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The Processing of Relationship Between Emotional Intelligence and Mathematics Scores

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***Abstract* – Seeks to offer new approaches in the field of intelligence; IQ coefficient, Multiple Intelligences (MI), the present study is to investigate the relationship between emotional intelligence to deal with math scores. And now emotional intelligence (EI). There search on female students in secondary schools of area 1 in Rey selected randomly in relative cluster. The sample consisted of 120 female students of mathematics in high schools of Rey that 60 students in the experimental group and 60 students in the control group aged 15 to 18 were selected. The experimental group, with a mean average of three years of math under 14 and the control group, with a mean average of three years of math top of 14. In this study, the emotional questionnaire of shot was used and the result was evaluated by t-test. The results of the analysis showed that between emotional intelligence and math scores, there is a significant difference.**

***Keywords* – IQ Coefficient, Multiple Intelligences, Emotional Intelligence, Math.**

I. INTRODUCTION

Mathematics are linked with formulas. For some students, the mathematical classes including equations and concepts that it is hard for them. This is not desirable for them and attending the classes for these students do not appeal. So it is better to educate math in more tangible world. (Zamani, Bibi Eshrat 1383, Presley, Wood, King Vmtk 1912).

However, the math lesson such as other subjects is not hard if you read correctly and consistently and while many students are not interested in math are not true and scientific. Math is both hard and easy. It is easy because its structure is sound and stable but it is so hard because it needs thought to understand the logical structure. And deep thinking is so hard for some people. On the other hand an important part of students' lack of interest is due to the poor mathematical educational methods. (Aghazadeh, Ahmad 1382,Vslr1958).

One of the questions of students and people is why learning mathematics is more difficult than other courses? Scholars in the field of mathematics have an answer to this question. Alan Wilfred Bishop[1] Professor of Mathematics Education at Monash University in Australia analyzes this challenge by saying that one of the most important issues in modern society is mathematics curriculum. But it is very difficult to teach it good. M a the matic can be quickly became abstract object. This means that as soon as the mathematic loses relationship with the real world outside the school students know, for many of them would be meaningless. The result is that around the world, students in their math lessons are drop. (Mobini, Mohammad Taghi, 1369).

While any kind of education, including math education requires special measures conditions. First, a student and his ability should be recognized and then guided in the right direction. However, this guidance must be provided by a teacher who is familiar with proper education. All this will not be realized unless the correct definition of intelligence and learning exist (Scott, David 2000). For years experts were attached great importance to IQ and were thought the IQ is the representative rate of success. In schools, the students were awarded according to the standard IQ test and even some companies used intelligence test to employ. But recent research shows that intelligence tests is not the only criterion to measure and evaluate the success of a person. They are currently investigating the EQ (emotional intelligence) (Patrick 2008). The term intelligence, in the of multiple evolution in psychology, of a one-dimensional [1] concept (Binet, 1905) has become to multi-dimensional[2] (Gardner, 1983) and then to a sense of excitement[3] (Salvi mortality, 1990). In1988, Bar_on claimed that the emotional and social intelligence are better representative to succeed in life. (Bar-On, 1997). Due to the nature mathematics in which the learner must be enabled and interacted with each other and sometimes are under greats tress, it seems that emotional intelligence is very important in this class. Therefore, the aim of this study was to determine the relationship between emotional intelligence and better learning math.

Description and Discussion

A large variety of methods for teaching mathematics can be used. In the best practice methods that are considered educational goals. Mathematics education objectives are:

The Goal of Breeding

Breeding or training "is the regular and continuous flow to conduct of physical, cognitive, social and moral or, in general, all-round personality development of students in order to gain understanding of human knowledge and norms accepted by society and to help them thrive talent". Based on this definition, breeding is a system. The system that its major function is unlocking the potential and

[1]Beinet knew intelligence as the equivalent of mental and lingual ability
[2]Multi-dimensional intelligence, including verbal intelligence, logical mathematical intelligence, musical intelligence, interpersonal intelligence, visual-intelligence, and more.
[3]A comprehensive model of intelligence as well as understand and regulate emotions and a criteria to think about feelings

educating citizens who acquire socially acceptable norms and committed to the values of it.

The Purpose of Education

The concept of education opposed to the breeding is not a system. But training is purposeful activity and pre-designed. And its goal is to provide opportunities and situations that would facilitate and speed learning within the educational system so its goals are more accurate and specific and more precocious than the objectives of breeding. Training may be with or without the presence of the teacher and through film, radio, television and other media. Teaching is part of training. And includes a series of regular, targeted and predetermined activities. And its aims are to create favorable conditions for learning by the teacher.

II. Cultural Objective

Mathematics is an important part of culture. Students learn mathematics as part of the culture and ideas of mankind. Referring to the history of mathematics can be proud of a nation created in mathematics. It increases confidence in students and elates the subject to the national history and tradition.

Emotional Objective

It means the pleasure that can be gained through the pursuit of intellectual activities and loving knowledge. Mathematics makes us experts. It stimulate sour intellectual curiosity and a sense of elegance and perception. Maurice Klein said "Mathematics is the highest intellectual achievement and the most noble human mind (Lang, Serge 0.1371 and Rubin 2004). To achieve these goals, teachers should try to remove the teaching process from passive mode and encourage students to actively participate in the learning material.

Skills Emphasized in Mathematics Include

Problem Solving, discover argument, hypothesis and theory, use tools and technology, Estimates and numeric approximations, measurement, use the chart and geometric intuition, numerical Computation and mental operations, pattern-finding algorithms and modeling and enumeration. Also, learning, teaching, curriculum and evaluation are the major issues in mathematics education. In other words, while teachers can help students learn, skills, ways of thinking and expressing their opinions, they must also learn how to learn. (.P, George and Papanastazyv 2002).

To achieve the goals of mathematics education and skills listed; the best training pattern is the pattern of "student-centered", that is the pattern of experience and dialogue. In this model, all educational activities are based on "experience and dialogue". Experience is divided into two parts practical and observational. In practical experience, students will act yourself and plan to carry out various activities. Making educational software falls into this category. In observation, the student learns the lessons visual or auditory. The use of educational software, see movies, listen to tape or audio CD, go to the camps and scientific visits placed in this category. Dialogue also includes two internal dialogue and dialogue with other students. The internal dialogue of the students are asked to think about the subject as well and put their ideas about it on paper or otherwise record. Using this method gives the students to come out of the absolute position of a listener and think actively.

Often certain criteria, such as the ability to problem-solving, reasoning, memory determine intelligence. (Wechsler, 1958) Cognitive intelligence or IQ, including the ability to remember, think logically and abstract; while, emotional intelligences related to the use of cognitive intelligence on how to succeed in life. (Sobhanirace, 1387). There search reveals the importance of emotional intelligence in the classroom (Ptraydz, Fredrickson, Farham, 2004), mental problems (Shatz, Shvtplzvmalvf, 2001), teamwork (Jordan, 2002), work environment (work of 2003), and improved performance in interviews (Fox Vaspktr 2000). According to leading psychologist and expert in emotional intelligence Goleman, about 80% causes of the success can be attributed to emotional intelligence. In general, students who have high EQ, or emotional intelligence, show high levels of positive affect and low negative affect levels. They are conscientious and acceptor and have fewer emotional problems and in interpersonal relationships, have better performance. (Goleman, 1998).

III. The Main Hypothesis of This Study

There is a significant relationship between emotional intelligence and math scores,.

Methods

This study is descriptive cor-relational[4] and its purpose is practical. The criteria for data collection is the documentary and field[5]. With the aim of processing and comparing emotional intelligence and math scores of female students in secondary schools in the District 1 Rey and randomly was conducted in relative cluster[6]. The sample group were 120 people that were 15 to 18 years old. The experimental group, with a mean average of three years of math under 14 and the control group, with a mean average of three years of math top of 14. In this study, the emotional questionnaire of Shot was used. This questionnaire was made by the keeper and colleagues in 1998, based on the theoretical model of emotional intelligence of Salovi and Mayer and to measure the emotional intelligence of teenagers. (Salvimortality, 1990) The results were analyzed by student T_Distribution[7]

Findings

Due to the groups studied comprised two independent groups were compared in a quantitative variable distance. And taking into account that the data follow the normal

[4]It is research subset descriptive (non-test) and its purpose is to show the relationship between the variables.

[5]Qualitative research that starts with question then leads to the results and from results to hypothesis then to theory

[6]A possible typical example in which each sample is a sector group of members

[7]It is a test called T_test that declare amount of the ensure of the difference of two random variables from their sample.

distribution, two independent samplest-test was used. Table1 shows the information you approach the overall results. The table shows that the average EI of the students in the experimental group is 133.38 and the control group is 129.3.

Table 1. Descriptive statistics compared the emotional intelligence of students in the experimental groupand the control group

	Number	Average	Deviation of the average	Audit or error
EI of experimental group	60	133.3833	121.99654	15.74969
EI of control group	60	129.3000	13.94213	1.79992

Table 2. Comparison of the three-year average of mathematics in the experimental group and the control

	Number	Average	Standard deviation	The average error
Average of mathematics of experimental group	60	12.1333	1.38352	0.17861
Average of mathematics of control group	60	16.4500	1.34574	0.17373

Table 3. Thestatistical correlationtable of t_ testof two independent groups due to the average of EI

Groups						
					Confidence intervalwith95% difference	
	t	Freedom degree	Significant level	Average difference	Lowest level	Highest level
EI of experimental group	8.469	59	.000	133.38333	101.8683	164.8984
EI of control group	71.8361	59	.000	129.30000	125.6984	132.9016

According to the above tables, There is significant relationship between emotional intelligence of experimental and the control group. And the hypothesis is confirmed, Therefore, people who have high emotional intelligence have the high average math score. The output of this analysis show that the value of to obtained in the experimental group students is 469/8 and the control group is 836/71. The T difference compared between the two groups indicate that the hypothesis is confirmed.

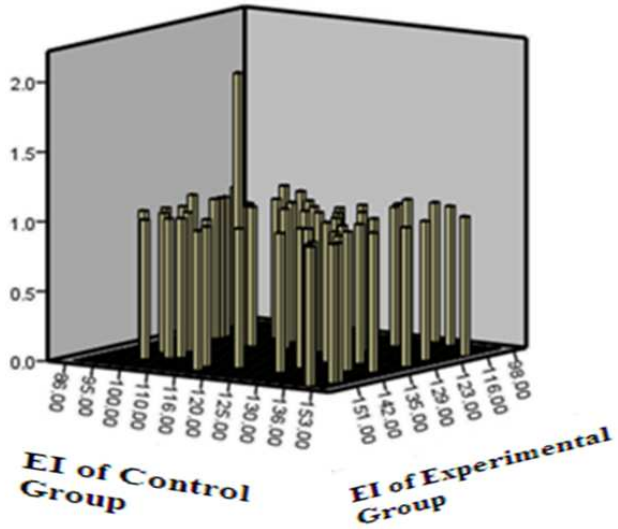

Fig.1. EQ of experimental and control group

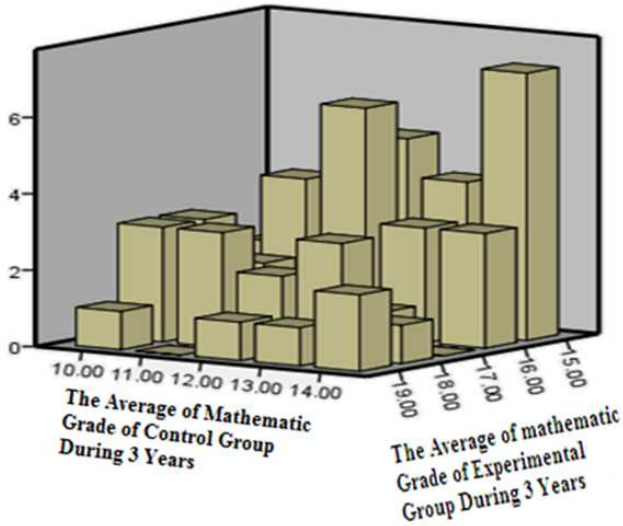

Fig. 2. The three-year average of mathematics in the experimental group and the control

IV. Conclusions

The values obtained in the experimental group is 8.469 and in the control group is 469/8 and 71.836. So this is concluded that there is a significant positive relationship between all the components of emotional intelligence, including emotional self-awareness, decisiveness, self-esteem, self-actualization, interpersonal relations, social responsibility, problem-solving, reality testing, stress tolerance, impulse control, happiness and optimism and student math scores. In other words as one have more component of emotional intelligence listed, the math

scores placed at a higher level. The learner in a good teaching that help learners learn well must be active, discuss, solve problems and gain experience with the guidance of their teacher. Most mathematicians have a high social intelligence and their hard works how their high confidence. They understand philosophy and abstract concepts and this cause a good spiritual intelligence. Innovation and Initiative in problem solving is because of creative intelligence and accurate learning is the characteristics of cognitive intelligence. They well know the position and ability to meet their reasonable demands. So it should be taken to promote a variety of intelligence, not just cognitive intelligence and that prevention is better than treatment problems such a slack of learning, and academic failure.

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