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Multiple Intelligences and their Relationship to English Language Students' Achievement

الذكاءات المتعددة وعلاقتها بتحصيل الطلاب في اللغة الإنجليزية

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Abstract:

This study aimed at investigating the relationship between multiple Intelligences and English language achievement of secondary school EFL students in Yanbu. The study attempted to answer the following questions:

- what are the multiple intelligences prevalent among EFL secondary school students.
- What are the multiple intelligences that characterize high achieving EFL secondary school students?

A multiple intelligences questionnaire were used to gather the data from 120 student samples. This study explored the types of multiple intelligences of these participants based on their achievement at high and low levels (as measured by English scores and the teachers' opinion) at Yanbu secondary schools.

The results of this study revealed that secondary school students preferred the use of multiple intelligences in the following order: Logical-Mathematical, Intrapersonal, Visual-Spatial, Bodily-Kinesthetic, Interpersonal, Verbal-Linguistic, Naturalistic and finally Musical intelligence. Furthermore, the results indicated that the most used multiple intelligences types by high achievers were Logical-Mathematical intelligence; Intrapersonal intelligence and Visual-Spatial intelligence.

This study concluded that the teaching learning context can better meet the needs of all students by discovering how they learn best and setting up lessons to meet the individual needs.

Keywords: Multiple Intelligences, Logical-Mathematical, Intrapersonal, Visual-Spatial, Bodily-Kinesthetic, Interpersonal, Verbal-Linguistic, Naturalistic, Musical intelligence.

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الملخص:

هدفت هذه الدراسة إلى التحقق من أنواع الذكاءات المتعددة المستخدمة لدى طلاب الصف الثالث الثانوي بمدينة ينبع وعلاقة هذه الذكاءات بتحصيلهم في مادة اللغة الانجليزية. ولقد حاولت هذه الدراسة الإجابة عن الأسئلة الرئيسية التالية:

- ماهي أنواع الذكاءات المتعددة الشائعة الاستخدام بين طلاب المرحلة الثانوية الدارسين للغة الانجليزية؟
- ماهي أنواع الذكاءات المتعددة التي يتميز بها طلاب المرحلة الثانوية مرتفعي التحصيل في مادة اللغة الانجليزية؟

وقد استخدم الباحث استبانة ت لتحديد أنواع الذكاءات المتعددة لجمع البيانات من 120 طالب تم تقسيمهم إلى مرتفعي ومنخفضي التحصيل الدراسي بناءً على درجاتهم في اختبارات اللغة الانجليزية وآراء معلميهم في المدارس الثانوية.

أظهرت النتائج الرئيسية للدراسة أن طلاب المرحلة الثانوية يفضلون استخدام أنواع الذكاءات المتعددة بالترتيب التالي: الذكاء المنطقي الحسابي، الذكاء الاجتماعي، الذكاء البصري المكاني، الذكاء الجسدي الحسي، الذكاء الشخصي، الذكاء اللغوي، الذكاء الطبيعي وأخيرا الذكاء الموسيقي. بينما أشارت النتائج إلى أن الذكاء المنطقي الحسابي والذكاء الاجتماعي والذكاء الشخصي على التوالي أكثر استخداما لدى الطلاب مرتفعي التحصيل.

توصلت هذه الدراسة إلى إمكانية تلبية العملية التعليمية لاحتياجات جميع الطلاب على نحو أفضل وذلك من خلال اكتشاف طرق تعلمهم المفضلة وإعداد الدروس التي تتناسب مع احتياجاتهم.

الكلمات المفتاحية: الذكاءات المتعددة؛ الذكاء المنطقي الحسابي؛ الذكاء الاجتماعي؛ الذكاء البصري المكاني؛ الذكاء الجسدي الحسي؛ الذكاء الشخصي؛ الذكاء اللغوي؛ الذكاء الطبيعي؛ الذكاء الموسيقي.

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Introduction:

English is an important language in the modern world. A recent research study proposed that approximately 375 million people speak English as their first or native language (Mitchell & Myles, 2004). More than fifty countries have chosen English as their official language and use it in various fields of government or business (CIA, 2008). Because of this, learning English is essential for contemporary people to gain global perspectives, whether as their first, second, or foreign language.

Nowadays, learning English has become a necessity all over the world. English has become an important tool of communication not only with people all over the world but also as a mean of getting access of knowledge whether in books, articles or internet web sites.

In spite of this great-emphasized importance to learn the English language, most of our students are struggling to master it. One way to help our students to learn and acquire the English language is to be aware about their multiple intelligences (MIs). Therefore, our students should be taught according to their multiple intelligences (MIs) in order to succeed in mastering the English language.

In the last thirty years or so, the interest of researchers has moved from the teaching methods to learner characteristics and the learning processes by which learners acquire knowledge (e.g. learning strategies (LSs), learning styles, and multiple intelligences (MIs)).

The multiple intelligences theory (Gardner, 1983, 1999, 2004) has significant implications for education in general, and for language

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acquisition, in particular (Armstrong, 2007; Azar, 2006; Buchen, 2006; Christion, 2004). The theory can be effective for improving English as a Second Language (ESL) or English as a Foreign Language (EFL) student's achievement improve (Barrington 2004; Chan 2006; Hall, 2004). Gardner proposed a theory that defined human intelligence as multiple abilities, which include linguistic, musical, logical mathematical, bodily-kinesthetic, visual-spatial, interpersonal, intrapersonal, naturalistic, existentialist. Every student has different strengths and weaknesses in these areas. It is the contention of the researchers that if students were taught through all of the multiple intelligences, their learning would be enhanced.

Multiple intelligence is a natural way to structure learning. All the aspects of the person are taught to, meaning can be extracted, and applications can be made to life. The children in our classrooms are multifaceted and have many abilities. We as teachers need to give the students the skills and the opportunity to use their abilities and enhance them throughout their life. One purpose of this study was to investigate the types of (MIs) used by EFL secondary school students and the (MIs) which were most frequently used by successful learners.

There have been a number of studies examining the relationship between multiple intelligences and EFL achievement, Abu Ghararah and Koura (2010) conducted a study to discover differences in MIs used by third year intermediate school students in Madinah and their relationship to achievement in English language. Results indicated that the students used Interpersonal, Musical, Intrapersonal, Logical–Mathematical, verbal–linguistic intelligences most frequently. The multiple regression analysis developed a weak correlation in Logical–Mathematical, Verbal-Linguistic,

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Intrapersonal and Interpersonal intelligences and their achievement in the English language. In addition, results showed that the multiple intelligences that most contributed to student's achievement were Logical–Mathematical, Verbal-Linguistic, Intrapersonal, Interpersonal, and Spatial intelligences ranked respectively.

Koura (2005) explored intelligences that the pre- university students in Egypt report as their most highly developed and the relationship (if any) between MIs in EFL classrooms and students' achievement. Findings indicated that Interpersonal intelligence was the highest intelligence used by students while Natural intelligence was the lowest used by them. Students' Logical/Mathematical intelligence correlated positively and significantly with their EFL achievement whereas their Bodily/Kinesthetic intelligence negatively and significantly correlated with their EFL achievement.

Shalk (2002) conducted a study on high school students to validate the use of MI profiles as a means of predicting success on standardized tests. The results substantiated existence of distinct profiles of intelligence in relationship to state test scores. For reading scale score, linguistic and interpersonal intelligences emerged as the key profile intelligences. For mathematical scale score, logical/mathematical, linguistic and interpersonal are the profile variables. However, the percentage of the explained variance is low, suggesting that the relationship between MI and standardized tests achievement is present but weak.

In conclusion, studies on the relationship between MIs and achievement in the field of EFL/ESL classrooms have not reached a conclusive agreement. A number of studies confirmed a positive relationship

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while other did not come to similar conclusions. One purpose of this study is to discover the relationship between the different types of intelligences and EFL achievement.

Statement of the Problem

Students in Saudi secondary schools generally display lower than expected achievement in English language. Evidence for existence of this problem had been observed in a pilot study test scores, teacher observation of less time on task, and limited work completion. The researcher conducted a pilot study on 60 third-year students at AL Waleed Bin Abdul Malik secondary school in Yanbu. The students were given an English language test based on their syllabus of the second term, 1439, 1440 H. The students mean score in different test components as well as their total mean score showed that their current level in English was below average. It is clear from the pilot study results that there is a weakness among secondary school students in their achievement in EFL. A number of reasons could be responsible for this low language level. This might be related to many variables; amongst them their unawareness of their multiple intelligences learning activities that might strengthen them. In addition, an informal interview with 10 secondary school teachers revealed that they were not aware of their students' multiple intelligences.

Questions of the Study

Based upon the previous discussion, the present study was set up in order to answer the following questions:

1. What are the MIs prevalent among EFL secondary school students?

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2. What are the MIs that characterize high achieving EFL secondary school students?

Purposes of the Study

This study attempted to:

1- Identify the types of MIs used by secondary school students studying EFL;

2- Explore the types of MIs used by high achieving secondary school students studying EFL.

3- Determine the differences between the types of MIs used by the total sample and high achieving secondary school students studying EFL.

Significance of the Study

The significance of this study was derived from its attempt to:

1- Contribute to identifying the types of MIs a used by Saudi secondary school students studying EFL;

2- determine types of MIs used by high achieving secondary school Saudi students learning the English language; and

3- Benefit researchers, teacher trainers in colleges of education, EFL teachers, supervisors and students.

4- Directs the attention of the language curriculum designers to the importance of MIs -based activities which are somehow neglected in the English language textbooks.

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Delimitation of the Study

The study was delimited to one hundred and twenty Saudi third- year EFL male students in two private secondary schools in Yanbu.

Definition of Terms

Multiple Intelligences

MIs are both innate and acquired mental abilities that human beings use and develop through education. They are a combination of physical, biological, and social domains (Gardner, 1983, 1999, 2004).

In this study, multiple intelligences mean the intelligences preferred by secondary school students.

Verbal-Linguistic Intelligence (VL)

Gardner (1983) described VL as the capability of using the language effectively. This includes recognizing the phonology of sounds, the semantic and syntactic constructions of distinct linguistic communications, and use different lexical forms (Gardner, 1999).

Logical-Mathematical Intelligence (LM)

LM is used to mean the capacity for inductive and deductive thinking, and the ability to solve mathematical operations and use abstract thinking (Gardner, 1983).

Visual-Spatial Intelligence (VS)

VS is the ability for understanding and using spatial dimensions, visualizing objects, interpreting two dimensional representations, and appreciating and creating art Gardner (1983).

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Bodily-Kinesthetic Intelligence (BK)

Gardner (1983, 1999) described BK as people's ability for controlling physical motion, and using various physical skills to provide a parallel approach to the cognitive features of problem solving.

Musical-rhythmic Intelligence (MR)

MR is the capacity to understand different sounds, pitch, rhythm, tones and timbres, and compose and appreciate music. (Gardner,1983, 1999).

Interpersonal Intelligence (IP)

IP is the capacity to develop social skills and interact with people in a successful way. (Gardner, 1983).

Intrapersonal Intelligence (IA)

Gardner (1999) defined IA as the ability to understand oneself and develop self-reflection, and awareness.

Naturalistic Intelligence (N)

N is as people's ability for interacting with nature, recognizing and classifying plants, minerals, animals, and rocks. Classification and categorization skills depend on observing nature, which entails naturalistic intelligence. (Gardner, 1983).

Review of Literature

The following is a brief review of literature of studies related to application of the (MI) theory in the field of teaching English as a foreign or a second language in light of the variables of the study.

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Application of the MI theory in the field of teaching English as a foreign or a second language has shown significant results and implications (e.g. Carlton and Thomas,2000; Shore,2003; El-Embaby,2008; Kim, 2009 and Sinder,2010).

Carlton and Thomas (2000) conducted a study to explore the effects of using MI activities in the classroom on students' achievement in English as a second language. Activities used ranged from transparency maps, small group reading, and vocabulary worksheets to online research, games and simulation projects. Findings revealed that the experimental group was 20 points higher than the control group's average.

Snider, (2001) studied the relationship between multiple intelligences, and academic achievement, of 128 high school students. Among the most related findings of his study was that male students were stronger on bodily-kinesthetic, logical-mathematical, and spatial intelligences. Achievement was found to increase when students were taught through their preferred and MI.

Shalk (2002) conducted a study to validate the use of MI profiles as a means of predicting success on standardized tests. The results substantiated existence of distinct profiles of intelligence in relationship to state test scores. For reading scale score, linguistic and interpersonal intelligences emerged as the key profile intelligences. For mathematical scale score, logical/mathematical, linguistic and interpersonal are the profile variables. However, the percentage of the explained variance is low, suggesting that the relationship between MI and standardized tests achievement is present but weak.

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Shore (2003) conducted a study and concluded that the application of MI theory leads to noticeable gains in state assessment and achievement gains on standardized tests on the k-12. She concluded that MI incorporation in elementary and secondary school classrooms led children to break their district, county, and national peers in basic skills.

Loori (2005) conducted a study in which the differences in intelligences preferences of ESL male and female students are investigated. Ninety international students at three American universities took part in this study. The results showed that "there were significant differences between males' and females' preferences of intelligences. Males preferred learning activities involving logical and mathematical intelligences, whereas females preferred learning activities involving intrapersonal intelligence." (p. 77).

Pendidikan,(2007) examined the multiple intelligences pattern among 160 high achievers and 150 normal student from secondary schools around Sarawak. The Multiple Intelligences Inventory was modified and validated according to the research needs. The results showed that the normal students posses the following intelligences: interpersonal, bodily-kinesthetic, musical-rhythmic, visual-spatial verbal-linguistic, logical-mathematical, intrapersonal and naturalist. Whilst for high achievers posses the following intelligences: interpersonal, logical-mathematical, intrapersonal, visual-spatial, verbal-linguistic, naturalist, musical-rhythm, and bodily-kinesthetic.

Razmjoo (2008) conducted a study to explore the relationship between MI and language proficiency in Iran. Results of the study indicated that there is not a significant relationship between language proficiency and

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the combination of intelligences in general and the types of intelligences in particular. Moreover, none of the intelligences types was found as the predictor for language proficiency.

El-Embaby (2008) conducted a study to determine the effectiveness of MI activities in developing students' writing competencies. Results of the study indicated that there were statistically significant differences between the performance of the experimental group and the control groups in the writing test favoring the experimental groups. MI activities appeared to be effective in developing EFL students' writing competencies.

Kim (2009) conducted a study aimed to investigate the differences between Gardener's multiple intelligences among freshman students enrolled at UNRWA higher education institutes in Jordan. To achieve the aim of the study the multiple intelligences scale was applied after having checked its psychometric traits on a random sample consisting of (515) students. Results of the study showed that among the most popular types of intelligence amongst the sample are verbal intelligence, personal intelligence, bodily-kinesthetic intelligence, emotional intelligence, interpersonal intelligence, spatial intelligence, mathematical-logical intelligence, natural intelligence, and finally musical intelligence. In addition, the study revealed that there was a correlated relationship between all the types of multiple intelligences and academic achievement except for the bodily-kinesthetic intelligence, spatial intelligence and natural intelligence.

Saricaiglu and Arikan (2009) constructed a study to investigate the relationship between particular intelligence types and students' success in grammar, listening and writing in English as a foreign language. The results of the study revealed that negative but significant relationships were found

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between success in students' test scores in grammar and BK, VS, and IA intelligences whereas the relationship between MR and writing was found to be significant and positive.

Glenn (2010) conducted a quantitative quasi-experimental study to discover whether there was a significant relationship between student achievement determined through GPAs and MIs. By utilizing a second single sample t-test, a significant relationship was discovered between the variables of GPAs and MIs.

Abu Ghararah and Koura (2010) conducted a study to discover differences in MIs used by third year intermediate school students in Madinah and their relationship to achievement in English language. Results indicated that the students used a number of intelligences, which were IP, MR, IA, LM, and VL intelligences. The multiple regression analysis developed a weak correlation in LM, VL, IP and IA intelligences and their achievement in the English Language. In addition, results showed that the MIs that most contributed that to students` achievement were LM, VL, IP, IA, and VS intelligences ranked respectively.

It is clear from the above-mentioned studies that the relationship between MI and academic achievement in the field of EFL/ESL classrooms has not reached a conclusive agreement. A number of studies established a positive relationship while other did not come to similar conclusions. This study is conducted to prove this relationship and to investigate such a relationship between the different types of intelligences and student scores on the English language test. In addition, it is evident from the results of the above studies that the implementation of MIs theory in the EFL/ESL

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classrooms improves language skills whether written or spoken. The review of literature and related studies above gave a momentum for conducting the current study to be set up and investigate which MI characterize the Saudi secondary school students.

In conclusion, due to the importance of MIs theory in acquiring and enhancing the foreign language, this study was an attempt to discover the relationship between specific types of MIs that characterize high achieving EFL secondary school students.

Instrumentation

In order to answer the questions of this study, a Multiple Intelligences Questionnaire (MIQ) was used.

Pilot Study

The pilot study was conducted at two public secondary schools during the second semester of the academic year 1439 H / 2019 C. The purposes of conducting the pilot study were to determine the validity and reliability of the MIQ, to ensure the accuracy and clarity of all of the items and to estimate the time allocation for completing the questionnaire.

The participants were thirty male students randomly selected from two private schools in Yanbu. The students' teacher administered the MIQ. Students were given clear and direct instructions in Arabic and were encouraged to answer all items in the questionnaire honestly and objectively. Most students completed the questionnaire within 30-35 minutes. After that, the data of the pilot study was collected and analyzed using the SPSS. Then, the researcher decided to use the same questionnaire after some changes were made as a result of the pilot study.

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Validity of the Questionnaire

The multiple intelligences questionnaire was written in Arabic and judged for validity by eight experts in the department of Methods and Curricula from different universities in order to check the accuracy of the statements and their content validity. Modifications, changes and restatements of some items were done according to the jury opinion.

Internal Consistency of the Multiple Intelligences (MIQ)

Internal Consistency of the MI was established by the correlation coefficients between the total scores of every type of

MIs	Verbal	Logical	Visual	Bodily	Musical	Interpersonal	Intrapersonal	Naturalistic
Verbal	-----	0.25**	0.18*	0.22*	0.11	0.10	0.2*	0.34**
Logical		-----	0.41**	0.32**	0.04	0.22*	0.39**	0.27**
Visual			-----	0.27**	0.20*	0.18*	0.26**	0.20*
Bodily				-----	0.38**	0.28**	0.25**	.26**
Musical					-----	.11	.2*	.25**
Interpersonal						-----	.05	.16
Intrapersonal							-----	.28**
Naturalistic								-----

intelligence and the total scores of the whole types of intelligences and

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between every type and the other type of intelligence. Table (3) shows the Correlation Coefficients matrix between MIs.

Table (1): Correlation Coefficients between MIs.

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

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

Results of table (1) indicate that the correlation coefficients for the Arabic version of the MIQ were significant at the 0.01 level. The results of table (1) also show that the ranges of internal consistency of intelligences domains were between (0.04 and 0.41), and all of these values are suitable for conducting such a study.

Reliability of the Questionnaire

To determine the reliability of the statements of the questionnaire, the overall statements were tested under the main method used to detect reliability.

To determine the reliability of the statements of the Arabic Version of the MIQ, the overall statements were tested under the main method used to detect reliability. Cronbach's alpha method was utilized to find the consistency of the statements. The results in table (5) showed that the statements were of high reliability, which was in the range of (0.65 and 0.75).

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Table (2) Alpha Cronbach's Coefficients Values for (MIQ)

MIs	Verbal	Logical	Visual	Bodily	Musical	Interpersonal	Intrapersonal	Naturalistic
α	0.69	0.71	0.68	0.72	0.65	0.66	0.75	0.69

versions of the MIQ was valid and reliable. So, the Arabic versions of MIQ was appropriate and suitable for participants of the study.

Administration of the Study Instrument

The administration of the research instrument was carried out during the second semester of the academic year1439 AH/ 2019 C.

One hundred and twenty students were randomly selected from Alanfal and Alhadithah Secondary Schools for boys in Yanbu.

An Arabic version of the MIQ was distributed by the researchers and the classroom teacher to the study sample.

Students were divided into high and low achievers based on their English language scores in the first semester and the teachers' own observation of their students' performance.

Students received copies of the MIQ and were given clear and direct instructions in Arabic on how to complete the questionnaire. The total number of completed copies was one hundred eighteen (64 low achievers and 54 high achievers).

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Analysis of the returned MIQ copies was done and results were tabulated. A detailed discussion of the results is presented below.

Results and Discussion

The purpose of this study was to investigate the relationship between MIs and English language achievement of EFL secondary school students. Multiple intelligences data were collected for a sample of 120 secondary school students in Yanbu using MIQ. Descriptive statistics were computed for all of the MIQ data using SPSS. This section presents a discussion and summary of the results related to questions of the study in light of data analysis and interpretations of the results.

Research Question (1)

1. What are the multiple intelligences prevalent among EFL secondary school students?

In order to determine the MIs prevalent among EFL secondary school students the means and standard deviation are used. Results were shown in table (3) below.

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Table (3) Means and Standard Deviations for Students' Scores on the (MIQ)

Intelligence	Mean	Standard Deviation
Verbal-Linguistic	14.30 (6)	2.60
Logical-Mathematical	15.36 (1)	2.51
Visual-Spatial	14.95 (3)	2.64
Bodily-Kinesthetic	14.93 (4)	2.62
Musical	12.14 (8)	3.44
Interpersonal	14.67 (5)	2.60
Intrapersonal	15.18 (2)	2.33
Naturalistic	13.83 (7)	3.08

Findings in table (3) showed that secondary school students preferred the use of MIs in the following order: logical-mathematical, intrapersonal, visual-spatial, bodily-kinesthetic, interpersonal, verbal-linguistic, naturalistic and finally musical intelligence. This means that logical-mathematical intelligence is the most popular type of intelligences used by those students (Mean=15.36) followed by intrapersonal intelligence (Mean =15.18). Visual-spatial intelligence (Mean=14.95) came third which were used by those students. The least popular types of intelligences were verbal-linguistic, naturalistic and finally musical intelligence. (with means of 14.30, 13.83, and 12.14 respectively). In the middle were intelligences mildly used by the sample and they included bodily-kinesthetic (Mean= 14.67) and interpersonal intelligences (Mean= 14.93).

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Students intelligence preferences indicate that they like to learn step by step, enjoy solving problems, find working with numbers pleasant, like computer and board games. They also prefer to work on their own better than work in group, like to think things through in their minds and set own goals. In addition, the sample students enjoy making models, like making pictures, maps, diagrams, and depend on visual aids in dealing with a learning task.

On the other hand, students in this study tend not to favor language learning activities that include singing and music. In addition, they do not favor learning topics that focus on environmental and natural issues. Moreover, this sample student do not like to favor verbal linguistic learning activities that focus on reading, writing, making speeches and doing debates, working on word puzzles like crosswords and word searches.

A host of studies investigated MIs favored by students at different levels of education (Abu Ghararah and Koura, 2010; Azar, 2006; Chan, 2006; Koura, 2005; Shalk, 2002 and Chou, 2003). The current study partially supported some of them and drastically contradicted the results of others. This is understandable since MIs could vary according to culture, educational systems, and the nature of the study sample, but the present results highlight the types of learning preferences of students that should be considered by Saudi EFL teachers, supervisors, book writers and teacher educators.

Research Question (2)

What are the multiple intelligences that characterize high achieving EFL secondary school students?

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In order to determine the MIs characterize high achieving EFL secondary school students; the means and standard deviation were calculated. Results are shown in table (4).

Table (4) Means and Standard Deviations for High achieving Students' Scores on the (MIQ)

Intelligence	Mean	Standard Deviation
Verbal-Linguistic	14.02 (6)	2.97
Logical-Mathematical	15.84 (1)	2.32
Visual-Spatial	14.93 (4)	2.35
Bodily-Kinesthetic	14.82 (5)	2.54
Musical	11.56 (8)	2.69
Interpersonal	14.95 (3)	2.73
Intrapersonal	15.21 (2)	2.27
Naturalistic	13.65 (7)	2.89

Results of table (4) indicate that the most used MIs types by high achieving students were logical-mathematical intelligence (Mean= 15.84); intrapersonal intelligence (Mean= 15.21) and interpersonal intelligence (Mean= 14.95). Other intelligences like, verbal-linguistic intelligence (Mean= 14.02); naturalistic intelligence (Mean= 13.65) and musical intelligence (Mean= 11.56) were reported to be the least used intelligences by this sample. In the middle were intelligences mildly used by the sample

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and they included visual-spatial intelligence (Mean= 14.93) and bodily-kinesthetic intelligence (Mean= 14.82).

A closer look at results reported in table (4) reveals a consistency between MIs favored by high achieving students and the study sample as a whole table (3). The only difference is that high achieving students' intelligences are well developed than the general sample. A look at means in table (3) and table (4) shows that the greater mean scores were in favor of the high achieving group. High achieving students are characterized by being able to think conceptually and abstractly, and have the capacity to discern logical or numerical patterns. They use numbers, math, and logic to find and understand various patterns: thought patterns, number patterns, visual patterns and color patterns. They like to conduct experiments and solve puzzles.

High achieving students in this sample are a mix of inter and intrapersonal intelligent. Some of them like to work alone, they are self-reflective and self-aware, they tend to be in tune with inner feelings, beliefs, and thinking processes. On the other hand, a considerable number of them love to work in groups, they are good team members and skilled in conflict resolution since they exhibit great deal of empathy for others.

Results of this study suggest that EFL teachers need to strengthen their students MIs by providing the learning sources and instructional activities and strategies that provide for such MIs. High achieving students for example need charts, diagrams, statistical data, individual as well as group activities and cooperative projects. In addition, they need instructional strategies that focus on problem solving, investigation, experimentation,

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questioning, journal writing, cooperative learning as well as independent learning projects.

Results reported in table (4) above are partially in congruence with those reported by (Hodge, 2009; Chan, 2006; Koura, 2005; and Chin 2004) whereas they contradict those revealed by Rogmajoo, 2008.

As indicated in our discussion of results in table (3) that the least preferred MIs by the sample were musical, naturalistic and verbal / linguistic.

Conclusions and Recommendations

Conclusions:

A number of conclusions can be drawn from the results of this study:

1- Students preferred MIs could be developed and enhanced through providing them with learning activities, exercises, and topics that cater for these intelligences.

2- The teaching learning context can better meet the needs of all students by discovering how they learn best and setting up lessons to meet the individual needs thus engaging their students in learning.

Recommendations:

Based on the findings of the current study, the following recommendations were

1- Ministry of Education should train EFL teachers with respect to the use MIs in order to help their students to learn the English language more efficiently.

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2- Both EFL teachers and students should be aware of the MI theory and its applications.

3- The MI theory and it applications should be taught as an integral part of the methodology courses in the teacher education programs.

4- Activities, exercises, and tests included in EFL courses should be built on the lines of the MI theory.

5- Workshops should provide hands-on-experience training for in-service teachers on how to cater their teaching and evaluation to the applications of the MI theory in their classrooms.

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