes towards the instructions they had received.

 Procedure

Over the course of 21 teaching sessions, the students were exposed to their course materials including audio, video and textual input. During exploration of those materials, the experimental students (N- 17) were made aware of word combinations, specifically, collocations through different techniques such as textual analysis, dictionary use, storing collocations, translation activity etc. while in the control group (N=13), the conventional slot and filler approach was upheld.

At the product phase of the current study, two similar sets of Test of Written English taken from computer-based practice tests of TOEFL (2006) were employed (one in the first session as a pretest to ascertain that both groups were initially on a par as far as their writings were concerned. At these stages, the students' writings were corrected holistically (on a scale from zero to 30) and were scored twice.

The Pearson Product Moment Correlation was employed both in pre-test and posttest stage to determine the (intra-rater) reliability of the two sets of scores on subjects' writings (see table 1).

Table 1: Pearson product moment correlations (intra-rater reliability)

Groups	pretest	posttest
Control	0.85**	0.88**
Experimental	0.90**	0.91**

*Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

Furthermore, the Spearman Brown's prophecy formula was employed to correct the reliability and estimate the total reliability coefficients both in pre-test and post test stage (see table 2).

Table 2: Correlations (through Spearman Brown prophecy Formula)

Groups	pretest	posttest
Control	0.92**	0.94**
Experimental	0.95**	0.95**

*Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

To determine whether subjects in experimental group had been made aware of collocation as a result of instruction on collocation, one session before posttest an unexpected self-designed achievement test of collocation (based on what has been covered in the class during the treatment period) was employed at the product phase.

At the process phase, the students were assigned to write on six topics from computer-based practice tests of TOEFL (2006) every three other sessions and the analytic method of scoring was employed. The rating scale used here was adapted from Heaton (1990). His rating scale consists of Grammar, Vocabulary, Mechanics, Fluency, and Relevance and the researcher allocated 6 points to each of these components in order to correct the learners` writings analytically. Finally**,** right after the final exam**,** in the process phase, a questionnaire was employed for eliciting L2 learners' opinions, attitudes and preferences.

The data derived from the English written tests were analysed by the statistical program, Microsoft excel program version 2003. The data were also depicted graphically by Microsoft excel program version 2003.

Results

The results here are presented in three parts: 1) product-based data 2) process-based data   3) the results of the questionnaire.

Product-based Data

This section presents results from the quantitative analysis of the data derived from the pre-test and post- test scores of learners' writings as well as the achievement test of collocation scores (product phase). The descriptive statistics of t-test for comparing the performance of the two groups on TWE (test of written English) of TOEFL (2006) at the pre-test stage and post stage are presented in Table 3.

Table 3: Group statistics of the experimental and control pretest and posttest scores

Groups	Stage	N	Mean	Std. Deviation	Std. Error Mean
Control	Pretest	13	19.37	1.41	0.39
	posttest	13	19.50	1.63	0.45
Experimental	Pretest	17	19.57	1.80	0,.44
	posttest	17	22.09	2.57	0.62

Table 4: Independent - Sample t-test on the experimental and control pretest and posttest scores

Stage	Groups	Mean Differences	Std. Error	t observed	df	Sig. (2-tailed)
Pretest	Control-Experimental	0.20	0.58	0.36	28	ns
Posttest	Control-Experimental	2.59	0.75	3.43	28	0. 01

As Table 4 demonstrates, the result was promising since the difference between the experimental and control group scores was insignificant at the pre-test stage. In other words, the t-value was found insignificant, meaning that in terms of their writing abilities, the two groups were homogeneous at the start.

On the other hand, to support or reject the null hypothesis, another t-test was conducted on the post test scores of both experimental and control groups and it was found that the observed-t (3.43) in this stage, exceeds critical t-value (2.467), at the significance level of $p \leq 0.01$. The difference of mean scores of two groups in the post test administration is 2.59 and it indicates that the experimental group outperformed the control group. It can be concluded that collocational teaching had impact on improvement of experimental group's writings. Thus, it is quite safe to reject the null hypothesis. Hence, it can be claimed that subjects' writing abilities improved through collocational teaching.

Also, to see the gains of the experimental group separately, a two-tailed matched t-test was run on the experimental group.

Table 5: Dependent Sample t-test Result for comparing the performances of experimental group at pretest and post-test stage

Groups	Pair	Paired Differences			t observed	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error			
Experimental	pretest - posttest	2.51	1.68	0.41	6.19	16	0.001

The t-observed for the experimental group (6. 19) in Table 5 exceeds the t-critical (2.92) at 0.01 level of significance; therefore, the difference between the pretest and post test means of the experimental subjects is statistically significant. Thus, it indicates that students' writing abilities in experimental group improved significantly. This result again gives evidence to reject the H_0 and conclude that the difference between the two mean scores reflects that the experimental improvement is due to collocation instruction.

In order to determine whether subjects in the experimental group had been made aware of collocations as a result of instruction on collocation, an independent t- test was performed on the students' scores (in both treatment groups) derived from achievement collocation test.

Table 6: Group statistics of collocation achievement test

Groups	N	Mean	Std. Deviation	Std. Error
Control	13	17.54	2.79	0.77
Experimental	17	24.06	2.65	0.64

Table 7: Independent -Sample t-test result of collocation achievement test

Groups	Mean Differences	Std. Error	t observed	df	Sig. (2-tailed)
Experimental- Control	6.52	1.005	6.49	28	0.001

According to the results shown in Table 7, the t-observed (6.49) exceeds the t-critical t-value (2.76) at 0.01 level of significance. Thus it can be concluded that there is a significant difference between the two groups' performances in the achievement collocation test. Therefore, it can be claimed that this difference is due to the kind of instruction the experimental group received and this gives further evidence for rejecting the null hypothesis.

 Process-based Data

This section presents the qualitative examination of the data derived from the process phase of the study. To come up with a clear picture of subjects' performances during the treatment (throughout the semester), the students' writings were scored analytically based on the guidelines provided by Heaton (1990).

To closely analyse the subjects' process of learning and to explore the possible effects of collocational teaching, the different component mean scores on each topic (six topics in total) for both groups were measured and their learning processes were depicted graphically and compared both between groups as well as within the experimental group in terms of their mean gain scores (Figure 1 to 7).

As the polygon in figure 1 shows, the experimental and control subjects' performance at the beginning of the term up to the mid-term (third topic) at grammar component of rating scale are almost at the same level and show no progress but from this time onwards, the experimental grammar curve shows rather significant improvement compared to that of their counterparts in the control group.
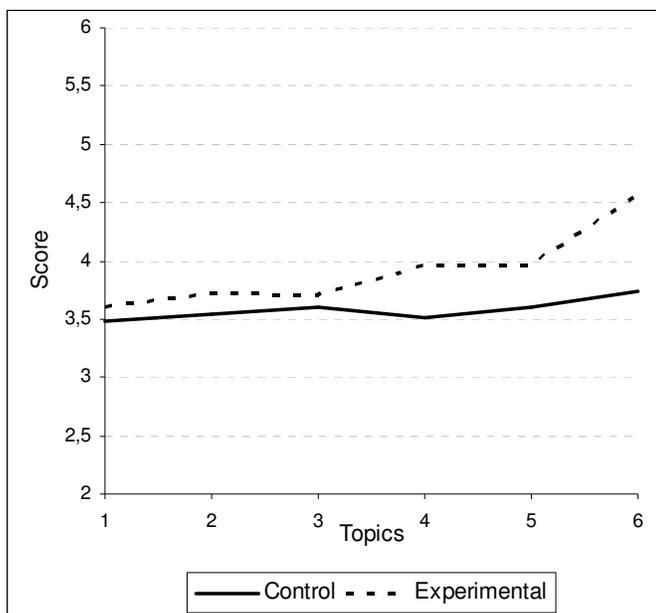
Figure 1: the control and experimental groups' learning processes at Grammar
component

No considerable improvement is observed for the control group during the same period of time (from topic 3 to topic 6).

According to Figure 2, both the experimental and control subjects have comparatively improved at vocabulary component but the slope of line for the experimental group grows steeper; the process of learning vocabulary (for the experimental subjects) continues its sharp rise up to the end of the term (last topic).
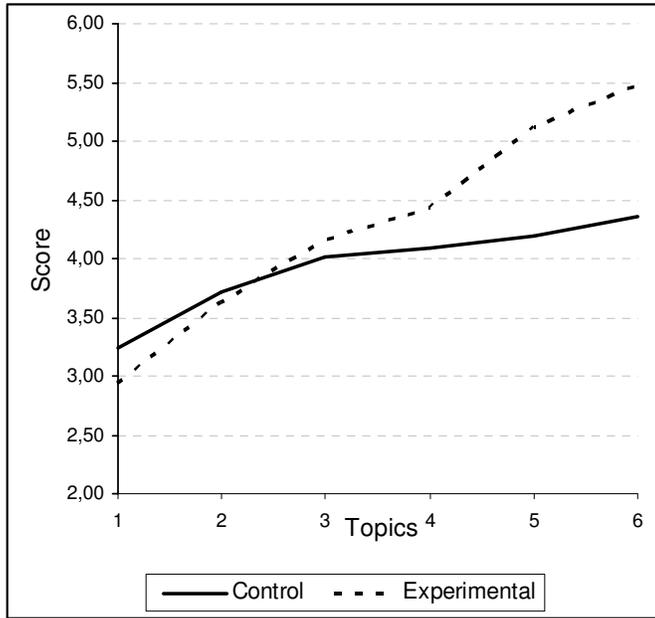
Figure 2: The control and experimental groups' learning processes at Vocabulary component

This learning process for fluency starts tracing its steady progress right from the beginning of the term until the end. As it is evident in figure (3), the mean scores of the experimental group are lower than those of the control group for the first topic.
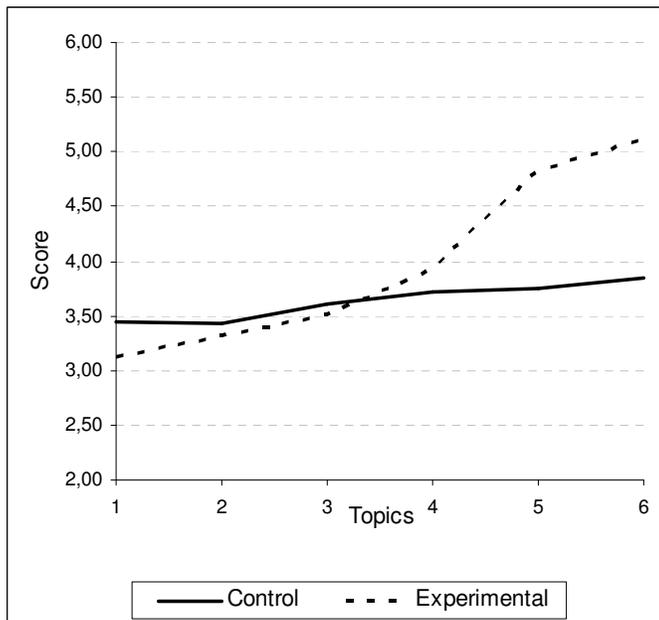
Figure 3 The control and experimental groups' learning processes at fluency component

As Figure 3 shows the control group makes very slow progress in fluency all throughout the semester whereas the experimental group tracks an ordinary progress from the beginning up to the mid-term (the third topic). It can be observed that in topic 4, the fluency curve for the experimental group outstrips that of the control group to a small extent. Afterwards, as the polygon shows the slope moves up quite significantly and continues in the same developmental pattern until the end of the semester. This indicates the experimental subjects' dramatic improvement in fluency takes place over the last few weeks of the term. It seems that the type of instruction has an effect on experimental subjects' fluency from mid-term onwards.

Regarding relevance component, as is evident in figure 4, both the experimental and control groups are found to make an ordinary progress comparatively. However, both groups' lines on the graph rise and drop. This indicates that there is not much considerable difference between these two groups at relevance component of writing although the experimental group shows more improvement in this component.
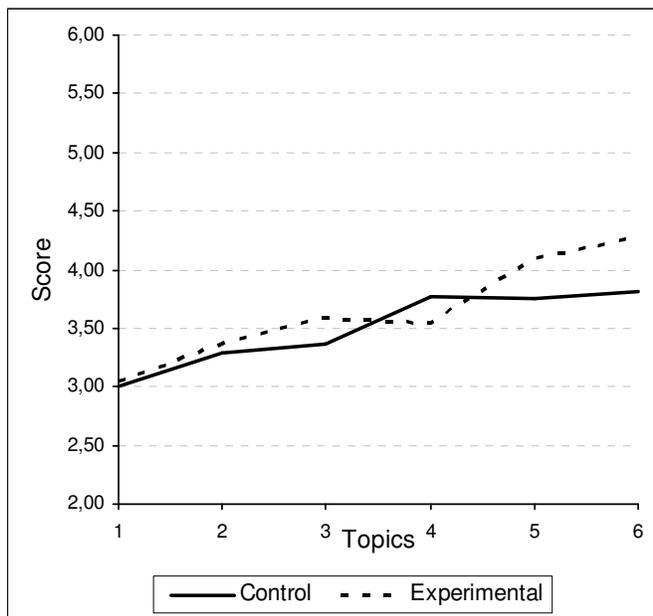

Figure 4: The control and experimental groups' learning processes at relevance component

As to mechanics, Figure 5 shows that there is no significant difference between the experimental and control groups and both groups follow similar patterns although (as it can be observed on the graph) the control group at the beginning of the semester outperforms in mechanics while at the end of the term it appears that the experimental group does better at this component.
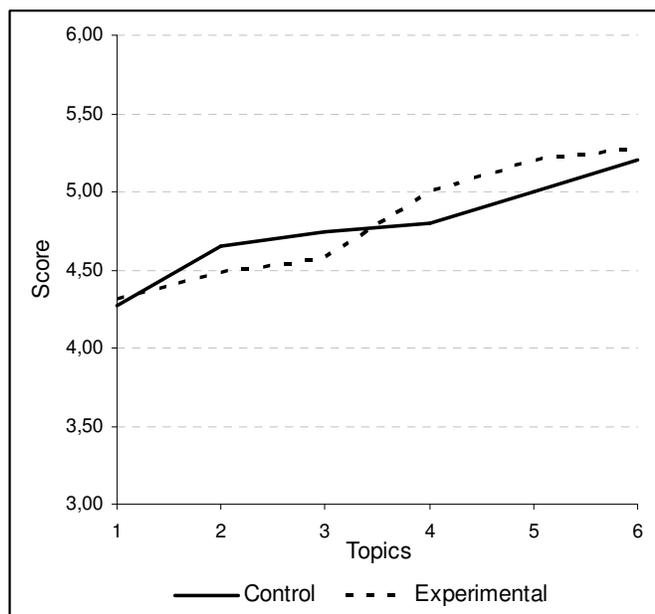

Figure 5: The control and experimental groups' learning processes at Mechanics component

Figure 6 shows that both the experimental and control groups have similar patterns over the first few weeks of treatment. In other words, there has been no significant difference between the experimental and control groups regarding writing until the mid-term but from this time period onward, the experimental group's curve on the graph starts increasing dramatically compared to the control group's curve so that in topic 6 their difference reach a maximum of 4.68 . It seems that if the treatment period were expanded for experimental group, it would lead to their radical improvement in writing skill.
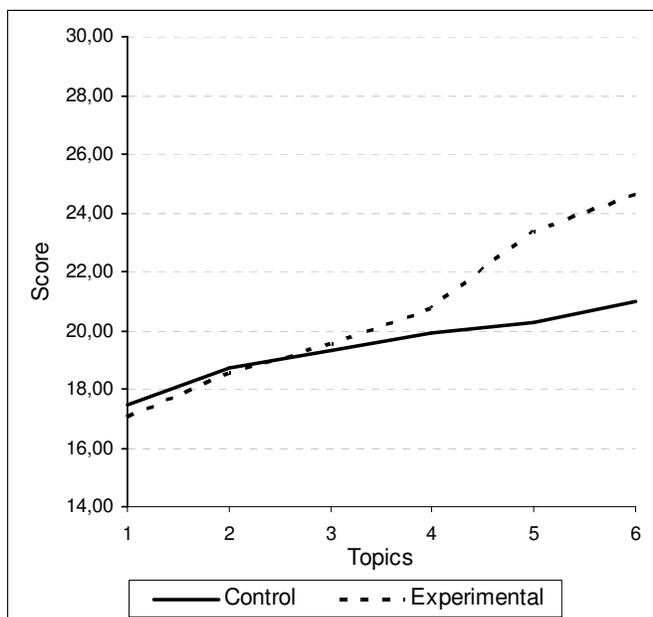
Figure 6: Comparison of the overall learning processes of control and experimental groups at writing components

A comparison of the experimental group curves for the whole treatment period would reveal the process of experimental subjects' writings improvement by the type of instruction (see Figure 7).
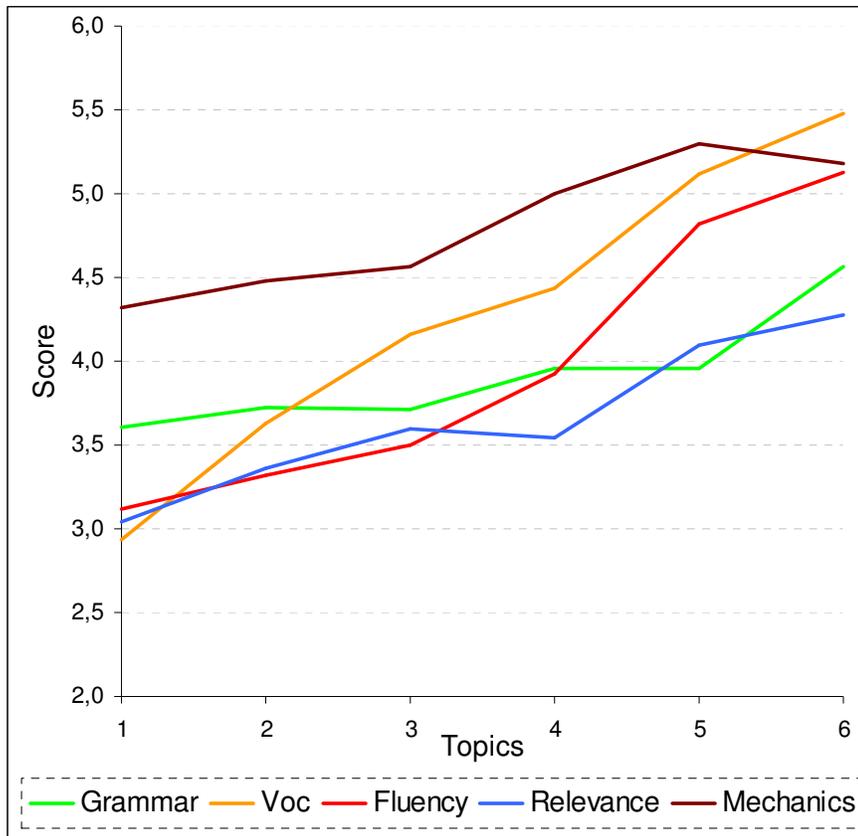
Figure 7: The comparison of experimental group's developmental process at each writing components

As it can be observed in Figure 7, the subjects' learning process for vocabulary and fluency components develops quite significantly while this developmental process regarding relevance and mechanics takes place to a lesser extent. This learning process develops to a small extent with regard to grammar component. In sum, the polygon shows the positive effect of collocational teaching on vocabulary and fluency components of writing.

The comparison of vocabulary and fluency lines on the graph shows that the vocabulary learning process develops more significantly compared to fluency component until the mid-term but from this time onwards the fluency curve develops more rapidly in comparison with vocabulary curve so that it gets a very similar pattern to vocabulary curve toward the end of term.

The Result of the Questionnaire

To better understand the experimental subjects' attitudes toward instruction on collocation, the overall percentage of their responses toward the sum of questions in the questionnaire are represented graphically (Figure 8).
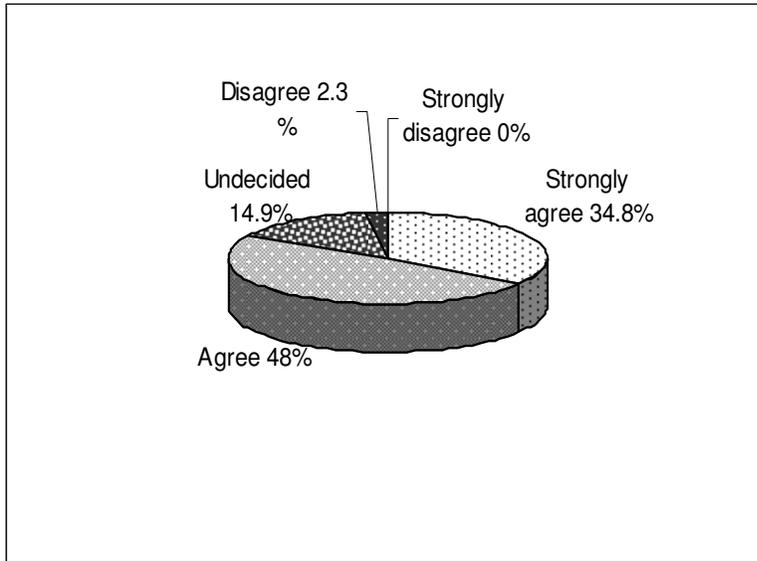

Figure 8: Overall distribution of experimental subjects' responses toward Instruction on collocation in percentage term
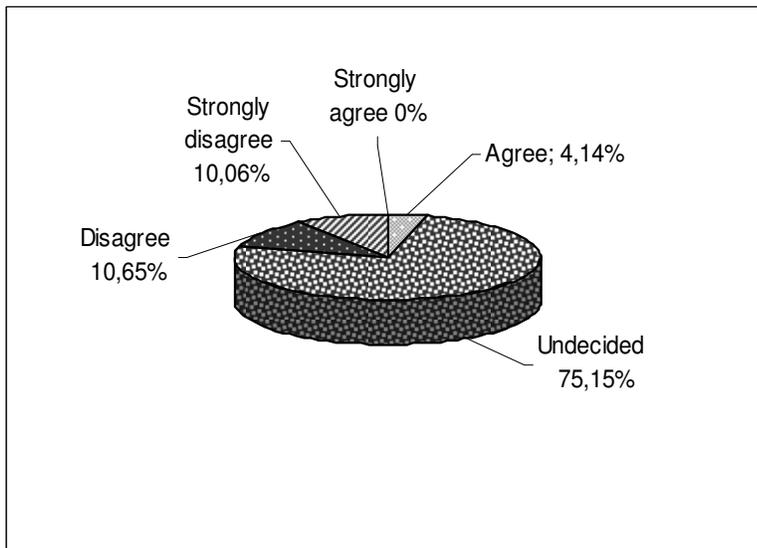

Figure 9: Overall distribution of control subjects' responses toward Instruction on collocation in percentage term

As it can be observed in Figure 8, a large percentage of experimental subjects (82.8%) either strongly agree or agree upon the type of instruction, 14.9% remain undecided and only a small percentage of them (2.3) is not in favor of this method.

It is worth mentioning here, since students in control group were not familiar with the concept of collocation and collocational teaching, their responses to all items in the questionnaire clustered around the option *undecided* and in some rare cases, they chose irrelevant options (see Figure 9).

Conclusion

The positive effect of 'collocation-noticing' on experimental students' writings turned out sufficiently profound to be of statistical significance through quantitative analysis of the data at the product phase of the study.

This finding is consistent with Zhang's finding (1993) which suggests a correlation between knowledge and use of English collocations and the quality of college freshman's writing. The results also give credence to the claims that awareness of the restrictions of lexical co-occurrence can facilitate ESL/EFL learners' ability to encode language (Nattinger, 1988) and thus can conform to the expectations of academic writing or speech communication (Bahns, 1993; Bahns & Eldaw, 1993; Farghal & Obiedat, 1995; Granger, 1998).

The qualitative examination of data at the process phase of the study also supports a positive impact of the method on students' fluency and vocabulary at the process phase of the study. Only the effect on students' grammar failed to be of great significance graphically.

Hill (1999) and Thornbury (1998) believe that learning lexical strings seem to enable students to extract the grammar themselves as they begin analysing acquired language. One possible justification for this is the fact that the experiment was conducted over 21 teaching sessions and learners required more time to be able to extract the grammar themselves.

These findings confirm Farghal and Obiedat's (1995) emphasis on teaching vocabulary collocationally instead of individually and also support Zhang's conclusion (1993) that collocational knowledge is a source of fluency in written communication among college freshmen. Also, the results from the questionnaire reveal the experimental subjects' favorable attitudes toward collocational teaching.

It can be concluded from the present study that instruction on collocation should be encouraged to replace conventional single-item vocabulary instruction for the purpose of enhancing EFL learners' writing abilities.

To sum up, despite the small number of subjects and the relatively small difference in instructional methods administered to the experimental and the control group, the positive effect of 'collocation-noticing' on experimental students' writings turned out sufficiently profound to be of statistical significance at the product phase of the study. The data also support a positive impact of the method on students' fluency and vocabulary at the process phase of the study. Only the effect on students' grammar failed to be of great significance graphically. It needs to be acknowledged, however, that the experimental instructional method appeared much more beneficial to some participants than to others, as signaled by the comparison of the standard deviations mentioned in Table 4.1.

The concept of this study is particularly based on those theories which show that it is essential to focus on phrases and patterns in language teaching (Sinclair, 1991; Hunston, Francis and Manning, 1997). Moreover, it is founded on the observations that activities to deal with lexical elements need to be conducted in ways to raise learners' consciousness of the significance of the lexical features (Ellis, 1992; Willis & Willis, 1996).

It seems that the present methods used by teachers to teach lexis in current English classrooms in Iran have been inspired by the traditional slot-and filler approach which was in general use long ago. The language of our current textbooks especially at schools is at odds with our current understanding of language and how it is acquired. Hence, there is no point in changing classroom practice if the theory of language reflected in authorized textbook is exactly the opposite way.

Nevertheless, if new ways of presenting materials are going to be attempted, teachers and textbook writers need to note two significant points for improving the teaching. One is that they need to consider what kinds of lexical features they should highlight, and the other is that they should reflect on how to present the elements so that learners can acquire competence to utilise the elements.

In spite of having good knowledge of English grammar and vocabulary, many Iranian EFL learners seem to have serious problems with collocations in terms of receptive and productive skills. This inefficiency seems to be particularly related to

the inadequate emphasis put on collocational patterns in our textbooks, and the type of instructions they receive.

Many scholars believe that students' communication and language skills are bound up with their knowledge of collocation. It is hoped that this study may arouse more researchers' attention to learners' acquisition of collocations, and difficulties in collocations. Collocation deserves ongoing careful study. It can be concluded from the present study that instruction on collocation should be encouraged to replace conventional single-item vocabulary instruction for the purpose of enhancing EFL learners' writing abilities. Besides, collocation instruction is what most EFL students would prefer and believe to be useful in enhancing their writings.

Implications

Collocations in teaching and learning

1. To improve the learners' knowledge of collocations, teachers can start from their instruction. Teachers can adjust their curriculum to accommodate the teaching of collocations into their current practices.

2. In teaching collocations in consciousness-raising ways, teachers always need to consider in what kinds of discourse of meaningful situations, their students may use collocations

3. English learners should be made aware of their insufficient collocational knowledge. They need to make an effort to build up their collocation size to improve their collocational knowledge.

Collocations in materials development and testing

1. Textbook designers should emphasize and highlight collocations in textbooks.
2. To develop learners' ability to use English, our ministry of education needs to reflect on the methodologies that have been applied in the classroom, realize the crucial shortcomings and seek solutions.

3. Syllabus designers might benefit from the results of this study by bringing collocation into focus and arranging the collocations students need in a meaningful way and presenting them topically.

4. Test developers may design test formats aimed at tapping learners' knowledge of collocations. A kind of such test was previously developed by Gyllstad (2005).

Suggestions for Future Research

Several suggestions are provided here for future research.

1. This study was conducted to check the L2 learner' writings. The researcher believes that further studies can be conducted to check the effect of collocation instruction on L2 learners' reading, speaking and listening.

2. In this research, L2 learners' level of proficiency in English was advanced level. It is suggested that this study be replicated with learners of intermediate level of proficiency.

3. This study was conducted employing instruments of TOEFL test (TWE), questionnaire and a self-made achievement test of collocation. It is recommended to replicate this study implementing other data gathering methods.

4. The focus of current study has been on neighborhood collocates in learning lexis. Another study might be designed to investigate the impact of coherence collocates.

5. Another study may be designed to investigate the role of materials and exercises in bringing lexical phrases and collocations into focus of classroom.

References

Bahns, J. (1993). Lexical collocations: a contrastive view. *ELT Journal* 47(1), 56-63.

Bahns, J., & Eldaw, M. (1993). Should we teach EFL students collocation? *System*, *21*(1), 104-114.

Biskup, D. (1992). L1 influence on learners' renderings of English collocations. A Polish/German empirical study. In P.J.L. Arnaud and H. Béjoint (eds), *Vocabulary and Applied Linguistics* (pp. 85-93), London: Macmillan.

Ellis, R. (1992). *Second language acquisition and language pedagogy*. Avon: Multilingual Matters.

Farghal, M., & Obiedat, H. (1995). Collocations: A Neglected Variable in EFL. *IRAL, 33*(4), 315-331.

Gitsaki, C. (1999). *Second Language Lexical Acquisition: A Study of the Development of Collocational Knowledge*. Bethesda, MD: International Scholars Publications.

Granger S. (1998). Prefabricated patterns in advanced EFL writing: collocations and formulae. In A. Cowie (ed.) *Phraseology: theory, analysis and applications*. (pp. 145-160). Oxford: OUP.

GYLLSTAD, H. (2005). *Words that go together well: developing test formats for measuring learner knowledge of English collocations. http://www.englund.lu.se/content/view/173/209/.* In F. Heinat, and E. Klingvall (eds), *The Department of English in Lund: Working Papers in Linguistics.* volume 5. o.O. J, S. 1-31

Heaton, J. B. (1990). *Writing English language tests.* New York: Longman Group UK Limited.

Hill, J. (1999, April). Collocational competence. *English Teaching Professional* 11.

Howarth, P.A. (1996) *Phraseology in English academic writing: some implications for language learning and dictionary-making.* Tübingen: Niemeyer.

Hunston, S., Francis, G. and Manning, E.(1997). Grammar and Vocabulary: Showing the Connections. *ELT Journal. 51/3*, 208-216.

Lewis, M. (1993). *The Lexical Approach.* Hove: Language Teaching Publications.

Lewis, M. (1994). *The Lexical Approach. The State of ELT And A Way Forward.* Hove: Language Teaching Publications.

Nattinger, J. (1988). Some Current Trends in Vocabulary. In R. Carter, & M. McCarthy (eds.). *Vocabulary and Language Teaching* (pp. 337-344). Harlow: Longman.

Nesselhauf, N. (2005). *Collocations in a Learner Corpus.* Amsterdam: John Benjamins.

Sinclair, J. (1991). *Corpus, Concordance, Collocation.* Oxford: Oxford University Press.

Thornbury, S. (1998) The lexical approach: a journey without maps. *MET,* 7 (4), pp. 7-13

TOEFL. (2006). ETS TOEFL. Retrieved from http://www.ets.org/toefl/

Willis, D. and J. Willis. (1996). Consciousness-raising activities in the language classroom. In J. Willis & D. Willis (Eds.), *Challenge and Change in Language Teaching* (pp. 63-76). Oxford: Heinemann.

Zhang, X. (1993) *English Collocations and Their Effect on the Writing of Native and Non-native College Freshmen,* Ph.D. thesis, Indiana University of Pennsylvania.

Appendix A

1. If you could go back to some time and place in the past, when and where would you go? Why? Use specific reasons and details to support your choice.

2. Is it better to enjoy your money when you earn it or is it better to save your money for some time in the future? Use specific reasons and examples to support your opinion.

3. Do you agree or disagree with the following statement? Boys and girls should attend eparate schools. Use specific reasons and examples to support your answer.

4. Some people prefer to spend most of their time alone. Others like to be with friends most of the time. Do you prefer to spend your time alone or with friends? Use specific reasons to support your answer.

5. Every generation of people is different in important ways. How is your generation different from your parents' generation? Use specific reasons and examples to explain your answer.

6. Learning about the past has no value for those of us living in the present. Do you agree or disagree? Use specific reasons and examples to support your answer.

Appendix B

Name ……………….   Class ………………………

Choose the correct collocation.
   1- I can't fall asleep unless I've checked to …… sure the door is locked. (get/make/take)
   2- It's really important to ……. friends with different kinds of people. (find/do/make)
   3- Jane and Anna have a very good ……… They love doing things together. (relation/relations/relationship)
   4- He tried to ….. it secret from his family. (keep/get/take)
   5- It is customary to ….turns speaking.(make/take/do)
   6- He is marvelous at ……. jokes. (saying/telling/doing)
   7- She ….. a bad dream last night and woke up sweating. (saw/made/had)
   8- You must ….. an effort to work harder. (take/make/ do)
   9- John and Mary are hoping to ….. a family soon. (start/begin/do)

10- The drug companies …… a lot of influence on doctors. (do/have/put)

11- She is ……. a baby. (waiting for/expecting/waiting)

12- Can you tell me …. Please? I left my watch at home. (hour/the time/the hour)

13- Jane …… attention to what I told her and started working harder. (had/took/paid)

14- Remember that it …… a good impression if you are on time. (puts/does/makes)

Match the two parts of these collocations.

15- Healthy   time   …………….

16- Make   speaking   ………………

17- Keep   a commitment   …………….

18- Squander   time   …………………

19- Kill   an example   ………………..

20- Generally   money   ……………….

21- Set   in contact   ……………….

22- Spare   eating   ……………….

Complete the collocations.

23- I hope their disagreement over the bill won't   ……..   their friendship.

24- If two friends meet on the street, they usually ………… hands.

25- In order to reduce stress, one should do ………….… exercise.

26- I can get along on five hours of sleep at night if I can …... a nap during the day

27- Changing the rules may ….more harm than good.

28- Before she goes to bed, she can't do anything that ….concentration.

29- The accident … a huge effect on her life.

30- Jim gave me a very useful .…... of advice.

Title

The Washback Effect of the University Entrance Examination on Iranian English
Teachers' Curricular Planning and Instruction

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Abstract

This study examined the impact of the University Entrance Examination (UEE) on
pre-university English teachers' (PETs) teaching and curricular planning in six
dimensions. Eight factors usually associated with the UEE washback effect in the
Iranian EFL context were investigated in this study.

Based on stratified random sampling, 377 PETs were selected to respond to
the questionnaires. As to the qualitative method sampling, eight purposively selected
PETs participated in two focus group interviews. Stepwise regression was used to
analyze the quantitative data from the survey questionnaires and a systematic note-
based technique recommended by Kruger (2002) was used to analyze and interpret the
qualitative data from the focus group interviews.

The findings revealed that time arrangement was the most affected area among
the six dimensions. Based on the results from the stepwise regression analysis, only
perceived students' learning attitudes (21.2%), perceived external pressure in teaching

(3.0%), and perceived professionalism in teaching (1.1%) can be used to reliably predict PETs' perceptions of the impact of the UEE. All of the interviewed PETs perceived the negative effect of the UEE and expected the authorities to reform it based on the current teaching and testing theories.

Key words: University Entrance Examination, washback effect

Background

Traditionally, language testing researchers have focused their attention on inherent issues in tests. But recently some researchers have turned to the empirical investigation of the washback phenomenon which is not limited to the test itself. It depends on other teacher and contextual factors which may be different from context to context (Cheng, Watanabe, & Curtis, 2004).

According to Ostovar Namaghi (2006), three forces control and steer teachers' work in the Iranian educational context. First, since teachers cannot choose a textbook which is in line with their students' needs, the input is controlled by the prescribed curriculum. Second, the output is controlled by the mandated national testing scheme so that teachers cannot develop tests which have a positive backwash on teaching and learning. And third, since high score is culturally equal to higher achievement, the process of teaching and learning is controlled by the grade pressure from students, parents and school principals. He argues that teachers are pure implementer of the prescribed initiatives and schemes surrounded by cultural constraints which prevent them from using their own professional knowledge and experience.

The centralized control of curriculum and assessment in Iran is assumed to have led to teaching towards the high-stakes UEE which affects the future career and lives of pre-university and high school students. Iranian senior high school English teachers, in general, and pre-university English teachers (PETs), in particular, feel they are expected to prepare their students for university entrance exams by having them translate English texts into Persian. They explain and put an emphasis on the grammatical structures explicitly. They also try to improve their students' reading skill at the expense of listening, speaking and even writing skills. The dominant methodology is grammar-translation with a teacher-centered approach in which language usage and not actual language use is emphasized.

Many students at pre-university and academic senior high schools assume that the purpose of English teaching and learning is preparation for the UEE. Students usually influence PETs' instruction through their expectations that they should prepare them for the UEE. Since the UEE influences students' future career and lives, PETs often teach to the test and students focus only on those activities and skills that are likely to appear on the test.

English Education in Iran

In Iran, English is taught as a foreign language and is practiced within a context-restricted environment, in which the textbook and classroom teacher play the main role.

Previously, English education in Iran formally started from second grade in junior high schools, but now it begins from the first grade. All schools at different levels follow the curriculum standards. The Ministry of Education (ME) compiles, develops and publishes textbooks and teaching materials for nationwide public and private high schools.

Iranian Nationwide University Entrance Examination

According to Cheng (2005) examinations have been used as a means of control and as a way to counter nepotism and favoritism in the allocation of scarce opportunities. They have also been used to encourage the development of talent, upgrade the school performance, and select for education and employment for many years.

The UEE is a high-stakes test in which many students become disappointed. Students' failure to enter higher education institutes has led to undesirable outcomes such as dropping out of studies or brain drain and thus loss of a great portion of the county's potential.

As pointed out by Chapman and Snyder (2000), high-stakes tests will have a greater influence on teaching and learning if their "primary use is to ration future opportunity as the basis for determining admission to the next layer of education or to employment opportunities" (458). Although the number of the country's higher education institutes has been increased and the capacity of many universities has been expanded, the fierce and tough competition among pre-university and high-school graduates is still a major concern. Less than one third of the students who sit for the UEE manage to enter universities.

Pre-university and high school graduates, who wish to enter the country's tuition-free public universities, participate in an annual and intense multiple-choice exam which usually lasts about 4.5 hours. The Education Evaluation Organization (EEO) which operates under the supervision of the Ministry of Science, Research, and Technology takes care of all aspects of the UEE.

One of the main criticisms regarding the UEE is that it is a very limited way of evaluating the caliber of pre-university and high-school graduates who wish to gain a place at university. In such a situation, doing anything out of interest which is unlikely to be tested in the exam is assumed to be a waste of time.

Objective and significance of the Study

The purpose of this study was to investigate and determine PETs' perceptions of the impact of the UEE on their curricular planning and instruction in six dimensions:1) syllabus design, 2) methods of teaching, 3) teaching contents, 4) classroom activities and time arrangement, 5) instructional materials, and 6) classroom assessment.

By providing the UEE authorities with helpful information, the findings of this study can be used as one of the related information sources to reform the current UEE system so that it can foster positive washback effect on English teachers that will, in turn, help improve language education in Iran. By indicating the washback effect in a specific context, this study will potentially contribute to a general understanding of the washback phenomenon.

Research Hypothesis

H_0 . The variance of PETs' perceptions of the impact of the UEE explained by the linear combination of the independent variables (teaching Experience, Educational background, perceived professionalism, gender, school type, school location, perceived students' learning attitudes, and perceived external pressure in teaching) will be zero.

Conceptual Framework

In this study, eight factors assumed to be closely associated with the washback effect of high-stakes tests were studied to determine the degree and scope of the washback

phenomenon through examining PETs' perceptions of the impact of the UEE on their curricular planning and instruction.

Wall and Alderson (1993) created the washback hypothesis, and since then some studies have been done on it (Cheng, 2005, 2000, 1998, 1997; Spratt, 2005; Watanabe, 2004; Chen, 2002a, 2002b; Hamp-Lyons, 1997; Bailey, 1996; Alderson & Hamp-Lyons, 1996). The washback hypothesis is a subdivision of the impact theory which tries to study the relationship between a test and the society in which it is used (Backman & Palmer, 1996; Wall, 1996, 1998). Washback is the term used in applied linguistics to refer to the effect of tests at the classroom and school level.

Innovation theory (Henrichsen 1989) from which the conceptual framework for the impact studies began and washback theory (Hamp-Lyons 1999; Alderson & Hamp-Lyons 1996; Alderson & Wall 1993;) propose that test-related effects may occur at different points in time, even before a new formal test is introduced. Washback theory was developed into 15 hypotheses by Alderson and Wall (1993, p. 120-21) as delineated below. Except for those which are related to the learners and learning, the rest (hypotheses 1, 3, 4, 7, 9, 11, 12, and 15) were explicitly or implicitly addressed in this study.

1. A test will influence teaching

2. A test will influence learning

3. A test will influence what teachers teach; and

4. A test will influence how teachers teach

5. A test will influence what learners learn

6. A test will influence how learners learn

7. A test will influence the rate and sequence of teaching; and

8. A test will influence the rate and sequence of learning

9. A test will influence the degree and depth of teaching

10. A test will influence the degree and depth of learning

11. A test will influence attitudes towards the content, method, etc. of teaching and learning

12. Tests that have important consequences will have washback; conversely

13. Tests that do not have important consequences will have no washback

14. Tests will have washback on all learners and teachers

15. Tests will have washback effects for some learners and some teachers, but not for others.

Based on the findings from recent studies on the washback phenomenon, tests by themselves will have little impact on teaching. There are other factors associated with washback which may lead to different results from context to context (Cheng, 2005; Chen, 2002a, 2002b; Shohamy et al, 1996; Alderson & Hamp-Lyons, 1996; Wall & Alderson, 1993; Shohamy, 1993). For example, Grant (1996) stated that "what teachers do in their classrooms is likely to be influenced by a range of factors reflecting a variety of sources" (p. 238).

In this study, eight factors (teaching experience, educational background, perceived professionalism in teaching, gender, school type, school location, perceived students' learning attitudes, and perceived external pressure) which are assumed to be closely associated with the washback effect were studied.

Research Design

The sequential explanatory mixed method design was used in this study. A mixed method design is "a procedure for collecting, analyzing, and linking both quantitative and qualitative data in a single study or in a multiphase series of studies"(Creswell, 2005, p. 53). He asserts that the combination of quantitative and qualitative data will lead to a better understanding of the research problem.

Survey Method

A survey questionnaire (See the appendix) was developed from interviews of Iranian PETs, adaptation and modification of items from Chen's (2002a) questionnaire, and insights from the following relevant studies, that is, (Cheng, 2005; Cheng et al., 2004; Brown, 2002, 2000; Cheng, 2000; Shohamy et al., 1996; Wall & Alderson, 1996; Watanabe, 1996b; Alderson & Hamp-Lyons, 1996; Cheng, 1997; Beattie, 1995; Alderson & Wall, 1993; Herman & Golan, 1991).

Semi-Structured Focus Group Interviews

The questions for the focus group interviews (See the appendix) were developed based on Chen's (2002a) interview guide modification, recommendations from

Krueger (1994, 2002). A tape recorder was used to transcribe the collected data verbatim. Then, the transcribed data were content analyzed.

Eight purposively selected PETs participated in two focus group interviews to discuss the questions raised on the focus group interview guide. The researcher was the moderator who had the whole discussion process under control. An assistant moderator, who was an EFL lecturer with a background in research, was selected to help the researcher. Based on the recommendations and suggestions from Krueger (2002, p. 6), the assistant moderator was responsible to deal with the following tasks:

1. Help with equipment and refreshments,
2. Arrange the room,
3. Welcome participants as they arrive,
4. Sit in designated location,
5. Take notes throughout the discussion,
6. Operate recording equipment,
7. Do not participate in the discussion,
8. Ask questions when invited,
9. Give an oral summary,
10. Debrief with moderator,
11. Give feedback on analysis and reports.

Validity and Reliability

A panel of experts reviewed and assessed the instruments three times to determine their content and face validity. In an expert analysis, annotations are given about potential problems in a questionnaire (Brannen, 1992).

Thirty PETs responded to the items and helped the researcher establish the reliability of the first three parts of the survey questionnaire. The internal consistency reliability coefficient for the items in the first three parts of the survey questionnaire was 0.97.

Population and Sample

In this study, the target population was pre-university English teachers in Iran. But the accessible population was pre-university English teachers in the north east of the country. Based on the consideration of statistical power, the sample size formula developed by Krejcie and Morgan (1970), the appropriate sample size for this study was 375 subjects.

Regarding the sampling procedure for the semi-structured focus group interviews, eight English teachers were purposively selected from pre-university centers in the north east of the country. All of them were volunteer English teachers who were eager to talk about the subject (Krueger, 1994). All of them were teaching English at pre-university centers in the north east of the country.

In this study, two groups were interviewed. Each of the two groups consisted of four participants. Three of them had a BA degree and one had an MA degree. Each group included two male and two female teachers (See the appendix).

Data Collection Procedures

After the sampling procedures were finalized, data collection was carried out in two phases. The data collection procedures are presented sequentially here. Quantitative data collection method (survey questionnaire) is followed by qualitative data collection method using semi-structured focus group interviews.

In this study, mailed survey questionnaire was used as one of the methods of data collection. The data collection procedures recommended by Dillman (1978) and modified by Chen (2002a, p. 64) were used with some minor modifications as follows:

1. A phone call was made to the principals of the randomly selected pre-university schools informing them of the forthcoming questionnaires.

2. A week later, the survey questionnaire packets were sent to the principals. The packets included: 1) questionnaires, 2) pre-addressed, stamped return envelope 3) letter to the principal to explain how to help with the data collection, and 4) cover letter to the teacher which stated: a) the purpose of the study and its social utility, b) professional organization and institution, c) why the respondent is important, d) promise of confidentiality and explanation of identification, e) the discussion of code number on the questionnaire, f) what to do if questions arise, g) an appreciation, and h) deadline date.

3. A week later after the deadline to return the questionnaire, the first follow-up was conducted to remind the principals who had not returned the questionnaires.

4. Another week after the first follow-up, phone call reminders were given to the principals who had not returned the questionnaires.

5. Double-dip (Dillman, 1978) was used to control non-response error.

Data Analysis

As indicated in the following table, the findings of this study showed that PETs allocated considerable amount of classroom activities and instruction time for specific test preparation. The highest mean among the six subcategories regarding the level of PETs' perceptions of the UEE washback was related to the classroom activities and time arrangement dimension (4.11 out of six).

Table 1: The level of PETs' perceptions of the UEE washback effect on their
curricular planning and instruction (N=220)

Dimensions of Teachers' Perception	Mean	St Dev
1. Classroom activities and time arrangement	4.11	.49
2. Teaching methods	3.89	.53
3. Teaching materials	4.09	.59
4. Syllabus design	3.98	.53
5. Teaching contents	3.83	.36
6. Classroom assessment	3.64	.29

Statistical Package for Social Sciences (SPSS) was used to analyze the quantitative data from the survey questionnaires. Stepwise regression was used to see if the independent variables would contribute significantly to PETs' perceptions of the impact of the UEE. As suggested by Pallant (2001), normality, linearity, homoscedasticity, and outliers were checked by inspecting the normal probability plots of the regression standardized residuals and the residuals scatter plots. None of the assumptions were seriously violated. The regression result is described as follows.

Table 2: Regression of PETs' Perception of the Impact of the UEE on
independent variables

Independent Variable (X)	B	Beta	t	Sig.	Adjusted R^2
1. Perceived Students' Learning Attitudes	.103	.458	5.464	.000	21.2
2. Perceived External Pressure in Teaching	-.057	-.203	-2.998	.003	3.0
3. Perceived Professionalism in Teaching	.028	.156	2.000	.047	1.1
Constant	2.049		6.644	0.00	
Total					25.3

Standard Error of the Estimate = 0.36586

The adjusted R^2 column (Table 2) indicates that the first variable (perceived students' learning attitudes) explains 21.2 percent of the variation in the dependent variable (PETs' perception of the impact of the UEE). It has a p-value of .000. The second variable (perceived external pressure in teaching) explains 3.0 percent of the variation with a p-value of .003 and the third variable (perceived professionalism in teaching) explains 1.1 percent of the variation with a p-value of .047.

Thus, 25.3 percent of the variance in the dependent variable is explained collectively by all of the independent variables. This means that 25.3 percent of the variance in PETs' perception of the impact of the UEE can be predicted from the variables: 1) perceived students' learning attitudes, 2) perceived external pressure in teaching, and 3) perceived professionalism in teaching.

The unstandardized B indicates that for every unit increase in the first independent variable (perceived students' learning attitudes), a .103 unit increase in the dependent variable (PETs' perception of the impact of the UEE) is predicted, holding all other independent variables constant. Since the B coefficient sign is positive, the relationship of this variable with the dependent variable is positive (the greater the perceived students' learning attitudes the more the impact of the UEE).

For every unit increase in the second independent variable (perceived external pressure in teaching), a -.057 unit decrease in the dependent variable is predicted, holding all other independent variables constant. Since the B coefficient sign is negative, the relationship of this variable with the dependent variable is negative.

And finally, for every unit increase in the third variable (perceived professionalism in teaching), a .028 unit increase in the dependent variable is predicted, holding all other independent variables constant. Since the B coefficient sign is positive, the relationship of this variable with the dependent variable is positive.

Table 3: The ANOVA table indicating how the regression equation accounts for
variability in PETs' perception of the impact of the UEE

	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Regression	9.63	3	3.21	24.004	.000
Residual	26.90	201	.13		
Total	36.54	204			

The F test is used to test the significance of the regression model as a whole. Since the p-value (Table 3) associated with the F value (24.004) is smaller than the alpha level (0.05), the model is considered significantly better than would be expected by chance and the null hypothesis (the variance of the dependent variable I explained by the linear combination of the independent variables will be zero) is rejected.

This overall significance test [$F(3, 201) = 24.004$, $p < .05$] indicates that the group of independent variables (perceived students' learning attitudes, perceived external pressure in teaching, and perceived professionalism in teaching) can be used to reliably predict the dependent variable (PETs' perception of the impact of the UEE). Therefore, the prediction equation can be suggested as:

$$\hat{Y} = 2.049 + 0.103X_1 + (-0.57X_2) + 0.028X_3 + 0.36586$$

Where:

$\hat{Y}$ = PETs' perception of the impact of the UEE

X_1 = Perceived students' learning attitudes

X_2 = Perceived external pressure in teaching

X_3 = Professionalism in teaching

As to the qualitative phase, the systemic and note-based content analysis process (See the appendix) was used to analyze the focus group interviews. A tape recorder was used to verify specific quotations and transcribe the interviews (Krueger, 1994, 2002). Generally speaking, PETs threw blame on obstacles and constraints outside themselves in their interviews. A conflict between the thrust of communicative approach which values spoken fluency and communication and the UEE which assesses accuracy in reading alone was iterated by PETs as one of the main factors that restricted their latitude.

In fact, PETs perceived they were in the middle of a tug of war in which the need for a more communicative teaching approach, on the one hand, and the current traditional UEE, on the other hand, pulled at opposite ends. They felt that the UEE system was not in synchrony with the current advocated teaching approach and reported that this mismatch would always impede innovation in the instruction and curriculum planning process.

Based on the eight interviewed PETs' remarks, the main impact of the UEE on their curricular planning and instruction was in the following areas.

Table 4: Impact of the UEE on PETs' Curricular Planning
and Instruction

Impact	Frequency
Teaching to the Test	8
The Use of Exam-Related Books	5
The Use of Sample Exams	5
Assessment	3
Teaching Content	2
Syllabus Design	1

The findings related to the influence of teaching experience are in line with Chen's (2002a, 2002b) findings in Taiwan that teachers' teaching experience had a negligible relationship with their perceptions of the washback impact of the public examination. However, the results contradict with those obtained by Shohamy et al. (1996) that experienced teachers in comparison to novice teachers are more sensitive to public examinations and more likely to teach to the test.

Although educational background has been mentioned as an external and teacher related factor that takes some account of why washback occurs or does not occur (Watanabe, 1996a, 1996b; Chen, 2002a, 2002b), the results of this study showed that it was a negligible factor.

The results related to professionalism in teaching are in accordance with the previous studies (Cheng, 2005; Chen, 2002a, 2002b; Vallette, 1994; Alderson & Wall, 1993) that found teachers' fear of their students' weak performance in public exams would possibly lead them to teaching towards the test.

The findings related to gender are in agreement with Chen's (2002a) findings that there is a negligible relationship between teachers' gender and their perceptions of the washback impact of the Taiwanese basic competence test on their teaching.

School type (public and private) and school location (urban and suburban) had no role regarding the level of teachers' perceptions of the UEE washback effect on their instruction and curricular planning which contradict with the results obtained by Read and Hayes (2003) and Watanabe (2000, 1996b).

Finally, the findings related to perceived students' learning attitudes are in alignment with those of other researchers (Spratt, 2005; Chen, 2002a, 2002b; Alderson & Hamp Lyons, 1996; Beattie, 1995) who mentioned students' learning attitudes as one of the reasons why some teachers focused heavily on exam preparation activities and taught to the test.

Since some of the findings are not in keeping with those of other researchers, this may support the idea that washback is a complex phenomenon which is culturally and contextually bound, that is, its consequences for instruction, to a large extent, will depend on the context in which the test is held (Cheng, 2005).

Conclusion

Based on the findings of this study most of the surveyed and interviewed teachers, regardless of their experience, educational background, gender, the school type, and the school location where they taught, agreed that they perceived the negative effect of the UEE on their curricular planning and instruction and expected its reform.

The findings imply that if the current UEE is not reformed to include and assess students' oral and aural skills, potentially influential factors such as teachers' experience and educational background will play a neutral role in adopting effective teaching techniques. Thus, spending millions of Rials on training English teachers and

improving their level of knowledge at teacher training colleges and universities would be a great loss. Therefore, it is desirable to consider reforming the UEE based on the latest theories of language teaching and testing to help English teachers teach more communicatively.

Although there is a high level of curriculum alignment in Iran, it has produced less positive washback. Teachers and their students spend much of the class time on materials that turn up on the test and focus only on lower order skills. Since the UEE functions as a high-stakes gate-keeping test which has serious consequences for the future careers and lives of test takers, its impact on teacher and student behavior is inevitable. Therefore, it can be used as a feasible means of English language education reform.

It is hoped that the findings from this research and further empirical studies in the future will emerge to help testing authorities provide a more appropriate assessment tool with which to decide the future careers and lives of a very large number of Iranian students.

References

Alderson, J. C., & Hamp-Lyons, L. (1996). TOEFL preparation courses: A study of washback. *Language Testing*, *13*(3): 280-297.

Alderson, J. C. & Wall, D. (1993). Does washback exist? *Applied Linguistics, 14*(2): 115-129.

Bailey, K.M. (1996). Working for washback: A review of the washback concept in language testing. *Language Testing*, 13: 257-279.

Beattie, M. (1995). New prospects for teacher education: Narrative ways of knowing teaching and teacher learning. *Educational Research*, *37*(1): 53-70.

Brown, J. D. (2000). *University entrance examinations: Strategies for creating positive washback on English language teaching in Japan*. Shiken: JALT Testing & Evaluation SIG Newsletter. 3(2): 4-8. Retrieved December 21, 2006, from http://www.jalt.org/test/bro5.htm

Brown, J. D. (2002). *Questions and answers about language testing statistics: Extraneous variables and the washback effect*. Shiken: JALT Testing & Evaluation SIG Newsletter, 6(2), 12-15. Retrieved December 21, 2006, from http://www.jalt.org.

Chapman D. W., & Snyder, C. W. Jr. (2000). Can high stakes national testing improve instruction? Reexamining conventional wisdom. *International Journal of Educational Development*, 20(6): 457-474.

Chen, L. (2002a). Taiwanese junior high school English teachers' perceptions of the washback effect of the basic competence test in English. Unpublished Doctoral Dissertation, the Ohio State University, the United States.

Chen, L. (2002b). *Washback of a public exam on English teaching*. Educational Resources Information Center on Assessment and Evaluation (ERIC/AE) ERIC Number: ED 472167.

Cheng, L. (1997). How does washback influence teaching? Implications for Hong Kong. *Language Education, 11*(1): 38–54.

Cheng, L. (1998). Impact of a public English examination change on students' perceptions and attitudes toward their English learning. *Studies in Educational Evaluation, 24*(3): 279– 301.

Cheng, L. (2000). Washback or backwash: A review of the impact of testing on teaching and learning. (ERIC Opinion papers ED 442280).

Cheng, L., Watanabe, Y., and Curtis, A. (Eds.). (2004). *Washback in language testing: Research contexts and methods.* Mahwah, NJ: Lawrence Erlbaum Associates Inc.

Cheng, L. (2005). Changing language teaching through language testing: A washback study. Cambridge: Cambridge University Press.

Creswell, J. W. (2005). Educational research – Planning, conducting and evaluating quantitative and qualitative research. New Jersey: Pearson.

Dillman, D. A. (1978). *Mail and telephone surveys: The total design method*. New York, NY: John Wiley and Sons.

Grant, S. G. (1996). Locating authority over content and pedagogy: Cross-current influences on teachers' thinking and practice. *Theory and Research in Social Education*, *24*(3): 237-272.

Hamp-Lyons, L. (1997). Washback, impact and validity: Ethical concerns. *Language Testing*, *14*(3): 295-303.

Hamp-Lyons, L. (1999). Implications of the "examination culture" for (English language) education in Hong Kong. In V. Crew, V. Berry & J. Hung (Eds.), *Exploring diversity in the language curriculum* (pp. 133-141). Hong Kong: Hong Kong Institute of Education.

Henrichsen, L. E. (1989). Diffusion of innovations in English language teaching: The ELEC effort in Japan, 1956–1968. New York: Greenwood Press.

Herman, J. L., & Golan, S. (1991). *Effects of standardized testing on teachers and learning-Another look.* CSE Technical Report 334. Los Angeles: University of California. Center for Research on Evaluation, Standards and Student Testing.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement, 30*: 607-610.

Kruger, R.A. (1994). *Focus* groups. *(2nd ed.*). California: Sage Publications, Inc.

Krueger, R. A. (2002). *Designing and conducting focus group interviews.* University of Minnesota. Retrieved February 26, 2007, from http://www.shadac.umn.edu/img/assets/18528/FocGrp_Krueger_Oct02.pdf.

Pallant, J. (2001). *SPSS survival manual: a step-be-step guide to data analysis using SPSS for Windows (version 10).* Australia: Allen and Unwin.

Ostovar Namaghi, S. A. (2006). Forces steering Iranian language teachers' work: A grounded theory. *The Reading Matrix*, 6(2): 90-105.

Read, J. and Hayes, B. (2003). The impact of IELTS on preparation for academic study in New Zealand. *IELTS International English Language Testing System Research Reports, 4*: 153-206.

Shohamy, E. (1993). The power of test: The impact of language testing on teaching and learning. *NFLC Occasional Papers*, ED 362-040.

Shohamy, E. Donitsa-Schmidt S., & Ferman, I. (1996). Test impact revisited: Washback effect over time. *Language Testing, 13*: 298-317.

Spratt, M (2005). Washback and the classroom: the implications for teaching and learning of studies of washback from exams. *Language Teaching Research, 9*: 5–29.

Wall, D. (1996). Introducing new tests into traditional systems: Insights from general education and from innovation theory. *Language Testing, 1*3 (3): 334 - 354.

Wall, D. (1998). Impact and washback in language testing. In Corson, D and Clapham, C. (Eds.) *Language Testing and Assessment*. Vol. 7 of the Encyclopedia of Language and Education. Amsterdam: Kluwer Academic Publishers. 291-302.

Wall, D., & Alderson, J.C. (1993). Examining washback: The Sri Lankan impact study. *Language Testing, 10*(1):41-69.

Wall, D. & Alderson, C. (1996). Examination washback: The Sri Lankan impact study. In A., Cumming & R. Berwick (Eds.), *Validation in language testing* (pp. 194-221). Philadelphia: Multilingual Matters.

Watanabe, Y. (1996a). Does grammar translation come from the entrance examination? Preliminary findings from classroom-based research. *Language Testing, 13*(3): 318-333.

Watanabe, Y. (1996b). Investigating washback in Japanese EFL classrooms: problems of methodology. The language testing cycle: From inception to washback (Series S, Number 13) (pp. 208-239). Canberra, Australia: Applied Linguistics Association of Australia.

Watanabe, Y. (2000). Washback effects of the English section of Japanese entrance examinations on instruction in pre-college level EFL. *Language Testing Update, 27* (Summer): 42-47.

Watanabe, Y. (2004). Methodology in washback studies. In L. Cheng, Y. Watanabe & A. Curtis (Eds.), *Washback in language testing: Research contexts and methods* (pp.19-36). Mahwah, N.J.: Lawrence Erlbaum.

Appendix

Survey Instrument

Part I: Impact of the University Entrance Exam (UEE) on Teachers' Curricular Planning and Instruction.

Directions: In this questionnaire, the term **"UEE"** refers to the **University Entrance Exam**. Please read each of the following statements and write down the number that best describes your perceptions regarding the level of agreement on your activity/time arrangement, your teaching method, materials you are using to teach, your syllabus design, the depth of content you cover, and your classroom assessment. Please place your response in the blank right after the item.

<div>

KEY

6 = Strongly Agree	**5 = Agree**	**4 = Slightly Agree**
3 = Slightly Disagree	**2 = Disagree**	**1 = Strongly Disagree**

</div>

> For example, I like to watch TV. …5.... If you place 5 on this
> statement, it means you **agree** that you like to watch TV.

1. The UEE motivates me to implement activities which are able to promote my students' skills for the university entrance tests.   ……….

2. I rarely use specific language teaching activities to prepare my students just for the UEE.   ……….

3. I arrange my classroom activities carefully in order to achieve the requirements of the syllabus with the aim to help my students perform well on the UEE.   ……….

4. I spend more time teaching grammar structures than the time instructing communication skills because I think grammar is more likely to be tested in the UEE.   ……….

5. I spend more time on the students' test-taking strategies for the UEE, especially when the students are about to take the UEE.   ……….

6. I arrange my classroom activities mostly based on different factors, such as my teaching experience or students' language ability, regardless of the objectives of the UEE.   ……….

7. I use the teaching methods that are more likely to be tested in the UEE.   ……….

KEY

> **6 = Strongly Agree   5 = Agree   4 = Slightly Agree**
> **3 = Slightly Disagree   2 = Disagree   1 = Strongly Disagree**

> For example, I like to watch TV. …5.... If you place 5 on this
> statement, it means you **agree** that you like to watch TV.

8. I change my teaching methods to help students succeed in the UEE. ……….

9. I rarely change my teaching methods just for the sake of helping my students succeed in the UEE. ……….

10. I neglect some teaching methods that I think are inefficient in preparing my students for the UEE. ……….

11. The UEE has little impact on how I teach. ……….

12. I use the books specified by the Ministry of Education in my teaching because they cover most of the content to be tested in the UEE. ……….

13. I include some materials other than the textbooks in my instruction as long as these materials help my students succeed in the UEE. ……….

14. I give my students worksheets that review the expected test content in order to prepare them for the UEE. ……….

15. I have my students practice the most updated mock tests in order to familiarize them with the test format. ……….

16. The UEE has an influence on my decision regarding what supplementary materials to use in my instruction. ……….

17. In devising my teaching syllabus for instruction I look at relevant sources to ensure that I cover the kind of items that are to be tested in the UEE. ……….

18. The UEE affects the process of my syllabus design, including practicing the kind of items that are to be tested. ……….

19. I give little attention to the UEE while designing my teaching syllabus. ……….

20. The UEE has an influence on my decision regarding which language skill is more important to be taught.   ..………

21. I usually modify my syllabus according to the UEE.   ……….

KEY

6 = Strongly Agree	**5 = Agree**	**4 = Slightly Agree**
3 = Slightly Disagree	**2 = Disagree**	**1 = Strongly Disagree**

For example, I like to watch TV.   …5.... If you place 5 on this statement, it means you **agree** that you like to watch TV.

22. I focus more on the skills which are more likely to be tested in the UEE while planning for my curriculum.   ……….

23. I adjust the sequence of my teaching skills based on the UEE.   ……….

24. I think it is important to cover every section of the textbook although some sections are unlikely to be tested in the UEE.   ……….

25. I focus more on certain sections in the textbook because I think the content is more likely to be tested in the UEE.   ……….

26. I skip over certain sections in the textbook because I think their content is less likely to be tested in the UEE.   ……….

27. I include some relevant content in my instruction other than the content in the textbook in order to help my students get a higher score in the UEE.   ……….

28. The UEE has little impact on what I teach.   ……….

29. I mark my students' work by weighting the criteria used in the UEE.   ……….

30. I evaluate my students based on the written and oral tests.   ……….

31. I evaluate my students only based on their performance in the written exam. ……….

32. I include listening skill in my classroom quizzes in order to promote students' communicative abilities.   ……….

33. I include speaking skill in my classroom quizzes in order to promote students' communicative abilities.   ……….

34. I adapt test items from the mock tests developed by the experienced publishers in my classroom quizzes in order to prepare my students for the UEE.   ……….

35. The UEE format affects my assessment rating scales.   ……….

Part II. Factors Associated with Teachers' Perceptions of Impact of the UEE on their Curricular Planning and Instruction.

Directions: Please read each statement below and **write down the number** that mostly describes your current teaching situation regarding the level of agreement on the factors associated with your perceptions of impact of the UEE on your curricular planning and instruction. Please place your response in the blank right after the item.

KEY

6 = Strongly Agree	**5 = Agree**	**4 = Slightly Agree**
3 = Slightly Disagree	**2 = Disagree**	**1 = Strongly Disagree**

For example, I like to watch TV.   …5.... If you place 5 on this statement, it means you **agree** that you like to watch TV.

1. Students' learning attitude has an influence on my curricular planning and
   instruction.   ……….

2. I teach whatever I think is important regardless of whether my students like it or not.
   ……….

3. I spend less time on oral activities because my students are less interested in the
   skill which is unlikely to be tested in the UEE.   ……….

4. I spend more time on written activities because my students are more interested
   in the skill which is likely to be tested in the UEE.   ……….

5. I often try to cover what will be tested, as my students would expect me to do so.
   ……….

6. I prefer my students to perform well in the UEE.   ……….

7. I often feel embarrassed if my students do not perform well in the UEE as compared
   to the other students taught by my colleagues.   ……….

8. I often feel guilty if my students do not succeed in the UEE.   ……….

9. Students' test results influence how people judge me as a good teacher.
   ……….

10. The UEE gives me important feedback on how I teach.   ……….

KEY

6 = Strongly Agree	**5 = Agree**	**4 = Slightly Agree**
3 = Slightly Disagree	**2 = Disagree**	**1 = Strongly Disagree**
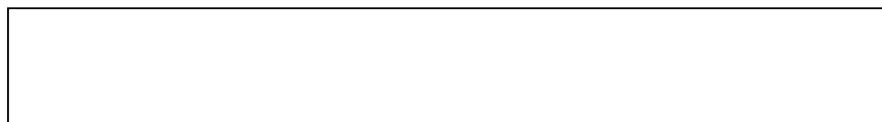
> For example, I like to watch TV.   …5.... If you place 5 on this
> statement, it means you **agree** that you like to watch TV.

11. I face constant pressure to improve my students' test scores because most of my school administrators are more interested in increasing test scores than in improving overall student learning.   ……….

12. I feel pressure from my school principle to improve my students' test scores.   ……….

13. I feel pressure from other teachers to improve my students' test scores.   ……….

14. I feel pressure from students' parents to improve their test scores.   ……….

Part III: Teachers' Expectations of the University Entrance Exam

Directions: Please read each of the following statements and **write down the number** that best describes your expectations regarding the **university entrance exam (UEE)**. Please place your response in the blank right after the item.

KEY

6 = 100 %   **5 =** 80 %   **4 =** 60 %   **3 =** 40 %   **2 =** 20 %   **1 =** 0 %

> For example, I expect to win the race.   …5.... If you place 5 on this
> statement, it means you expect **80 %** to win the race.

1. It would be much better if testing authorities tested students based on communicative principles.   ……….

2. The content of the UEE should be changed to motivate teachers for listening practices.   ……….

3. The content of the UEE should be changed to motivate teachers for speaking practices   ……….

4. The content of the UEE should be changed to motivate students for listening practices.   ……….

5. The content of the UEE should be changed to motivate students for speaking practices.   ……….

6. The UEE authorities should include **listening** tests.   ……….

7. The UEE authorities should include **communicative** items. ……….

8. The UEE authorities should include **reading** tests.   ……….

9. The UEE authorities should include **writing** tests.   ……….

10. It seems that the four skills (listening, speaking, reading, and writing) are well-balanced in the UEE.   ……….

12. The UEE authorities should be willing to reform the current entrance examination system in order to foster positive washback effects that will help improve language education ……….

 Part IV: Teachers' Personal Characteristics and School/Context Characteristics

Directions: Please **write down the number** for the most appropriate response that describes your current teaching profile.

1. Location of the school where you are currently teaching: …..

    1) Suburban   2) Urban

2. School type: ……….

    1) Public   2) Private

3. Your gender: ……….

    1) Male   2) Female

4. Highest degree you have obtained: ……….

    1) BA   2) MA   3) Other: ____

5. Years you have been teaching English (including this year): …….years.

Thank you very much for your participation and contribution!

Discussion Guide for Focus Group Interview

I.   Introduction: Welcome and introduce names. Have the participated teachers share about how they usually plan their curricula.

II. Have the participated teachers complete the "Participation Information Form" with observed background information.

III. Teachers' perceptions about and expectations of the University Entrance Exam.

    1. What factors influence your curricular planning and instruction?

       Probing questions: particularly 1) final term exam format 2) the UEE, 3) textbook, and 4) time constraint.

    2. How do you perceive the impact of the University Entrance Exam on your curricular planning and instruction?

Probing questions: such as 1) your syllabus design, 2) choice of teaching materials other than textbooks, 3) time arrangement / classroom activities, 4) your teaching method, 5) the content you would teach, and 6) the way you would assess your students.

3. How do your personal characteristics impact your curricular planning and instruction?

    Probing questions: such as 1) gender, 2) experience, 3) educational background, and 4) professional dignity.

4. How does your teaching context impact your curricular planning and instruction?

    Probing questions: particularly 1) the location of your school, 2) your school type (private or public), 3) stress from your school principals, and 4) students' learning attitudes.

5. What are your expectations of the UEE?

    Probing questions: particularly 1) reform the current UEE system, 2) listening, speaking, reading, and writing.

IV. Summary and conclusion
    1. Is there any other idea/point that you would like to share with us?
    2. Any other thing that you would like to comment?
 V. Appreciations

Instructions on Systematic and Note-Based Content Analysis Process

I. Start while still in the group
    1. Listen for inconsistent comments and probe for understanding
    2. Listen for vague or cryptic comments and probe for understanding
    3. Consider asking each participant a final preference question
    4. Offer a summary of key questions and seek confirmation

II. Immediately after the focus group

5. Draw a diagram of seating arrangement

6. Spot check tape recording to ensure proper operation

7. Conduct moderator and assistant moderator debriefing

8. Note themes, hunches, interpretations, and ideas

9. Compare and contrast this focus group to other groups

10. Label and file field notes, tapes and other materials

III. Soon after the focus group--within hours analyze individual focus group.

11. Make back-up copy of tapes

12. Listen to tape, review field notes and read transcript if available

13. Prepare report of the individual focus group in a question-by-question format with amplifying quotes

14. Share report for verification with assistant moderator

IV. Later--within days analyze the series of focus groups

15. Compare and contrast results by categories of individual focus groups

16. Look for emerging themes by question and then overall

17. Construct typologies or diagram the analysis

18. Describe findings and use quotes to illustrate

V. Finally, prepare the report

19. Consider narrative style versus bulleted style

20. Use a few quotes to illustrate

21. Sequence could be question by question or by theme

22. Share report for verification

23. Revise and finalize report

Table: Demographic characteristics of surveyed pre-university English teachers

School Location	Number	Percentage
Urban	135	61.40
Suburban	85	38.60
Total	220	100

School Type		
Public	185	84.10
Private	35	15.90
Total	220	100
Gender		
Male	112	50.90
Female	108	49.10
Total	220	100
Highest Degree		
BA	187	85.00
MA	30	13.60
Others	3	1.40
Total	220	100
Teaching Experience		
10 or under 10	37	16.80
11-15	67	30.50
16-20	52	23.60
Over 20	64	29.10
Total	220	100

Table 2: Demographic characteristics of the

interviewed PETs

Characteristics	Number
School location	
Suburban	4
Urban	4
Total	8
School type	
Public	6
Private	2
Total	8

Gender	
Male	4
Female	4
Total	8
Degree	
BA	6
MA	2
Total	8
Teaching experience	
10 or under 10	2
11-15	2
16-20	2
20 or over 20	2
Total	8

Title:
Learning Style Preferences among Iranian Male and Female EFL Students

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Abstract

This study investigated the preferred learning style(s) of Iranian EFL students who were studying English at EFL institutes in different cities in Iran. An overall of 300 participants were selected from 6 different cities including Shiraz, Isfahan, Tehran, Mashhad, Araak, and Bushehr, 150 were female and 150 male students. The data on learning styles were collected by using an existing and well-tested instrument-- Reid's Perceptual Learning Style Preference Questionnaire (PLSPQ, 1987) which was translated into Persian and checked by three professors at Shiraz University for the correctness of the translation. Findings of the study indicated that the auditory learning style, the visual learning style, the tactile learning style, and the kinesthetic learning or hands on activity learning were preferred by the students as the major styles. Both female and male students chose the individual learning style and the group learning style as one of their minor learning styles. The study also revealed that males were more interested in tactile, group, and kinesthetic learning styles while the female students showed less preference toward these learning styles specially the

group learning style. The implication of the study is that students should be introduced to different learning styles so that this familiarity can ease their way of learning a foreign language.

Key words: Language learning styles, auditory learning style, the visual learning style, the tactile learning style, and the kinesthetic learning

1. Introduction

Language learning styles, defined as natural, habitual, and preferred way(s) of absorbing, processing, and retaining new information and skills (Reid, 1995), have aroused a great deal of attention and have been the focus of a number of L2 studies in the years following the publication of Reid's influential work on the topic in 1987.

Different authors and researchers define learning styles differently. According to Reid (1987), the different ways of how a learner acquires, retains and retrieves information are collectively termed as learning styles or learning preferences. She contends that learning styles are internally based characteristics, often not perceived or consciously used by learners, for the intake and comprehension of new information. In general, students retain these preferred learning styles despite the teaching styles and classroom atmospheres they encounter, although the students may, over time, acquire additional styles.

Brown (2000) defines learning styles as the manner in which individuals perceive and process information in learning situations. He argues that learning style preference is one aspect of learning style, and refers to the choice of one learning situation or condition over another.

Celcia-Murcia (2001) defines learning styles as the general approaches—for example, global or analytic, auditory or visual—that students use in acquiring a new language or in learning any other subject.

2. Literature Review

2.1. Researches Carried Out on Learning Style Preferences

A significant study done on learning style preferences was done by Reid (1987). By using Perceptual learning style preference Questionnaire (PLSPQ) she asked 1388

students to identify their perceptual learning style preferences. The results of the study showed that ESL students strongly preferred kinesthetic and tactile learning styles. Most groups showed a negative preference for group learning. Graduated students indicated a significantly greater preference for visual and tactile learning than undergraduates. Both graduates and undergraduates strongly preferred to learn kinesthetically and tactilely. With regard to the effect of sex, males preferred visual and tactile learning significantly more than females. With respect to age, the results showed that the older the student, the higher the preference means for visual, auditory, kinesthetic, and tactile learning. Regarding language background, Korean students were the most visual in their learning style preferences; they were significantly more visual than American and Japanese students. Arabic and Chinese language groups were also strong visual learners. Reid came to the conclusion that the learning style preferences of nonnative speakers differ significantly from those of native speakers; that ESL students from different language backgrounds sometimes differ from one another in their learning style preferences; and that variables such as sex, length of time in the United States, length of time studying English in the United States, field of study, level of education, TOEFL score, and age are related to differences in learning styles; and modifications and extensions of ESL student learning style may occur with changes in academic environment and experience. Based on the findings of the survey done by Reid (1987), she distinguished four perceptual learning modalities:

1) Visual learning (for example, reading and studying charts)

2) Auditory learning (for example, listening to lectures or audiotapes)

3) Kinesthetic learning (involving physical responses)

4) Tactile learning (hands-on learning, as in building models)

Hyland (1993) replicated the study done by Reid (1987) on the learning style preferences of ESL learners in the United States. Reid's questionnaire asking students to identify their perceptual learning preferences was administered in either Japanese or English to 440 students at 8 universities in Japan. His study confirmed Reid's findings that Japanese learners appear to have no strong learning style preferences, a fact which might help explain the language learning difficulties experienced by many Japanese students. Moreover, because the visual modality is a negative style for many Japanese, many students are unable to take full advantage of an education system which emphasizes the importance of reading texts, composition and written grammar exercises. On the other hand, students with mixed modality strengths are able to

process information in a number of ways and often have a better chance of success than those with single modality strength. The research suggests that while Japanese learners have no major learning preferences, they appear to have three modalities (auditory, tactile, and kinesthetic) and individual learning as their minor styles.

Wintergerst and DeCapua (1998) attempted to identify the learning styles of ESL students through an analysis and comparison of participants' responses to three elicitation instruments: Reid's (1987) PLSPQ, a background questionnaire, and data from oral interviews. The participants of the study were undergraduate Russian-speaking students enrolled in credit-bearing intermediate or advanced ESL courses. There were 32 participants at two private institutions of higher learning in metropolitan New York (a major university in New York City and a small college on Long Island). Findings from the data indicated that the preferred major learning style of these Russian-speaking students was kinesthetic, closely followed by auditory. In addition, the results of the data suggested that the learning style preferences of these participants reflected more their personal learning style preferences than the influence of cultural traditions. This finding was an outcome of comparing the participants' PLSPQ responses with those from the oral interviews of a sampling of the population.

In a second follow-up study, Wintergerst, A. C., & DeCapua, A., & Itzen, R. C. (2001) expanded upon the first study by examining the difficulties of conceptualizing learning style modalities and of developing assessment instruments for ESL students that actually measure what they claim to do. The authors expanded the focus of their study to include university-level ESL students representing four language groups at two institutions of higher learning in the metropolitan New York area. The sample consisted of 100 ESL students, 55 females and 45 males, enrolled in credit-bearing intermediate or advanced ESL courses. The students ranged from 17 to 49 years old, with a mean age of 21.5. The four language groups included Chinese (51), Korean (23), Spanish (11), and Russian (15). Wintergerst et al. examined the validity of the hypothesized factor structure of Reid's PLSPQ through exploratory factor analysis. Exploratory factor analysis was used to explore the dimensionality of the PLSPQ. Results showed that specific survey items did not necessarily group into factors conceptually compatible with Reid's learning style model. This, however, is not to say that unconfirmed hypothesized model resulting from factor analysis invalidates the model but only different populations may produce other results.

Riazi & Riasati (2006) carried out a study in Shiraz EFL institutes. The study aimed at investigating the language learning style preferences of Iranian EFL learners, and the degree of teachers' awareness of them. To this end, two hundred and nineteen language learners (121 males and 98 females) from different levels of instruction and different ages (14-44), studying at two language institutes took part in the study. As a further step, 14 teachers working with the same students were called for cooperation. A 13-item language learning preference questionnaire adopted from Brindley (1984) was employed to elicit information for the study. Results showed the learning preferences of students in different areas. Results also indicated that teachers are aware of their students' learning preferences in some cases, but unaware in some others. Therefore, they concluded that there needs to be a closer cooperation between teachers and students in some instances.

It was felt that because the Riazi and Riasati study was limited in scope and also a larger and more thorough study to depict Iranian student's learning style preferences was needed, the presents study's aim was to cover and expand the scope of the study. To reach this aim, the authors of this study increased the sample size and the areas of the study.

3. Objectives the Study

The present study attempts to study the preferred learning style(s) of the Iranian EFL students who are studying English at EFL institutes across the country. Also to determine the preferred learning style(s) of male and female students, and further to examine whether the learning style preferences of male and female EFL students differ or not. Finally, if student's geographical location affects their preference for learning styles.

The following questions are therefore to be answered by this study:
1. What are the overall learning style preferences among Iranian male and female EFL students?
2. Are there any differences between the preferred learning style(s) of Iranian male and female EFL students or not?
3. Do the learning style preferences of Iranian EFL students differ with regard to different geographical locations (cities/provinces) in Iran?

4. Method

4.1 Participants

The participants in this study were selected from 6 cities in Iran including Shiraz, Isfahan, Tehran, Mashhad, Araak, and Bushehr. The reason for such a selection was the geographical location of these cities. Bushehr is located in the south of Iran, Shiraz at the southwest, Isfahan and Araak at the center, Tehran near the north, Mashhad at the northeast. Furthermore, these cities are all the centers of their provinces. The other reason for choosing these cities was the accessibility of language institutes for data collection. Two EFL institutes were chosen from each city, one of them a male attending and the other a female attending institute. The participants were between 17 to 20 years of age and were high school students attending the EFL institutes. Each class consisted of an average of 25 students, meaning 50 students from each city. Overall 300 students took part in this study, and of these 300 participants, 150 were female and 150 were male students.

4.2. Instruments

Data on learning styles were collected by using an existing and well-tested instrument, Reid's Perceptual Learning Style Preference Questionnaire (PLSPQ, 1987) which was translated into Persian and checked by three professors at Shiraz University who were experts in research methodology and English language. The reason for using a translated version was to facilitate the data collection process and remove any probable language barriers. This self-report questionnaire helps us identify the ways in which learners learn best and prefer to learn. The 30 statements in the questionnaire cover Reid's six learning style preferences, with five statements for each preference. The six learning style preferences are visual, auditory, tactile, kinesthetic, group, and the individual learning style.

The reason for choosing Reid's PLSPQ for this study was because that this questionnaire was used more frequently than any other questionnaire in this field of study in also the validation and reliability of it.

4.3. Data Collection Procedures and Analysis

The data for this study was collected through Reid's PLSPQ questionnaire (1987), which uses the Likert Scale for the statements.

Before administering the questionnaire, a brief instruction was given to the participants telling them about the purpose of the self-reporting questionnaire and asking them to respond to each statement quickly. It took about 15 minutes for the students to answer the questionnaire items and then the sheets were collected.

The data which were collected through the PLSPQ were subjected to descriptive statistics utilizing minimum, maximum, mean, and standard deviation. They were, also, subjected to the independent group t-test.

5. Results and Discussion

This section presents the results of the study and discusses the findings. The first part deals with the findings about the overall learning style preferences of the Iranian EFL students for the six categories. The second part describes the male and female preferred learning style(s). The last part is concerned with the findings regarding geographical locations. The obtained results are tabulated and presented in related tables and figures. Then the findings are discussed and interpreted.

5.1. Overall Learning Style Preferences of Iranian Male and Female EFL Students.

Table 5.1. Mean Scores on Learning Style Preferences of Iranian Female and Male EFL students

	Auditory	Kinesthetic	Visual	Tactile	Group	Individual
Male	19.14	19.14	18.86	19.76	18.02	16.12
Female	18.78	18.46	18.60	18.56	16.98	16.77
Total Mean	18.96	18.80	18.73	19.16	17.50	16.44
Type	**Major**	**Major**	**Major**	**Major**	**Minor**	**Minor**

The point should be mentioned that according to scoring procedure for PLSPQ, mean score 17.91 and above is considered Major Learning Style Preference; mean score 15.91 to 17.90 is considered Minor Learning Style Preference; Mean score 15.91 or less is considered Negative Learning Style Preference. The cutting point of 17.91 that was used for Major Learning Style Preference was the Grand mean, and one standard deviation below this was used for recognizing the area of Minor

Learning Style Preference and the area below this part was used to define the Negative Learning Style Preference as used by Reid (1987).

Now we will have a look at the results of each learning style preference individually:

By looking at Table 5.1 we see that the auditory learning style was preferred as a major style by the students (total mean = 18.96). This shows that the students prefer to learn by listening. The visual learning style was also chosen as a major learning style among the participants (total mean= 18.73). These students usually enjoy reading and prefer to see the words that they are learning. They also like to learn by looking at pictures and flashcards.

Having a look at the means reveals that tactile learning style is the most preferred style among the participants (total mean= 19.16). These students learn by touching and manipulating objects. They often learn inductively rather than deductively. Kinesthetic learning or hands on activity learning was chosen as a Major learning style preference by the students (total mean= 18.80). These students like movement and need frequent breaks in activities. They are often physically adept. They learn through experience and physical activity.

Both female and male students chose the individual learning style as one of their minor learning styles (total mean= 16.44), meaning that this style was less preferred among the other learning styles. The group learning style was also chosen as a minor learning style by the students (total mean= 17.50). These learners prefer studying with others; group interactions help them learn.

By looking at the results of individual learning and group learning, it can be concluded that learners seem to favor a communicative approach to language learning. It seems they feel more comfortable, productive, and relaxed by working in other ways, e.g. in pairs, or in groups where their voices would be heard, and views listened to and valued.

It is worth to mention that comparing the preferred learning styles of the Iranian EFL students with the preferred learning styles of EFL learners of other nations is the number of the major preferred learning styles of the Iranian EFL students (Auditory, Kinesthetic, Tactile, and Visual).Also Iranian EFL students favored two minor style (Group and Individual learning styles), but no negative style. As mentioned in the literature review, the study done by Wintergerst and DeCapua (1998) showed that Russian students favored the kinesthetic learning style closely followed by the

auditory learning style. Also Reid (1987) reported that Chinese university students in the U.S preferred Kinesthetic and tactile style and disfavored the group learning style. Jones (1997) stated that his Chinese (Taiwan) university students (N = 81) favored Kinesthetic and Tactile styles, and disfavored Individual styles. The Singapore university students in Chu & Chew's 1997 study (N = 318) favored Kinesthetic and Tactile styles, and did not disfavor any styles. Two empirical studies that investigated non-Chinese EFL students based on Reid's typology are Rossi-Le (1995) and Hyland (1993). Rossi-Le surveyed adult L2 immigrants in the US. They favored Kinesthetic and Tactile styles and did not disfavor any styles. Hyland's Japanese learners favored Auditory and Tactile styles, and disfavored Visual and Group styles. Hyland also reports that senior students favored kinesthetic styles.

5.2. Male and Female Preferred Learning Style(s)

To find out if the differences between male and female students' in terms of their preferences for learning styles were significant or not, Independent t-tests were run. Results of the t-tests are presented in Table 5.2:

Table 5.2: Results of the t-tests for Male and Female Preferred Learning Style(s)

	sex of respondent	N	Mean	Std. Deviation	Std. Error Mean
GROUP	male	150	18.0200	4.63496	.37844
	female	150	16.9867	4.32099	.35281
AUDITORY	male	150	19.1400	2.98549	.24376
	female	150	18.7800	3.43466	.28044
VISUAL	male	150	18.8667	2.83001	.23107
	female	150	18.6067	3.09990	.25311
INDIPENDENT	male	150	16.1200	4.40701	.35983
	female	150	16.7733	5.49697	.44883
KINESTHETIC	male	150	19.1400	3.26262	.26639
	female	150	18.4600	2.57147	.20996
TACTILE	male	150	19.7600	4.11688	.33614
	female	150	18.5667	3.68093	.30055

As it can be seen in table 5.2, both male and female participants chose the auditory learning style as one of their major learning style preferences. According to table 4.2 there is no mean difference between male and females in this aspect (p=0.333 > 0.05). The Visual learning style was also chosen as a major learning style

among the participants (total mean= 18.73). Here we also see that there is no meaningful significance between female and male students ($p=0.449 > 0.05$).

There was a meaningful significance between male and female students in the tactile learning style. This major style ($p=0.009 > 0.05$). The male students' total mean was 19.76, but the female's total mean was 18.56, meaning that this style was more preferred by male students. Kinesthetic learning or hands on activity learning was chosen as a Major learning style preference by both female and male students (total mean= 18.80). There was a meaningful significance between male and female students ($0.046 > 0.05$). The male students' total mean was 19.14, but the female's total mean was 18.80, meaning that this style was more preferred by male students.

Both female and male students chose the individual learning style as one of their 2 minor learning styles (total mean= 16.44), meaning that this style was less preferred among the other learning styles and we see that there is no meaningful significance between the male and female students ($p=0.257 > 0.05$).

There was a meaningful significance in the group learning style among female and male participants ($p=0.47 > 0.05$). The male students' total mean was 18.02, but the female's total mean was 16.98, meaning that this style was more preferred by male students as one of their major styles but the female students chose it as one of their minor ones.

5.3. Findings Regarding Geographical Locations

Table 5.3 presents the results of learning style preferences for the six categories in the six cities.

Table 5.3: Mean of learning style preferences of students in the six cities.

City	N	Tactile	Auditory	Kinesthetic	Visual	Group	Individual
Araak	50	20.02	19.24	19.42	18.94	17.96	15.48
Bushehr	50	20.12	19.36	19.96	19.72	18.38	15.52
Isfahan	50	18.40	19.06	18.14	18.36	16.86	16.70
Mashhad	50	19.24	18.88	18.62	17.98	16.80	17.10
Shiraz	50	18.54	17.26	17.84	18.72	15.68	17.90
Tehran	50	18.66	19.96	18.82	18.07	19.34	15.98

As we can see in table 5.3, the tactile learning style is preferred as a major learning style by all the selected locations (total mean> 17.91). These students learn by touching and manipulating objects. They often learn inductively rather than

deductively. They tend toward psychomotor over abstract thinking, and they also prefer personal connections to topics. Moreover, they follow directions they have written themselves/ that they have rehearsed. We should bear in mind that these students learn best through the use of creating maps, building models, art projects, using manipulative, drawing, designing things, and writing/tracing.

The auditory style is preferred as a minor style in Isfahan (total mean= 17.26), but a major style in the other selected locations shows that the students prefer to learn by listening. They also enjoy conversations and the chance for interactions with others. They also prefer listening and taking notes, listen for patterns, consult peers to ascertain that they have the correct details, can recall what they have heard, and can follow oral directions. These students prefer activities such as discussion, dialog, debate, memorization, phonics, oral reading, hearing anecdotes or stories, listening to tapes or CDs, and also cooperative learning groups.

The kinesthetic learning style is considered as a minor learning style in Fars (total mean<17.91), but preferred as a major learning style in the other selected locations (total mean>17.91). These students learn best through the use of playing games, role playing, read body language/gestures, mime, drama, and learn or memorize while moving (pacing, stationary bike, finger or whole body games).

The visual learning style is preferred as a major learning style in all the selected locations (total mean>17.91). These students usually enjoy reading and prefer to see the words that they are learning. They also like to learn by looking at pictures and flashcards. They learn by observation, can recall what they have seen, can follow written or drawn instructions. They also like to read and use written notes. These students benefit by visualizing, watching TV/video/films. These students learn best through the use of charts, graphs, diagrams, and flow charts, sight words, flashcards, visual similarities and differences, pictures and graphics, maps, silent reading, written instructions, and computer assisted learning.

The individual learning style is preferred a negative learning style among the students of Araak, Bushehr (total mean< 15.91) and a minor learning style among the students of Tehran, Isfahan, Tehran, Mashhad, and Fars. The group learning style is considered as a negative learning style in Fars (total mean<15.91). The students of Mashhad, and Isfahan preferred it as a minor learning style (total mean < 17.91), But considered as a major learning skill in Araak and Tehran (total mean > 17.91).

6. Conclusions

Some major points concluded from the study are summarized below:

1) Regarding the overall learning style(s) of Iranian EFL students, The Auditory, Visual, Kinesthetic, and Tactile learning style were preferred as Major learning styles. The Group learning style and also the Individual learning style are chosen as Minor learning style. It is worth noting that none of the styles were chosen as a negative learning style by the participants.

2) Concerning Male and female preferred learning style(s), The male EFL student preferred the Auditory, Visual, Kinesthetic, Tactile, and Group learning styles as their major learning styles and the Individual learning style as a Minor learning style. However, the female EFL students preferred the Auditory, Visual, Kinesthetic, and Tactile learning styles as their Major learning style but the Group and Individual were preferred as their Minor learning style.

3) Findings regarding geographical locations:

The Tactile learning style was preferred as a major learning style in all 6 cities. In all the cities except Isfahan the auditory learning style was preferred as a major learning style. The EFL students of Isfahan preferred it as a minor learning style. In all the cities except Shiraz the kinesthetic learning style was preferred as a major learning style. The EFL students of Shiraz preferred this learning style as a minor learning style.

The visual learning style was preferred as a major learning style in all 6 cities. The Group learning style was preferred as a major learning style in Araak, Bushehr, and Tehran. It was preferred as a minor learning style in Isfahan and Mashhad. The EFL students of Shiraz preferred this learning style a negative one. The EFL students of Araak and Bushehr preferred the individual learning style a negative learning style, but the students of Tehran, Shiraz, Isfahan, and Mashhad preferred it as a major learning style.

7. Pedagogical Implications

With regard to the results of the study, some practical implications can be provided which may be useful to EFL institutes and EFL teachers and students of Iran in general.

1. It is worth to mention that students do not like to work individually. In other words, some effort should be done to encourage the students to work in groups.

2. Students should be introduced to the learning styles so that this familiarity can ease their way of learning a foreign language.

3. Teachers should not stick to the textbooks. Supplementary materials such as short stories, films, tapes, handouts and so on should be used. Furthermore, EFL institutions should install modern language laboratories.

4. Teachers should pay attention to the fact that besides audio material, the students also have the need to watch video material as well in order to see what happens in different situations.

5. Teachers should bear in mind that students have to interact with each other in order to get familiar with interactive skills.

6. Teachers should encourage the students to discover their own learning preferences to facilitate their learning.

7. Teachers from different geographical locations in the country can organize their syllabus upon the specified learning styles of that location in order to achieve better results and facilitate the learning for the students of that specific location.

References

Brown, H. D. (2000). *Principles of language teaching and learning* (4th ed.). White Plains, NY: Longman.

Chu, L. & Chew, M.L. (1997) How do we learn best? Preferences and strategies in learning and teaching styles at the National University of Singapore. Paper presented at Singapore Tertiary English Teachers Society/National Tsinghua University Joint Seminar, Hsin Chu, Taiwan.

June 1997. (Note: A modified version of this paper appears in *Asian Journal of English Language Teaching,* 9, 1-21, 1999).

Celce-Marcia, M. (2001). *Teaching English as a second or foreign language* (3rd ed.). Dewey Publishing Services: NY.

Hyland, K. (1993). Culture and learning: A study of the learning style preferences of Japanese students. *RELC Journal,* 24 (2), 69-91.

Reid, J. (1996) A learning styles unit for the intermediate ESL/EFL writing classroom. *TESOL Journal* Autumn: 42-7.

Reid, J.M. (1987). The learning style preferences of ESL students. *TESOL Quarterly*, 21 (1), 87-111.

Reid, J.M. (ed.) (1995) *Learning styles in the ESL/EFL classroom.* Boston: Heinle and Heinle.

Riazi, A.M., & Riasati, M.J. (2006). Language learning style preferences: A student's case study of Shiraz EFL institutes. *Asian EFL Journal,* 9, (1). 97-125.

Rossi-Le, L. (1995). Learning styles and strategies in adult immigrant ESL students. In J.M. Reid (ed.), *Learning styles in the ESL/EFL classroom*. (pp.119-25). Boston: Heinle and Heinle

Wintergerst, A. C., & DeCapua, A., (1998). *Exploring learning styles of Russian ESL students.* Paper presented at the 32nd Annual TESOL Convention, Seattle, WA.

Wintergerst, A. C., & DeCapua, A., & Itzen, R. C. (2001). The construct validity of one learning styles instrument. *System, 29*, 385-403.

Iranian EFL Journal

Title:

The effect of anxiety on reading comprehension across genders:

A case of Iranian EFL learners

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Abstract

The present study aimed at investigating the relationship between anxiety and reading comprehension, on the one hand, and the role of gender in the amount of anxiety experienced when reading an English text, on the other. In doing so, sixty junior students (30 males and 30 females) served as subjects of the study. The statistical analysis of participants' scores in reading comprehension tests and Foreign Language Reading Anxiety Scale (FLRAS) showed a rather significant negative correlation between anxiety and reading comprehension. When the participants were divided into male and female groups, the correlation between the two variables was significantly negative only for the latter group (i.e. females), however. The comparison of anxiety scores showed no significant difference between males and females. Nevertheless, the comparison of choice distribution using Mann-Whitney Test showed that females were significantly more anxious than males concerning item 6 of FLRAS that emphasizes unknown structures in a reading passage.

Key Words: anxiety, reading comprehension, gender, FLRAS, topic familiarity, language learning

Introduction

No language teaching method would be successful if it ignores the learners' feelings. Human beings are emotional creatures and this emotional aspect is interrelated to cognitive aspect, which is to say when learners think, they feel as well. There is a mutual relationship between these two aspects and a perfect learning occurs when they are considered as complements not separate phenomena. In the last few decades, investigation of negative effects of emotions on foreign/second language learning has become an important concern of many researchers (Gardner, 1985; MacIntyre and Gardner, 1991; Onwuegbuzie, Bailey, and Daley, 1999; Saito & Samimy, 1996). Interest in the role of affective aspects in education, in general, was implicit in the first part of twentieth century and this interest culminated with the advent of humanistic approach in 1960's.

One of the affective aspects of human behavior that has been explored in the study of second/foreign language learning is anxiety. Language learners are reported to experience high degree of anxiety and foreign language classes are found to be the most anxiety-provoking courses for students (Horwitz, Horwitz, & Cope, 1986). The situation is even more challenging for language learners at university level because for the first time they experience the new environment of university which is by itself anxiety-inducing.

Statement of the problem

Nowadays, one of the greatest concerns of foreign/second language teachers is the creation of low-anxiety and comfortable classes. Thus, one of the essentials in achieving the goal (having comfortable classrooms) is the exploration of the nature of students' anxiety. In so doing, the use of qualitative data gathering techniques, in parallel to quantitative ones, in the field of reading-related anxiety, helps a better investigation of anxiety, its sources, and possible treatments.

In the same line of argumentation, gender is another factor that deserves more attention in studies both related to anxiety and reading comprehension. As Brantmeier (2004) mentions, "…only a small number of L2 reading studies have been conducted where gender is examined in the procedures and analysis…"(p.4). University classes

are coeducational in Iran and there is no difference between males and females in terms of reading material, teaching methodology, and evaluation.

One further finding was that cultural diversities may play an essential role in studies related to reading anxiety, in contrary to the general foreign language anxiety. After reviewing the related literature, the authors of the present research could not find any study regarding the relationship between anxiety and reading comprehension in Persian-speaking Iranian EFL (English as a Foreign Language) learners.

Research questions

The present study was conducted to find answers to the following questions:

1. Is there any relationship between reading anxiety and reading comprehension among Iranian EFL learners at university level? If so, what are possible sources of Iranian EFL learners' anxiety of reading comprehension?

2. Which group of FL learners is more anxious when reading in English: males or females?

Review of literature

One of the major aspects of the emotional side of human behaviour which has received considerable attention is anxiety. The complexity of anxiety in general and language anxiety in particular has brought about different perceptions and definitions of this construct. Perhaps, these variations in definitions and perspectives may imply the need for further research concerning this phenomenon. Scovel (1978, p.134) claims that anxiety is associated with feeling of uneasiness, frustration, self-doubt, apprehension or worry. In a rough classification, psychologists have three perspectives toward anxiety: trait anxiety, state anxiety and situational anxiety.

Language anxiety is known to be a situation-specific anxiety by some scholars (Backman, 1976; Tucker, Hamayan, and Genesee, 1976; Phillips, 1992). Observations show that psychological and physiological symptoms which anxious foreign language students experience do not differ from other situational anxieties. It can be defined as a situational feeling of uneasiness, specifically related to the language learning context. Horwitz, Horwitz and Cope (1986) are the first researchers to treat and conceptualize foreign language anxiety as a separate and distinct phenomenon specific to language learning context. In this regard, another noteworthy point is that the participants' familiarity with the topic of the passage and the background

knowledge are strongly culture-related. Research findings show that passages that contain native-culture-related materials cause better and faster comprehension in students. Johnson (1981), for example, conducted a study with 46 Iranian intermediate/advanced ESL students and 19 American subjects at university level to investigate the effect of familiar cultural materials and complexity of English language on reading comprehension. The results showed that the culturally familiar text was comprehended more by members rather than non-members of each cultural group.

Kim (2001) argues that of the two constructs, namely motivation and anxiety, the former has subsumed the latter in research studies before Horwitz et al.'s (1986) seminal paper in which they reported that foreign language anxiety shares some characteristics with three other performance anxieties: (a) communication apprehension; (b) test anxiety; and (c) fear of negative evaluation. They believed that these three components are the sources of foreign language anxiety.

Early research on FL anxiety mostly considered speaking and listening as most anxiety provoking skills in language classrooms (Aida, 1994; Horwitz, et al. 1986; Philips, 1992). However, for its crucial role in language learning, interest in investigating second/foreign language reading comprehension skill has recently increased dramatically (Bernhardt, 2003 and 2005; Brantmeier, 2003; Carrell, 1983). Saito, Horwitz, and Garza (1999, p.202) conceptualized reading anxiety as being distinguishable but related to general language anxiety. In an introduction to their work, Saito et al. (1999:203) contend that two aspects of reading comprehension are highly potential for creating anxiety: (a) Unfamiliar scripts and writing systems and (b) Unfamiliar cultural material. Of these two factors, they claim that the former is more immediate than the second because when reading, readers first encounter the symbols and decode them into sounds. Matsuda and Gobel (2001, as cited in Matsuda and Gobel 2004, p.22), conducted a similar study targeting English majors in a Japanese university and found no statistically significant relationship between the FLCAS and the FLRAS (Foreign Language Reading Anxiety Scale) as a whole; however, by conducting factor analyses they found that some subcomponents of the two scales were closely related.

One of the recent conceptualization of second language reading is suggested by Bernhardt (2005). Her recent model, like previous one, is three dimensional and includes literacy knowledge, language knowledge (with emphasis on vocabulary), and

unexplained and under investigation facets, although she mentions some shortcomings of her previous model. She posits that reading is a juggling and switching process in cognition and knowledge sources operate synchronically, interactively, and synergistically.

In studies related to anxiety and language learning, there has been some attempt, though not seemingly sufficient, to consider the gender differences. If there is a difference between males and females in the amount of anxiety they experience and the relationship of their anxiety with their performance, especially in coeducational systems, different treatments may be necessary to help these two groups. As Brantmeier (2004) contends "gender as a variable in L2 reading deserves more attention" (p.4).

Zhang (2000) in a study of 145 Chinese language learners who were studying ESL in Singapore found that females and males experience different degrees of anxiety with respect to three items of FLRAS. Later, Kitano (2001) investigated the anxiety of college Japanese language learners and reported a correlation between anxiety and self-perception in male students.

MacIntyre, Baker, Clement, and Donovan (2002) studied the effects of language, sex, and grade on willingness to communicate, anxiety, and other variables among seventh to ninth graders. They found that although boys' overall willingness to communicate and anxiety levels remain constant across the three grade levels, girls show an increase in willingness and decrease in anxiety from grade eight to grade nine.

In another study, Machida (2001, as cited in Matsuda & Gobel, 2004) examined FL Japanese language class anxiety based on gender, nationality, first language, and prior foreign language experience. She found significant differences for gender (female learners were more anxious than male counterparts) and for first language (Chinese and English speakers displayed higher anxiety than other language subgroups).

In the same vein, Pappamihiel (2002) conducted a study with 178 middle-school Mexican immigrant students attending school in the U.S. and found a significant gender difference in amount of anxiety in mainstream classes. In her study, girls displayed significantly more language anxiety than boys in mainstream classes. Pappamihiel (2002) also mentions some studies on psychology (Bernstein, Garfinkel, & Hoberman, 1989; Gierl & Rogers, 1996; Plancherel & Bolognini, 1995) in which

girls proved to be more anxious than boys. However these studies do not seem to consider language anxiety as being different from other anxieties.

Methodology

The present study used both quantitative and qualitative techniques. The data was collected during the academic year. The study was conducted with the approval and cooperation of the subjects and the course instructor. The quantitative aspect of the study was mainly deductive in that the goal was to test some hypotheses concerning foreign language acquisition.

Subjects and setting

The study was conducted at Izeh[2] branch of Azad University. Sixty junior students (30 females and 30 males) were selected to serve as subjects of this research. Their ages ranged from 22 to 30 years. The subjects had passed four courses of reading including: Reading comprehension (1), Reading comprehension (2), Reading comprehension (3), and Advanced reading. In order to determine the homogeneity of the participants, in terms of reading comprehension proficiency, only those students who scored 13-17 in "advanced reading comprehension" course were selected. Almost 64% of university students in Iran are girls. About the same proportion was present as subjects of the present study. Of 118 junior students, 73 students were female and 45 students were male.

Instruments

The instruments used in the study were as follows:

1. *Reading comprehension test:* Part of a short story was adopted from Oral Reproduction of Stories (Birjandi and Nowruzi 1993). Students were assumed to study the book during the following semester. The story was Art for Heart's Sake, written by Rube Goldberg (1883-1970), an American writer. Since it was not possible to use the whole story, the first 809 words (two pages, 77 lines, 3822 characters) were retyped and duplicated to be utilized as the main passage. The text included the glosses provided in the book. In order to ensure that the reading assessment task provides a true picture of reading comprehension, subjects were required to do two

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[2] Izeh is a city in the northeastern part of Khuzestan.

tasks after reading the vignette: written recall task and multiple-choice questions. In written recall task, the participants were asked to read the text and write down as many ideas and details as they could remember. Further, inter-rater reliability for written recalls was 0.89. Further, inter-rater reliability for written recalls was 0.89. After consulting a third rater, the disagreement was resolved and one hundred percent agreement was achieved. In case of multiple-choice questions, however, ten four-choice items were developed following Farhady, Jafarpour, and Birjandi's (1994) guidelines with each question having only one correct answer. The test demonstrated an acceptable reliability (Cornbach's alpha internal consistency coefficient: 0.91) in a pilot study conducted before the main study.

2. *Topic familiarity gauge:* In order to control the familiarity of both groups (males and females) with the topics subjects were asked to self-report their degree of familiarity with the topic of the passage after reading it. A five-point Likert scale that included five options (including "really familiar", "familiar with most", "familiar with some", "not very familiar", and "not familiar") was utilized, with a score range from 1 to 5. The lower the mean score the more familiar the subjects were with the topic.

3. *FLRAS (Foreign Language Reading Anxiety Scale):* In order to measure the amount of subjects' reading anxiety, the Foreign Language Reading Anxiety Scale (FLRAS) developed by Saito, Horwitz, and Garza (1999) was utilized. This gauge was made to measure foreign language learners' anxiety over various variables of reading (vocabulary, grammar, pronunciation, reading strategies, etc.), their perceptions of reading difficulties in their target language (here English), and their perception of relative difficulty of reading as compared to the difficulties of other language skills. It includes 20 items, scored on a five-point Likert scale. The Cornbach's alpha internal consistency coefficient (i.e. reliability) of the FLRAS was 0.73 in the present study. This figure seems an acceptable reliability in statistical analysis and shows that the anxiety scale has functioned well in terms of consistency. Internal consistency coefficient of the FLRAS in a study of 252 university students in English classes in Japan was 0.71 that is comparable to the present finding (Matsuda and Gobel 2004:26).

4. *Guided interview (semi-open interview):* Because of the limitations of quantitative studies in terms of interpretation and discussion, three male and three female subjects were randomly selected and were interviewed individually to find the potential sources of anxiety among them. Before the main interview, in a pilot study using open-ended questions, sixty-nine students were asked about the difficulties they experience in reading classes and the sources of apprehension when they read English texts. This piloting provided a more focused perspective towards the main interview. Inspired by results of pilot study, some questions of the interview were prepared in advance to guide and structure the interview. The questions were mainly about (a) the reasons for being anxious about reading in English, (b) the problems they had concerning reading in English classrooms, (c) the role of familiarity with culture and writing system of English. The subjects' responses were transcribed as the interview proceeded. It was not practical to write down the entire interviews; therefore the observers tried to put down the main points. Sometimes new questions were posed based on the interviewees' responses and sometimes they were asked to provide examples and explanations. The researchers did not record participants' voice, to stop them from feeling uncomfortable with the presence of a tape recorder in the classroom.

Procedures

The study was conducted in four stages. In the first stage, with the approval and cooperation of subjects' instructor and the Head of the Language Department, subjects were gathered in a classroom and asked to fill FLRASs. Twenty statements in FLRAS were read and translated in Persian one by one to the subjects in order to clarify any possible ambiguity in comprehension of the content. Students were asked to mark their first impression about the statements on the scale and were ensured that the study was completely confidential.

The second stage began immediately after the last subject completed the FLRAS. In this stage, the reading comprehension test was given to the subjects. Then, they were instructed to write down as many main ideas and details as they could recall in their native language after reading the passage without looking back at the text once they finished reading. They were told that the quantity of correctly recalled information was important and how well they wrote would not matter. After

completing the recall task, the subjects were required to answer ten multiple-choice questions about the passage.

In the third stage, subjects were asked to fill in the topic familiarity scale. This was to compare the familiarity of the two groups with the topic of the passage. Subjects were asked to determine their degree of familiarity with the topic of the passage by selecting one of five options in the gauge.

The last stage began after a half-an-hour tea break. Three male and three female students (randomly selected from sixty subjects of the study) were randomly selected to take part in the guided interview. During the interview, in order to lower the subjects' inhibitions and self-ego fences and make them talk about what they really felt and thought, the attempt was to make conversation friendly and informal. Finally, their answers were transcribed for analysis.

Data analysis

Brantmeir's (2005) criteria were used to score the written recalls. The total number of correctly recalled pausal units was calculated for each written recall by the authors and two native Persian speakers as part of the subjects' reading comprehension performance. The number of correct responses for multiple-choice questions was calculated too. Scores of the two groups on topic familiarity gauges were compared with Paired t-test to see the degree of significance between males and females in terms of their familiarity with the topic of the passage.

Correlation of reading anxiety and reading comprehension was counted through Pearson Product-Moment correlation. Anxiety was correlated with written recalls and multiple-choice questions separately. This formula was used several times: once for the entire participants as a single group, once to find the correlation of females' reading performance with their scores in reading anxiety scales and once to find the same thing for males.

In order to compare the two groups of subjects in terms of their reading anxiety, the mean scores of their anxiety scales were compared using another Paired t-test. Comparison of choice distribution for two genders concerning twenty items of FLRAS was done through utilization of Mann-Whitney U-Test.

Results

Descriptive statistics regarding the two research questions are presented below.

Research question one:

Is there any relationship between reading anxiety and reading comprehension among Iranian EFL learners at university level? If so, what are possible sources of Iranian EFL learners' anxiety of reading comprehension?

Pearson product-moment correlation coefficient was computed to find the answer to the first research question. As is observed in table 1, the results showed that reading anxiety had a significant negative correlation with written recall scores ($r = -0.25$, $p<.05$, $n = 60$). The correlation was significantly negative for scores of multiple-choice test too, although the correlation was less strong ($r = -0.2$, $p<.05$, $n = 60$). Therefore, concerning the first research question, the results show that anxiety is negatively correlated with subjects' performance in both reading tasks. This finding is in line with that of Saito et al.'s (1999) who found that the participants' course grades were negatively correlated with their reading anxiety. However, Saito et al.'s subjects were beginners and course grades may not represent a pure measure of reading comprehension (they used course grades as a general measure of performance). Since subjects of the present study were junior university students majoring in English language, it may be argued that anxiety affects reading comprehension at higher levels of proficiency.

Table 1. See below

For further analysis, Pearson product-moment correlation coefficient was computed for each gender group separately (Table 2). To the authors' surprise, no significant correlation was found for male group in both reading comprehension tasks. The computed correlations between anxiety and reading tasks were negatively significant for female participants. The correlations were -0.46 and -0.41 for written recall task and multiple-choice test respectively. Therefore, the first hypothesis is supported when we consider both gender groups as a single homogeneous group. But the hypothesis is only supported for female participants if the participants are considered as belonging to two different groups (i.e. females and males).

Table 2. See below

Research question two:

Which group of FL learners is more anxious when reading in English: males or females?

The comparison of two groups' reading anxiety mean scores through paired t-test showed no significant difference, although female participants (M=56.5) were slightly more anxious than males (M=55.5) (Tables 3 & 4). These findings support the second hypothesis of the study and the predicted results, but not at statistically significant level. In studies on psychology, girls are generally found to be more anxious than boys (see Bernstein, Garfinkel, and Hoberman, 1989; Plancherel and Bolognini, 1995; Gierl and Rogers, 1996). Besides, concerning foreign language anxiety research, the insignificant difference between the two gender groups in the present study is not consistent with some other studies that found female students significantly more anxious in EFL classes (e.g. Pappamihiel, 2002:327; and Machida, 2001, cited in Matsuda and Gobel, 2004:23).

Table 3. See below

Table 4. See below

The results of the guided interviews were analyzed in search of a pattern of potential sources of anxiety and apprehension subjects experience in reading English. The induced pattern was in line with the results of the pilot study, suggesting that some degree of generalization is possible. Participants' responses were grouped under three categories. As shown in Table 5, they were: (a) textual factors, (b) interpersonal factors, and (c) intrapersonal factors.

Table 5. See below

Results of topic familiarity gauges

The mean scores of two groups (males and females) on topic familiarity gauge were compared using two-tailed t-test. As is shown in Figure 1, although females scored more (M=2.1) than males (M=1.9) on the gauge, the difference between two groups was not significant at 0.05 level of probability (t= -1.03, Sig. =.3).This means that topic familiarity of the two groups should be assumed a controlled factor that cannot affect the results of reading comprehension tasks of one group more than the other.

Figure 1. See below

Discussion

According to the results obtained from the present study, it can be concluded that there are several factors which cause anxiety and hence affecting reading comprehension. One of these factors is oral activities that students are required to do in reading classrooms. About 48.3% reported anxiety over item 17 which reads as "I don't mind reading to myself, but I feel very uncomfortable when I have to read English aloud". The same point is evident in the interview results too, especially in interpersonal sources of anxiety. The teacher needs feedback on the part of the students in order to assess their comprehension and most of time this feedback is provided orally by students. Therefore, when students try to speak in reading classrooms they are prone to the anxiety about speaking and accordingly fear of negative evaluation, communication apprehension, and test anxiety as three components of foreign language anxiety may occur.

In accordance with reading processes and anxiety, the target language orthography and writing system are also of importance. According to the insight provided by the guided interview concerning the sources of anxiety, graphic features of the text appear to be a factor. Reading comprehension needs processing of printed words and then connecting them to the inside-head knowledge (i.e. what the reader already knows) of the language and the world. One of the major differences concerning first and second language reading is that, contrary to the second language, in the first language, readers have an extremely extensive lexicon available in their mind that they resort to for decoding the printed messages. Besides the semantic aspects of the words, orthographic features of L2 are one of the major difficulties for L2 readers. Gholamian and Geva (1999) argue that "the depth or opaqueness of the link between English orthography and its phonetic system makes it phonologically less recoverable than more regular alphabetic scripts such as Persian and Spanish" (p.184). The same may be suggested for anxious Persian speaking EFL learners. English writing system uses Roman alphabet with many irregularities. On the other hand, Farsi is written with the slightly modified form of Arabic script and (with few exceptions) does not have irregularities in sound-symbol relationships. Therefore, the high degrees of reported reading anxiety in the present study may be allocated partly to the English writing system. Therefore, it could be assumed that texts that are typed

are less anxiety-provoking that those that are hand-written. Also the words and the lines should have enough space between them and the letters should not be too small. Some types of fonts in typing machines may be troublesome for some students that are not familiar with them. For example, "*Julie's team of dogs was lined up at the starting gate*" would be more difficult to decode than "Julie's team of dogs was lined up at the starting gate".

The other influential factor concerning the reading-related anxiety is the background knowledge. Unfamiliarity with what is going to happen, the context in which the individual is going to be present, and what the individual is going to be dealing with is generally apprehensive. Reading a text in a foreign language is not an exception. As evidence, about two third of the participants (60%) reported anxiety over item 5, "I am nervous when I am reading a passage in English when I am not familiar with the topic". It implies the importance and sensitivity attached to selection of the passages for reading classes in terms of topic. In co-educational classes of reading comprehension, the consideration of background knowledge and passage content becomes more important since some studies have found that some topics may benefit one gender more than the other (Bugel & Buunk, 1996). Therefore, in order to provide an equal situation for all language learners in reading classes, especially when it comes to evaluation, the topic and the content of the passage should be selected with more sensitivity.

Other prominent set of factors that may be potential source of reading anxiety is related to the text (factors like vocabulary, structures, idioms, size of letter, etc.). The text that is empty of new language input adds nothing to the proficiency of L2 readers and may just amuse them. According to the input hypothesis, students acquire the language input that contains materials slightly above their current level of proficiency. In regard to contribution of different components of the text to comprehension, Krashen and Terrell (1983) claim that the research with second language acquirers suggests that syntax makes a contribution to reading difficulty, but lexical and semantic factors can outweigh syntactic factors. Since results of the present study show that anxiety is negatively correlated with reading comprehension, the authors assume that the same contributions hold true for the anxiety arousal. In other words, it is believe that lexical and semantic factors may cause more anxiety than syntactic factors.

Regarding gender and anxiety, one reason for the present findings might be that male university students are more profession-oriented than females. They usually pursue financial purposes more than females (Baker & MacIntyre, 2000). On the other hand, personal achievements (high grades, dominance in the class discussions, etc.) are more important for females. This may make females more concerned about socializing and practicing on their interpersonal relationship, which consequently leads to reduction of their apprehension. Another possible interpretation is related to the proportion of female and male students in university classes in Iran. Generally, in Iranian university classrooms, male students are the minority and female students overwhelmingly outnumber male ones. Therefore, when in a language classroom one gender group dominates, members of that group would experience less anxiety and apprehension. This assumption is mostly true when learner's reading is heard or evaluated by classmates and the instructor. In the same line of argumentation, in order to involve students in classroom activities, instructors often divide the students into two groups: ladies and gentlemen. They normally want the same amount of classroom participation and activities from two groups (for example for doing exercises they say "one from ladies and one from gentlemen") without considering the point that the two groups are not equal in terms of members. Therefore, this tendency seems to benefit females because they are less subject to class activities and its anxieties.

The next contributing factor to this study might be that female students are more successful in having close interpersonal relationship with teachers (Bracken and Crain, cited in Pappamihiel, 2001). This advantage may cause the mitigation of female participants' anxiety in the EFL classrooms. Further, cumulative effect of different treatments by teachers might contribute to students emotional states.

Anxiety: Cause or effect?

One of the questions in studies related to anxiety and learners' performance, which is normally posed and is a matter of dispute among scholars, is the direction of the relationship between anxiety and language performance. It has been argued that anxiety may not be always the cause of low performance and sometimes it may be provoked as the consequence of low performance and lack of language skills (for more information see Angraman & Abu-Rabia, 2002; Ganschow & Sparks, 1996;

Sparks & Ganschow1991, 1993a, 1993b). Angraman and Abu-Rabia (2002) call this seemingly ongoing discussion among researchers a "chicken or egg question"(p.150).

There are some discussions favouring each of the directions (anxiety as a cause and anxiety as an effect) in the field of language learning research and both positions seem probable and plausible (Ganschow & Sparks, 1996; Horwitz et al. 1986; MacIntyre,1995; Sparks & Ganschow1991, 1993a, 1993b). In terms of the present study, we assume the first position (anxiety as a cause) to be more probable. However, we do not refuse the idea that anxiety for some learners may be the effect of text processing difficulties present in their native language skills. Three reasons may be put forward for this assumption; first, in a study conducted by Izadi (2003) on the effect of language anxiety on listening comprehension of intermediate Iranian EFL learners at university level, subjects' performance improved after an anxiety treatment session. In other words, when anxiety decreased as a result of treatment session, the performance on listening comprehension improved. Second, for the present study participants were selected from those junior students who had a good performance on "advanced reading comprehension" course. Therefore, they are less likely to have language processing difficulties. Finally, as Saito et al. (1999) state, because many language learners report having reading-related anxiety, it seems more likely that anxiety is not the effect of impaired language processing in majority of learners.

Conclusion

Overall, the data analysis shows that there is a significant negative relationship between reading comprehension and reading anxiety among Iranian EFL learners, and girls are slightly, though not significantly, more anxious than boys in EFL classes in Iranian universities when reading in English. However, this correlation exists as long as no gender difference is assumed. In other words, when the reading performance of each gender group was correlated with its anxiety level, the significant correlation was only found for female participants. Previous studies have revealed important differences between males and females in factors like interest in, familiarity with, and enjoyment of passage content (Brantmeier, 2003). This study goes farther to suggest that anxiety is another factor that affects males and females differently. It may be concluded that the treatment of reading-related anxiety seems more urgent for female FL learners. Further, this finding implies the need for further gender-oriented investigations of effects of anxiety on FL learners' performance. It seems that gender

is a factor that has not received sufficient attention in studies related to anxiety and reading comprehension.

Pedagogical implications

Concerning different anxiety provoking factors, some suggestions are summed up below. They may help both the course designers and the language teachers to decrease the degree of anxiety in reading comprehension.

Previous studies have revealed that speaking is the most anxiety-inducing skill in FL classes (Horwitz, et al. 1986; Von Worde 1998). One of the suggestions that may be put forward is decreasing oral activities in reading classrooms and asking students to show their comprehension of the text through written language. However, these techniques are useful in early reading classes when the anxiety is more prevalent or for beginners who do not have sufficient command of the target language.

University students are usually young and young people, moving in the direction of identity development, are more sensitive in terms of their social face. In this regard, the instructor in language classes may have a great facilitating role in decreasing the learners' anxiety. When students think that they belong to the same group and failure or success of each member belongs to all members, the fear of negative evaluation considerably decreases. The teacher by providing a supportive role can make students courageous to take part in class activities and not be afraid of making errors. Errors in language learning have been proved to be an essential part of language acquisition.

Concerning culture, Gene and Bada (2005) found that culture-training classes are significantly beneficial in terms of language skills, raising cultural awareness, and changing attitudes towards native and target language societies. So, since unfamiliar cultural materials are one of the potential sources of anxiety, target language culture training will be effective in decreasing anxiety among FL learners. However, concerning political issues there may be some restrictions on teaching a foreign culture in Iranian university classes.

As a general technique, it is recommended that, in dealing with a passage, teachers start with the activation of students' previous knowledge about the text and arm them with necessary knowledge in case they are not familiar with the topic. In this way, students will be prepared for reading activities and feel less anxious.

In case of the graphic features of the text, we suggest that in early stages it will be better if graphic features are controlled to reduce anxiety because early experiences in language classroom seem to have long-lasting effects on learners' feelings and emotions about language learning. In later stages, checking graphic features may be reduced and more replications of real world reading tasks may be included.

Another recommendation for anxiety alleviation is teaching reading strategies. Reading comprehension is a skill that is highly dependent on the knowledge of lexis and syntax. In other words, those readers who have good knowledge of vocabulary and structures of a language are more successful than those who are less proficient in these aspects. Some students believe that they have to know every word and structure in the passage in order to comprehend it. They become anxious when their expectations are not warranted by the passage. Therefore, one solution to this problem is to get familiar with strategies of different types in reading comprehension. Anderson (2003) believes that, "Perceptive second/foreign language (L2) readers are those who are aware of and use appropriate strategies for learning and communicating in an L2."(p.3)

References

Aida, Y. (1994). Examination of Horwitz, Horwitz and Cope's construct of foreign language anxiety: The case of students of Japanese. *Modern Language Journal*, *78*, 155–168.

Anderson, N. J. (2003).Scrolling, clicking, and reading English: Online reading strategies in a second/foreign language. *The Reading Matrix*, *3*(3), 1-33.

Angaman, O., & Abu-Rabia, S. (2002). The influence of language anxiety on English reading and writing tasks among native Hebrew speakers. *Language, Culture and Curriculum 15*, 143-159.

Backman, N. (1976). Two measures of affective factors as they relate to progress in the adult language learning. *Working Papers in Bilingualism 10*, 100-22.

Baker, S. C., & MacIntyre, P. D. (2000). The role of gender and immersion in communication and second language orientations. *Language Learning 50*, 311-341.

Bernhardt, E. B. (2003). New directions in reading research: Second language perspectives. *Reading Research Quarterly 37*(4), 112-117.

Bernhardt, E. B. (2005). Progress and procrastination in second language reading. *Annual Review of Applied Linguistics*, *25*, 133-150.

Bernstein, G. A., Garfinkel, B. D. & Hoberman, H. M. (1989). Self-reported anxiety in adolescents. *American Journal of Psychiatry 146*, 384-386.

Birjandi, P., & Nowruzi, M. (1993). *Oral reproduction of stories*. Tehran: SAMT

Brantmeier, C. (2003). Does gender make a difference? Passage content and comprehension in second language reading. *Reading in a Foreign Language 15*, 1-27.

Brantmeier, C. (2004). Gender, violence-oriented passage content and second language   reading comprehension. *The Reading Matrix 4*(1), 1-19.

Brantmeier, C. (2005). Anxiety about L2 reading or L2 reading tasks? A study with advanced language learners. *The Reading Matrix 5*(2), 67-85.

Bugel, K., & Buunk, B. P. (1996). Sex differences in foreign language text comprehension: The role of interests and prior knowledge. *Modern Language Journal 80*, 15-31.

Carrell, P. L. (1983). Some issues in studying the role of schemata, or background knowledge, in second language comprehension. *Reading in a Foreign Language 1*(2), 81-92.

Farhady, Jafarpur, H., A. & Birjandi, P. (1994). *Testing Language Skills from Theory to Practice*. Tehran: SAMT.

Ganschow, L., & Sparks, R. (1996). Anxiety about foreign language learning among high school women. *Modern Language Journal 80*, 199-212.

Gardner, R. C. (1985)*. Social psychology and second language learning: the role of attitudes and motivation*. London: Edward Arnold Publishers.

Gene, B., & Bada, E. (2005). Culture in language learning and teaching. *The Reading Matrix 5*, 73-84.

Gholamian, M., & Geva, E. (1999). Orthographic and cognitive factors in the concurrent development of basic reading skills in English and Persian. *Language Learning 49*, 183-209.

Gierl, M. J., & Rogers, W. T. (1996). A confirmatory factor analysis of the test anxiety inventory using Canadian high school students. *Educational and Psychological Measurement 56*, 315-324.

Horwitz, E.K., Horwitz, M.B. & Cope, J, (1986). Foreign language classroom anxiety. *The Modern Language Journal 70*, 125-132.

Izadi, A. (2003). Anxiety and listening comprehension in Iranian intermediate EFL learners. *Unpublished Master of Art Dissertation,* Shahid Chamran University, Ahvaz, Iran.

Johnson, P. (1981). Effects on reading comprehension of language complexity and cultural background of a text. *TESOL Quarterly 15*, 169-181.

Kim, Y. (2001). Foreign language anxiety from an interactionalist's perspective. *www. http://www.ericfac.piccard.csc.com. Accessed Sept. 2005.*

Kitano, K. (2001). Anxiety in the college Japanese language classroom. *Modern Language Journal, 85*(4), 549–566.

Krashen, S. D., & Terrell, T. D. (1983). *The natural approach: Language acquisition in the classroom*. New Jersey: Alemany Press Regents.

Lee, J. F. (1986). Background knowledge and L2 reading. *Modern Language Journal 70*, 350-354.

Machida, S. (2001). Anxiety in Japanese-language class oral examinations. *Sekai no Nihongo Kyoiku 11*, 115–138.

MacIntyre, P.D. (1995). How does anxiety affect second language learning? A reply to Sparks and Ganschow. *The Modern Language Journal 79*, 90-99.

MacIntyre, P. D., Baker, S. C., Clement, R., & Donovan, L.A. (2002). Sex and age effects on willingness to communicate, anxiety, perceived competence, and L2motivation among junior high school French immersion students. *Language Learning 52*(3), 537–564.

MacIntyre, P.D., & Gardner, R. C. (1991). Methods and results in the study of anxiety and language learning: A review of literature. *Language Learning*, *41*(1), 85-117.

Matsuda, S., & Gobel, P. (2001). Quiet apprehension: reading and classroom anxieties. *JALT Journal 23*, 227–247.

Matsuda, S., & Gobel, P. (2004). Anxiety and predictors of performance in the foreign language classroom. *System 32*, 21-36.

Onwuegbuzie, A. J., Bailey, P, & Daley, C. (1999). Factors associated with foreign language anxiety. *Applied Psycholinguistics 20*, 217-239.

Pappamihiel, N. E. (2002). English as a second language students and second language anxiety. *Research in the Teaching of English 36*, 327-355.

Phillips, E. M. (1992). The effects of language anxiety on students' oral test performance and attitudes. *The Modern Language Journal 76*, 14-26.

Plancherel, B., & Bolognini, N. (1995). Coping and mental health in early adolescence. *Journal of Adolescence 18*, 459-474.

Saito, Y., Horwitz, E. K., & Garza, T. J. (1999). Foreign language reading anxiety. *The Modern Language Journal 83*, 202-218.

Saito, Y., & Samimy, K. (1996). Foreign language anxiety and language performance: a study of learning anxiety in beginning, intermediate, and advanced level college students of Japanese. *Foreign Language Annals 29*, 239-251.

Scovel, T. (1978). The effect of affect on foreign language learning: a review of the anxiety research. *Language Learning 28, 129-142.*

Sparks, R. L., & Ganschow, L. (1991). Foreign language learning differences: Affective or native language aptitude differences? *Modern Language Journal 75*, 3-16.

Sparks, R. L., & Ganschow, L. (1993a). The impact of native language learning problems: Case study illustrations of the linguistic coding deficit hypothesis. The *Modern Language Journal 77*, 58-74.

Sparks, R. L., & Ganschow, L. (1993b). Searching for the cognitive locus of foreign language learning difficulties: Linking first and second language learning. *The Modern Language Journal 77*, 289-302.

Tucker, G. R., Hamayan, E, & Genesee, F. H. (1976). Affective, cognitive, and social factors in second-language acquisition. *The Canadian Modern Language Review 32*, 214-226.

von Worde, R. (1998). *An investigation of students' perspectives on foreign language anxiety* http://www.eric.com. *Accessed Jan. 2005.*

Zhang, L. J. (2000). Uncovering Chinese ESL students' reading anxiety in a study-abroad context. *Asia Pacific Journal of Language in Education 3*, 31-56.

Table 1. Pearson product-moment correlation coefficient of anxiety and reading comprehension for all of the participants

	N	*r*	*P*
Written recall	60	-0.25	0.04
Multiple Choice Questions	60	-0.2	0.05

Table 2. Pearson product-moment correlation coefficient of anxiety and reading comprehension of male and female groups separately

Gender		N	r	P
Males	Written recall	30	0.013	0.94
	Multiple choice questions	30	0.035	0.85
Females	Written recall	30	-0.467	0.009
	Multiple choice questions	30	-0.417	0.022

Table 3. Basic statistics for different variables among male and female groups

Gender		N	Minimum	Maximum	Mean	Standard Deviation
Males	Written Recall	30	3.00	36.00	13.2333	8.30738
	Multiple Choice Questions	30	2.00	10.00	4.4667	2.45979
	Anxiety	30	37.00	71.00	55.5000	8.29936
	Topic Familiarity	30	1.00	4.00	1.9333	0.86834
Females	Written Recall	30	4.00	47.00	18.4000	10.64992
	Multiple Choice Questions	30	2.00	10.00	6.0667	2.91173
	Anxiety	30	32.00	74.00	56.5000	9.60154
	Topic Familiarity	30	1.00	4.00	2.1667	0.87428

Table 4. Comparison of males' and females' anxiety using a paired t-test

	Mean	t	df	P
Males' Anxiety	55.5			
		-0.432	58	0.67
Females' Anxiety	56.5			

Table 5. Results of the guided interview

Textual Factors	Interpersonal factors	Intrapersonal factors
(1) Unknown vocabulary items	(1) Fear of making errors especially pronunciation errors	(1) Tiredness
(2) Unknown idioms	(2) Correction of errors by the professor and peers	(2) Lack of interest in reading in general and topics of the texts in particular
(3) Unknown structures	(3) Other people negative evaluation of one's abilities and skills	(3) Lack of self-confidence
(4) Too many implications in a text	(4) Obliged style of reading imposed by the professor	(4) Fear of not being able to get the meaning and the purpose of the author
(5) Unknown allusions and other figures of speech like irony, pun, metaphor, symbolism, etc. especially in literary texts	(5) Time pressure set by the professor	(5) Being inexperienced in reading English texts
(6) Technicality of the text, not being familiar with topics of the texts, and lack of background knowledge	(6) Competitiveness sense and the desire to be better than other classmates	(6) Not knowing the reading strategies
(7) Page layout including factors like: too small letter size, faint-colored letters, illegible letter spacing and line spacing, and not organizing the text in to paragraphs and related parts.		(7) Not knowing the target language speakers' cultural characteristics
(8) Difficult style of writing used by some authors		

Figure 1. Mean scores of two groups on topic familiarity gauge
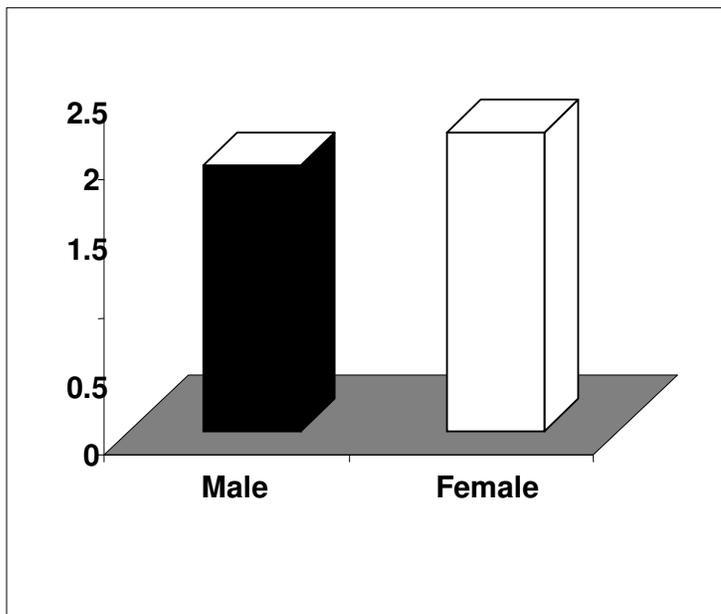
Iranian EFL Journal

Title:

On The Relationship Between

Introversion/Extroversion and Grammaticality

Judgment among the Iranian EFL Learners

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Abstract

The present study is a correlational research which attempts to investigate the relationship between Introversion/Extroversion and English grammaticality judgment among the Iranian EFL learners currently studying in domestic colleges. It tries to find answers to the following questions: a) Is there any relationship between introversion/extroversion and grammaticality judgment among EFL Iranian learners? b) Is there any relationship between proficiency and the grammaticality judgment among the EFL Iranian learners? c) Is there any relationship between introversion/extroversion and proficiency among EFL Iranian learners? d) Do proficiency and introversion/extroversion have any relationship with the grammaticality judgment among the EFL Iranian learners? To provide answers to the questions, 142 students from among all the student population studying EFL at Guilan university in Rasht were selected through Farhady's TOEFL test (Farhady, 2006). The participants were selected after excluding those who got L scores of above 4 or 5 from the EPI personality inventory. The subjects were divided in two groups of low (73

participants) and high (69 participants) based on the results of the proficiency test. They were then divided into two groups of introverts and extroverts following the results of the Eysenck Personality Inventory (EPI). After that, the degree of the participants' grammaticality judgment was measured through a grammatical accuracy test. The data collected were analyzed through a combination of descriptive and inferential statistics. The results of the independent sample t-test and Pearson product moment correlation indicated that there is no relationship between introversion/extroversion and grammaticality judgment. However, a regression analysis revealed that there was a high correlation between language proficiency and grammaticality judgment. Moreover, between the variables tilted language proficiency and introversion/extroversion, only proficiency was a predictor for grammaticality judgment.

Key Words: Introversion, Extroversion, Grammaticality Judgment, GJ, EFL learners, Placement test, OPT, Correlation

1. Introduction

Information about mental processes in, learning, understanding, and producing language and associated social processes is directly useful for the design, execution, and evaluation of language teaching. The science most usually appealed to for such information is psychology. Whether such information is necessary is a moot point; however, it is believed that teaching based, in part, on accurate psychological information is less likely to be a hit-and miss affair, more likely to be led to the desired level of achievement, than if such information is either ignored or rejected. As a matter of fact, most of the major language teaching methods have claimed to draw on the currently dominant psychological theory on learning. For example, the Grammar-translation method, with its emphasis on training the mind and strengthening the mental power of language learners, appealed to the so-called faculty psychology; the audio-lingual method incorporated some of the principles of behaviorist learning theory, mainly the concept of habit formation and the law of effect; and the cognitive-code method taped to the potentially rich areas of problem solving (McDonough, 1986).

A couple of definitions for learning seem to be worth discussing at this point. As Brown (2007, p. 7) puts it, learning is defined, in contemporary dictionaries, as

"acquiring or getting of knowledge of a subject or skill by study, experience, or instruction." It has also been defined even more succinctly as" a change in an individual caused by experience" (Slavin, 2003, 138).

From the above quotations and based on the obsessing concern of many authorities in education, it is obvious that no exhaustive definition of learning is yet practical. The complexity of the process of learning is reflected by this imprecision of the definitions of learning.

Teaching and learning are so inseparable that teaching cannot be defined apart from learning. Teaching is defined as, "guiding and facilitating learning, enabling the learner to learn, and setting the conditions for learning" (Brown,2007, p.8).Therefore, our philosophy of education, teaching style, approach, methods and classroom techniques will all be determined through our understanding of how the learner learns. If learning is taken as a process of operant conditioning through a carefully paced program of reinforcement, the corresponding teaching will be drastically different from the time learning is taken from another angle of vision.

1.1. Factors Affecting Classroom Achievement

The questions concerning certain learner factors have been those which have focused on the organization of language teaching and on the selection of students at different levels of instruction: What is the optimal age for language learning? Can a specific language learning aptitude be identified? If so, how can it be assessed? Are there any differences in learning style or cognitive style which should be taken into account in pedagogy? What role do motivation and attitude play in language learning? Are there any qualities of personality that favor or hinder progress in a second language? What is the role of socio-cultural factors? Practitioners and administrators have been very receptive to the idea of organizing language teaching according to the answers of these questions. For example, they would like to start foreign language in school systems at the psychologically right age, or they would be quite prepared to make allowance for learner aptitude or personality factors in the planning of language classes or in the teaching methodology.

Research on second or foreign language acquisition has identified a variety of factors hypothesized to account for some of the variance in the level of proficiency attained by individuals learning a second/foreign language. The factors involved may generally be classified into the following categories: cognitive, affective, social, and

biological variables. Cognitive variables refer to the relatively stable ability characteristics of learners that may affect their success in language learning. They are factors such as background knowledge, reflectivity/impulsivity, ambiguity tolerance, field dependence/independence, and a few more. Affective variables identify individual features related to factors such as self-esteem, inhibition, risk-taking, attitude, anxiety, interests and needs, empathy, motivation and introversion/ extroversion. Social variables describe characteristics related to factors such as social distance, culture shock, and social context. Finally, biological variables involve individual characteristics referring to the factors of age and sex (Brown, 2007).

   The positive effect of both cognitive and affective factors in second/ foreign language learning is proved through scientific pieces of research. The evidence indicates that each factor makes a unique if not specialized contribution to learning. The question of concern, then, is not to determine which of these factors is relevant for second language learning, but rather to identify the specific conditions and particular language tasks that are maximally dependent upon each set of factors. Among the learning variables that must be taken into account in any consideration of language teaching or learning, the affective variables and mainly introversion/extroversion which is the focus of this study are dealt with in the following:

1.2. Affective Variables

In the process of learning a second/foreign language, a total commitment from the learner is inevitable. A total physical, intellectual and emotional response is demanded to successfully send and receive linguistic messages. Language is inextricably bound up with virtually every aspect of human behavior. It is, therefore, difficult to isolate the component parts of second or foreign language acquisition. It is even more difficult to deal with one of these components – the affective domain – without reference to other ones. However, it is possible to speak of affective or emotional factors in second/foreign language learning with some degree of precision which presupposes the interrelationship of the dynamics of human behavior (Brown, 1981, cited in Alatis *et al*., 1981). The most influential learner variables are related to the learner emotions, attitudes, and personality. The affective domain plays a larger role in developing second/foreign language skills than does the cognitive because of the role emotions have in handling the will to activate or shut down the cognitive

function. Students' willingness toward learning determines the amount they learn. If they do not want to learn, they will learn very little or they will not perform to their maximum capacity (Chastain, 1988).

1.2.1. Introversion/Extroversion

Extroversion vs. introversion is a significant dimension of style that particularly influences classroom management, especially grouping of students (Oxford and Anderson, 1995). Extrovert learners gain their energy and focus from events and people outside of themselves. They enjoy a breadth of interest and many friends, and they like group work. Extrovert learners enjoy English conversation, role plays and other highly interactive activities. Introvert learners, on the other hand are stimulated most by their own inner world of ideas and, feelings. Their interests are deep, and they have fewer friends than extrovert students (but often strong ones). They prefer to work alone or else in pair with someone they know well. They dislike lots of continuous group work in the language classroom. With introvert students, it is often useful to employ the 'think–pair–share' sequence, in which the student gradually eases into group work (Oxford and Anderson, 1995).

Extroversion is a desirable behavior particularly in the Western societies. The outgoing, amiable, talkative personality tends to be held up as axiomatically ideal. This valuing over introversion carries over to the language classroom as well. Quiet, reserved personalities are treated in such societies as 'problems', and language teachers seek ways of encouraging extroversion. The syndrome is further complicated by the tendency in modern language teaching to emphasize speaking in the classroom with all too little emphasis on the aural comprehension (Brown, 2007).

The following table which is taken from Widdowson (1979), with some modifications, shows the differences between introverts and extroverts.

Table 1. Introvert versus Extrovert Characteristics

Criteria	Extroversion	Introversion
General	Sociable	Quiet
Attitude to people	Has many friends	Doesn't make friends easily, prefers books to friends.
Attitude to study	Dislikes studying by himself	Likes studying by himself

Decision making	Makes quick decisions and takes chances	Plans things carefully in advance

1.2.2. Theory of Introversion/Extroversion

The theory of introversion/extroversion which comes from the work of Eysenck contends that the basic difference between extroverts and introverts are biological, rooted in the reticular activity system of the brain. This system which monitors incoming neural impulses resulting from environmental stimulation controls the arousal level of the cortex of the brain. Introverts are held to have higher levels of cortical arousal compared with extroverts. These different arousal levels cause introverts and extroverts to have different behavioral and attitudinal preferences and tendencies. Assuming that both groups function at a moderate level of arousal, extroverts tend to seek stimulation from the environment to increase arousal level while introverts attempt to seek a reduction of stimulation (Eysenck and Levey, 1972, pp. 61-62 quoted by Wangstaff, 1999).

1.2.3. Contradiction between Psychologists and Applied linguists

There is a clear contradiction between the predictions of psychologists and applied linguists regarding the relationship between extroversion and language learning. Psychologists claim that extroversion is a disadvantage for learning on the ground that an extrovert has "less cortical arousal", is more easily "inhibited" and has a "limited long term memory". In contrast, many applied linguists predict that extroversion is an advantage for learning a second / foreign language on the assumption that an extrovert elicits more "input" and produces "more output" (Stern, 1983).

   Based on the contradictions observed from the findings of the studies so far, it might be concluded that extroversion may not help in developing either linguistic skills (e.g. structure section of TOEFL) or even communicative skills (e.g. speaking of IELTS) in an Iranian EFL situation where there is little exposure to English and where mostly non-communicative teaching methods are used in English classes. It would be helpful to see if introversion/extroversion has any impact on a particular facet of EFL learning.

1.3. Personality and Accuracy

The ability to function in another language is generally characterized in terms of being able to speak that language. When someone asks "Do you know another language?" they generally mean "Can you speak the language?" In order to speak a language accurately, one needs to have mastery of phonology, morphology and syntax. These various elements comprise the "linguistic competence" of the speaker, which is a matter of formal accuracy. The term "linguistic competence" was proposed by Noam Chomsky (1957, 1965). In 1974, the sociolinguist Dell Hymes proposed the notion of "communicative competence" which incorporated both linguistic and sociolinguistic skills as factors that guarantee appropriateness of speech in various social contexts (Nunan, 1999, p. 229).

For most of the history of language teaching, grammar has had to do with "correctness" and the role of the teacher was to transmit the rules that would result in correct usage. However, in recent teaching programs, a more careful approach is taken and the appropriateness of language use is also added to the concept of grammaticality/acceptability. Grammatical accuracy of a language is a controversial issue. Even among experts, there may be disagreements on the accuracy of particular phrases or sentences (Nunan1999, p. 97). However, the degree to which someone's knowledge of language approximates the common acceptability norms is something accessible through various testing procedures.

As mentioned earlier, extrovert learners are more likely to perform better in interpersonal skills than introvert learners. In a language class, they are usually the group dynamic ones who tend to respond better to activities which demand more spontaneous speaking skills. Now, the degree to which this spontaneity of extroverts in productive skills is accompanied by grammatical accuracy in comparison to the accuracy observed in the reticence of introverts is a question of concern.

1.4. Introversion/Extroversion and ESL/EFL Classroom Achievement
1.4.1. Theoretical Overseas Views
Rubin (1975) describes the good language learners as having a strong desire to communicate, which according to psychologists is also to be a characteristic of extrovert people. She further suggests that if good language learners are successful in communication, their motivation to acquire necessary tools to continue communicating will increase.

Investigators such as Naiman *et al.* (1978) and McDonough (1981) have suggested that more sociable learners will be more inclined to talk, more inclined to join groups, more likely to participate in class, more likely to volunteer and to engage in practice activities (e.g. in oral interviews), and also more likely to maximize language use opportunities outside classroom by using language for communication. Thus, these learners might benefit more from a communicative approach to language teaching/learning. Introverts, on the other hand, tend to be less willing to participate and more anxious learners. Furthermore, they may be interested in other forms of learning such as reading and writing.

According to Chastain (1988, p. 124), some students are so shy and so timid and unsure of themselves even in their first language, that attempting to communicate in a second language can be traumatic for them. On the other hand, the extrovert student seems to be able to engage more freely in activities which may expose his linguistic inadequacies to his classmates. Each personality type has its own advantage in learning a second/foreign language. Introverts maybe more conscious and more dedicated to the task. Extroverts tend to participate more actively in class with less fear of risk taking and they are willing to practice their developing communication skills with native speakers.

Regarding extroversion as Ellis (1994) says, one of the intuitively appealing hypothesis that has been investigated is that extrovert learners learn more rapidly and are more successful than introvert learners. It has been suggested that extrovert learners find it easier to make contact with other users of the L2 and therefore will obtain more input.

Fontana (1995, p. 196) states that Ellion (1973) detected an interesting relationship between educational achievement and personality that changes in time. By the age of eight, there is a statistically positive relationship among children between extroversion and academic attainment. Ten years later, the relationship is reversed so that achievement is positively related to introversion.

Ehrman and Oxford (1995, p.70) says that some have suggested that the best learners are likely to be extrovert because of their willingness to speak out and interact.

As Brown (2007, pp. 166-167)) puts it, the view that extroverts are brighter is misleading. Extroverts actually need other people in order to feel good. However, extroverts are not necessarily loud mouthed and talkative. They may be relatively shy,

but still need the affirmation of others. Introversion, on the other hand is the extent to which a person derives a sense of wholeness and fulfillment apart from a reflection of this self from other people. He also mentions that contrary to our stereotypes, introverts can have an inner strength of character that extroverts do not have. Unfortunately these stereotypes have influenced teachers' perception of students. There is enough evidence that teachers admire talkative, outgoing students who participate freely in class discussions. On the other hand, introverts are sometimes thought of as not being as bright as extroverts. Educators have warned against prejudging students on the basis of perceived extroversion.

1.4.2. Practical Overseas Studies

As an early study on the topic, Rossier (1975) attempted to determine whether introversion/extroversion is a significant variable in the learning of English as a second language by Spanish speaking high school students in the United States. A positive correlation was found between extroversion and oral English fluency as judged by three raters.

Seliger (1977) relied on classroom observation to determine levels of extroversion/introversion in order to test the hypothesis that students who initiate language interaction (High Input Generators, HIGs) are higher achievers in second language learning. He concluded that active learners who utilize all opportunities-- both formal and informal tend to learn the L2 at a faster rate.

Busch (1982) explored the relationship between the extroversion/ introversion tendencies of Japanese students and their proficiency in English as a foreign language (EFL). The hypothesis that extroverts are more proficient in English was not supported. Statistical analysis revealed that extroversion had a significant negative correlation with pronunciation. In addition, introverts tended to have higher scores on the reading comprehension and grammar components of the standardized English test.

Strong (1983) did not find a relationship between a measure of extroversion (based on the Early School Personality Questionnaire) and various indices of structure, vocabulary, and pronunciation, based on naturalistic language obtained from a group of kindergarteners in a California School. In the same direction, Ely (1986) in a more complex design in which sociability was hypothesized to be a component predicator of classroom participation (which was itself meant to be a component predicator of proficiency) found that sociability did not predict classroom

participation and only predicted one of the criterion measures, a 'correctness' factor based on a story-telling task.

Genessee and Hamayan (1980, as cited in Skeham, 1989) failed to find any relationships between personality variables and achievement.

Dewaele (1993, cited in Johnstone, 1994) conducted an empirical study of 21 Dutch-speaking university students. He found that in a formal context the oral discourse of introvert speakers was richer than that of extroverts. All students were at a fairly advanced level French having studied it for at least six years pre-university. He found that the stress and anxiety felt by the introvert learners led them to produce a discourse that was delivered more slowly but that was richer in vocabulary.

More recently, Kim (1998) investigated the relationship between some personality variables (including extroversion/introversion) and EFL proficiency of Korean elementary school children measured in the Level Test with a consideration of other independent variables, such as grade and gender. Contrary to the prior research with adult foreign language learners using MBTI measures, the results of this study did not show any significant main effect of personality variables.

Van Daele (2005) investigated the effect of extroversion on L2 oral proficiency among Flemish L2 learners of French & English. As a result, extroversion had little or no effect on the oral speech production of Flemish L2 learners of French & English.

In summary, several conclusions can be drawn from the above mentioned studies: Firstly, the studies by Naiman *et al*. (1978) and Busch (1982) did not establish any significant correlation between extroversion and second language proficiency. Secondly, Seliger (1977) found out that extrovert learners do better on final course grade and exam respectively. Thirdly, although Rossier (1975) found a positive correlation between extroversion and oral English proficiency, Busch (1982) reported that extroverts had a significant negative correlation with pronunciation and introverts tend to have higher scores on the reading and grammar components of the standardized English tests. This last finding indicating that introverts do better than extroverts in grammar part of the English tests needs to be further investigated to see if this grammatical accuracy of introverts is a recurring pattern which is characteristic of introverts both in spoken and written language or it is merely a one-time event that is less likely to occur again. It is worth doing further research to know if the accuracy is actually due to introversion or it is an event which is under the mere influence of proficiency background.

1.4.3. Practical Domestic (Iranian) Studies

Pazhuhesh (1994) studied the relationship between the personality dimensions of Int/Ext and EFL reading comprehension among the Iranian students. In her study, introverts were significantly better than their extrovert counterparts.

Babaeikhou (1995) investigated the relationship between Int/Ext and Iranian EFL learners' English proficiency. The results showed that extrovert learners performed significantly better on a measure of language proficiency than did their introvert counterparts.

Alimohammadi (1996) studied the relationship between Exam nervousness, Introversion/extroversion, parents' education and job, and the scholastic achievement among third year grade Guidance School students studying in Bafgh, Iran. In this study, 187 girls and 168 boys participated. The results confirmed the first hypothesis indicating a significant correlation between exam nervousness and scholastic achievement. However, the results did not reveal the effect of extroversion on the scholastic achievement. He found a significant correlation between parents' education and job and students' scholastic achievement.

Zandi (2001) studied the relationship between introversion/ extroversion, gender and the EFL proficiency of Iranian students. He used a nationwide pre-university English achievement test in an educationally deprived region. Statistical analysis revealed that the introversion / extroversion tendencies of the students did not have a significant correlation with the EFL proficiency. That is, the null hypothesis, was not rejected either.

Saemian (2001) has also carried out a study on the effect of personality factors (introversion/extroversion) on vocabulary learning of EFL Iranian Students. She also considered the role of sex on vocabulary learning of the introvert/extrovert learners. The results of the statistical analysis indicated that Introversion/extroversion does not affect male or female learners' vocabulary learning.

Rezaie (2002) has investigated the relationship between personality traits of introversion/extroversion and the use of language learning strategies. A t-test analysis revealed that extroverts used social, cognitive, memory, and affective strategies more than introverts, the highest differences being in social and cognitive strategies respectively.

Ashtari (2002) made an attempt to explore the relationship between intelligence, extroversion/introversion and speaking in a foreign language among EFL Iranian

Learners. The results were in favor of a significant positive correlation between extroversion and speaking in a foreign language.

Imanpour (2005) investigated the effect of introversion/extroversion on the use of language learning strategies by Iranian EFL University students. She used 134 female students majoring in English translation at Islamic Azad University - Shiraz Branch as her subjects. Through a number of independent sample t-tests, it was proved that there was no significant difference between extroverts and introverts in the choice of language learning strategies except, however, for the memory and social strategies. In other words, personality had only significantly affected the choice of memory and social strategies by Iranian EFL Students.

1.5. Statement of the Problem

It is a common belief that people with high levels of proficiency must have higher grammatical accuracy and/or higher acceptability judgments than those with a lower proficiency level. Now if the personality traits, introversion/ extroversion, may be a determining factor concerning the increase or decrease of grammaticality judgment of EFL learners regardless of how much proficient they are, it will be useful and practical to encourage one of these traits in EFL teaching and learning.

This study aims at investigating the possible relationship between introversion/extroversion and English grammaticality judgment of the Iranian EFL students currently studying in domestic colleges.

1.6. Objectives of the Study

This study looks into the role personality traits of introversion/ extroversion play in the grammaticality judgment among the Iranian EFL learners studying at Guilan University language center. The following are the objectives the study looks for:

The first objective is to investigate the relationship between language proficiency and the grammaticality judgment among the Iranian EFL learners studying at Guilan University language center.

The second objective of the current study is to find out the relationship between introversion/extroversion and the language proficiency among the Iranian EFL learners studying at Guilan University language center.

The third objective is to ascertain the relationship between introversion/extroversion and the grammaticality judgment among the Iranian EFL learners studying at Guilan University language center.

The fourth and in effect the chief objective for which the study has been made is to seek whether proficiency and introversion/extroversion have any bearing on the grammaticality judgment of the Iranian EFL learners.

In a nutshell, the study aims to make a comparison between introvert students and their extrovert peers regarding their grammaticality judgment. As a collateral aim, the study seeks to compare introvert students with their extrovert peers with respect to their language proficiency.

1.7. Research questions

Regarding the objectives of the study the following research questions are proposed:

1. Is there any relationship between introversion/extroversion and proficiency among the EFL Iranian learners?

2. Is there any relationship between introversion/extroversion and the grammaticality judgment among the EFL Iranian learners?

3. Is there any relationship between proficiency and the grammaticality judgment among the EFL Iranian learners?

4. Do proficiency and introversion/extroversion have any relationship with the grammaticality judgment among the EFL Iranian learners?

1.8. Significance of the Study

Such assumptions that extroversion may help or hinder developing second/foreign language skills as stern (1983, p.79) maintains "may be only half-truth, but they provide the stimulus for systematic investigations". Having been provided with the stimulus in observing individual differences regarding language learning behaviors in EFL classes on the one hand, and taking the clear contradiction of ideas between applied linguists and psychologists, on the other hand, the researcher is determined to make an attempt in providing a response to
this stimulus.

This study as mentioned earlier, aims to clarify if introversion/ extroversion has any bearing on the grammaticality judgment of EFL Iranian students currently

studying in domestic colleges. There are a number of reasons which necessitate such a study:

1. There has been little or no single study with the same participants and design which investigated the issue of the grammaticality judgment among EFL learners in relation to extroversion/introversion.   .

2. The point of the conflict between the predictions of psychologists and applied linguists can not be approximately tackled unless such kinds of investigations are carried out.

3. Some of the previous studies in the field of EFL learning are either of little relevance to the very point being under investigation or suffer from some methodological problems, hence obscuring the issue as the result of their either external or internal validity problems.

4. The findings of this study may contribute to the field of applied linguistics and of course language teaching.

5. The study can also have some implications on parental training. Parents can aim at developing certain personalities in their children to guarantee their future success in particular careers which call for better language skills.

2. Method

In this section, the participants, explaining how, where and in what ways they are selected, are introduced. Furthermore, the instruments utilized for the data collection including the TOEFL proficiency test, the Eysenck personality inventory, and the EFL grammaticality judgment test together with the necessary validation will be provided. In addition, the data collection procedure and the data analyses used in the study are elaborated.

2.1. Participants

The participants are 142 students from among all the student population studying EFL at Guilan university in Rasht who were selected through Farhady's TOEFL test (Farhady, 2006). The participants were selected after excluding those who got L scores of above 4 or 5 from the Eysenck Personality Inventory elucidated below. They were divided in two groups of low (73 participants below the mean) and high (69 participants above the mean) based on the results of Farhady's proficiency test. There were both male and female students within the range of 18 to 28 years of age

2.2. Instruments

The instruments made use of are as follows:

1) The EFL proficiency test is a TOEFL test developed and validated by Farhady (2006). The original version of the test includes 100 items, however due to the practicality problems, it was reduced to 60 items. It consists of three sections of structure, vocabulary, and reading comprehension respectively each with four alternative choices of which the testees have to choose the correct response. As a pilot study, the 60-item test was administered to a group of 50 students studying EFL at Guilan University. The reliability of the test calculated through the use of KR–21 formula was dependable.

2) Eysenck Personality Inventory (EPI) which is a scale including 57 questions to measure individuals' impulsivity and sociability, as these two factors are believed to be the main subcomponents of extroversion. It is applicable to participants over 16 years of age. Participants are asked to mark their answers in the boxes under the "yes" or "no" columns provided on the answer sheet. According to Azarkhosh (2000, p.p. 151-159), in a research carried out by Mohammady (1998) concerning the validation of the abridged form of the EPI (the 57-item one), the distribution of the scores for the three criteria was reported to be normal.

It includes three criteria for the identification of extroverts and introverts. The L criterion which includes 9 items identifying those participants that are tying to show themselves better than what they actually are. Participants with L scores above 4 or 5 are supposed to be discarded from the study. The E criterion which includes 24 items measuring the degree of introversion or extroversion. The E scores above 53 percent (equal to the raw score of 13) indicate the extroversion personality trait, and the scores below 53 percent are indicators of introversion. And, the N criterion which includes 24 items indicating the degree of stability or instability (not included in the study).

3) The EFL Grammaticality Judgment Test which is a test including 40 items taken from the structure section of the TOEFL by Gear and Gear (2005). Participants are asked to select the underlined word or phrase that is not acceptable in standard written English, and write the correct form in the boxes provided for each item. An approximate time of 30 minutes is allotted to the test. Directions are given in written form and an objective scoring of one point for each item is considered so that the total test score would be 40. Concerning the reliability, as a pilot study, the test was

administered to a group of 50 students studying EFL at Guilan University. The result showed a reliability of 0.98.

2.3. Procedure for Data Collection and Analysis

To gather data, students were asked to take the TOEFL test in their regular class sessions. The participants were administered the test, following clear instructions. An approximate time of 60 minutes was allotted to the test, 20 minutes for each section. Most of the participants managed to finish the proficiency test comfortably within the time limit or earlier. Subsequently, some refreshments were served, and the students were given the Eysenck Personality Inventory (EPI). Clear instructions were provided, and students were requested to give utmost care and attention while being as impulsive in performing the task as possible. It took even the most reflective ones 15 minutes to complete the EPI. Following an interval of 3 days or so, the EFL grammaticality judgment test was administered to the same participants. They were asked to select the underlined word or phrase that is not acceptable in standard written English, and write the correct form in the boxes provided for each item. An approximate time of 30 minutes was allotted to the test. The answer sheets were collected and scored, objectively, by the researcher. From among 175 samples collected, 33 samples were discarded from the study due to the L scores exceeding 4 (27 candidates) and the age range of above 28 (6 candidates). Based on the results of the Eysenck personality Inventory, the participants were divided in two groups of introverts (57 participants) and extroverts (85 participants).

The collected data was analyzed through a combination of descriptive and inferential statistics. The independent sample t-test was used in order to compare the mean scores of proficiency and grammaticality judgment among introverts and extroverts. The level of significance for the data analysis was set at 0.05. To investigate the relationship between introversion/extroversion, proficiency, and grammaticality judgment, Pearson Product Moment correlation coefficient (r) was made use of. Moreover, to clarify whether proficiency and/or introversion/ extroversion is a predictor for grammaticality judgment among the EFL learners, regression analysis was run.

3. Results and Findings

In this section, the results obtained are presented both descriptively and inferentially.

### 3.1. Basic Descriptive Statistics for Language Proficiency

In table 3.1**.**, the participants are characterized with regards to their scores on the proficiency test. As seen in the table, the mean score for the proficiency test is calculated as (32.1±8.92).

Table 3.1. Basic Descriptive Statistics for the Participants' Language Proficiency

Factor	N	Minimum	Maximum	Mean	Std. Deviation
Proficiency	142	10	52	32.14	8.96

Figure 3.1. below represents a histogram showing the distribution of scores obtained from administering the EFL proficiency test to 142 participants of the present study.

Figure3.1. Display of Language Proficiency Scores

Std. Dev = 8.94
Mean = 32.1
N = 142.00
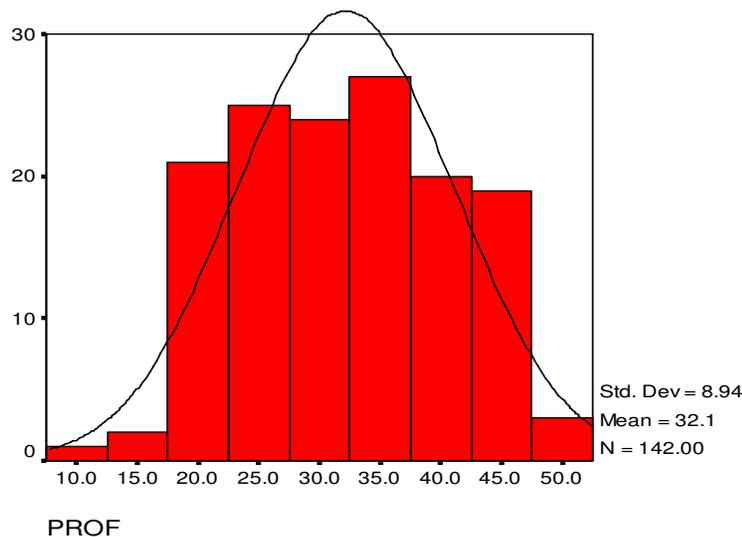
PROF

3.2. Sample *t-test* for Introversion/ Extroversion and Language Proficiency

In order to investigate the relationship between the participants' language proficiency and their personality traits, the mean score of proficiency among introverts and extroverts, being 32.63 and 31.82 respectively, is calculated. Then, the significance of the difference observed between the means is investigated through the application of the independent sample *t-test*. As represented in table 3.2., the computed significance to compare the mean scores of the two personality traits equals to 0.599.This

magnitude is much greater than the significance level set for the study (0.05). This suggests the fact that there is no statistical difference between the two groups concerning their language proficiency. Consequently, both groups are statistically at the same level, and neither introverts nor extroverts are better as far as EFL proficiency concerns.

Table 3.2. Independent Sample t-test for Intoversion/Extrovesion & Language Proficiency

Variables	N	Mean	Std. Deviation	t	Sig.
Introversion	57	32.63	8.90	.713	.599
Extroversion	85	31.82	9.00		

*Significant at .05

3.3. Correlation between Intoversion/Extrovesion & Language Proficiency

As displayed in table 1.5, the computed magnitudes of the Pearson product moment correlation (r) concerning the investigation of the relationship between introversion/ extroversion and EFL proficiency equal to 0.016 and -0.125 respectively. This analysis represents that statistically speaking, there is little positive correlation between introversion and language proficiency (0.016 is close to zero - much smaller than +1), while the correlation coefficient –0.125 indicates a little negative correlation between extroversion and language proficiency (-0.125 is close to zero). This can be deduced from the fact that there is little or no relationship between Introversion/extroversion and language proficiency among the EFL Iranian learners.

Table 3.3. Correlation between Intoversion/Extrovesion & Language Proficiency

Variables	Introversion	Extroversion	Proficiency
Introversion	1		.016
Extroversion		1	-.125
Proficiency	.016		1

*Significant at .05

**3.4. Basic Descriptive Statistics for Grammaticality Judgment**

In table 3.4., the participants are characterized with regards to their scores on the grammaticality judgment test. The table represents the mean score for the grammaticality judgment test as (12.24±6.89).

Table3.4. Basic Descriptive Statistics for the Participants' GJ

Factor	N	Minimum	Maximum	Mean	Std. Deviation
GJ	142	1	29	12.24	6.89

Figure 3.4. represents a histogram showing the distribution of scores obtained from administering the EFL grammaticality judgment test to 142 participants of the present study.

Figure 3.4. Display of Grammaticality Judgment Scores
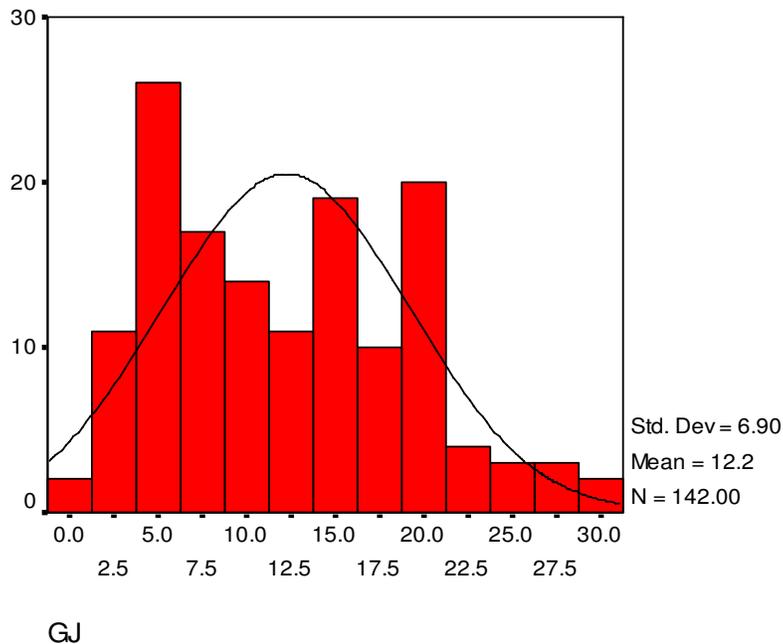
Std. Dev = 6.90
Mean = 12.2
N = 142.00

GJ

3.5. Independent Sample *t-test* for Introversion/Extroversion and Grammaticality Judgment

In order for the study to find out which personality groups (introverts or extroverts) of the students in Guilan University was better in terms of their grammaticality judgment, the mean scores of grammaticality judgment for the introvert and extrovert groups were compared through the use of the independent sample t-test. Table 3.5 displays that the significance computed by the *t-test* analysis is 0.790, which is much greater than 0.05 (the significance level set for this study). Statistically speaking, no difference can be imputed to the personality traits of introversion/extroversion regarding their grammaticality judgment. This result stems from the fact that neither group is statistically better in terms of their grammaticality judgment.

Table 3.5. Independent Sample t-test for Intoversion/Extrovesion & GJ

Variables	N	Mean	Std. Deviation	t	Sig.
Introversion	57	12.05	7.38	-.213	.790
Extroversion	85	12.37	6.59		

*Significant at .05

3.6. Correlation between Intoversion/Extrovesion and the grammaticality judgment

Table 3.6. indicates that the computed magnitudes of the correlation coefficient regarding the relationship between introversion/extroversion and the grammaticality judgment equal to - 0.184 and - 0.148 respectively. This represents a little negative correlation between the variables, since the computed coefficients are both close to zero. This can be resulted from the fact that introversion/extroversion have little or no statistical bearing on the grammaticality judgment of the EFL Iranian learners. The negative magnitude shows that the scores on the introversion/extroversion scales are the reverse of those on the grammaticality judgment test; however the relationship is so low that it should be ignored.

Table 3.6. Correlation between Intoversion/Extrovesion & GJ

Variables	Introversion	Extroversion	GJ
Introversion	1	-	-.184
Extroversion	-	1	-.148
GJ	-.184	-.148	1

*Significant at .05

3.7. Multiple Regressions for Introversion/Extroversion and Language Proficiency

In order to clarify if proficiency and/or introversion/extroversion is a predictor for grammaticality judgment among the EFL learners, the relationship between variables titled proficiency, and introversion/extroversion as possible predictors and the grammaticality judgment as a dependent variable was investigated through the application of the multiple regression analysis. Based on the results presented in table 3.7, regarding the relationship between variables titled introversion/extroversion, and language proficiency as possible predictors and grammaticality judgment as independent variable, the significance for language proficiency is calculated as .000*, while the computed significance for introversion / extroversion equals to 0.456. Statistically speaking, the magnitudes of significance clearly manifest that language

proficiency is a predictor for grammaticality judgment (0.000* < 0.05). However, the personality traits of introversion/extroversion are not likely to be predictors for the independent variable (0.456 > 0.05). This is an indicative of the fact that the grammaticality judgment of the EFL Iranian learners is a function of their language proficiency.

Table 3.7. Multiple Regressions for Introversion/Extroversion and Language Proficiency

Variables	Beta	t	Sig.
Introversion/Extroversion	-.055	-.749	.456
Language Prof	.74	10.11	.000*

Dependent Variable: Language Proficiency

*Significant at .05

3.8. Stepwise Multiple Regression for Predicting the Grammaticality Judgment

The interaction between introversion/extroversion and proficiency as possible predictors and grammaticality judgment as dependent variable was investigated through the application of the stepwise multiple regression. In this analysis, the relevant variables are juxtaposed for the indication of the predictor(s). As shown in table 3.8, the juxtaposition result is an indicative of the fact that language proficiency when juxtaposed with introversion/extroversion is the mere statistical predictor for the grammaticality judgment among the EFL Iranian learners. This all boils down to the fact that grammaticality judgment is not a function of introversion/extroversion but a function of language proficiency.

Table 3.8. Stepwise Multiple Regressions for Predicting the GJ

Step	Predicting Variable(s)	R	R²	Adjusted R²	The Std. Error of the Estimate
First	Language Prof	.750	562	.557	4.39

Predictors: Language Prof

Excluded Variables: Introversion/Extroversion

Dependant Variable: GJ

4. Conclusion

The personality variables introversion/extraversion have long been neglected in linguistic research in general and research into EFL grammaticality judgment in particular. Due to a number of methodological and conceptual divergences, the limited amount of research findings in this area could and cannot be generalized. This study tried to contribute to the research field by making use of a validated personality scale (EPI) and sensitive linguistic measures for language proficiency and grammaticality judgment. Contrary to what the researcher expected, the following results, drawn from the research, can provide appropriate answers to the posed research questions:

i) The introvert students studying EFL at Guilan university language center did not show any statistical significant difference from their extrovert peers regarding their written performance on the proficiency test.

ii) The introvert students studying EFL at Guilan university language center did not show any statistical significant difference from their extrovert peers regarding their written performance on the grammaticality judgment test.

iii) There was a statistically high significant relationship between language proficiency and grammaticality judgment among the Iranian EFL learners studying at Guilan University.

iv) Between the variables tilted language proficiency and introversion/ extroversion, only proficiency was a predictor for grammaticality judgment among the Iranian EFL learners studying at Guilan University.

The aforementioned findings may be elucidated in various ways. One plausible account can be according to what (1988) and Brown (2007) suggest. As Brown (2007) puts it, the view that extroverts are brighter than introverts in language learning is misleading. Introverts can have an inner strength of character that extroverts do not have. Unfortunately these stereotypes have influenced teachers' perception of students. There is enough evidence that teachers admire talkative, outgoing students who participate freely in class discussions. Educators have warned against prejudging students on the basis of perceived extroversion. Chastain (1988) believes that extroverts seem to be able to dominate classroom communicative activities with less fear of risk-taking comparing to their introvert peers; however introverts maybe are

more conscious and dedicated to their task. These personality differences can not be an indicative of the priority of extroverts to introverts in learning reading, speaking, and writing skills. The findings of this study seem to coincide the above-mentioned views.

The present findings can illuminate the issue Stern (1983) put forward concerning a clear contradiction of ideas between psychologists and applied linguists. As he said, psychologist claim that extroversion is a disadvantage for learning on the ground that an extrovert has "less cortical arousal", is more easily "inhibited", and has a "limited long term memory". In contrast, many applied linguists predict that extroversion is an advantage for learning a second/foreign language on the assumption that an extrovert elicits more "input" and produces "more output". The lack of a significant relationship between introversion/extroversion and language proficiency/grammaticality judgment brings the truth to light and settles the disagreement.

Language teachers in Iran, as do most of their counterparts in other countries, tend to wish to encourage extroversion and to treat quiet reserved students as problems. This valuing over introversion originates from the emphasis in modern communicative classes on speaking skills and overlooking the grammatical accuracy of what the EFL learners produce. However, as Chastain (1988) puts it, some students are so shy and so timid and unsure of themselves even in their first language, that attempting to communicate in a second language can be traumatic for them. Students' reclusiveness is not going to be taken as their incapability in language learning. Personality traits do not hinder or improve the grammaticality judgment of EFL learners. What accounts for their language learning ability in general and grammaticality judgment in particular, as the findings of this study suggest, is the amount of proficiency orientation made use of by their instructors. The more proficient EFL learners they are, the better acceptability judgment they will have, irrespective of their bipolar personality orientation.

Teachers can make use of the students' personality traits in material selection, groupings, task instructions, and increasing students' metacognitive knowledge which in turn influences their learning strategies. Dividing students into introverts and extroverts, teachers can have a better insight dealing with their class activities.

Due to the problems the researcher encountered with regards to the availability of the participants, the factors of gender and age were not taken into account in the

research. Doing further studies on the grammaticality judgment of the female and male EFL Iranian learners regarding their age limit is the researcher's preoccupation.

Moreover, grammaticality judgment which indicates the EFL learners' ability in judging and correcting sentences examines the EFL learners' productive skill in written form. Now, whether the personality traits of introversion/extroversion have any bearing on the grammaticality of the EFL learners' spoken language is another question of concern. Further research is needed to investigate if introversion or extroversion has any relationship with the grammaticality of EFL spoken Language.

References

Alatis, J. E, Altman, H.B & Alatis, P.D. (1981). *The Second Language Classroom: Directions for the 1980'*s. New York: Oxford University Press.

Ali Mohammadi, H. (1996). The relationship between test anxiety and introversion/extroversion. Unpublished MA Thesis, Islamic Azad University, Shiraz Branch.

Ashtari, F. (2002). *A Study of the Relationship Between, Extroversion/Introversion and Speaking in a Foreign Language*. Unpublished MA Thesis, Isfahan University, Iran.

Azarkhosh, M. (2000). The Application of Psychological Tests and Clinical Recognition. Tehran: Ravan Publications Press.

Babaeikou. A. (1995). Extroversion/Introversion and English Language Proficiency. Unpublished Master's Thesis, Tehran University, Iran.

Birjandi, P. Mosallanejad, P. Bagheridoust, E. (2005). *Principles of Teaching Foreign Languages*. Iran, Tehran: Rahrovan Publishers.

Brown, H. D. (2007). *Principals Of Language Learning And Teaching*. (3rd ed). USA: Prentice-Hall, Inc.

Busch , D. (1982). Introversion/extroversion and the EFL proficiency of Japanese students. *Language Learning,* 32(1),109-131

Chastain, K. (1988). *Developing Second Language Skills: Theory and Practice*. America: Harcourt Brace Jovanovich Publishers.

Cook, G. (2003). *Applied Linguistics* .Hong Kong: Oxford University Press.

Cook, V. (2001). *Second Language Learning and Language Teaching*. GB: Edward Arnold.

Ehrman, M. E., & Oxford, R.L. (1995). Effects of Sex Difference, Career Choice, and Psychological Type on Adults Language Learning Strategies. *Modern Language* Journal, EJ378899.

Ellis, R. (1994). *The Study of Second Language Acquisition*. Oxford: Oxford University Press.

Ely, C. M (1986). An analysis of discomfort, risktaking, sociability, and motivation in the L2 classroom. Language Learning, 36, 7, 7 – 25.

Eysenck, H. J. and Eysenck, S. B. (1968). *Manual for the Eysenck Personality Inventory*. Sandiego, California: Educational and Industrial Testing Service.

Farhady, H. (2006). *Test of English as a Foreign Language: Farhady's English Courses*. Tehran: Iran Language Center.

Finocchiaro, M. and Brumfit, C. (1983). *The Functional-Notional Approach, From Theory to Practice*. New York: Oxford University Press.

Fontana, D. (1995). *Psychology For Teachers* (3rd ed). London: Macmillan.

Gear, J. & Gear, R. (2005). *Cambridge Preparation for the TOEFL Test* (3rd Ed). Cambridge: Cambridge University Press.

Ghafour Rezayee, G. (2002). *Relationship Between Personality Traits Of Extroversion/Introversion And The Use Of Language Learning Strategies*. Unpublished MA Thesis, Islamic Azad University, Tehran Central Branch.

Hadley, O. A. (2003). *Teaching Language in Context*. USA : Heinle & Heinle.

Imenpour, A. (2005). *The Effect OF Introversion/Extroversion on the Use of Language Learning Strategies*. Unpublished MA Thesis, Islamic Azad University, Shiraz Branch.

Johnstone, R. (1994). Research On Language Learning And Teaching: *Language Teaching*, 27, 145-156. Cambridge University Press.

Kim, J. J. (1998). *Personality Variables and EFL Proficiency among Korean Elementary School Students*. Dissertation Abstracts International, 58(07), 2538A.

Lightbrown, P. and Spada, N. (2006). *How Languages are Learned*. Oxford: Oxford University Press.

Mackey, A. and Gass, S. M. (2005*). Second Language Research: Methodology and Design*.Mahwa, New Jersy: Lawrence Erlbaum Associates.

McDonough, S. (1986). *Psychology In Foreign Language Teaching.* London: Rotledge.

Moris, W. M. (1979). *Extroversion and Introversion: An International Personality*. New York. Halsted Press.

Naiman, N., Frohilich, M., Stern, H, and Tedesco, A . (1978). The good language learner. *Research in Education series*, 7. Toronto: Ontario Institute for Studies in Education.

Nunan, D. (1999). *Second Language Teaching and Learning* Boston, Massachusetts: Heinle *& Heinle Publishers.*

Oxford, R. L., and Anderson, N. J. (1995). A Cross-cultural View Of Learning Styles. *Language Teaching*, 28(4), 201-215.

Pazhuhesh, P. (1994). *The Role of Extroversion/Introversion In EFL Reading*. Unpublished Master's Thesis, Tehran University, Iran.

Rossier, J, C. (1975*). Extroversion/Introversion as a Significant Variable in the Learning of Language*. Doctoral Dissertation, Dissertation Abstracts, International.36: 7308A-7309A.

Rubin. J (1975). What the "good language learner" can teach us. *TESOL Quarterly*, 9, 41-51.

Saemian, M. (2001). *Personality Factors (Introversion/Extroversion) and Vocabulary Learning*. Unpublished MA Thesis, Islamic Azad University, Tehran Branch.

Schmitt, N. (2002). *An Introduction to Applied Linguistics*. New York: Oxford University Press Inc.

Seliger, H . W. (1977). A study of interaction patterns and L2 competence. Condensed Version of oral presentation, Los Angeles, *Second Language Research Forum* , UCLA.

Skeham, P. (1989). *Individual Differences in Second Language Learning.* USA: Routledge, Chaoman and Hall.

Slavin, R. (2003). *Educational Psychology: Theory And Practice*. Boston: Allyn and Bacon.

Stern, H. H. (1983). *Fundamental Concepts in Language Teaching*. Oxford: Oxford University Press.

Strong, M.H. (1983). Social Styles and Second Language acquisition of Spanish Speaking Kindergarteners. *TESOL Quarterly*, 17(2), 241-58.

Van Daele, S., The Effect of Extroversion on L2 Oral Proficiency. Article. Retrieved November 24, 2005 from the World Wide Web: http://www.UCM.es/info/circulo/no 24/ Vandadaele.htm.

Wang staff, B. J. (1999). *Personality (a cognitive approach)*. New York: Rutledge.

Widdowson, H.G. (1979). *Reading and Thinking in English*. Oxford: Oxford University Press.

Zandi, M. (2001). *The Relationship Between Introversion/Extroversion, Gender And The EFL Proficiency Of Iranian Pre-university Students*. Unpublished MA Thesis, Islamic Azad University, Shiraz Branch.

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