Ferdowsi University of Mashhad

The Relationship between Iranian EFL Learners' MI, their English Language Skills & Academic Achievement

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بسم الله الرحمن الرحيم

DEDICATED TO MY

FAMILY AND MY

HUSBAND FOR THEIR

LOVE AND SUPPORT

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List of Abbreviations

EI: Emotional Intelligence

MI: Multiple Intelligences

MIDAS: Multiple Intelligence Developmental Assessment Scale

GPA: Academic Achievement

Abstract

Educational systems have often sought to help students develop a sense of accomplishment and self confidence. Gardner's theory of MI provides a theoretical foundation for recognizing the different abilities and talents of students. This theory acknowledges that while all students may not be verbally or mathematically gifted, they may have an expertise in other areas. They might be strong at bodily/kinesthetic, visual/spatial, musical, interpersonal, intrapersonal and naturalist intelligences. Approaching and assessing learning in this manner allows a wider range of students to successfully participate in classroom learning.

The purpose of this study is to investigate whether there is any meaningful relationship between successfully learning English language skills, such as reading, writing, speaking, listening, academic achievement, and MI. For this aim, 96 junior and senior students studying English literature at Ferdowsi University of Mashhad were selected. The participants were given the translated version of MIDAS, Multiple Intelligence Developmental Assessment Scale, to provide an objective measure of the MI. The participants' scores in reading, writing, speaking, listening and GPA were obtained from the administration office of the faculty. Then the scores of participants in eight intelligences in the MIDAS were considered as the independent variables against their scores in reading, writing, speaking, listening and GPA each serving as the dependant variables.

Correlational analyses showed that among all eight intelligences, linguistic intelligence correlated meaningfully with GPA. As with the writing skill, there was significant correlation between success in writing in English and linguistic intelligence as well as logical/mathematical and intrapersonal intelligences. Meanwhile, the study indicated that linguistic, logical/mathematical and spatial intelligences correlated the most with listening and speaking skills. Considering reading skill, the study did not find any meaningful relationship between MI and this skill. Backward multiple regressions were also run in order to find out which one of the MI subscales (as the independent variables) can predict the success in English language skills and GPA (as the dependent variables). The results showed that none of the intelligences can highly predict English language skills performance and GPA.

Key terms: multiple intelligences, academic achievement (GPA).

Chapter one
Introduction

1.1. Background

“we are faced with a stark choice: either to continue with the traditional views of intelligence and how it should be measured or to come up with a different and better way of conceptualizing the human intellect.” (Gardner, 1999, p.3).

According to Howard Gardner, co-director of the project Zero at Harvard Graduate School of Education “all human beings have at least eight intelligences and no two people have exactly the same profile of intelligences”. He says “we can either ignore those differences and teach everybody the same stuff in the same way and assess everybody in the same way or we can say “look people learn in different ways, and we have different intellectual strengths and weaknesses.” (Weiss, 1999, p.2)

Intelligence has long been the concern of educators, professional teachers, syllabus designers and psychologists. They have been interested to know the possible match between intelligence and the ability to learn a foreign language. Until recently, tests of intelligence, especially those developed by Binet were used to assess academic potential of school children. However, these tests are based on the traditional definition of intelligence which is now regarded as disputable and too narrow. Far from considering intelligence as a linguistic and logical/mathematical-mathematical concept, a change of attitude has taken place. This change is based largely on the work of Howard Gardner, the educational psychologist and creator of the theory of MI (Hosseini, 2003).

MI theory says that everyone has certain ways that she/he learns best. Gardner in 1983, first identified seven ways of learning, called intelligences. Later he added an eighth to the list. He also leaves open the possibility that more intelligences can be identified in the future (Walhalla & Coffman, 1999). He introduces these intelligences as: verbal/linguistic intelligence, musical/rhythmic intelligence, bodily/kinesthetic intelligence, logical/mathematical intelligence,

visual/spatial intelligence, interpersonal intelligence, intrapersonal intelligence,

Walhalla and Coffman (1999) stated that teachers, students, parents, neighbors-everyone has all these intelligences. But each person has several favorite intelligences that he/she uses most. Schools tend to focus on verbal-linguistic and logical/mathematical intelligences. Unfortunately students who are not strong in these may be labeled as slow or at-risk learners. Yet often these students are capable of learning when information is presented in ways that address their preferred intelligences.

Gardner defends his eight-dimensional model of intelligence by claiming that the particular intelligences he has nominated are verified by eight databased "signs." Signs include such clues as an intelligence having a distinct developmental and a distinct evolutionary history; that is within individuals there is a similar sequence of development of an intelligence beginning in early childhood and continuing into maturity. Human tool using, for example, has such an evidential evolutionary history and is an example of bodily/kinesthetic intelligence (Richards & Rodgers, 2001).

Gardner's theory of MI enables us to discuss positive strengths in all children and to plan appropriate learning strategies for a more effective educational environment. Gardner maintains that intelligence is something more complex than can ever be reflected by a test score, and that the western education system overemphasizes the linguistic and logical/mathematical intelligences. Our classrooms should include activities, material and assessment that respond to all intelligences (Faggella & Horowitz, 1990; Lazear, 1992; cited in Reiff, 1996).

1.1.1. A Short History about Intelligence

According to Quigley (1994) early studies of the intellect can be traced to Franz Joseph Gall's observation of the relationship between certain mental characteristics of his schoolmates and the shape of their heads. When he became a physician and scientist, his

studies became a part of a discipline called ‘phrenology’. By studying the shape of the skull, researches believed they could determine the strengths, weaknesses and idiosyncrasies of a mental profile. The work of Gall and his colleague, Joseph Spurzheim, was very popular in Europe and the United States during the early part of the nineteenth century.

Francis Galton, one of the first psychologically oriented scientists to try to measure the intellect directly, sought to measure intelligence and hoped, through proper ‘breeding’ to increase the overall intelligence of the population (Gardner & Hatch, 1989, cited in Quigley, 1994). At the turn of the century, scientists began to look at capacities such as language and abstraction to gain a more accurate assessment of human intellectual powers.

Early in the twentieth century, Alfred Binet, with his colleague, Theodore Simon, devised the first tests of intelligence in order to determine which primary grade students were ‘at risk’ for failure so that these students could receive remedial attention and to place other children at their appropriate grade level (Gardner, 1999). Therefore intelligence testing became widespread and intelligence became something that could be measured and reduced to a single number of ‘IQ’ score.

Gardner’s MI theory provides a much broader and interactive approach to learning. Gardner believed that our culture defined intelligence too narrowly. He sought to broaden the scope of human potential beyond the confines of the ability to answer items on tests of intelligence and an IQ score. Over the past decade, Gardner’s research led him to challenge the concepts of intelligence on a theoretical level. Studying the development and breakdown of cognitive and symbol using capacities, he became more convinced that the human mind may be quite modular in design. On a more practical level, he was disturbed by the almost exclusive use of linguistic and logical capacities in the construction of items on intelligence, aptitude and achievement tests. The MI theory challenges the concept of intelligence as a single general capacity that everyone possesses in varying degrees. Gardner suggests that intelligence has more to do with the capacity for (1) solving problems and (2) fashioning products in a rich context and naturalistic setting (Armstrong, 1987, cited in Quigley, 1994). Gardner defines human cognitive competence in terms of a set of abilities, talents or mental skills, which he calls intelligences. From this broader and more pragmatic perspective, the concept of intelligence becomes a more functional concept that can be seen in people’s lives.

Certain key elements make up MI theory. Gardner posits that each person possesses all eight intelligences and that most people can develop each intelligence to an adequate level of competency. It is also important to note that the intelligences usually work together in complex ways. Intelligences are always interacting with each other. In addition, there are many ways to be intelligent within each category. There is no standard set of attributes that one must have to be considered intelligent in a specific area. Gardner points out that his model of eight intelligences is a tentative one, further research may bring about revisions of the original or additions.

1.2. Statement of the Problem

Each individual has more than one unitary intelligence. Gardner (1983) was dissatisfied with the unitary concept of intelligence and the various attempts psychometricians made to measure it. He proposed seven relatively independent forms of intelligences: linguistic, logical-mathematical, spatial, musical, bodily-kinesthetic, interpersonal and intrapersonal.

Since the beginning of the 20th century, verbal and mathematical intelligences have been empirically tested through intelligence tests, college entrance exams, aptitude assessments, and other traditional educational exercises such as short answer tests, exams and quizzes. Such instruments have been the assessment cornerstones of western academic culture. Students who enter institution of higher education to pursue specialist programs are also screened and evaluated on the basis of traditional intelligence-type tests and the abilities which are necessary for their chosen fields are not accounted. Such tests may indicate potential success in the general education area, however they are less predictive of success in programs that require other abilities such as visual-special, bodily-kinesthetic or musical intelligence (Gardner 1983).

Unfortunately, it seems that the educational system in Iran also has a focus on especially the linguistic intelligence and not enough attention is given to intelligences such as musical.

The present study based on Gardner's MI theory, aims to investigate the relationship between learners' MI and their success in language learning. Some recent researches (Furnham, Chamorro-Premuzic & McDougall, 2003; Laidra, Pullmann & Allik, 2007; Deary, Smith & Fernandes, 2007; Parker, et al, 2006) have been carried on intelligence and its relationship with academic achievement. However, few researches

(Razmjoo, 2008; Yeganefar, 2005) have been carried considering MI and English language proficiency. It seems that MI are not seriously considered in researches related to learning the English language skills and academic achievement. Therefore, the current study attempts to overcome the limitation of those studies by considering MI, English language skills and academic achievement.

1.3. Significance of the Study

MI theory is proposed and put into practice in a way to call for an alternative classroom design to traditional classroom setting. It addresses a variety ways people learn. The presentation of foreign teaching material should engage all or most of the intelligences due to the fact that each of the intelligences is potentially available in every learner. Materials should allow students with different intelligence types to interact with each other and to develop the intelligences in which they are less strong.

English language learning and teaching play an important role in educational curriculum in Iran so the result of this study can be useful for learners; MI theory is a way to motivate learners by activating multiple ways of meaning-making through the use of tasks relating to the different intelligences. Providing a variety of language activities that stimulate the different intelligences, proposed by Gardner, makes it possible to engage multiple pathways necessary to produce sustained deep learning (Schumann, 1997). The results of this study is also significant for teachers; The way teachers present material to their students influence learners' belief about their ability to participate successfully in a language task. MI theory framework is a useful tool for planning language learning tasks which insure that students can cope in the presence of challenge (Arnold & Fonseca, 2004). Besides that, The greatest challenges today is to provide curriculum which effectively caters to the needs of diverse groups students and the MI framework can provide more options for students who are not academically or linguistically strong in English to demonstrate their knowledge.

Moreover, Gardner (1993, cited in Arnold & Fonseca, 2004) explains the social advantages inherent in the application of this theory: "It is of the utmost importance that we recognize and nurture all the varied human intelligences. If we recognize this, I think we will have at least a better chance of dealing appropriately with the many problems that we face in the world" (p.12).

Finally, finding the type of relationship between MI and English language skills and GPA will provide us with opportunities to look differently at the curriculum, instruction and assessment.

1.4. Purpose of the Study

1.4.1. Research Questions

The present study seeks to find the relationship between English language skills (reading, writing, speaking and listening), GPA and MI and tries to answer the following questions:

1. Is there any relationship between Iranian EFL learners' MI and their English writing skill?
2. Is there any relationship between Iranian EFL learners' MI and their English reading skill?
3. Is there any relationship between Iranian EFL learners' MI and their English listening & speaking skills?
4. Is there any relationship between Iranian EFL learners' MI and their GPA in English language?

1.4.2. Research Hypotheses

In order to investigate the aforementioned research questions empirically, the following null hypotheses are formulated:

Ho_1. There is no relationship between Iranian EFL learners' MI and their English writing skill.

Ho_2. There is no relationship between Iranian EFL learners' MI and their English reading skill.

Ho_3. There is no relationship between Iranian EFL learners' MI and their English listening & speaking skills.

Ho_4. There is no relationship between Iranian EFL learners' MI and their GPA in English language.

1.5. Definition of the Key Terms

Academic achievement: academic achievement or GPA (grade point average) according to the Oxford Dictionary refers to an indication of a student's success at a college or university, calculated as the total number of grade points received over a given period divided by the total number of related credits.

Bodily/kinesthetic Intelligence, deals with the ability to use all or part of one's body to solve problems or fashion products (Gardner & Chen, 2005; cited in Saricuoglu & Arikan, 2009).

Intrapersonal Intelligence, involves the ability to understand oneself including emotions, desires, strengths, and vulnerabilities and to use such information effectively in regulating one's own life (Gardner & Chen, 2005; cited in Saricuoglu & Arikan, 2009).

Interpersonal Intelligence, describes the ability to recognize, appreciate and contend with the feelings, beliefs, and intentions of other people (Gardner & Chen, 2005; cited in Saricuoglu & Arikan, 2009).

Logical/mathematical Intelligence, involves the ability to appreciate and utilize numerical, abstract, and logical reasoning to solve problems (Gardner & Chen, 2005; cited in Saricuoglu & Arikan, 2009).

Musical Intelligence, entails the ability to create, communicate, and understand meanings made out of sound (Gardner & Chen, 2005; cited in Saricuoglu & Arikan, 2009).

Naturalist Intelligence, concerns the ability to distinguish among critical features of the natural environment (Gardner & Chen, 2005; cited in Saricuoglu & Arikan, 2009).

Verbal/linguistic Intelligence, describes the ability to perceive and generate spoken and written language (Gardner & Chen, 2005; cited in Saricuoglu & Arikan, 2009).

Visual/spatial Intelligence, refers to the ability to perceive, modify, transform, and create visual and/or special images (Gardner & Chen, 2005; cited in Saricuoglu & Arikan, 2009).

1.6. Limitations of the Study

This study will have limited generalization, because it will focus on a narrow indicator of academic achievement –grade point average. This is only one of the variables that can be used to gauge academic success. Also the present study will be restricted to students studying English at Ferdowsi University of Mashhad. Furthermore, according to Gardner (1999) any intelligence should be assessed by a number of complementary approaches that consider the several core components of intelligence, but because of lack of the time and facilities, this study was limited to a questionnaire.

Chapter Two
Review of the Related Literature

2.1. Introduction

This chapter will open with the definition of intelligence and its historical evolution, then the issue will be reviewed from the psychological perspective, MI theory will be discussed and finally the related studies will be reviewed.

2.2. Intelligence

According to Gardner (1999) features of ideal human being differs in every society. For instance, ancient Greeks valued physical agility, rational judgment and followers of Islam prized the holy soldier. Over the past few centuries, especially in western societies intelligent person is valued. Those charged with guiding a society have always been looking for intelligent people. But what is intelligence and who is an intelligent person?

Although intelligence is a possession prized by most people, the term has no objective, agreed-upon referent either among the general public or contemporary psychologists. Characteristics such as age, weight, or height