UNIVERSITI PUTRA MALAYSIA

RELATIONSHIP BETWEEN MULTIPLE INTELLIGENCES AND READING PROFICIENCY OF IRANIAN EFL STUDENTS

KARIM HAJHASHEMI

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RELATIONSHIP BETWEEN MULTIPLE INTELLIGENCES AND READING PROFICIENCY OF IRANIAN EFL STUDENTS

By

KARIM HAJHASHEMI

Thesis Submitted to the School of Graduate Studies, University Putra Malaysia, in Fulfilment of the Requirement for the Degree of Master of Arts

October 2010
to my inspiring father,

to my loving mother,

my supporting siblings, and

my cute and handsome nephews Ali & Pouya
RELATIONSHIP BETWEEN MULTIPLE INTELLIGENCES AND READING PROFICIENCY OF IRANIAN EFL STUDENTS

By

KARIM HAJHASHEMI

October 2010

Chairman: Associate Professor Wong Bee Eng, PhD
Faculty: Modern Languages and Communication

The purpose of this study was to examine the relationship between multiple intelligences (MI) and reading proficiency of Iranian EFL pre-university students in Tehran, Iran and to see if gender plays a role in this regard. Specifically, the study attempted 1) to verify the intelligences identifiable among high/low achievers in reading, 2) to discover the differences in multiple intelligences of Iranian EFL students based on their reading proficiency and gender, 3) to determine the relationship between the multiple intelligences and reading proficiency of Iranian EFL students, 4) to identify the components of multiple intelligences which are correlated with the score of reading proficiency test of Iranian EFL students, and 5) to find the intelligence type that is the best predictor of learners’ performance in reading proficiency test. In order to meet the objectives, four research questions were asked. A descriptive and ex post facto design
was employed to ascertain relationships among the naturally occurring variables. The participants for this study were 128 pre-university students (grade 12, 18-19 years old) of both genders studying in Tehran in the academic year 2008-2009. The district was chosen randomly among 19 school districts of Tehran. The students were chosen randomly from two different segregated high schools in that region. Random sampling was used to create homogeneous groups without involving any potential biases or judgments. Three instruments were utilized in this study namely, 1) a demographic questionnaire; 2) the Persian version of McKenzie’s MI Inventory; and 3) a standardized reading proficiency test which was selected from retrieved paper-based TOEFL® tests.

Analyzing the data using $t$-test, it was found that there was a statistically significant difference in the mean musical-rhythmic intelligence scores of the low achievers and the high achievers. This means that there were no significant differences between intelligence types of the students and their reading proficiency scores except for their musical-rhythmic intelligence which was positive and stronger among the low achievers. Based on this, it seems that the high achievers have a lower musical intelligence, which also means that better readers are less intelligent ‘musically’. A statistically significant difference between the mean bodily-kinesthetic intelligence scores and the two genders was also revealed. In other words, no significant gender difference was found in the intelligence types of the students except their bodily-kinesthetic intelligence which was positive and stronger among the females. No significant difference was found between
the male and female Iranian EFL pre-university students in their reading proficiency scores.

Results obtained from the correlation analysis revealed no significant relationship between the two variables of MI and reading score. Based on Guilford’s rule of the thumb, the relationship of MI and reading scores in the present study was found to be negligible. Furthermore, the results of the correlation analysis revealed that there was a low significant, negative relationship between musical-rhythmic intelligence and reading which suggests that when the reading score of a student increases, musical-rhythmic intelligence of the same student decreases and vice versa. This finding indicates that the low proficiency EFL learners’ reading comprehension performance is related to the musical-rhythmic intelligence.

Overall, three categories of MI were found to be predictive of reading proficiency. Those significant predictor variables were musical-rhythmic, verbal-linguistic, and bodily-kinesthetic intelligences. The coefficient of determination $R^2$ of the variables (musical-rhythmic, verbal-linguistic, and bodily-kinesthetic) showed that these variables contributed 13.5% of the variance in reading proficiency collectively.
Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Sastera

HUBUNGAN ANTARA KECERDASAN BERGANDA (MULTIPLE INTELLIGENCES) DAN KECEKAPAN MEMBACA DI KALANGAN PELAJAR EFL IRAN

Oleh

KARIM HAJHASHEMI

Oktober 2010

Pengerusi: Prof. Madya Wong Bee Eng, PhD
Fakulti: Bahasa Moden dan Komunikasi

Tujuan kajian ini adalah untuk mempelajari hubungan antara multiple intelligences (MI) dan kemahiran membaca dikalangan mahasiswa pra-universiti EFL di Teheran, Iran serta mengetahui hubungkait faktor jantina dalam kajian ini. Secara khususnya, kajian ini cuba 1) mengesahkan kecerdasan yang boleh dikenalpasti antara pelajar yang cemerlang dengan pelajar yang lemah 2) membezakan kecerdasan penggandaan di kalangan pelajar EFL Iran berdasarkan kecekapan membaca dan jantina, 3) menentukan hubungan antara kecerdasan majmuk dengan keupayaan membaca pelajar EFL Iran, 4) mengenalpasti komponen kecerdasan majmuk yang berkorelasi dengan skor pembacaan ujian kemahiran daripada pelajar EFL Iran, dan 5) mencari faktor MI sebagai prediktor terbaik untuk prestasi pelajar dalam ujian kemahiran membaca. Empat soalan kajian telah dikemukakan vi
untuk mencapai objektif kajian ini. Satu rekabentuk yang deskriptif dan “ex post facto”
telah dibentuk untuk memastikan hubungan di antara pembolehubah yang terhasil secara
sendirinya. Peserta untuk kajian ini terdiri daripada 128 pelajar pra-universiti (gred 12,
18-19 tahun) dari kedua-dua jantina yang menuntut di Teheran pada tahun akademik
2008-2009. Daerah untuk melaksanakan kajian ini dipilih secara rawak di antara 19 jenis
daerah persekolahan di Teheran. Pelajar-pelajar juga dipilih secara rawak dari dua
sekolah menengah yang berasingan yang berada didalam daerah yang terpilih.
Persampelan rawak digunakan bagi memperolehi kumpulan-kumpulan yang homogeny
serta tanpa sebarang prasangka atau penilaian. Tiga jenis instrument telah digunakan
dalam kajian ini iaitu 1) soal-selidik demografi, 2) “McKenzie’s MI Inventory” versi
Parsi, dan 3) satu ujian kecekapan kemahiran membaca yang dipilih daripada kertas ujian
TOEFL® yang telah dipiawaikan. Semasa penganalisaan data, perbezaan statistik yang
signifikan telah dijumpai dalam skor min pelajar yang berprestasi rendah dan tinggi.
Berdasarkan maklumat ini, penuntut yang berprestasi tinggi nampaknya memiliki
kecerdasan muzikal yang lebih rendah, hal ini turut bermakna bahawa pembaca yang
lebih baik juga kurang cerdas secara muzikal. Satu perbezaan statistik yang signifikan
antara skor rata Perisikan Kinestetik dengan kedua-dua jantina itu juga diperlihatkan.
Tidak ada hubungan yang signifikan dijumpai antara kedua-dua pembolehubah MI
dengan skor membaca. Seterusnya, keputusan regresi ‘stepwise’ menunjukkan bahawa
terdapatnya signifikasi yang rendah, hubungan negatif antara kecerdasan muzik dan
membaca yang menunjukkan bahawa ketika skor membaca meningkat, kecerdasan
muzikal pelajar yang sama menyusut dan sebaliknya. Penemuan ini menunjukkan bahawa

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prestasi kemahiran membaca pemahaman di kalangan penuntut EFL yang berprestasi rendah adalah berkaitan dengan kecerdasan muzikal. Selain itu, 3 kategori MI tersah berkaitan dengan kemahiran membaca. Prediktor pemboleh ubah yang signifikan itu ialah “muzikal”, “lisan” dan “kecerdasan kinestetik”. Koefisien determinasi $R^2$ daripada pembolehubah (muzikal, lisan, dan kinestetik) menunjukkan bahawa pembolehubah-pembolehubah ini menyumbang 13.5% daripada varias dalam kemahiran membaca.
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I certify that a Thesis Examination Committee has met on (October 2010) to conduct the final examination of Karim Hajhashemi on his thesis entitled “Relationship between Multiple Intelligences and Reading Proficiency of Iranian EFL Students” in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the Master of Arts.

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Date:
DECLARATION

I declare that the thesis is my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously, and is not concurrently, submitted for any other degree at Universiti Putra Malaysia or at any other institutions.

______________________________
KARIM HAJHASHEMI

Date: 19 October 2010

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LIST OF ABBREVIATIONS

B.A. Bachelor of Arts
EFL English as a foreign Language
ESL English as a second Language
g factor General intelligence
IELTS International English Language Testing System
IQ Intelligence Quotient
ISCED 97 International Standard Classification of Education version 97
ITBS Iowa Tests of Basic Skills
L1 First language or mother tongue
L2 Second language
LEP Limited English proficiency
M.A. Master of Arts
MI Multiple Intelligences
MIDAS Multiple Intelligences Developmental Assessment Scale
MIPQ III Multiple Intelligence Profiling Questionnaire III
MIT Multiple Intelligences in Teaching
PhD Doctor of philosophy
PSI Problem Solving Inventory
RAT Reading Ability Test
REQ Reading Efficiency Questionnaire
SAT Scholastic Aptitude Test
SILL Strategy Inventory for Language Learning
SOCAUTS Sociotropy-Autonomy Scale
SPSS Statistical Package for the Social Sciences
TAKS Texas Assessment of Knowledge and Skills
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<td>TCAP</td>
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<td>TOEFL</td>
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<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
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CHAPTER 1
INTRODUCTION

This chapter presents the background to the study, the education system of Iran, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, and definition of key terms. The conceptual framework is also discussed in this chapter.

1.1 Background to the Study

Preparing students to deal with the outside world is the main responsibility of educational institutions; therefore, schools are usually inclined to assess students by using the same criteria that society does. A culture which puts maximal value on the verbal-linguistic and logical-mathematical intelligences will result in a focus on these abilities in schools. Armstrong (2003, p. 4) states that our culture is dominated by verbal-linguistic intelligence and most educators would agree that the verbal-linguistic intelligence dominates the teaching-learning environment in our classrooms. Such a limited view of intelligence has alienated numerous students (Armstrong, 2003; Levine, 2003; Ruggieri, 2002), and society cannot afford to continue with this line of thought (Cetron & Cetron, 2004; Eisner, 2004). Pearson and Stephens (2004, p. 39) acknowledge that the information taught and tested in schools has been based on one type of knowledge, while slighting, and even ignoring “other kinds of knowing”.

also remind readers that we “have contrived a way of ‘doing school’ that bears little resemblance to the real learning and teaching that motivated human societies to create schools in the first place” (p. 39). Eisner (2004) claims that,

> the primary aim of education is not to enable students to do well in school, but to help them do well in the lives they lead outside of school. We ought to focus on what students do when they can choose their own activities. (p. 10)

The failure of a single general intelligence (g factor) to explain human performance has led many psychologists and educators to believe that individuals, with their specific strengths and weaknesses, can be conceptualized as having multiple abilities (Chan, 2006; Karolyi, Ramos-Ford & Gardner, 2003; Sternberg, 1997, 2000, 2005).

In the past there was a firm belief in the unitary general intelligence ‘g’ or general factor (Spearman, 1904; cited in Williams, Zimmerman, Zumbo & Ross, 2003). This g factor was understood to be fixed at birth. The scales used to measure general intelligence included memory, language skills, reasoning, digit span (the ability of a child to recall a sequence of numbers just spoken), and psychological judgment. Later (after World War II), attempts were made to revise and improve the scales used in measuring general intelligence. Yet this general intelligence which was operationally defined as the ability to answer questions on an IQ test left some questions unanswered especially in school settings. For instance it could not explain the phenomenon of children who scored low