

INVESTIGATING THE RELATIONSHIP BETWEEN INTELLIGENCE BELIEFS AND HIGH SCHOOL FEMALE STUDENT,S MULTIPLE INTELLIGENCE IN NAGADEH

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Abstract

The purpose of this study is to investigate the relationship between intelligence beliefs and high school female students' multiple intelligence in Naqade. The population of this study are the fourth grade high school female students in Naqadeh who are 316 participants and the volume of the sample according to Morgan's table are 90 participants. Stratified randomization is used for the samples. The method in this description study is correlational and in order to measure intelligence beliefs, the 14-item questionnaire of intelligence beliefs measurement based on the 5-choice Likert spectrum has been adopted from the book of measurement scale in cognitive psychology (abdollah zade, zare', 1391), and to measure multiple intelligence, 64 five-choice items based on Likert spectrum has been adopted from Estrenberg's book (2000) translated by Saeedipur, that its face and content validity were evaluated by 4 psychology professors. In order to evaluate the reliability of the questionnaire, Cronbach's alpha index was used in which the computed amount for intelligence beliefs was 72%. The relationship between the variables with regression statistical test was investigated; according to the significance level, the results show that there is a significant relationship between intelligence beliefs and Gardner's multiple intelligence.

Key word: *Learning, Intelligence beliefs, Gardner's multiple intelligence*

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Introduction and stating the problem

Intelligence beliefs as a motivational issue which is the infrastructure of the person's motivation in reaching success in a higher level, has so much importance (Day Mon and Feldosen, 1998). Intelligence beliefs has considered the people as their excellent styles. Intelligence beliefs underpin the person's judge about him/herself, the universe and the people who are living there. According to them, Intelligence belief acts as an inner medium which provides striking intellectual structures for cognition, affection and behavior. So, intelligence beliefs can be categorized within document stability. There are different definitions of intelligence beliefs by the researchers: Intelligence belief variable emphasizes the person's basic beliefs that whether the person's belief about his/her physical and mental ability is intrinsic and flexible, or not? Intelligence beliefs as a motivational issue which are the infrastructure of the person's motivation in reaching success in a higher level, has so much importance. One of the debates that leads us to ideal learning is seeking about intelligence beliefs and its relationship with human brain. Nowadays, the student's educational achievement is considered as an important index in evaluating educational systems. In addition, educational achievement has always been important for the teachers, students, parents, theorists, and training researchers. For example, the learners' educational achievement is considered as one of the most important criteria for evaluating the teachers' performance. For school and university students the grade point average shows their academic capabilities for entering work domain and employment and higher grades. Perhaps it's because of this importance that training theorists focus most of their studies on recognition of effective factors of educational development. Among the effective factors of educational development, cognitive and motivational factors can be mentioned. Dong (2000) pattern which is according to cognitive and social approach is investigating the relationship between these factors and educational development. In this pattern, intelligence beliefs and the purposes of the development are taken into consideration. Intelligence beliefs include incremental intelligence beliefs and intrinsic intelligence beliefs. Incremental intelligence beliefs refer to this entry that intelligence is a flexible and increasable quality. In contrast, intrinsic belief, regards intelligence as a stable and non-increasing quality. Students who have incremental intelligence beliefs focus on their merits improvements and acquiring new knowledge and try to overcome past failure and defeats. But students who have intrinsic intelligence beliefs focus on gaining good performance and do the minimum effort to overcome the problems (Heyman, 1993).

According to Dong (2000), intelligence beliefs are side effects of behavior and do not affect the performance directly; the purposes are monitoring the students' reasons to do the assignments. Dong has taken 2 purposes into consideration: mastery goals and performance goals. Students who choose mastery goals, emphasize on gaining mastery and skills in their assignments. In contrast, students who choose performance goals, are trying to show their abilities to other people and having their desired judgments. The relationship between intelligence and learning, which was subject to various statements in the history of thinking about human, has attracted increasing attention to itself. Although "intelligence" is one of the issues which is discussed a lot in psychology, there isn't a standard definition about what exactly forms "intelligence".

Some researchers regard intelligence as an individual and public capability, while some others believe that intelligence includes a range of skills and aptitudes. Intelligence is among the subjects which has been concerned a lot in psychology, and during history of psychology there were efforts in investigating the nature of intelligence, its kinds, its changeability, and When intelligence is discussed, features like rapid and increasing learning, rapid and accurate computations, and new solutions come to mind. Generally, there are so many definitions on intelligence and according to these definitions, different categories of the types of intelligence has been proposed. Serendike, Spearman, Treston, Sternberg, and Gardner are people who classified different types of intelligence according to the definitions. Luis Toreston (1887-1955), a psychologist, proposed a different theory about intelligence. His theory instead of considering intelligence as an individual and public capability, focuses on 7 primary mental abilities (Toreston, 1938). The capabilities which he has considered are as follows: verbal understanding, reasoning, speed, understanding, numerical ability, vocabulary fluency (fluent speech), associative memory, and spatial visualization. One the most recent ideas is Gardner's multiple intelligence approach. Instead of focusing on the analysis of examination scores, Gardner believes that numerical amount of human's mind is not an exact and complete indicator of his/her capabilities. His approach describes 8 different intelligences according to skills and abilities which are rated in different cultures. These 8 intelligences are: Verbal-linguistic intelligence, Logical-mathematical intelligence, Spatial-visual intelligence, Bodily-kinesthetic intelligence, Musical intelligences, Interpersonal intelligence, Intrapersonal intelligence, Naturalist intelligence. Naturalist intelligence is so important in identifying and nurturing all the human's intelligences and all the students' intelligence dimensions and capabilities. According to

prof. Gardner's view, all human beings are different in intelligence and the ability to use multiple intelligence, because we possess different intellectual and cognitive capabilities and potentials. Shur Jin Rabin (2001) in a PhD research at George Washington University was investigating the relationship between the implementation of multiple intelligence approach and the students' development. The researchers' hypothesis was that, the educational enhancement of the learners was meaningful in comparison with the implementation of their course schedule based on the multiple intelligence theory.

In this comparative study, the researcher selected randomly 45 students through 3 years (15 learners in each year), through 6 different courses.

Then the researcher provided 3 standard tests and analyzed them. The results showed the meaningful relationship between using multiple intelligence and learners' educational success in mathematics, reading and writing. But there was no relationship in 3 other courses.

In another research that has done in some parts of Chicago, that hold between 9 to 11 years old learners. Observations showed that using of this strategy leads to considerable success in reading comprehension as well as mathematic. (Mack Mahan, Rose and Parker, 2004).

Azdner and Azkban (2004), selected 75 students and divided them into 2 groups. At first they provided with pretest and their scores were not so different. First group was thought by a traditional way and the second one was thought based on multiple intelligence theory, and also learners' intelligence, enthusiasm as well as their abilities were considered.

After training both 2 groups participated in a posttest. The scores of the second group were higher than first one.

In another study by Farnham and Yen (2005) the results showed significant differences between male and female learners based on multiple intelligence differences. Results showed that, male learners have high potentiality in Logical-mathematical intelligence, Spatial-visual intelligence, Bodily-kinesthetic intelligence, Musical intelligences, Intrapersonal intelligence, Naturalist intelligence.

Female learners in contrast have more potentiality in intrapersonal and Verbal-linguistic intelligences.

In another study by Elbalhan (2006) that was done on intermediate learners in Kuwait. He compares the impact of multiple intelligence on reading skills. To this end, he selected one group of this level for his study, all learners could get 25% of high scores. Half of these learners

presented by traditional way and the others thought based on multiple intelligence theory. The results highlighted that, the experimental group had better performance than control group through the whole year.

The results which related to gender distribution, showed both male and female learners, preferred extremely spatial-visual intelligence as their first option. Also results identified that there is a significant relationship between different kinds of children’s intelligences and their parents’ educational and socio-economical levels.

In Azdilks’ study (2010), multiple intelligence of 6th students has studied in order to identify the effects of multiple intelligence on the development of learners based on “particle model of material”. The research was done for 4 elementary schools which were selected randomly, with 132 6th grade learners in spring semester in 2008. Results showed that there is a little positive coefficient correlation between learners’ success and logical-mathematical, visual-spatial, and intrapersonal intelligences.

Finding of a research:

Research hypothesis 1: there is a connection with between with beliefs and multiple with.

Table1: Correlation

		bavarhoshi	hosh8gane
Spearman's rho	bavarhoshi	Correlation Coefficient	1.000
		Sig. (2-tailed)	.287**
		N	.005
hosh8gane	Correlation Coefficient	.287**	1.000
	Sig. (2-tailed)	.005	.
	N	94	94

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

The results of this survey in the table show that in the meaningful level sig=.000 , the connection between with beliefs and multiple wits is(r=0.287). the rate of this connection is quite moderate and the connection type between these two variables is direct and the meaningful level of research(sig=.000) is less than a=0.01, that shows the meaningfulness of the connection. According to these results we can say that wit beliefs and multiple wits affect each other. Considering the positive connection r= 0.0287 shows that wit beliefs and multiple wits are in a

same direction. If the wit beliefs of students enhance, their multiple wits increase as well and vice versa.

Research hypothesis 2: there is a connection between wit beliefs and verbal- lingual wit.

Table2: Correlations

			kalamizabani	bavarhoshi
Spearman's rho	kalamizabani	Correlation Coefficient	1.000	.278**
		Sig. (2-tailed)	.	.007
		N	94	94
	bavarhoshi	Correlation Coefficient	.278**	1.000
		Sig. (2-tailed)	.007	.
		N	94	94

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

The results of this survey in the table 2 show that in the meaningful level sig=0.000, the connection between wit beliefs and verbal- lingual wit is(r=0.278) and the rate of this connection is quite moderate and the type of these two variable is direct and the meaningful level of the survey(sig=0.000) of less than a=0.01. that shows the meaningfulness if the connection. According to these results we can say that wit beliefs and verbal- lingual wit affect each other. Considering the positive connection, r=0.0278 shows that wit beliefs and verbal- lingual wit are in a same direction if the wit beliefs of students enhance, their verbal – lingual wit become better and vice versa.

Research hypothesis3: there is a connection between wit beliefs and interpersonal wit.

Table3:Correlations

			bavarhoshi	mosighiyayi
Spearman's rho	bavarhoshi	Correlation Coefficient	1.000	.399**
		Sig. (2-tailed)	.	.000
		N	94	94
	mosighiyayi	Correlation Coefficient	.399**	1.000
		Sig. (2-tailed)	.000	.
		N	94	94

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

The results of this survey in tables 3 shows that the amount of sig=0.101 is more than a=0.01. so the connection between wit beliefs and interpersonal wit is not meaningful. In other words they are not coherent.

Research hypothesis 4: there is a connection between wit beliefs and musical wit.

Table4: Correlations

			bavarhoshi	mosighiyayi
Spearman's rho	bavarhoshi	Correlation Coefficient	1.000	.399**
		Sig. (2-tailed)	.	.000
		N	94	94
	mosighiyayi	Correlation Coefficient	.399**	1.000
		Sig. (2-tailed)	.000	.
		N	94	94

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

The results of this survey in table 4 shows that in the meaningful level sig=0.000, the connection between wit beliefs and musical wit is (r=0.399). that the rate this connection is moderate and the connection type between these two variables is direct and the meaningful level of this research sig=0.000 is less than a=0.01 that shows the meaningfulness the connection.

According to these we can say wit beliefs and musical wit affect each other. Considering the positive connection, r=0.399 shows that wit beliefs and musical we are in a same direction. If the wit beliefs as well and vice versa.

Discussion and conclusion:

The purpose of this study was to investigate the relationship between intelligence Ybavrhay with multiple intelligences Gardner , fourth grade female students in secondary cash is 93-92 school year . According to the test statistic t = 14.26 and pvalue <.05, from the perspective of students , the school believes that high IQ questions about beliefs .

The findings in table one , two or four shows a positive relationship between beliefs about intelligence and multiple intelligences exist. So that the hypothesis of a significant change in the results , two and four can be seen . According to the findings obtained by means of questions for the study population is 52.234 according to the average score of 14 to 70, the score is 42 . The

result is an estimate of the mean response Guyana above average score . Represent the views of pupils , the school believes that high IQ questions about beliefs .

Hayayn(1993) researchfindings, Bahan(2006), Shoreh(2001),Dweck(2000), Dai(1998)Is .

In their study , they also found a significant relationship in your results . Overall, the results suggest that training on intelligence beliefs associated with multiple intelligences , and finally " teaching and student learning leads to better performance . Therefore, researchers and practitioners in the education system to better fulfill their important responsibilities should be to restore your mind and perceptions of the concept of human intelligence and their talents . In other words, the recognition of plurality or multiplicity of intelligence , either in theory or in connection with the learning styles embodied in it , Would be the basis for a theory of thinking in terms of reforms in education and in the teaching learning process and its custodiansIn the light of the guidance and nurturing talents to form a more comprehensive , effective and fair run - through .

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