THE IMPACT OF PERSONALITY TRAITS ON THE AFFECTIVE CATEGORY OF ENGLISH LANGUAGE LEARNING STRATEGIES

Seyed Hossein Fazeli
Department of English Language Teaching, Abadan Branch, Islamic Azad University, Abadan, Iran
Email: fazeli78@yahoo.com

Abstract
The present study aims at discovering the impact of personality traits in the prediction use of the Affective English Language Learning Strategies (AELLSs) for learners of English as a foreign language. Four instruments were used, which were Adapted Inventory for Affective English Language Learning Strategies based on Affective category of Strategy Inventory for Language Learning (SILL) of Rebecca L. Oxfords (1990), A Background Questionnaire, NEO-Five Factors Inventory (NEO-FFI), and Test of English as a Foreign Language (TOEFL). Two hundred and thirteen Iranian female university level learners of English language as a university major in Iran, were volunteers to participate in this research work. The intact classes were chosen. The results show that although there is a significant relationship between each of the two traits of personality and use of the AELLSs, personality cannot be a strong predictor with high percentage of contribution to predict use of the AELLSs.
Keywords: Affective Language Learning Strategies, English Learning, Personality Traits.

1. Introduction
Since differences among learners have been identified as variables which influence language learning outcome (Larsen-Freeman & Long, 1991; Skehan, 1989) and high percentage of sources of learners' knowledge comes from teachers (Marttinen, 2008), Horwitz (1988) encourages teachers to discover the prescriptive belief of their own students. Moreover, in order to provide successful instruction, teachers need to learn to identify and understand their students' individual difference, and even they need to become more aware that weather their teaching styles are appropriate to their learners' strategies (Oxford & Cohen, 1992).

Since the 1990s, there has been a growing interest on how personality correlates with the academic performance. Personality has been conceptualized at different levels of breadth (McAdams, 1992), and each of these levels include our understanding of individual understanding. Moreover, individuals are characterized by a unique pattern of traits, and

successful language learners choose strategies suit to their personalities (Oxford & Nyikos, 1989). In addition, since LLSs are not innate but learnable (Oxford, 1994), broad justifications have been offered for the evaluation of personality as a predictor of the Affective English Language Learning Strategies (AELLSs).

In such way, the premise underlying line of this research is that success in AELLSs plays an important role in affecting learners' English language learning process.

2. Review of the Literature

The examination of variation in human behavior is referred to as the study of individual differences (Ehrman & Dornyei, 1998). Such study of individual differences includes many subsets of studies such as the study of personality differences (Hampson & Colman, 1995), and personality factors that were shown as important factors in development of linguistic abilities (Ellis, 1985). Psychologically, it is a truism that people are different in many fundamental ways, and learners are individuals, and there are infinite variables (Skehan, 1989). In this manner, Horwitz (1999) points out that "language learners are individuals approaching language learning in their own unique way" (p.558). In addition, one individual who is characterized as a particular psychological character, adopts different learning strategies (Brown, 2001). In such situation, teachers must make their students aware of the range of the strategies they can adopt (Cook, 2008).

There are some possible ways to look at the AELLSs and their relationship with personality traits. The first is to see the use of the AELLSs as an outcome of personality traits. The second is to see them as having uni-directional causal role increasing personality traits. The third one is to see the relationship between the two as mutual, and causality is bi-directional.

3. Methodology

3.1. Participants

The chosen participants for this study were female students who studying in third grade (year) of English major of B. A. degree, age ranging from 19 to 28 (Mean = 23.4, SD = 2).Their mother tongue was Persian (Farsi) which is the official language of Iran.

The socio-economic status of participants, such as the participants' social background, and parents' level education controlled as well by a questionnaire. Accordingly, the participants, who were ranked as a middle class, were chosen.

Because of the nature of this work (regarding use of the AELLSs), a general English proficiency test for determining the proficiency level of participants in English was applied in order to minimize the effect of English

language proficiency. As Jafarpour (2001) defines "the percent classification of subjects by the experimental test that corresponds to those by the criterion" (pp.32-33) (as cited in Golkar & Yamini, 2007), top of subjects are 27% and bottom of subjects are 27% (Golkar & Yamini, 2007), the participant who were classified as intermediate subjects, were asked to participate in the current study.

3.2. Instrumentation in the Current Study

Four instruments were used to gather data in the current study. They were:

3.2.1. Adapted Inventory for Affective English Language Learning Strategies

The Strategy Inventory for Language Learning(SILL) of Rebecca L. Oxford (1990) is a kind of self-report questionnaire that has been used extensively by researchers in many countries, and its reliability has been checked in multiple ways, and has been reported as of high validity, reliability and utility (Oxford, 1996). In addition, factor analysis of SILL is confirmed by many studies (Hsiao & Oxford, 2002; Oxford, 1996; Oxford & Burry-Stock, 1995). In this way, as Ellis (1994) believes Oxford's taxonomy is possibly the most comprehensive currently available. Several empirical studies have been found moderate intercorrelation between the items of six categories in SILL (Oxford & Ehrman, 1995).

Based on the Affective category of SILL, the investigator adapted a questionnaire. In adaptation of each instrument from one language to another in research works, some problems occur, such as the problem of translating one questionnaire into another language (Perera & Eysenck, 1984). Similarly to the other two questioners (NEO-FFI and Background Questionnaire), adapted AELLSs inventory was checked through back translation into English by three English teachers, and three psychologists who were fully proficient in both languages (English and Persian), in order to check the consistency with the English version, and based on it, the pilot study was performed. The items were corrected until full agreement among the translators was achieved, and the pilot study confirms such translated items. In addition, the balance between spoken and written Persian was checked.

In the case of such questionnaires, three psychologists and three English teachers were asked to check the questionnaire from two points of view. Firstly, since both psychologists and linguists were fully proficient in both languages (English and Persian), they were asked to check the translated version of the questionnaire in order to check the consistency with English version of them. Secondly, since both the psychologists and English teachers were professional in related study of the questionnaire, they were asked to check the psychometrics of the questionnaire.

After full agreement among the psychologists and linguists was achieved, and the pilot study confirms the items of such questionnaire, it was administrated in the main study.

3.2.2. Test of English as a Foreign Language (TOEFL)

Because of the nature of this work (regarding use of the AELLSs), TOEFL (Structure and Written Expression, and Reading Comprehension parts), as a general English proficiency test, was used for determining the proficiency level of participants in English in order to minimize the effect of English language proficiency. The participants, who were ranked as intermediate subjects, were asked to participate in the current study.

3.2.3. A Background Questionnaire

The socio-economic status of participants, such as the participants' social background, and parents' level of education were controlled by a background questionnaire. The middle class students were chosen.

3.2.4. NEO-Five Factors Inventory (NEO-FFI)

The Big Five Personality Questionnaire is based on the Big Five Factor Model of personality whose major proponents are Lewis Goldberg, Paul Costa, and Robert McCare. This theory proposes that five broad dimensions provide complete description of personality.

The questionnaire of the Big Five Factors is one of the most widely used personality assessment in the world. In addition, evidences indicate that Big Five is fairly stable over time (Costa & McCare, 1988; Digman, 1989). Moreover, factor structure resembling the Big Five Factors were identified in numerous sets of variables (Digman & Inouye, 1986; Goldberg, 1981, 1990; John, 1990; McCare & Costa, 1985; Saucier & Goldberg, 1996). In addition, the scales of Big Five have proven to be a useful tool in a number of applied fields. In this way, the Big Five Factors Inventory has enjoyed wide spread popularity in applied organizational context. The reliability reported in the manual is adequate (.78 for mean of the five factors) (Costa & McCare, 1992).

The dimensions composing the Big Five Factors (as cited in related literature by different dominant researchers such as Chamorro-Premuzie, Furnham & Lewis, 2007; Costa & McCare, 1992) are detailed as: a) Neuroticism represents the tendency to exhibit poor emotional adjustment, anxious, and pessimistic; b) Extraversion represents the tendency to be sociable and assertive, cheerful, active, upbeat, and optimistic; c) Openness to experiences (intellect) represents the tendency to imaginative, intellectually curious, imaginative, and artistically sensitive; d) Agreeableness is the tendency to be trusting, compliant, caring, gentle,

compassionate, empathic, and cooperative; e) Conscientiousness represents the tendency to responsible, organized, hard-working, responsible, dependable, able to plan, organized, persistent, achievement oriented, purposeful, strong-willed, and determined.

The NEO-FFI is a sixty-item version of S form of the NEO-PI-R that is applied to measure the five domains of personality. It consists of five 12-item scales. Each of these sixty items includes five choices. As the procedure of administration of the SILL, the participants were asked to choose the statement which true of them. In addition, they were told that there is no right or wrong answer to these statements. The NEO-FFI is self-scoring, and paper and pencil survey. It is 5-point scale, ranges from "Strongly Disagree" to "Strongly Agree". The choices are as: a) Strongly Disagree, b) Disagree, c) Neutral, d) Agree, e) Strongly Agree.

The adapted Persian version of NEO-FFI was used in the current study. The short form of NEO-FFI (Costa & McCare, 1992) was translated into Persian language (Fathi-Ashtiani, 2009).

3.3. Sample of the Pilot Study

Thirty-nine female university students learners of English as a university major at Islamic Azad University were asked to participate in the pilot study. In this pilot study, the percentage of participants from each branch is approximately equal to the others. They were told about the importance of the results of the pilot study.

3.4. Reliability of the Instruments

This section will explore the reliabilities of the three instruments: Adapted Inventory for Affective English Language Learning Strategies, NEO-FFI, and TOEFL. The reliability of the experimental measures were assessed by calculating Cronbach's alpha over their items across all the participants in the current study which were found .71 for Adapted Inventory for Affective English Language Learning Strategies,.82 for NEO-FFI, and .80 for TOEFL.

The reliability coefficient indicated the degree to which the results on a scale can be considered internally consistent, or reliable (De Vellis, 2003; Ghiasvand, 2008; Moemeni, 2007; Nunnally & Bernstein, 1994). Such finding of reliability for the three instruments confirms the finding of reliability in the pilot study.

3.5. Data Collection Procedures in the Main Study

The data for the study described in this study collected between September 2010 and November 2010 in Iran, at the Islamic Azad University Branches of three cities that are named Abadan, Dezful, and Masjed-Solyman. These three cities are located in Khuzestan province in south of Iran.

All of the instruments were administrated during class time and based on the availability of the participants of third grade (year) at three stages. The researcher, himself, administrated all the instruments. All the subjects participated in the main study, were explained the goals of the current study by the researcher.

3.5.1. Stage One

At this stage, the participants were asked to answer a TOEFL test. Approximately 80 minutes were taken to answer the test. Such duration of time was equal to the duration of time that was calculated in the pilot study (the first week).

3.5.2. Stage Two

At the second stage, the respondents were asked to fill the Adapted Inventory for Affective English Language Learning Strategies. The respondents were asked to respond to the questions within 5-10 minutes. The time that assigned for administration of the SILL was determined according to the results obtained from the pilot study. Along Adapted Inventory for Affective English Language Learning Strategies, Background Questionnaire was administrated (the second week).

3.5.3. Stage Three

At this Stage, NEO-FFI was administrated. The time that was assigned for administration of the NEO-FFI was determined according to the results obtained from the pilot study.10 – 15 minutes was enough to complete NEO-FFI (the third week).

3.6. Data Analysis

After data collection, the data were entered into databases (Excel and SPSS) to enable data analysis to be carried out.

The first procedure of data analysis includes Pearson Correlation that used to identify the strength and direction of the relationship between variables. Correlation does not imply causality, but it does provide a picture of relationships. The classification of strength of correlation is not well accepted among different researchers, and there are different classifications such as the classification suggested by Cohen, J. (1988), Delavar (2010), Ghiasvand (2008). In the current study, the classification that was suggested by Cohen, J. (1988) was chosen as criterion to interpret and discuss about the strength of the correlation (Table 1).

The second procedure of data analysis includes Analysis of Variance (ANOVA) that is an analytic tool. In non-experimental research, ANOVA does not show the same meaning as experimental research.

Table1: The classification was suggested by Cohen, J (1988)

Level of Strength	**Amount of the Strength**
Low	r=.10 to .29
Medium	r=.30 to .49
Strong	r= .50 to 1

In non-experimental research, ANOVA does not mean causality between the independent variables and the dependent variables when there is significant relationship. In this way, the use of ANOVA in non-experimental research is criticized if the goal is finding casual relationships (Johnson, 2001). Moreover, the use of ANOVA in non-experimental research is perfectly acceptable when the goal is not causality according to top statisticians (e.g. Johenson, 2001). In addition, ANOVA has been frequently used for many years in non-experimental research (Johnson, 2001).

In such a way, correlation is used to find the degree and direction of the relationship between variables, and ANOVA test the significance of the relationship.

The third procedure of data analysis includes multiple regression analysis. As Newton and Rudestan (1999) point out, it is used to find the relationship between multiple distributed independent variables and a single dependent variable. In such a way, the researcher used multiple regression to identify, among all, the five independent variables that are the best predictors of the overall use of ELLSs use. In this procedure, stepwise method was used; and the interpretation of the stepwise method of multiple regression was based on the samples of Ghiasvand, 2008; Kalantari, 2008.

4. Results, Discussion, and Conclusion

In the entire sample, the strategies in the Affective category were categorized as medium frequently used strategies, with a mean of 3.1 (SD=.69) (Based on the Oxford' key, 1990).

The means were calculated in order to determine the mean of the each of five traits of personality among the total group of the respondents (N=213) (Table 2).

Table 2: Means and Standard Deviations (SD) of the five traits of personality in the current study

Personality Trait	**N**	**Mean**	**SD**
Neuroticism	213	23.0	8.3
Extraversion	213	27.4	5.5
Openness to Experiences	213	27.9	4.7
Agreeableness	213	32.4	5.4
Conscientiousness	213	34.7	6.3

Table 2 showed that the mean of the Conscientiousness trait (Mean=34.7, SD =6.3) was more than each of the means of the other four traits, and the mean of the Neuroticism trait (Mean=23.0, SD=8.3) was less than each of the means of the other four traits.

The Pearson Correlation was performed to examine whether there is relationship between the overall Affective strategy use strategies and the five traits of personality (Table 3).

Table 3: The summary of correlations among the overall Affective strategy use and the five traits of personality

		Extraversion	**Openness to Experien-ces**	**Agreeab-leness**	**Conscientio-usness**	**Neuroti-cism**
Affective Strategies	Pearson Correlation	.022	.239**	-.025	.214**	-.020
	Sig. (2-tailed)	.747	.000	.721	.002	.772
	N	213	213	213	213	213

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

According to Table 3, the students' overall Affective strategy use was significant positively correlated with the Openness to Experiences trait, and the Conscientiousness trait at a significant level (p>.01). The levels of correlations were found low for both of the Openness to Experiences trait, and for the Conscientiousness trait. For each of the Extraversion trait, the Agreeableness trait, and the Neuroticism trait, the correlation was non-significant (P>.05). In table 3, there was not found any a significant negative type of correlation (p<.01).

According to Table 3, the students' overall Affective strategy use was not correlated with the Extraversion trait (p>.05). In such way, Table 3 indicated that there was not a meaningful significant relationship between the overall Affective strategy use and the Extraversion trait.

Table 3 indicated that, based on increasing of the Openness to Experiences trait level of the students, higher average of Affective Strategies would be used, and based on decreasing of the Openness to Experiences trait level, lower average of Affective Strategies would be used. In such way, Table 3 showed that there was a meaningful significant positive relationship between the overall Affective strategy use and the Openness to Experiences trait (r=.239, p<.01). The positive relationship implies that the students with higher level of Openness to Experiences trait use Affective strategies more.

According to Table 3, the students' overall Affective strategy use was not significant correlated with the Agreeableness trait (p>.05). In such way,

Table 3 indicated that there was not a meaningful significant relationship between the overall Affective strategy use and the Agreeableness trait

Table 3 indicated that based on increasing of the Conscientiousness trait level of the students, higher average of Affective Strategies would be used, and based on decreasing of the Conscientiousness trait level, lower average of Affective Strategies would be used. In such way, Table 3 showed that there was a meaningful significant positive relationship between the overall Affective strategy use and the Conscientiousness trait ($r=.214$, $p<.01$). The positive relationship implies that the more Agreeable students use Affective strategies more.

According to Table 3, the students' overall Affective strategy use was not significant correlated with the Neuroticism trait ($p>.05$). In such way, Table 3 indicated that there was not a meaningful significant relationship between the overall Affective strategy use and the Neuroticism trait.

The multiple regression analysis, for all the five traits of personality (as independent variables) and the overall use of Affective strategies (as a dependent variable) were analyzed through the stepwise method. Out of the five traits of personality, only two variables entered the equation (Table 4).

Table 4: The model summary of the equation

Model	Variables Entered	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	Openness to Experiences	.239[a]	.057	.053	.66967
2	Conscientiousness	.301[b]	.090	.082	.65928

Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100
Dependent Variable: Affective Strategies
a. Predictors: (Constant), Openness to Experiences
b. Predictors: (Constant), Openness to Experiences, Conscientiousness

According to Table 4, regression analysis has run up to two steps. In the first step, the Openness to Experiences trait entered the equation that the Adjusted R-Square became .053. In the second step, when the Conscientiousness trait entered the equation, the Adjusted R-Square increased up to .082. In other words, based on the Adjusted R-Square, the emerged model for the two independent variables with the Adjusted R-Square of .082, accounted for explaining about 8.2% of the variance of the students' overall Affective strategy use.

Further, Table 5 (regressional ANOVA) showed that the effect was significant, and all the models had high F values ($F=12.768$, $F=10.440$, $P< .01$). Therefore, it could be concluded that about 8.2% of changes in the students' overall Affective strategy use was accounted for by the Openness to Experiences and Conscientiousness traits.

Table 5: The results of regressional ANOVA of the equation

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.726	1	5.726	12.768	.000[a]
	Residual	94.625	211	.448		
	Total	100.351	212			
2	Regression	9.075	2	4.538	10.440	.000[b]
	Residual	91.276	210	.435		
	Total	100.351	212			

a. Predictors: (Constant), Openness to Experiences
b. Predictors: (Constant), Openness to Experiences, Conscientiousness
c. Dependent Variable: Affective Strategies

As stated, Table 5 indicated that the effect of the Openness to Experiences and Conscientiousness traits was significant at the $p<.01$ level. Remaining the three traits of personality did not enter the regression equation because of level of their errors were greater than .05, and they had very weak effect in prediction of the overall Affective strategy use. In such way, rest of the contribution for the overall Affective strategy use was unaccounted.

Table 6: The unsatnderdised coefficients[a], t tests and significances for different models predicted of the equation

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.143	.275		7.789	.000
	Openness to Experiences	.417	.117	.239	3.573	.000
2	(Constant)	1.544	.346		4.457	.000
	Openness to Experiences	.373	.116	.214	3.215	.002
	Conscientiousness	.243	.087	.184	2.776	.006

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.143	.275		7.789	.000
	Openness to Experiences	.417	.117	.239	3.573	.000
2	(Constant)	1.544	.346		4.457	.000
	Openness to Experiences	.373	.116	.214	3.215	.002
	Conscientiousness	.243	.087	.184	2.776	.006

a. Dependent Variable: Affective Strategies

According to Table 6, the effect of the Openness to Experiences trait was greater than the effect of the Conscientiousness trait to change the overall Affective strategy use, because of the obtained Beta for the Openness to Experiences trait showed that for each of one unit of value of change in the Standard Deviation of the Openness to Experiences trait, the amount of change .214 occurred in the Standard Deviation of the overall Affective strategy use. However, for the Conscientiousness trait, for each of one unit of value of change in its Standard Deviation, the amount change of .184 occurred in the Standard Deviation of the overall Affective strategy use. From the above table, it was further evident that for all the predicted models and constants, the t values ranged from 2.776 to 7.789, which all were found to be significant, and significance levels ranged from .006 to .000 level.

Table 7: The excluded variables[c] of the equation

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	Extraversion	-.019[a]	-.279	.780	-.019	.971
	Agreeableness	-.052[a]	-.769	.443	-.053	.988
	Conscientiousness	.184[a]	2.776	.006	.188	.981
	Neuroticism	.018[a]	.267	.790	.018	.975
2	Extraversion	-.080[b]	-1.147	.253	-.079	.888
	Agreeableness	-.103[b]	-1.514	.131	-.104	.928
	Neuroticism	.086[b]	1.224	.222	.084	.876

a. Predictors in the Model: (Constant), Openness to Experiences
b. Predictors in the Model: (Constant), Openness to Experiences, Conscientiousness
c. Dependent Variable: Affective Strategies

Table 7 shows the excluded variables in this equation. The excluded variables in the first step were Extraversion, Agreeableness,

Conscientiousness, and Neuroticism. In the second step, the excluded variables were Extraversion, Agreeableness, and Neuroticism.

In summary, one can conclude that the traits like the Openness to Experiences trait and the Conscientiousness trait best predicted the overall use of Affective Strategies of the students.

5. Limitations of the Current Study

Generally speaking, there are some difficulties inherent in endeavor to conduct any research work on the learners of second/foreign language. Such difficulties occur because of the variables used in conducting this type of research (Ellis, 1985). Similarly, the present study due to using Ex Post facto type of research has certain limitations.

References

Brown, H. D.2001. *Principles of language learning and teaching*. Englewood Cliffs, NJ: Prentice Hall.

Chamorro-Premuzie, T., Furnham, A., & Lewis, M. 2007. "Personality and approaches to learning predict preference for different teaching method." *Learning and Individual Differences* 17:241-250.

Cohen, J. 1988. *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.

Cook, V. 2008. *Second language learning and language teaching* (4th ed.). London: Edward Arnold.

Costa, P.T., & McCare, R.R. 1988. "Personality in adulthood: A six-year longitudinal study of self-reports and spouse ratings on the NEO personality inventory." *Journal of Personality and Social Psychology54*.4: 853-863.

Costa, P.T., & McCare, R.R. 1992. *Professional Manual for the NEO-PI-R and NEO-FFI*. Odessa, FL: Psychological Assessment Resources.

Delavar, A. 2010. *Theoretical and experimental principle of research in human sciences*. Tehran: Roshd Publication.

De Vellis, R. F. 2003. *Scale development: Theory and application* (2nd ed.). Thousand Oaks, California: Sage.

Digman, J. M. 1989. "Five robust traits dimensions: Development, stability, and utility." *Journal of Personality* 57.1:195-214.

Ehrman, M.E., & Dornyei, Z. 1998. *Interpersonal dynamics in second language education: The visible and invisible classroom*. Thousand Oaks, Calif: Sage Publications.

Ellis, R. 1985. *Understanding second language acquisition*. Oxford: Oxford University Press.

Ellis, R. 1994. *The study of second language acquisition*. Oxford: Oxford University Press.

Fathi-Ashtiani, A. 2009. *Psychological tests: Personality and mental*

health. Tehran: Be'sat Publication Institute.
Ghiasvand, A. 2008. *Application of statistics and SPSS in data analysis*. Tehran: Lovieh publication.
Goldberg, L. R. 1981. "Language and individual differences: The search for universals in personality lexicons." In L. Wheeler(Ed.), *Review of personality and social psychology*(Vol.2: 141-165). Beverrly Hills, CA: Sage.
Goldberg, L. R. 1990. "An alternative description of personality: The big five factor structure." *Journal of Personality and Social Psychology* 59*:*1216-1229.
Golkar, M., & Yamini, M. 2007. "Vocabulary, proficiency and reading comprehension." *The Reading Matrix*7.3: 88-112.
Hampson, S.E., & Colman, A. E. 1995. *Individual differences and personality*. New York: Longman.
Horwitz, E. K. 1988. "The beliefs about language learning of beginning university foreign language students." *Modern Language Journal* 72.13: 283-294.
Horwitz, E. K. 1999. "Cultural and situational influences on language learners' beliefs about language learning: a review of BALLI studies." *System* 27*:*557-576.
Hsiao, T-Y., & Oxford, R. L. 2002. "Comparing theories of language learning strategies: A confirmatory factor analysis." *Modern Language Journal* 86.3:368-383.
John, O. P. 1990. "The big five factor taxonomy: dimensions of personality in the nature language and in the questionnaire." In L.A. Pervin (Ed.), *Handbook of Personality: Theory and Research,* 66-100. New York: Guilford Press.
Johnson, B. 2001. "Toward a new classification of non-experimental quantitative research." *Educational Researcher*30.2:3-13.
Kalantari, K. 2008. *Data processing and analysis in socio-economic research*. Tehran: Farhang Saba Publisher.
Larsen-Freeman, D., & Long, M. H. 1991. *An introduction to second language acquisition research*. New York: Longman.
Marttinen, M. 2008. V*ocabulary learning strategies used by upper secondary school students studying English as a second language*. (Online) M.A. Dissertation. Retrieved from 20 March 2010 from https://jyx.jyu.fi/dspace/bitstream/handle/123456789/18447/URN_NBN_fi_jyu200803261288.pdf?sequence=1
McAdams, D. P. 1992. "The five-factor model in Personality: A critical appraisal." *Journal of Personality* 60*:329*-361.
McCare, R.R., & Costa, P.T. Jr. 1985."Updating Norman's adequate taxonomy: Intelligence and personality dimensions in natural language and

in questionnaires." *Journal of Personality and Psychology* 49:710-721.
Moemeni, M. 2007. *Statistical analysis with SPSS*. Tehran: Ketab neo Publication.
Newton, R.R., & Rudestam, K. E.1999. *Your statistical consultant: Answers to your data analysis questions*. California: Sage Publications, Inc.
Nunnally, J. C., & Bernstein, I. H. 1994. *Psychometric theory* (3rd ed.). New York: McGraw-Hill.
Oxford, R. L. 1990. *Language learning strategies: What every teacher should know*. Boston: Heinle & Heinle.
Oxford, R. L. 1994. Language learning strategies: An update. *Online Resources: Digest*. Retrieved 8 March 2011 from http://www.cal.org/ resources/digest/oxford01.html
Oxford, R. L. 1996. "Employing a questionnaire to assess the use of language learning strategies." *Applied Language Learning* 7(1& 2): 25-45.
Oxford, R. L., & Burry-Stock, J. 1995. "Assessing the use of language learning strategies worldwide with the ESL/EFL version of the Strategy Inventory for Language Learning (SILL)." *System* 23.1:1-23.
Oxford, R. L., & Cohen, A. 1992. "Language learning strategies: crucial issues of concept and classification." *Applied Language Learning 3*(1& 2): 1-35.
Oxford, R. L. & Ehrman, M. 1995. "Adult's language learning strategies in an intensive foreign language program in the United States." *System* 23.3: 359-386.
Oxford, R. L., & Nyikos, M. 1989. "Variables affecting choice of language learning strategies by university students." *Modern Language Journal* 73.3: 291-300.
Perera, M., & Eysenck, S. B. G. 1984. "A cross-cultural study of personality: Sri Lanka and England." *Journal of Cross Cultural Psychology* 15.3: 353-371.
Saucier, G., & Goldberg, L. R. 1996. "Evidence for the Big Five in analyses of familiar English personality adjectives." *European Journal of Personality* 7: 1-17.
Skehan, P. 1989. *Individual differences in second-language learning*. London: Edward Arnold.