

How Do Successful EFL Readers Bridge Between Multiple Intelligences and Reading Strategies?

Masoud Rahimi, Azizullah Mirzaei and Najmeh Heidari

Faculty of Letters and Humanities, Shahrekord Branch, Islamic Azad University, Shahrekord, Iran

Abstract: This study investigated the role of successful Iranian L2 readers' multiple intelligences (MI) in their effective use of reading strategies. At first, an ETS TOEFL reading comprehension test was administered to 135 male and female university students, who were studying English as a foreign language (EFL) at several different universities in Isfahan and Shahrekord (Iran); 80 students were selected as successful readers. They answered two Likert-type questionnaires, namely the MI Inventory for Adults and a reading strategies inventory. The results indicated that there was a significant positive relationship between linguistic, logical-mathematical, spatial, interpersonal and intrapersonal intelligences and reading strategy use, in general and metacognitive and cognitive reading strategy use, in particular. A significant positive relationship was also found between linguistic intelligence and the participants' use of memory strategy. Furthermore, there was a significant positive relationship between interpersonal intelligence and compensation and social strategy use.

Key words: Multiple intelligences • Reading strategy use • Successful L2 readers

INTRODUCTION

Successful reading in a second language (L2) represents the primary way for independent L2 learning and an invaluable skill for academic achievement [1, 2]. The educational system of Iran prioritizes English as foreign language (EFL) reading skill at all educational levels and largely conceives of English language teaching as improving students' reading skill to enable the learners to use the main academic resources available in their academic fields of inquiry [3]. Good L2 readers are said to be generally more successful and privileged in attaining future educational and professional careers. Given as such, the major concern in the related research is who those good or successful readers are, what individual attributes and intelligences they possess and what reading strategies they use while processing a reading text.

Reading a text is a type of problem-solving activity [4] and good readers continuously adjust their reading behaviors to deal with the text difficulty, task demands and other contextual variables. They are aware of their own cognitive and linguistic abilities and thus consider "the appropriate clues in anticipating, organizing and retaining text information" [5, p.204]. These characteristics and other similar features, referred to as strategic reading,

distinguish between successful and less successful readers [1, 5-9]. Good readers are found to be better strategy users in the sense that they are more conscious of and use the strategies more flexibly [10]. Learning strategies thus aid learners to be in charge of their own language learning and their personal, academic development [11].

With the advent of the Multiple Intelligences Theory (MIT), L2 research that dealt with learning strategies as possible sources of good (language) learners gained new vibrancy and produced very interesting results [12, 13]. Advanced by Gardner [14], MIT is a learner-centered theory that considers learners as different individuals possessing varying types of intelligences and learning dispositions [15]. It is believed that individual learners with different intelligence profiles encountering a problem-solving task such as reading a foreign text resort to different sets of strategies that might lead to successful or unsuccessful outcomes in practice [16-19]. This study argues that the relationship between reading strategy use and L2 success might be better portrayed if it is explored in light of the MIT.

Background: Reading is a complex process and developing fluency in reading is a challenging task for most L2 students [1, 2, 7, 19-21]. Researchers have shown

that reading is indivisible from learning and is a purposeful activity involving well-suited modes of processing. Therefore, the most appropriate mode of a given purpose should be chosen to accommodate its goal-oriented nature [5]. Over the past two decades, reading comprehension has been conceived of as the result of complex interactions between text, setting, reader, reader background, reading strategies, L1 and L2 and reader decision making [6]. The ability and propensity to use strategies effectively has been brought to the fore in L2 reading and a number of researchers [5, 7, 8, 22] have considered reading strategies as the quintessence of successful comprehension and greater self-confidence. Zare and Noordin [23] also reported that the overall use of language learning strategies had a strong positive relationship with reading comprehension success.

Learning strategies have been differently classified [24-27], but one classification which is more comprehensive is based on the work of Oxford [28]. She divides language learning strategies into two broad categories, direct and indirect, which are further subdivided into six groups. Direct strategies are divided into memory, cognitive and compensation strategies; indirect strategies are divided into metacognitive, affective and social strategies. Following is a brief description of Oxford's [28] taxonomy of language learning strategies:

- *Memory* strategies are used for storage of information.
- *Cognitive* strategies are mental strategies that help learners to make sense of their learning.
- *Compensation* strategies help learners to overcome knowledge gaps to continue the communication.
- *Metacognitive* strategies help learners to manage their learning.
- *Affective* strategies are related to the learner's emotional requirements such as confidence.
- *Social* strategies help learners to increase the interaction with the target language.

Because this study focused on reading strategy use and employed Singhal's [29] reading strategy questionnaire, besides the aforementioned strategies, *textual strategy* was also included in the classification of reading strategies in the present study. Singhal [29] referred to textual strategy as responding or connecting to text.

Related research on successful and unsuccessful language learners [30-35] has manifested that although effective learners employed suitable strategies to achieve their learning goals, ineffective learners chose and employed less useful strategies. Additionally, it was found that learners can benefit from instruction. It is almost implied in the work of language learning strategies that identifying good strategies assists poor learners to improve their language learning [36]. There is now ample evidence that good readers become 'strategic' in striving for comprehending the text [5, 22, 37, 38].

Multiple Intelligence Theory: Traditionally, a static and narrow view of intelligence was adopted in education and assessment programs and practices. Having devised the intelligence test, Binet (1904) claimed that this test measures the intelligence quotient (IQ) and predicts a child's success and failure in school. Students with higher IQ were allowed to take additional courses (such as calculation, critical reading and thinking skills), admitted to better universities and offered more advantageous job opportunities. Nevertheless, the work of some psychologists [39-41] showed prevalent dissatisfaction with such a static conception of IQ. They argue that IQ tests favor Western people, impede the progress of people with different languages and socioeconomic backgrounds and cannot tap into the learner's full sociocognitive potentials for learning and development. However, this dissatisfaction does not suffice and the whole concept has to be abandoned [19].

The traditional intelligence tests have been increasingly challenged by MIT, proposed by Gardner [14]. His theory is based on a pluralistic view of mind that identifies many different and discrete aspects of cognition and also takes into account people's different cognitive strengths and contrasting cognitive styles [19]. Multiple intelligence theory addresses a variety of ways people learn and suggests an alternative classroom design to the traditional classroom setting. This theory, through constructing a perspective of special-needs students as whole individuals, "provides a context for envisioning positive channels through which students can learn to deal with their disabilities" [42, p. 105]. The proposal of MIT has recently brought about much excitement among educational practitioners and researchers who are intrigued by the influence of individual attributes and differences on their learning success [17-19, 42-45]. Gardner [14] theorized seven different types of

intelligences. Subsequently, he added an eight--naturalistic intelligence--and also considered the possibility of a ninth--existential intelligence [46]. Gardner [14, 19] describes the types of intelligences as follows:

- *Linguistic intelligence* is the comprehension of syntax and phonology of language and its pragmatic uses to convince others of a course of actions. Poets exhibit a strong linguistic intelligence [14].
- *Bodily-kinesthetic intelligence* is the ability to find solutions or to fashion products using one's whole body or parts of the body. Dancers, athletes, surgeons and craftspeople possess a well-developed bodily-kinesthetic intelligence [19].
- *Spatial intelligence* is the ability to create a mental model of a spatial world and to be able to maneuver and operate using that model. People with a strong spatial intelligence often choose careers as sailors, engineers, surgeons, sculptors and painters [19].
- *Musical intelligence* is the ability to understand and express components of music, including melodic and rhythmic patterns. The core of musical intelligence is rhythmic and pitch analysis [19].
- *Logical-Mathematical intelligence* is the understanding and use of logical structures, including patterns and relationships and statements and propositions. The core of logical-mathematical intelligence is the perception of certain recurrent patterns, including numerical patterns and so on [19].
- *Intrapersonal intelligence* is the ability to access one's own emotional life through awareness of inner moods, intentions, motivations, potentials, temperaments and desires. It is a capacity to form an accurate, veridical model of one's self and to be able to use that model to operate effectively in life [19].
- *Interpersonal intelligence* is the ability to notice and make distinctions among other individuals with respect to moods, temperaments, motivations, intentions and to use this information in pragmatic ways. Successful salespeople, politicians, teachers, clinicians and religious leaders are all likely to be individuals with high degrees of interpersonal intelligence [19].
- *Naturalistic intelligence* is the capacity to recognize and classify the numerous species of flora and fauna in one's environment [19].
- *Existential intelligence* symbolizes "human capacity to raise and ponder large questions" [19, p. 59].

Multiple Intelligence, Learning Strategies and Second Language Learning:

Intelligence is "biopsychological potential to process information that can be activated in a cultural setting to solve problems" [46, pp: 33-34]. Recently, Brown [47] defines strategies as "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]. As can be seen, both of these definitions deal with the concepts of problem-solving and individual differences. Related L2 studies on individual differences have particularly concluded that individual differences are "consistent predictors of L2 learning success" [11, p. 6].

With the advent of learner-centered theories, MI has been given more prominence among L2 researchers. However, the related literature has housed a multitude of discordant results regarding the relationship of MI and other variables such as language proficiency, listening proficiency, reading comprehension and the like. For instance, Razmjoo [48], in his study on the relationship between MI and language proficiency among Iranian L2 learners, found no significant positive or negative relationship. He also reported no significant difference among the Iranian males and females with respect to the types of intelligences they used. Furthermore, his study revealed that none of the intelligence types could predict the Iranian's English language proficiency. Similarly, Naeini and Pandian [49] also reported no significant positive or negative relationship between MI, listening proficiency and motivational orientation among Iranian TEFL university students.

Interestingly, however, other Iranian researchers found significant relationships between MI and other variables, such as reading comprehension, writing ability, vocabulary strategies and learning strategies. For example, Hashemi [50] found that bodily and linguistic intelligences are good predictors of reading ability scores. Besides, the results of Razmjoo, Sahragard and Sadri's [51] study revealed that three vocabulary strategies (i.e. determination, social and memory strategies) have a significant relationship with several domains of MI. In addition, they found that linguistic and naturalistic intelligences make statistically significant contribution to the prediction of vocabulary learning knowledge.

Akbari and Hosseini [12] found significant positive relationships between the use of language learning strategies and MI. The highest correlation was between metacognitive strategy use and almost all the components of MI, followed by cognitive and memory strategies.

Social strategies, on the other hand, had a low correlation with interpersonal, intrapersonal and naturalistic intelligences. Among the types of intelligences, interpersonal and intrapersonal intelligences had a significant positive correlation with all strategy types. However, musical intelligence did not significantly correlate with any strategy type and bodily intelligence had a low positive correlation with memory strategies. Furthermore, it was found that linguistic, naturalistic and interpersonal intelligences acted as positive predictors of language learning strategy use, whereas bodily intelligence was a negative predictor of the strategy use.

Similarly, contradictory results were obtained in other L2 contexts, such as Turkish. For example, Özdemir, Düneysu and Tekayya [52] conducted a study among Turkish students to see the difference between MI instruction and traditionally designed science instruction. They observed that students instructed through MI instruction were more successful. They also reported logical-mathematical intelligence as the most common type of intelligence and musical intelligence as the least common type. Their results are in line with those of Baş [53] in that he showed that Turkish students who received MI instruction were more successful and had a higher motivation level than students who were educated by traditional instructional methods. However, the results of Özdemir *et al.*'s [52] study run counter to those of Yilmaz and Fer's [54] study which showed spatial intelligence as the leading intelligence type and interpersonal and intrapersonal intelligences as the least common types of intelligences among primary Turkish students.

While a large number of L2 researchers have made attempts to scrutinize the relationship between MI and such variables as foreign language learning [55-60], learning strategies [12], language proficiency [48], reading comprehension [50], listening proficiency [49] and success in General Physics lecture [61], there have been no sufficient attempts to explore the MI profiles of the successful L2 learners in relation to their use of specific L2 learning strategies. Understanding the intelligence- and strategy-oriented attributes of successful L2 learners can provide L2 practitioners with insights on how to reconsider their own teaching practices and approach their students' learning difficulties [62]. This study thus aimed to explore whether MIT can cast light on how the use of specific L2 reading strategies results in L2 reading success.

Objectives: This study was inspired by Gardner's MIT and the possible role that this theory can play in explaining the successful L2 learner's use of effective reading strategies. Specifically, the study addressed the following research question:

What is the relationship between reading strategy use and MI profiles of successful Iranian L2 readers?

Design of the Study

Participants: At first, the participants were 135 graduate and undergraduate students (55 male and 80 female). They were studying English as a foreign language at several different universities in Isfahan and Shahrekord, whose ages ranged from 18 to 30. They were a representative sample of Iranian L2 learners because they were admitted from all over the country. Then, an ETS TOEFL reading comprehension test was administered to select the successful Iranian L2 readers. Finally, 80 students were selected as successful readers using a criterion that was based on their TOEFL score. They were 31 males and 49 females whose ages ranged from 20 to 29.

Instrumentation

ETS TOEFL Reading Comprehension Test: First, to select successful L2 readers, an ETS (Educational Testing Service) TOEFL reading comprehension test was used. The TOEFL reading comprehension test was composed of 30 multiple-choice items and those whose scores were above 22 were selected as successful (or 'high,' using the term used in the scale) Iranian L2 readers based on the ETS rating scale originally used to assess TOEFL test takers. The related level descriptor of the scale indicates that the test takers who receive a score at the 'high' level typically understand academic texts in English that require a wide range of reading abilities regardless of the difficulty of the texts and have a very good command of academic vocabulary and grammatical structure. The Cronbach's alpha for the reading comprehension test used in this study was 0.88.

MI Inventory for Adults: Second, to determine the intelligence profile of the participants, the MI Inventory for Adults, developed by Armstrong [63], was used. The inventory presents 70 items in the form of a Likert scale. Determining seven types of intelligences, the inventory consists of ten statements for each specific intelligence type. The items were assessed on a 5-point Likert scale ranging from *strongly agree* (1) to *strongly disagree* (5). The reliability analysis of the instrument was

Table 1: Results of Pearson Product-moment Correlation for Types of Intelligences and Reading Strategies

Variables	Bod Int.	Ling Int.	Log Int.	Spat Int.	Mus Int.	Inter Int.	Intra Int.	N
Reading strategies Sig. (2-tailed)	.247.083	.348*.013	.316*.025	.340*.016	.083.565	.289*.042	.286*.044	80
Cognitive Sig. (2-tailed)	.065.654	.291*.040	.287*.043	.290*.041	-.040.782	.299*.035	.289*.042	80
Compensation Sig. (2-tailed)	-.086.553	.109.450	-.252.078	-.006.965	.145.317	.289*.042	-.032.827	80
Memory Sig. (2-tailed)	-.062.668	.310*.016	.026.859	.277.051	-.076.601	.246.085	.096.509	80
Metacognitive Sig. (2-tailed)	.118.415	.333*.018	.321*.023	.287*.043	.197.171	.291*.040	.290*.025	80
Affective Sig. (2-tailed)	.173.231	.061.672	.163.257	.157.276	.100.489	.076.553	.172.233	80
Social Sig. (2-tailed)	.213.103	-.084.561	.154.240	.140.331	.003.983	.290*.041	.197.132	80
Textual Sig. (2-tailed)	.059.657	.183.202	.233.104	.243.089	.104.471	.183.205	.140.333	80

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

computed using the Cronbach’s alpha reliability coefficient that was .79, indicating that the instrument can be considered as a reliable tool to be used for the purposes of this study.

Reading Strategies Inventory: Finally, to determine the reading strategy used by the participants, Oxford’s [28] and Waxman and Pardon’s [64] strategy inventory, originally adapted by Singhal [29], was used. This inventory consists of 31 items which were assessed on a 4-point Likert scale ranging from *not at all* (1) to *most of the time or frequently* (4). Oxford’s [28] classification of learning strategies is the more comprehensive one in the sense that she classified learning strategies into cognitive, compensation, memory, metacognitive, affective, or social strategies. Since Oxford’s description of each strategy type or student behavior can be applied to the four language skill areas, that is to say reading, writing, listening and speaking, in the present study, Oxford’s [27] terminology is used in the area of reading strategies. The reliability estimate of the test using Cronbach’s alpha was .78.

RESULTS

Pearson product-moment correlation coefficients were computed to explore the relationship between reading strategies and MI. Furthermore, Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. The results are presented in Table 1.

The results of Table 1 indicate that there was a moderate (according to Cohen’s guidelines, [65], pp. 79-81), positive relationship between the successful Iranian L2 readers’ use of reading strategy, in general and linguistic ($r = .348, n = 80, p = .013$), spatial ($r = .340, n = 80, p = .016$) and logical-mathematical ($r = .316, n = 80, p = .025$) intelligences and also a small positive relationship

between reading strategy use, in general and interpersonal ($r = .289, n = 80, p = .042$) and intrapersonal intelligences ($r = .286, n = 80, p = .044$). Concerning the relationship between MI and each type of reading strategies, it was found that the participant’s use of cognitive strategy had a small positive correlation with their interpersonal ($r = .299, n = 80, p = .035$), linguistic ($r = .291, n = 80, p = .040$), spatial ($r = .290, n = 80, p = .041$), intrapersonal ($r = .289, n = 80, p = .042$) and logical-mathematical ($r = .287, n = 80, p = .043$) intelligences. Moreover, a moderate positive relationship was found between memory strategy use and linguistic intelligence ($r = .310, n = 80, p = .016$) of the participants. A moderate positive correlation was also observed between metacognitive strategy use and linguistic ($r = .333, n = 80, p = .018$) and logical-mathematical ($r = .321, n = 80, p = .023$) intelligences. In addition, a small positive relation was shown between metacognitive strategy use and intrapersonal ($r = .290, n = 80, p = .041$), interpersonal ($r = .291, n = 80, p = .040$) and spatial ($r = .286, n = 80, p = .044$) intelligences. Finally, a small positive correlation was found between interpersonal intelligence and social ($r = .290, n = 80, p = .041$) and compensation ($r = .289, n = 80, p = .042$) strategy use of the participants.

DISCUSSION

This study revealed that linguistic, logical-mathematical, spatial, intrapersonal and interpersonal intelligences correlated significantly with reading strategy use. These results are in line with the findings of Armstrong [43]. Having scrutinized the brain structure, Armstrong argued that though reading is a linguistic activity and literacy can be considered as a component of linguistic intelligence, all of the eight intelligences make an impact on the real experience of reading. For example, to make sense of the text, the reader has to think logically and critically (logical-mathematical intelligence) and also

should be able to surmise the author's intention (interpersonal intelligence). Recognizably, spatial intelligence also correlated positively with reading strategies. Armstrong [43] presumed that "spatial intelligence (i.e. the intelligence of pictures and images) must first be brought to bear on the printed letters" (p. 19) and the reader may visualize the written text. Furthermore, intrapersonal intelligence has a key role in the adult L2 learning and with a well-developed intrapersonal intelligence, students can notice their weaknesses and strengths and hence identifying ways of circumventing challenges. Nevertheless, in contrast with Armstrong's [43] findings, bodily and musical intelligences did not correlate significantly with reading strategies. The finding that musical intelligence did not correlate with reading strategies is a bit of surprise because matching the visual images with sounds requires employing one's knowledge of musical intelligence [43].

The successful Iranian L2 readers' use of metacognitive and cognitive reading strategies showed significant correlations with linguistic, logical-mathematical, spatial, intrapersonal and interpersonal intelligences. This finding may indicate that people with higher scores on linguistic, logical-mathematical, spatial, intrapersonal and interpersonal intelligences are more cognizant of the learning process and also of organizing their learning, so that, accordingly, they can be more successful. Akbari and Hosseini [12] also reported the highest correlation between the participants' use of metacognitive strategy, followed by cognitive strategy and the overall MI score.

The fact that compensation strategy use and interpersonal intelligence correlated significantly may be ascribed to the reality that people benefiting from strong interpersonal intelligence are more willing to overcome communication breakdowns, for example by guessing intelligibly, getting help and using mime or gesture. Consequently, they continue using language and become more proficient [28]. In contrast, it can be argued that students less inclined towards interpersonal intelligence avoid guessing and getting help from others which, in turn, hinders their progress. It was also illustrated that the participants' use of social strategy correlated significantly with interpersonal intelligence. This finding was predicted due to the fact that both interpersonal intelligence and social strategies are aspects of communicative ability. The significant correlation between memory strategy use and linguistic strategies can be justified by the fact that successful readers can store information effectively.

CONCLUSION

In summary, this study showed a positive significant correlation between reading strategy use, in general and metacognitive and cognitive strategy use, in particular and linguistic, logical-mathematical, spatial, interpersonal and intrapersonal intelligences. In addition, there was a positive significant relationship between compensation and social strategy use and interpersonal intelligence. A positive significant relationship was also found between memory and linguistic intelligence.

The positive relationships between MI and reading strategies and also the fact that some intelligences acted as the positive predictors of reading comprehension suggest that teachers should initiate environments that foster reading through "music, art, nature experiences, logical analyses, dramatic performances, oral recitations, emotional expression, social interaction and a wide range of other creative nutrients" [43, p. 136].

However, the small sample size and also the low correlation values indicate that the findings of the study must be treated with caution. The second limitation was posed by the nature of self-report questionnaires. That is, the reliability of the data depends on the truthfulness of the participants. Therefore, further research is needed to see whether similar results can be obtained. This study was conducted with successful Iranian L2 readers; thus, similar studies should be conducted with lower- and intermediate-level readers. Furthermore, researchers can investigate the relationship between MI and other issues related to language learning such as language proficiency, learning strategies and vocabulary learning.

REFERENCES

1. Carrell, P.L. and W. Grabe, 2002. Reading. In N. Schmitt (Ed.), *An introduction to applied linguistics* pp: 233-250. Great Britain: Arnold.
2. Koda, K. and A.M. Zehler, 2008. Introduction: conceptualizing reading universals, cross-linguistic variations and second language literacy development. In K. Koda and A.M. Zehler (Eds.), *Learning to read across languages: Cross-linguistics relationships in first- and second-language literacy development* pp: 1-9. New York: Taylor and Francis Group.
3. Eslami-Rasekh, Z. and K. Valizadeh, 2004. Classroom activities viewed from different perspectives: Learner's voice and teacher's voice. *TESL-EJ*, 8(3): 1-13.

4. Pressley, M., P.B. El-Dinary, T. Schuder, J.L. Bergman, J. Almasi and R. Brown, 1992. Beyond direct explanation: Transactional strategy instruction of reading comprehension strategies. *The Elementary School J.*, 92(5): 513-555.
5. Koda, K., 2005. Insights into second language reading: A cross-linguistic approach. Cambridge University Press.
6. Erler, L. and C. Finkbeiner, 2007. A review of reading strategies: Focus on the impact of first language. In A. D. Cohen and E. Macro (Eds.), *Language learner strategies* pp: 187-206. Oxford University Press.
7. Field, M.L., 2006. Finding a path to fluent academic and workplace reading. In P. Jordens (Ed.), *Current trends in the development and teaching of the four language skills* (pp. 329-354). Berlin, New York, Mouton de Gruyter.
8. Grabe, W., 2006. Areas of research that influence L2 reading instruction. In P. Jordens (Ed.), *Current trends in the development and teaching of the four language skills* pp: 279-301. Berlin, New York, Mouton de Gruyter.
9. Schramm, K., 2008. Reading and good language learners. In C. Griffith (Ed.), *Lessons from good language learners*. pp: 31-243. Cambridge University Press.
10. O'Malley, J.M. and A.U. Chamot, 1990. *Learning strategies in second language acquisition*. Cambridge University Press.
11. Dörnyei, Z., 2005. *The psychology of the language learner: Individual differences in second language acquisition*. Mahwah, NJ: Lawrence Erlbaum Associates.
12. Akbari, R. and K. Hosseini, 2007. Multiple intelligences and language learning strategies: Investigating possible relations. *System*, 36: 141-155.
13. Serin, N.B., O. Serin, A. Yavuz and B. Muhammedzade, 2009. The relationship between the primary teachers' teaching strategies and their strength in multiple intelligences. *Procedia Social and Behavioral Sci.*, 1: 708-712.
14. Gardner, H., 1983. *Frames of mind: The theory of multiple intelligences*. New York, Basic Books.
15. Gardner, H., 1993. *Frames of mind: The theory of multiple intelligence, tenth anniversary edition*. New York, Basic Books.
16. Armstrong, T., 1993. *7 Kinds of smart: Discovering and identifying your many intelligences*. New York, Plume.
17. Armstrong, T., 2009. *Multiple intelligences in the classroom* (3rd ed.). Alexandria, VA: ASCD.
18. Campbell, L. and C. Campbell, 1999. *Multiple intelligences and student achievement: Success stories from six schools*. Alexandria, VA: ASCD.
19. Gardner, H., 2006. *The development and education of mind*. New York, Routledge.
20. Broughton, G., C.H. Brumfit, R. Flavell, P. Hill and A. Pincas, 1980. *Teaching English as a foreign language*. Great Britain: T.J. Press (Padstow) Ltd.
21. Tankersley, K., 2003. *The threads of reading: Strategies for literacy development*. USA, ASCD.
22. Ediger, A.M., 2006. Developing strategic L2 readers by reading for authentic purposes. In P. Jordens (Ed.), *Current trends in the development and teaching of the four language skills*. pp: 303-328. Berlin, New York, Mouton de Gruyter.
23. Zare, P. and N. Noordin, 2011. The relationship between language learning strategy use and reading comprehension achievement among Iranian undergraduate learners. *World Applied Sciences J.*, 13(8): 1870-1877.
24. Ellis, R., 1994. *The study of second language acquisition*. New York, Oxford University Press.
25. O'Malley, J.M., A.U. Chamot, G. Stewner-Manzanares, R.P. Russo and L. Kupper, 1985. Learning strategy applications with students of English as a second language. *TESOL Quarterly*, 19(3): 134-161.
26. Stern, H.H., 1992. *Issues and Options in Language Teaching*. Oxford: OUP.
27. Wenden, A. and J. Rubin, 1987. *Learner strategies in Language Learning*. Englewood Cliffs, NJ: Prentice Hall.
28. Oxford, R.L., 1990. *Language learning strategies: What every teacher should know*. Boston: Heinle and Heinle.
29. Singhal, M., 2001. June. CALL for reading skills in English: An interactive web program for college-level ESL students. *Proceedings of the Information Technology and Multimedia in English Language Teaching Conference*, The English Language Center of The Hong Kong Polytechnic University.
30. Naiman, N., M. Fröhlich, H.H. Stern and A. Todesco, 1978. *The good language learner* (Research in Education Series No. 7). Toronto, Canada: Ontario Institute for Studies in Education.
31. Rubin, J., 1975. What the "good language learner" can teach us. *TESOL Quarterly*, 9(1): 41-51.

32. Stern, H.H., 1975. What we can learn from the good language learner? *The Canadian Modern Language Review*, 31: 304-318.
33. Vann, R. and R. Abraham, 1990. Strategies of unsuccessful learners. *TESOL Quarterly*, 24: 177-198.
34. Wenden, A., 1985. Learner strategies. *TESOL Newsletter*, 19(5): 1-7.
35. Wong, L.L.C. and D. Nunan, 2011. The learning styles and strategies of effective language learners. *System*, 36: 144-163.
36. Hismanoglu, M., 2000. Language learning strategies in foreign language learning and teaching. *TESL*, 6: 8.
37. Afflerbach, P., P.D. Pearson and S.G. Paris, 2008. Clarifying differences between reading skills and reading strategies. *The Reading Teacher*, 61(5): 364-373.
38. Paris, S.G. and J.E. Jacobs, 1984. The benefits of informed instruction for children's reading awareness and comprehension skills. *Child Develop.*, 55(6): 2083-2093.
39. Guilford, J.P., 1967. *The nature of human intelligence*. New York: McGraw-Hill.
40. Thurstone, L.L., 1938. *Primary mental abilities*. Chicago, IL: University of Chicago Press.
41. Vygotsky, L.S., 1978. *Mind in society*. Cambridge, MA: Harvard University Press.
42. Armstrong, T., 2000. *Multiple intelligences in the classroom (2nd ed.)*. Alexandria, VA: ASCD.
43. Armstrong, T., 2003. *The multiple intelligences of reading and writing: Making the words come alive*. Alexandria, VA: ASCD.
44. Baum, S., J. Viens and B. Slatin, 2005. *Multiple intelligences in the elementary classroom: A teacher's toolkit*. New York: Teachers College, Columbia University.
45. Hoerr, T.R., 2000. *Becoming a multiple intelligence school*. Alexandria, VA: ASCD.
46. Gardner, H., 1999. *Intelligence reframed: Multiple intelligences for the 21st century*. New York, Basic Books.
47. Brown, D., 2007. *Principles of language learning and teaching (5th ed.)*. USA: Pearson Education, Inc.
48. Razmjoo, S.A., 2008. On the relationship between multiple intelligences and language proficiency. *The Reading Matrix*, 8: 155-174.
49. Naeini, M.B. and A. Pandian, 2010. On the possible relationships between multiple intelligences, listening proficiency and motivational orientation among Iranian TEFL university students. *The Iranian EFL J.*, 6(2): 75-99.
50. Hashemi, A., 2010. On the relationship between multiple intelligences and reading comprehension tasks: An authentic MI theory-based assessment. Retrieved March 10, 2010, from [http://faculty.ksu.edu.sa/aljarf/Documents/.../Akram % 20 Hashemi.pdf](http://faculty.ksu.edu.sa/aljarf/Documents/.../Akram%20Hashemi.pdf).
51. Razmjoo, S.A., R. Sahragard and M. Sadri, 2009. On the relationship between multiple intelligences, vocabulary learning knowledge and vocabulary learning strategies among the Iranian EFL learners. *Iranian EFL J.*, 3: 82-110.
52. Özdemir, P., S. Güneysu and C. Tekkaya 2006. Enhancing learning through multiple intelligences. *Educational Res.*, 40(2): 74-78.
53. Baş, G., 2010. Effects of multiple intelligences instruction strategy on students' achievement levels and attitudes towards English lesson. *Cypriot J. Educational Sci.*, 5: 167-180.
54. Yilmaz, G. and S. Fer, 2003. The students' opinion and achievement concerning instructional activities based on multiple intelligences theory. *Hacettepe Universitesi Egitim Fakultesi Dergisi*, 25: 235-245.
55. Arnold, J. and C. Fonseca, 2004. Multiple intelligence theory and foreign language Learning: A brain-based perspective. *IJES J.*, 4(1): 119-136.
56. Christison, M.A., 1996. Teaching and learning through multiple intelligences. *TESOL J.*, pp: 10-14.
57. Haley, M.H., 2001. Understanding learner-centered instruction from the perspective of multiple intelligences. *Foreign Language Annals*, 34(4): 356-360.
58. Haley, M.H., 2004. Learner-centered instruction and the theory of multiple intelligences with second language learners. *Teachers College Record*, 106(1): 163-180.
59. Saricaoğlu, A. and A. Arıkan, 2009. A study of multiple intelligences, foreign language success and some selected variables. *J. Theory and Practice in Education*, 5(2): 110-122.
60. Smith, E., 2001. Implications of multiple intelligence theory for second language learning. *Post-Script*, 2(1): 32-52.

61. Güzel, H., 2010. Profiles of university students based on multiple intelligence theory and its effect on their success in Physics lectures. *World Applied Sciences J.*, 10(6): 665-674.
62. Sewell, H.D., 2003. The good language learner. Retrieved May 23, 2011, from http://www.cels.bham.ac.uk/resources/essays/Sewell_SLA.pdf
63. Armstrong, T., 1994. Multiple intelligences in the classroom. Alexandria, VA: ASCD.
64. Waxman, H.C. and Y.N. Padron, 1987. The effect of students' perceptions of cognitive strategies on reading achievement. Paper presented at the annual meeting of the Southwest Educational Research Association, Dallas.
65. Cohen, J.W., 1988. *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.