



*In the Name of God*



**Shahrekord University**  
Faculty of Letters & Humanities  
English Department

**An Investigation Into Language Learning Strategy Use: The  
Role of Multiple Intelligences, Learning Style, and Proficiency**

A Thesis Submitted in Partial Fulfillment of the Requirements for the  
Degree of M.A. in TEFL

Supervisor:

**Dr. Ali Roohani**

Advisor:

**Dr. Masoud Rahimi**

By:

**Somayeh Rabiei**

October 2012

کلیه حقوق مادی مترتب بر نتایج مطالعات، ابتکارات  
و نوآوری های ناشی از تحقیق موضوع این پایان نامه  
متعلق به دانشگاه شهرکرد است.



**Shahrekord University**  
**Faculty of Letters & Humanities**  
**English Department**

This Is to Certify That the Content and the Quality of the Presentation of  
the M.A. Thesis Submitted by **Somayeh Rabiei** Entitled:

**An Investigation Into Language Learning Strategy Use: The Role of  
Multiple Intelligences, Learning Style, and Proficiency**

in Partial Fulfillment of the Requirements for the Degree of M.A. in  
TEFL Is Acceptable to the Research Committee (Score **19/5**).

Date of Approval:  
**14 October, 2012**

**Supervisor:** Dr. Ali Roohani .....

**Advisor:** Dr. Masoud Rahimi .....

**Committee Members:**

**Internal Examiner:** Dr. Ali Akbar Jafarpour .....

**Internal Examiner:** Dr. Azizullah Mirzaei .....

**Research & Graduate Studies Deputy**  
**Dr. Jahangir Safari**

## **ACKNOWLEDGEMENTS**

I would like to thank Almighty God for giving strength, good health and guiding me throughout this M.A. research study.

The number of persons to whom the researcher is indebted for the development of this study is too numerous to mention. However, some of the major contributors warrant special comment. Firstly, I express my deepest appreciation to my supervisor Dr. Ali Roohani for his invaluable suggestions and fruitful guidelines without which the completion of this thesis seemed far from possible. I am much beholden to him for his perusing criticism which taught me to have a broader perspective.

I am also thankful to my adviser, Dr. Masoud Rahimi, for his support and encouragement during all the phases of this thesis.

Moreover, I owe a great deal to my other professors, namely, Dr. Mahmood Hashemian, Dr. Azizullah Mirzaei, Dr. Ali Akbar Jafarpour, and Dr. Bashir Jam for their academic support during my studies at Shahrekord University.

Additionally, I am grateful to all the participants in Shahrekord University, Semnan University, and Shahrood University for their tolerance and friendly cooperation in collecting the data for this study.

Last but not least, I would like to express my great appreciation to my dear mother and my family for their overwhelming support and patience during the completion of this project.

To My Late Father  
Whose Warm  
Memory Always  
Keeps Me Going!

# TABLE OF CONTENTS

Table of Contents	i
List of Tables	v
List of Figures	vi
List of Abbreviations	vii
Abstract	viii

## CHAPTER ONE: INTRODUCTION

1.1. Preliminary	1
1.2. Statements of the Problem	7
1.3. Research Questions	11
1.4. Research Hypotheses	12
1.1. Significance of the Study	13
1.2. Definitions of Key Terms	16
1.6.1. Language Learning Strategies	16
1.6.2. Language Proficiency	17
1.6.3. Learning Style	17
1.6.4. Multiple Intelligences	18

## CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction	20
2.2. Language Learning Strategies	21
2.2.1. Classification of Language Learning Strategies	25
2.2.1.1. Rubin's Taxonomy of Language Learning Strategies	25
2.2.1.2. Oxford's Taxonomy of Language Learning Strategies	26



2.2.1.3.	O'Malley et al.'s Taxonomy of Language Learning Strategies	29
2.2.1.4.	Stern's Taxonomy of Language Learning Strategies	30
2.2.2.	Empirical Studies	31
2.2.2.1.	Studies Conducted Abroad	32
2.2.2.2.	Studies Conducted in Iran	36
2.3.	Intelligence	40
2.3.1.	Multiple Intelligences	42
2.3.1.1.	Empirical Studies	48
2.4.	Learning Style	52
2.4.1.	Models of Learning Style	54
2.4.1.1.	Kolb's Learning Style Model	54
2.4.1.2.	Myers-Briggs Type Indicator Model	56
2.4.1.3.	The Felder-Silverman Learning Styles Model	58
2.4.2.	Empirical Studies	62

### **CHAPTER THREE: METHODOLOGY**

3.1.	Participants	66
3.2.	Instrumentation	67
3.2.1.	Oxford Placement Test (OPT)	67
3.2.2.	Strategy Inventory for Language Learners (SILL)	67
3.2.3.	Multiple Intelligences Developmental Assessment Scales (MIDAS)	69
3.2.4.	Index of Learning Style (ILS)	71
3.3.	Procedure	74

3.4. Data Analysis	74
--------------------	----

#### **CHAPTER FOUR: RESULTS AND DISCUSSION**

4.1. Results	76
4.1.1. The First Research Question	76
4.1.1.1. Descriptive Statistics	76
4.1.1.2. Inferential Statistics	77
4.1.2. The Second Research Question	80
4.1.2.1. Descriptive Statistics	80
4.1.2.2. Inferential Statistics	82
4.1.3. The Third Research Question	85
4.1.4. The Fourth Research Question	91
4.1.3.1. Descriptive Statistics	91
4.1.3.2. Inferential Statistics	92
4.1.5. The Fifth Research Question	93
4.2. Discussion	96

#### **CHAPTER FIVE: CONCLUSION, IMPLICATIONS, LIMITATIONS, AND SUGGESTIONS**

5.1. Conclusions	110
5.2. Implications of the Study	114
5.3. Limitations of the Study	118
5.4. Suggestions for Further Research	120

<b>REFERENCES</b>	122
-------------------	-----

#### **APPENDIXES**

Appendix A: Strategy Inventory for Language Learning (SILL)	138
--	-----

Appendix B: Multiple Intelligences Developmental Assessment Scales (MIDAS)	140
Appendix C: Index of Learning Style (ILS)	144
Appendix D: Figures related to Assumptions for Correlational and Multiple Regression Analyses	152
Appendix E: Colinearity Diagnostics and Mahalanobis Distance Tables in the Multiple Regression Analyses	155

## LIST OF TABLES

Table 3.1. Demographic Features	67
Table 3.2. Distribution of ILS Items	72
Table 4.1. Descriptive Statistics of LLSs, Proficiency, and MI Scores	77
Table 4.2. Test of Normality	78
Table 4.3. Correlation Between LLSs and Proficiency	79
Table 4.4. Correlation Between LLSs and MI	80
Table 4.5. Descriptive Statistics of the Components of LLSs	81
Table 4.6. Descriptive Statistics of the Components of MI	82
Table 4.7. Correlations Between LLSs and the Components of MI	83
Table 4.8. Correlations Between the Components of LLSs and the Components of MI	84
Table 4.9. Correlations Among the Independent Variables (Sig. 2-Tailed)	85
Table 4.10. Model Summary	87
Table 4.11. ANOVA	88
Table 4.12. Regression Analysis for Gender, Proficiency, and MI	88
Table 4.13. Model Summary	89
Table 4.14. ANOVA	90
Table 4.15. Regression Analysis for the Components of MI	91
Table 4.16. Descriptive Statistics of the Components of LS	92
Table 4.17. Correlations Between LLSs and the Components of LS	93
Table 4.18. Levene's Test of Equality of Error Variances	94
Table 4.19. Independent <i>t</i> Tests Between the Learners' Dichotomous Learning Styles	94
Table E1. Collinearity Diagnostics	155
Table E2. Mahalanobis Distance	155

## **LIST OF FIGURES**

Figure D1. Scatter Plot on the Relationship Between LLSs and Proficiency	152
Figure D2. Scatter Plot on the Relationship Between LLSs and MI	152
Figure D3. Histogram of LLSs	153
Figure D4. Normal P-P Plot of LLSs	153
Figure D5. Scatter Plot of LLSs	154

## LIST OF ABBREVIATION

AC	▶▶▶	Abstract Conceptualization
AE	▶▶▶	Active Experimentation
CE	▶▶▶	Concrete Experience
EFL	▶▶▶	English as a Foreign Language
ESL	▶▶▶	English as a Second Language
ILS	▶▶▶	Index of Learning Style
L2	▶▶▶	Second Language
LLS	▶▶▶	Language Learning Strategy
LS	▶▶▶	Learning Style
MBTI	▶▶▶	Myers-Briggs Type Indicator
MI	▶▶▶	Multiple Intelligences
MIDAS	▶▶▶	Multiple Intelligences Developmental Assessment Scales
OPT	▶▶▶	Oxford Placement Test
RO	▶▶▶	Reflective Observation
SILL	▶▶▶	Strategy Inventory for Language Learning
TEFL	▶▶▶	Teaching English as a Foreign Language
VIF	▶▶▶	Variance Inflation Factor

## ABSTRACT

During the last decades, many L2 researchers have drawn their attention to the vital role that language learning strategies (LLSs) play in L2 learners' learning process. Such an increasing interest in LLSs has made the L2 researchers focus on the factors which can affect the effectiveness of learners' strategy use. In light of this issue, the main purpose of the present study was four-fold: (1) to explore any relationship between Iranian EFL learners' LLSs, on the one hand, and their multiple intelligences (MI) and L2 proficiency, on the other hand, (2) to examine the relationship between the components of LLSs and the components of MI, (3) to investigate whether MI, proficiency, and gender can contribute to learners' LLSs, and (4) to explore the relationship between their LLSs and learning style (LS), and to determine which LS is better in strategy use. For this purpose, 90 undergraduate EFL learners from Shahrekord University, Semnan University, and Payame-e-Noor University of Shahrood participated in this study. To collect the data, 4 types of instruments were used: (1) Strategy Inventory for Language Learning (1990) to measure learners' LLSs, (2) Multiple Intelligences Developmental Assessment Scale (1996) to measure their MI, (3) Index of Learning Style (2001) to identify their LS, and (4) Oxford Placement Test (2005) to assess their proficiency. Pearson product moment correlation analysis revealed a significant positive relationship between learners' LLSs and their MI while proficiency failed to show a significant relationship with LLSs. Also, significant correlations were found between some components of the learners' LLSs and some components of their MI. Furthermore, multiple regression analysis showed that the learners' MI made a unique contribution to their LLSs while proficiency and gender failed to contribute significantly to LLSs. Moreover, Pearson product moment correlation analysis revealed significant correlations between the learners' LLSs and their active/reflective and sequential/global styles. Additionally, *t* tests indicated significant differences between active/reflective and sequential/global learners' LLSs. The findings can provide some implications for L2 learners, teachers, and curriculum developers.

**Key Words:** Gender, Language learning strategies (LLSs), Language proficiency, Learning style (LS), Multiple intelligences (MI)

# **CHAPTER ONE**

## **INTRODUCTION**



# CHAPTER ONE

## INTRODUCTION

### 1.1. Preliminaries

In the past four decades, a shift of attention has taken place in second language acquisition research from the products of language learning to the processes through which learning takes place (Oxford, 1990). This shift was as a result of development in cognitive psychology (William & Burden, 1997). In fact, what happened during this period was a shift of emphasis from the teachers and teaching to the learners and the learning process (Lessard-Clouston, 1997). In this view, the learners have been assumed to actively participate in the learning process, so the teaching methods partially depend on their prior knowledge, the way they think, and their active cognitive processes (Weinstein & Underwood, 1985).

As a result of such shift, in the 1960s, the concept of learning strategies which was derived from information-processing model of cognitive psychology was developed (William & Burden, 1997). One decade later, the notion of learning strategies held its place in applied linguistics field. Then, the idea of language learning strategies (LLSs)

was widely popularized by the publication of an article entitled “What the ‘Good Language Learner’ Can Teach Us” by Joan Rubin in 1975 (Grenfell & Macaro, 2011). In fact, L2 researchers were extremely influenced by her idea about good language learners and the effective use of some strategies which might affect good language learners. Consequently, as Oxford (1990) notes, scholars have turned their attention to the role that strategies play in the facilitation of L2 learning process since then.

In Williams and Burden’s (1997) words, a learning strategy “is a series of skills used with particular learning purposes in mind. Thus, learning strategies involve an ability to monitor the learning situation and respond accordingly” (p. 145). To Brown (2007), strategies are “specific methods of approaching a problem or task, modes of operation for achieving a particular end, planned designs for controlling and manipulating certain information” (p. 119). Quite similarly, O’Malley and Chamot (1990, p. 52) define learning strategies as “complex procedures that individuals apply to tasks; consequently, they may be represented as procedural knowledge which may be acquired through cognitive, associative, and autonomous stages of learning.” In its broad modern usage, Oxford (2003) regards a strategy as a plan that is consciously employed to meet a goal. She enumerates conscious control, intention, and goal-directedness essential criteria for a strategy. More recently, Grenfell and Macaro (2011) define a strategy as “some form of activity that is used in response to problems when and where they arise. These problems might be found within discourse, within the social context, or inside the head of the learner—or all three” (p. 10).

Concerning the impact of LLSs on L2 learners, Oxford, Park-Oh, Ito, and Sumrall (1993) maintain that LLS use is highly influential since language learners who

frequently use them performed better in the course. They found that, in fact, there is a link between LLS use and language achievement. For Oxford (1990), using strategies is a prerequisite for gaining communicative competence. To put it differently, strategies can play an important role in language learning since “they are tools for active, self-directed involvement, which is essential for developing communicative competence” (Oxford, 1990, p. 1).

To move further, LLSs play a central role in lightening the teachers’ burden since an awareness of LLSs can help learners manage their own learning process since “language learning and language use strategies can have a major role in helping shift responsibility for learning off the shoulders of the teachers and on to those of the learners” (Cohen, 1998, p. 21). Additionally, LLSs can be taught and modified since they are changeable. Through strategy training, learners not only can use strategies more consciously but also can choose them more appropriately. Even more, such training helps students to gain awareness of the ways they learn and, consequently, if motivated enough, they will be able to maximize their learning experiences (Oxford, 1990).

As a matter of fact, several studies on LLSs (e.g., O’Mally & Chamot, 1990) have indicated if language learners follow some certain strategies, they can perform better. However, it should be noted here that the learner differences can affect the effectiveness of those strategies. Thus, in recent years, as Gowans (1999) points out, the study of effective LLSs and, consequently, the factors which affect strategy use have been the focus of numerous studies.

Another language learner variable which has taken on an increasing importance in education is intelligence. Since its introduction, the theory of intelligence has attracted

the attention of educators all around the world (Hoerr, 2000). Accordingly, in recent years, the field of applied linguistics has witnessed a major change in its understanding of the relationship between intelligence and L2 learning.

Traditionally, intelligence was viewed in terms of a single unique intelligence called general (g) factor (Spearman, 1904). Based on this view, intelligence takes solely verbal and mathematical capacities of individuals into account. The traditional views of intelligence, as Gardner (1983, 2011) points out, fail to count for learners' potentials for further growth. Bridging such gap, Gardner (1983) proposed a broader model of intelligence labeled as multiple intelligence (MI) in his book *Frames of Mind*. As Haley (2004, p. 355) points out, this theory assumes "the plurality of intellect." That is, MI theory views intelligence as a combination of different components which are more or less independent of one another (Gardner, 1983, 1999). In this regard, Gardner (2011, p. xxviii) defines the intelligence as "the ability to solve problems, or to create products, that are valued within one or more cultural settings." Such a definition, as Hoerr (2000) asserts, "is a pragmatic one, focusing on *using* an ability in a real-life situation" (p. 3). In other words, this definition encompasses a broader concept and emphasizes how individuals can do things in the real world.

Currently, MI "is an increasingly popular approach to characterizing the ways in which learners are unique and to developing instruction to respond to this uniqueness" (Richards & Rodgers, 2001, p. 123). As Armstrong (2009, p. 120) contends, application of MI can be exhaustively influential since it can "affect students' behavior in the classroom simply by creating an environment where individual needs are recognized and attended to throughout the school day. Students are less likely to be confused, frustrated,