

INTELLIGENCE OBSERVATION AMMAN ARAB UNIVERSITY VARIANCE UPON STUDENT'S POINT OF VIEW

Lina Mahmoud Mustafa Al Maharmeh

Assistant Professor, Faculty of Educational and
Psychological / Department of Special Education Sciences
Assistant Professor : Amman Arab University –Jordan

Nabil Salah Ibrahim Homedan.

Assistant Professor, Faculty of Educational and
Psychological / Department of Special Education Sciences
Assistant Professor : Amman Arab University –Jordan

ABSTRACT

This study was conducted on a sample of students from Amman Arab University, and was the study sample (65) students were chosen at random from a community (150) students, the study used a tool questionnaire to measure the variables, the answer to the first question, that the Amman Arab University Students results to all aspects of intelligence scored an average level for all areas of intelligence, either the results of the second question refers to the absence of differences related to gender in most areas with the exception of a difference in the areas of intelligence and musical intelligence existential difference was in favor of females, while the school year variable there was no statistically significant in most of the differences areas except the existence of differences in self-intelligence was the difference for the benefit of students per year and the third and fourth, compared to the students of the first and second year, and the results suggest the answer to the third question that there is a statistically significant relationship between the level of multiple intelligence and rates of cumulative students were positive relationship. The study recommends further research and studies on the different stages of learning.

Key words: *Multiple intelligence, Amman Arab University students, academic levels, Cumulative averages.*

The importance of Gardner's theory of intelligence that they are not patterns or ways to define intelligence that suits the individual's theory, but it is the theory of looking at the functional cognitive performance, and some of the people shows that they have very high levels of functionality in all the different intelligence types, and as a reminder we like to mention here that the German poet Johann Wolfgang Von Goethe, was well known international poet and philosopher, and he mention that most people can develop all intelligent to an appropriate level of efficiency, and suggests that every individual has the ability to develop intelligence to a high level of performance in the event of available appropriate encouragement and enrichment, education, and build on so it can be for us as members of the faculty at universities and teachers in schools that are working on different types of intelligences development of the students in the case have been identified on the type of intelligence and provide help factors in the development of intelligence from a variety of activities and experiences of educational and enrichment occasion.

"Gardner" has been able to expand his theory, the concept of intelligence so that it is consistent with the requirements of success in life, there is no one kind of intelligence, but more than one type and so, "Gardner" extended the term of intelligence to include high capacity which is outside the scope of intelligence in the traditional sense, and consider the humanitarian intelligence abilities are relatively independent of each other, opposed to the belief that he believed a lot of psychologists, is that intelligence ability mentality and one that one has to be either nimble Smart or stupid, so he worked on developing a variety of ways to measure multiple intelligences (Gardner, 1983, 1993).

Research Problem

The purpose of the study to know the degree of intelligence possessed by Amman Arab University for students from their point of view and its relationship with some variables is to find the following answered to the following questions.

1. What degree of multiple intelligences to the Amman Arab University for students from their point of view?
2. Are there differences in the degree of intelligence among the Amman Arab University for students from their point of view due to gender, year of study at the level of significance ($\alpha \leq 0.05$)?
3. What is the relationship between the degree of multiple intelligences to the Amman Arab University students and cumulative grades?

The Importance of Studying

Identify the types of multiple intelligence are in Amman Arab University for students from their point of view, the relationship of the types of intelligence variables related to sex and school year and its relationship with the cumulative average for the student, and the clear importance of the current study through the following things:

1. You are viewing the theory of multiple intelligences as one of the most important modern theories of intelligence and by which to detect multi-national force of the students, and as a result on to expand perception of human capabilities and diversity and not restricted to the linguistic and logical capacity only.
2. Recognize on the types of multiple intelligences of students in general, and determine the quality of intelligence and its variable sex and grade point average.
3. Re consideration to direct teaching methods used with students in the special and quality of intelligence

Study Limitations and Boundaries

Restricted to Amman Arab University for items curricula and methods of scientific research students for the academic year 2016-2017

Terminology of study. Amman Arab University students: - are the students enrolled in the subject curricula and methods of scientific research for the second semester of the year 2016-2017

Multiple intelligences. Defined as a set of multiple capabilities, which may appear through several areas, but, the types of the multiple intelligences are: linguistic intelligence, visual intelligence, and musical intelligence, intelligence concerning the nature, kinetic intelligence, social intelligence, and self-intelligence.

The Multiple intelligences primarily known by the levels obtained by the Amman Arab University students enrolled textured curricula and methods of scientific research, using multiple intelligences standard that is used in this study.

Many educators were spoken about the types of multiple intelligences and according to a Gardner's theory and referred to by Kirk, Jaljhr, Coleman, and Anastasiow, 2012, the multiple intelligences consist of:

1. Linguistic intelligence. Is the ability to think about the words and the ability to use language to express and the ability to grasp complex meanings, linguistic intelligence simplified and ease word order process and their meanings and enables the individual to use the language skills characteristically, show the effects of linguistic intelligence to write poems and novels.

2. Logical mathematical intelligence. Possesses an individual, who has that kind of ability to sports and logical and abstract thinking intelligence, it also employs a method to solve problems efficiently.

3. Visual spatial intelligence. Includes the employment of a set of interrelated skills such as discrimination visual intelligence Spatial (Spatial intelligence): includes the employment of a set of interrelated skills such as visual discrimination, mental imagination, visual interpretation, visual reasoning, have found that the individuals who have this kind of intelligence may they reach to a unique and unusual solutions for technical problems.

4. Bodily-Kinesthetic intelligence. Possessed individuals who are intelligent motor (active) physical ability to deal with different things as they are diversifying various physical skills such as athletes, and surgeons.

5. Musical intelligence. Means the ability of an individual to perceive rhythm, musical tone, and musical sounds, musical distributions.

6. Social/Interpersonal intelligence. Is the ability to understand others and deal with them easily, note the difference moods among others, and the ability to take the role of others, and the ability to form relationships.

7. Self/Intrapersonal intelligence. Is the ability to self-understanding and understanding of the individual for his thoughts and feelings and to use this knowledge and understanding in planning and directing his own life.

8. Naturalistic intelligence. is the ability to understand the natural world, this type of intelligence comes from the ability to distinguish, understanding, classification, and individuals who are characterized by this kind of intelligence are scientists, explorers and environmentalists, and scientists animals and seas.

9. Existential intelligence. Is the ability to understand the world of religions and spiritualities.

Theoretical Framework

The theoretical framework includes two aspects, namely the theoretical literature and previous studies below is an explanation for it:

First, the Theoretical Literature

Spearman identified the intelligence as pointed by as the ability to recognize relationships especially difficult or hidden relations. Also (Abu Hatab, 1996) identified that the scientist Binet was one of the first who have contributed to the field of intelligence tests, according to his point of view, the intelligence consists of four capabilities are understanding, innovation and criticism, and the ability to guide the thinking in a certain direction and retained it (Nasser, 2002).

But, Thorndike As stated in (Abbas 2002), he distinguished between three types of intellectual capacities are: Type the abstract or verbal, practical and kind, which includes ease of handling things and attitudes, and gender, which refers to the ease of dealing with people, but (Wechsler) has been known to intelligence that the overall ability to do the work meaningful and think rationally and to deal with the surrounding environment. The educators realized that intelligence consists of multiple types, not just about getting a high IQ scores to have individual success as well as excellence grades there are artistic talent and creativity. The term intelligence has expanded to include different types of intelligence, such as creativity and psychological intelligence .

Also (Gardner, 1993) in his book of "Mind Frame", it has between two concepts of traditional intelligence teams as the first concept of intelligence is the one who sees intelligence as a single unit, while the second concept of intelligence believes that it should be divided intelligence to many different species.

The theory of multiple intelligences of Howard Gardner of modern theories, has been developed this theory at (Harvard University) and is built on the principle that intelligence is not a unilateral, and be the difference between individuals is not in the degree of intelligence, but rather in the quality of, and based on what Gardner saw that intelligence consists of several types and not a kind one, and that a competent individual to learn in multiple ways (Al Baz, 2005).

Second: The Previous Studies

And (Ksicinski, 2000) conducted a study aimed at identifying multiple intelligences among students in one of the community colleges using the scale (MIDAS) to identify whether there were statistically significant differences in student performance on this scale due to variables of gender, age, race (origins) as the purpose of this study is to determine whether there are statistically significant differences between teachers and students in areas that affect the intelligence of intelligences types listed, the sample of the study consisted of (81) students attending one of the courses in the United States. The scale was applied, and the results of the study showed that participants demonstrated high performance personal intelligence/and low Rhythmic intelligence performance/music, statistically significant differences were observed between Personal /social intelligence and intelligence physical/kinetic, also noted differences in linguistic intelligence significance/verbal for females and physical/kinetic intelligence for males, and age variable showed statistically significant differences in musical intelligence/Rhythmic, and Kinetic/physical and verbal/linguistic, age group (20-24) gave itself the highest points in the (19) Skill out (26), showed the race lack significant differences among students due to their origins, teachers may give themselves higher marks in language/verbal intelligence and personal intelligence/social intelligence

And (Stevens, 2000) has conducted a study aimed at revealing the relationship between the activities of mathematical intelligence and linguistic and spatial intelligence and Wexler scale to (verbal and performativity, all), where the sample of the study consisted of (150) students from eight grades in school for the gifted, the study found a relationship between spatial intelligence activities function and overall mark

Wexler scale as well as (verbal and practical), a correlation function between linguistic intelligence activities and marks on the verbal scale and mark on the scale while not total There is a relationship with **Wexler** performativity, results indicated the absence of gender differences in their activities.

A study on (Chan, 2005) to know the relationship between perceived multiple intelligences and learning preferences between five (604) talented Chinese students in Hong Kong. These students may realize their strengths in both (social, linguistic, Self-intelligence), as they realized their weaknesses in both kinetic and environment intelligence. And better preferences in learning activities, linked to the discussion and lecture and peer education projects and simulation. Regarding the process of forecasting five preferences for learning, it has been shown that intelligence is a factor in self-as well as being an important prognosis factor. And meditation skills, and social skills have contributed to these learning activities, students who indicated that they have a greater number of learning preferences, gave themselves the highest estimates on linguistic and self-intelligence.

And took up a study on ((Chan, 2007 relations between the components of leadership and talent and multiple intelligences between (510) talented Chinese in Hong Kong, these students have realized their strengths on Three (3) intelligences are: linguistic, self and social, and they realized their weaknesses in brightness: kinetic and intelligence on the nature and appreciate themselves for leadership and flexibility and target orientation with a higher degree of appreciation of the adequacy of own leadership. the results showed that the brightness and two joint forecast factors and language are important and logical mathematical forecast factor was Important enough to drive. Goal-oriented, while social intelligence is important prediction factor driving flexibility.

The results indicated that critical thinking may be important to the sense of confidence or enough or see goals. Social skills may be important for openness to other opinions. And he found that students who rated as high in the linguistic and the brightness, or who rated as high in one of the brightness and low on the other, or low in the smartness together, were high and medium-and low three leadership components respectively.

Also Neto, Ruiz, and Frinham (2008), study looked at the relationship between sex and intelligence, and self-esteem of multiple intelligences of both parents, and intelligences of Portuguese adolescents in high schools, numbered (242) teenager, appreciate their wits degrees, degrees of intelligence their fathers, every intelligent multiple intelligences 10 (Gardner): linguistic and logical intelligence athletes and social intelligence, existential intelligence, spatial intelligence, musical intelligence, physical intelligence, wits and activist, spiritual intelligence, And intelligence on the ground. respondents also answered six simple questions related to intelligence and his tests and the results showed a variety of differences between the sexes in the self-assessment of intelligence, as much as the males themselves higher on the following logical intelligences-athlete, spiritual and temporal, concerning nature compared to females. Multiple regressions results indicated that linguistic intelligence, mathematical and logical intelligence and intelligence and self-important forecast factors for both esteem and parents on comprehensive estimates of intelligence.

The objective of studying and or baboons (Wu & Alrabah, 2009) to link the survey results regarding learning methods with multiple intelligences to culturally different groups of students studying English language in both Taiwan and Kuwait, and data were collected using the limited tools, first tool aimed to know my favorite student learning styles and multiple intelligences focused second tool. This data analysis showed both groups preferred learning styles and multiple intelligences dominant in each group of students. And held (Saban, 2009) study used content analysis method for Turkish studies that addressed the multiple intelligences theory. They recently showed a significant increase in the numbers of studies done in the field of multiple intelligences in Turkey as a result, a systematic analysis of these studies is important to being

able to see the present and future trends in education. Since this analysis will hopefully provide a means of experienced educators to start conversations about using the theory of multiple intelligences and provides new researchers interested in this area a certain orientation of studies relevant to the application of the theory of multiple intelligences (Master's thesis, Theses, and research published in scientific journals) from (2007-1999). This study included (71) and eight master theses and (18) in search, all analyzed on the basis of 25 basic idea, the study concluded that there is a need for qualitative studies related question: how to develop multiple intelligences in children?

Melham, 2010. The study aimed to detect blind students perceptions and parameters (the sharp and blind) to multiple intelligences have blind students in light of the theory of Gardner (Gardner) academic achievement for intermediate students blinds woman in Saudi Arabia was building tool for measuring multiple intelligences applied (37) and student (15) teachers. The most notable findings, statistical function differences between students and teachers of multiple intelligences among students also found differences between the perceptions of some teachers have intelligences due to the level of academic achievement for students, showed the results are statistically among the students their brightness's own estimates and final showing in the Arabic language, and between teachers for some students ' grades and intelligences in the relevant articles of those intelligences.

In a study both (Alounh & Blaawi, 2010), the aimed to identify the preferred learning methods and prevailing intelligences at Yarmouk University students and the relationship between them, and participated in the study (840) Students from different academic levels and colleges representatives of scientific, literary, and use data collection measure of learning styles and multiple intelligences Favorites after they were sincerity and consistency and results indicated that the method of kinetic learning occupied first place followed by hearing, physical touch, then the Visual collective finally prevailing intelligence type either. it was personal intelligence , Followed by Kinetic intelligence and athletic then existential, then came linguistic intelligence then normal and finally musical intelligence and found a statistically significant relationship between learning styles and multiple intelligences Yarmouk University students revealed the legal link analysis of any six learning styles affect the nine intelligences.

Both he and (Al Sharaiah & Salman, 2010) in their studies of the effectiveness of a training program on the development of children's intelligences kindergarten in Saudi Arabia, which consisted of 50 children from kindergarten, ranged in age between (5-6) years, and children were divided into two groups, experimental and experimental group underwent officer training, the results show that there is a statistical significance difference at a level ($\alpha \leq 0.05$) in college class of multiple intelligences and for children in the experimental group. This result refers to the effectiveness of the training program in the development of multiple intelligences for kids at preschool.

In a study of (Aghannmyin, 2011), which aimed at identifying multiple intelligences degrees and its relation to academic achievement Al-Hussein Bin Talal University students, and the sample of the study consisted of (751) students from the University of Hussein from different colleges at the University were chosen by random way, the results of the study showed that the highest degree of linguistic intelligence, spiritual intelligence was less, as results showed no statistically significant difference in the degree of own logical due to the interest in scientific colleges college type, also found differences Statistically significant in the degree of linguistic intelligence acquisition due to gender and type of College and for females and Humanities and the results showed no statistically significant differences in the degree of kinetic intelligence and spiritual possession due to gender and type of College as the results of the study showed statistically significant differences in natural intelligence attributed to gender, type of College and for females and scientific colleges and found significant relationship between collection and intelligences.

Action. Research Methodology:-use descriptive study (150) students ranged in four chapters and selected a random sample of Amman Arabic University study.

Personnel Distribution: a community study be (150) students of Arabic Oman University for the academic year 2016-2017 and selected random sample table sample fixing it (65).

[Table 1 here]

Steady Study Tool

Internal consistency coefficient was calculated for paragraphs just tool equation of ' alpha ' and the coefficient of consistency found to be (0.91).

[Table 2 here]

Statistics and Methods Used

Using Shave and the arithmetic mean and standard deviation and variance analysis to find out the differences as well as the definitive test to compare gateway and alzaeh (Variance) class was extracted for each domain by using the following equation:-arithmetic mean/standard deviation after each level is divided into three levels:

Low level (less than 1), Medium between (-1 and 1), and High (more than 1).

This section contains an overview of the findings of this study by answering her questions, as follows:

Discussion of the Results

The First Question

What is the level of multiple intelligence in Amman Arabic University students from their perspectives? Arithmetic averages and standard deviations, grade and level of multiple intelligences for Amman Arabic University students, and each area of study descending levels as shown on the following.

[Table 3 here]

We find that the level of multiple intelligences at Amman Arab University students from their perspective was average, as was existential intelligence first level and came in second rank 'self-intelligence' came in rank before the final 'linguistic intelligence' came in the final grade musician intelligence and this result has been agreed with the findings of the study done by (Shan, 2005), and 2007, (Neto et al., 2008), and (Ksicinski, 2000). Of that there is diversity in the level of multiple intelligences between high, medium and weak among students as the students realizing the power of self-intelligence and social intelligence, linguistic intelligence, and the weakness in both the movement intelligence and intelligence concerning the nature.

The Second Question

Are there differences in the level of multiple intelligences of the Amman Arab University students from their point of view due to the variables of sex, and the school year?

The averages, standard deviations, and test 'T' of the differences in the level of multiple intelligences in Amman Arab University students from their point of view, depending on the variable sex.

[Table 4 here]

1. Sex variable. Notes that there were no statistically significant differences at the level ($\alpha \leq 0.05$) in the level of multiple intelligences to the Amman Arab University for students from their point of view, due to a variable males, females, as well as the lack of statistically significant differences at the level of ($\alpha \leq 0.05$) in most areas, it was the values of (T) is not statistically significant, while the difference was found in the areas of musical, and existential intelligence, respectively, and the difference in favor of females evidenced by high Arithmetic Means compare to the males in these areas averages; this result differed with (Warner & Vrnham, 2008) and (Stevens, 2000). Where are males themselves as a much higher degree in mathematical intelligence logical and spatial, spiritual, spatial and natural than compare to girls.

2. School year variable. Computation of the arithmetic averages and deviations of the multiple intelligences levels to the Amman Arab University students in respect to their point of view, depending on the variant of the school year as shown below in Table 5.

The Arithmetic Mean and, standard deviations, to the level of multiple intelligences to the Amman Arab University Students from their point of view, depending on the variant of the school year- [Table 5 here]

It notes that there are apparent differences between the arithmetic mean of the level the Amman Arab University for students from their point of view, depending on the variant of the school year, as happened owners Category fourth year on the total score at the highest arithmetic average (72.46), followed by the owners of Category First Year, amounting to (69.50) and, finally, came the arithmetic average of the owners class second year, amounting to (63.00), and to determine whether the differences between the averages are statistically significant at the level of significance ($\alpha \leq 0.05$) was applied one-way analysis of variance (One way ANOVA), The results of analysis of variance, that The difference in the field of self-intelligence was in favor of the fourth year and the third year when compared with an average second year and explains it to the maturity of the students in the fourth and third year more than the students the first year and second year.

Analyze the 1 variance of the differences in the level of multiple intelligences to the Amman Arab University for students from the point of view, depending on the variant of the school year table-6 [Table 6 here]

The Third Question

The findings on answering the third question, which reads Is there a statistically significant relationship between the level of multiple intelligences to the Amman Arab University students and cumulative grades?

What is the Correlation between the level of multiple intelligences to the Amman Arab University Students and the cumulative using Pearson correlation coefficient and cumulative grades? [Table 7 here]

We note here and there is a significant relationship statistically positive at ($\alpha \leq 0.05$) between the level of multiple intelligences to the Amman Arab University students and cumulative grades; the correlation coefficients were between (0.6190.968-) and the level of significance (0.000), and these relationships have all been positive , and this result agreed with the remit to Melham study in 2010 of the existence of a relationship between females students' perceptions of the level of their intelligence attributed to the level of academia achievement.

Recommendations:

1. Reconsider their teaching methods and ways in terms of its diversity to suit different types of intelligence located at all students.
2. Use the results of multiple intelligences to design activities and curricula fit the diversity of the students
3. Conduct further studies and research on the different stages of learning and especially public and private universities

References

1. Abbas, F. (2002). *Alzca and psychometrics in the way clinical*. I 1. Beirut, the Lebanese Dar Manhal Ras Al-Nabaa Library for Printing and Publishing
2. Abo Firewood (1996) *Mental abilities*. 5th Floor, Cairo Angelo Library.
3. Abu Hatab, Fouad (1996). *Mental abilities*. I 5, Cairo: Anglo Egyptian Library.
4. Aghanmyin, M. M. A. (2011). *The degree of multiple intelligences to the Al-Hussein Bin Talal University students and its relationship to academic achievement have* (unpublished Master message). Mutah University.
5. Al Sharaiah, A., & Salman, R. (2010). *Effectiveness of the training program document to Gardner's theory of multiple intelligences development among children of pre-school in Saudi Arabia*. In *Seventh Arab Scientific Conference for the Gifted and Talented*, Amman, Jordan.
6. Alawneh, Shafiq Falah and Belawi, Munther Yousef (2010) *The preferred learning methods and the multiple intelligences prevailing among Yarmouk University students, educational and psychological sciences*, Volume 11 Issue 2
7. Al-Baz Abdul Aziz Bin Ibrahim (2005). *Patterns of thinking and intelligence*. Retrieved from <http://www.almuallem.net/maga/tafkeer808.html>.
8. Al-Mulhem, Aisha (2010) *"Multiple Intelligences as realized by Female Students and Teachers and their Relationship to Middle School Achievement in Saudi Arabia"*, 7th Arab Scientific Conference for the Care of the Gifted and the Talented, Amman, Jordan.
9. Alounh, S. F., & Balawi, M. Y. (2010). *Preferred learning styles and multiple intelligences prevailing at Yarmouk University students*. *Educational and Psychological Sciences*, 11.
10. Altham, A. (2010). *Multiple intelligences as perceived by the students blind and parameters and their relationship to academic achievement medium in Saudi Arabia stage*. In *Seventh Arab Scientific Conference for the Gifted and Talented*, Amman, Jordan.
11. Alzaveri, J. H. (2010). *Mistoy multiple intelligences managers secondary schools and teachers in the State of Kuwait and its relationship to organizational climate in their schools from the perspective of managers and teachers* (Master unpublished). Middle East University, Amman, Jordan.
12. Armstrong, T. (1994). *Multiple intelligences in the classroom*. Alexandria, VA: ASCD.
13. Campbell, L. (1999). *Teaching & learning through multiple intelligences*. Boston: Allyn & Bacon.
14. Chan, D. W. (2005). *Perceived multiple intelligences and learning preferences among Chinese gifted students in Hong Kong*. *Journal for the Education of the Gifted*, 29, 187–212. doi:10.1177/016235320502900204.
15. Chan, D. W. (2007). *Components of leadership giftedness and multiple intelligences among Chinese gifted students in Hong Kong*. *High Ability Studies*, 18, 155-172. doi:10.1080/13598130701709749.
16. Gardener, H. (1983). *Frames of mind*. Waukegan, IL: Fontana Press.
17. Gardener, H. (1993a). *Multiple intelligences: The theory in practice*. Washington, DC: Library of Congress.
18. Gardner, H. (1993b). *Frames of mind*. New York: Basic Books.
19. Kirk, S., Jaljhr, Coleman, M. R., & Anastasiow, N. J. (2012). *Children with special needs*. Mahmoud Education. Oman Dar Thought for Publication and Distribution.
20. Krejcie, R. V., & Morgan, D. W. (1970). *Determining sample size for research activities*. *Educational and Psychological Measurement*, 30, 607-610. doi:10.1177/001316447003000308.

21. Ksicinski, J. (2000). Assessment of remedial community college cohort for multiple intelligences (Doctoral Dissertation). ERIC Documents Reproduction Service No ED457924.
22. Najjar, I. (2010). Level of multiple intelligences to the faculty of science at the University of the Members of the umm al-Qura and its relationship to the creative skills. In Seventh Arab Scientific Conference for Giftedness and Almtvoukan.
23. Nasser, I. (2002). Introduction to education. Oman Dar Ammar Publishing and Altozaa.
24. Neto, F., Ruiz, F., & Furnham, A. (2008). Sex differences in self-estimation of multiple intelligences among Portuguese adolescents. *High Ability Studies*, 19, 189-204. doi:10.1080/13598130802504387.
25. Saban, A. (2009). Content analysis of Turkish studies about the multiple intelligences theory. *Educational Sciences: Theory and Practice*, 9, 859-876.
26. Shearer, C. B., & Luzzo, D. A. (2009). Exploring the application of multiple intelligences theory to career counseling. *The Career Development Quarterly*, 58, 3–13. doi:10.1002/j.2161-0045.2009.tb00169.x.
27. Stevens, B. (2000). Relationship between tradition and non- tradition, measures of giftedness in high IQ students (Unpublished Masters Theses). University of Arizona, Tuscson, AZ.
28. Wu, S.-H., & Alrabah, S. (2009). A cross-cultural study of Taiwanese and Kuwaiti EFL students. *Innovations in Education and Teaching International*, 46, 393–403. doi:10.1080/14703290903301826.

Tables

Table 1

Table Title Here.

No	Division 1	Division 2	Division 3	Division 4	Total
Scientific research methods	40	30	50	30	150
Number of responders on the study	12	11	30	12	65

Table 2

Reliability Coefficients Table.

No	Intelligence Range	Karmapa Alfa
1	Naturally	0.84
2	Musical	0.81
3	Logical	0.90
4	Existing	0.84
5	Socialism	0.91
6	Environmental	0.86
7	Linguistics	0.87
8	Self	0.90
9	Visual Spatial	0.87
	Ave Degree	0.91

Table 3

Levels of the Multiple Intelligence.

No.	Intelligence Type	Arithmetic Mean	Standard Deviation	Rank	Variance	Levels
4	Existential	8.51	1.030	1	1.62	High
8	Self	8.38	1.539	2	1.49	High
5	Social	8.02	1.709	3	1.13	High
6	Physical	7.84	1.833	4	0.95	Average
9	Visual spatial	7.7	1.691	5	0.80	Average
1	Natural	7.25	2.055	6	0.35	Average
3	Logical	7.24	1.552	7	0.34	Average
7	Linguistics	7.10	1.957	8	0.20	Average
2	Musical	6.97	1.713	9	0.07	Average
Total	Total Grade	6.9	0.994			

Table 4

Table Title Here.

Intelligence Type	Sex	Numbers	Arithmetic Mean	Standard deviation	T value	Alpha
Natural	Male	33	6.97	2.071	1.121	0.267
	Female	32	7.55	2.030		
Musical	Male	33	6.34	1.677	3.143	0.003*
	Female	32	7.61	1.520		
Logical	Male	33	6.91	1.422	1.752	0.085
	Female	32	7.58	1.628		
Self-Existential	Male	33	8.19	1.030	2.626	0.011*
	Female	32	8.84	.934		
Social	Male	33	8.00	1.503	0.074	0.941
	Female	32	8.03	1.923		
Linguistic	Male	33	7.84	1.834	0.011	0.991
	Female	32	7.84	1.864		
Physical	Male	33	6.88	1.980	0.906	0.368
	Female	32	7.32	1.939		
Self	Male	33	8.22	1.660	0.848	0.400
	Female	32	8.55	1.410		
Visual spatial	Male	33	7.38	1.737	1.560	0.124
	Female	32	8.03	1.602		
Total Grade	Male	33	66.72	8.693	1.888	0.064
	Female	32	71.35	10.719		

Table 5

Table Title Here.

Range	School Year	Numbers	Arithmetic Means	Standard Deviation
Natural Intelligence	First Year	6	7.17	1.472
	Second Year	8	6.75	3.105
	Third Year	36	7.14	2.153
	Fourth Year	13	7.92	1.038
Total		63	7.25	2.055
Musical Intelligence	First Year	6	7.83	1.169
	Second Year	8	7.00	2.390
	Third Year	36	6.72	1.614
	Fourth Year	13	7.23	1.739
Total		63	6.97	1.713
Logical Intelligence	First Year	6	6.83	1.602
	Second Year	8	7.00	2.138
	Third Year	36	7.31	1.470
	Fourth Year	13	7.38	1.502
Total		63	7.24	1.552
Existence Intelligence	First Year	6	8.83	.753
	Second Year	8	8.25	1.165
	Third Year	36	8.42	1.052
	Fourth Year	13	8.77	1.013
Total		63	8.51	1.030
Social Intelligence	First Year	6	8.50	1.761
	Second Year	8	7.75	2.315
	Third Year	36	7.97	1.521
	Fourth Year	13	8.08	1.935
Total		63	8.02	1.709
Physical Intelligence	First Year	6	7.17	2.317
	Second Year	8	6.50	1.309
	Third Year	36	8.14	1.743
	Fourth Year	13	8.15	1.864
Total		63	7.84	1.833
Linguistics Intelligence	First Year	6	6.67	2.503
	Second Year	8	6.25	1.282
	Third Year	36	7.11	1.909
	Fourth Year	13	7.77	2.127
Total		63	7.10	1.957
Self-intelligence	First Year	6	8.17	1.835
	Second Year	8	6.63	1.598
	Third Year	36	8.53	1.320
	Fourth Year	13	9.15	1.214
Total		63	8.38	1.539
Visual Spatial Intelligence	First Year	6	8.33	1.366
	Second Year	8	6.88	1.553
	Third Year	36	7.67	1.656
	Fourth Year	13	8.00	1.958
Total		63	7.70	1.691
Multiple Intelligence	First Year	6	69.50	11.743
	Second Year	8	63.00	10.650
	Third Year	36	69.00	9.090
	Fourth Year	13	72.46	10.437
Total		63	69.00	9.942

Table 6

Table Title Here.

Range	Sources of variance	Squares totals	Freedom levels	Average Squares	F-Value	Variance
Natural Intelligence	Between the groups	8.375	3	2.792	0.65	0.586
	Inside the groups	253.562	59	4.298		
	Total	261.937	62			
Musical Intelligence	Between the groups	7.573	3	2.524	0.854	0.470
	Inside the groups	174.363	59	2.955		
	Total	181.937	62			
Logical Intelligence	Between the groups	1.879	3	0.626	0.251	0.861
	Inside the groups	147.549	59	2.501		
	Total	149.429	62			
Existence Intelligence	Between the groups	2.355	3	0.785	0.731	0.538
	Inside the groups	63.391	59	1.074		
	Total	65.746	62			
Social Intelligence	Between the groups	2.089	3	0.696	0.23	0.875
	Inside the groups	178.895	59	3.032		
	Total	180.984	62			
Physical Intelligence	Between the groups	21.582	3	7.194	2.272	0.090
	Inside the groups	186.831	59	3.167		
	Total	208.413	62			
Linguistics Intelligence	Between the groups	12.732	3	4.244	1.114	0.351
	Inside the groups	224.697	59	3.808		
	Total	237.429	62			
Self-intelligence	Between the groups	33.484	3	11.161	5.808	0.002*
	Inside the groups	113.373	59	1.922		
	Total	146.857	62			
Visual Spatial Intelligence	Between the groups	9.062	3	3.021	1.059	0.373
	Inside the groups	168.208	59	2.851		
	Total	177.27	62			
Total levels	Between the groups	445.269	3	148.423	1.541	0.213
	Inside the groups	5682.731	59	96.317		
Total		6128	62			

Table 7

Table Title Here.

Range Sources of variance		Cumulative grades
Physical-Intelligence	Correlation coefficient	0.619**
	Level of multiple intelligences	0.000
Linguistics Intelligence	Correlation coefficient	0.780**
	Level of multiple intelligences	0.000
Self-intelligence	Correlation coefficient	0.621**
	Level of multiple intelligences	0.000
Visual Spatial	Correlation coefficient	0.694**
	Level of multiple intelligences	0.000
Natural Intelligence	Correlation coefficient	0.617**
	Level of multiple intelligences	0.000
Musical Intelligence	Correlation coefficient	0.616**
	Level of multiple intelligences	0.000
Logical	Correlation coefficient	0.608**
	Level of multiple intelligences	0.000
Existing Intelligence	Between the groups	0.590**
	Inside the groups	0.000
Social Intelligence	Level of multiple intelligences	0.562**
	Between the groups	0.000
Multiple intelligence	Level of multiple intelligences	0.968**
	Between the groups	0.000

At the 0.01 level