

Determination of the Relationship between Creativity of High School Teachers of Gorgan and Their Idealistic and Realistic Approach (2010-2011)

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ABSTRACT

The present study was formulated in order to study the relationship between creativity of high school teachers of Gorgan and their idealistic and realistic approach (2010-2011). The study was performed on the basis of a descriptive-correlative method with all high school teachers (821 with 465 females and 356 males) as statistical population. Sampling was randomly performed in a discrete categorized fashion and the sample size was set to be 262 persons (148 females and 114 males) according to Kerjisi and Morgan table. Data collection was performed by use of two questionnaires, i.e. Hanifi's questionnaire (2001) for measuring idealistic and realistic approach with 30 questions and Abedini's questionnaire (1984) for determining creativity with 60 questions. Validity of Abedi's tool has been reported to be 0.88; furthermore, in order to attain a higher confidence on Hanifi's tool, reliability was estimated to be 0.876 via calculation of Cronbach's coefficient among 30 teachers. The obtained data were statistically analyzed through SPSS Software. The results showed that there is a significant relationship between creativity of teachers and their idealistic and realistic approach.

KEYWORDS: creativity – high school teachers – approach – idealistic – realistic

1- INTRODUCTION

Realization of a knowledge-based society based upon advanced science and technology may be achieved by principle revolution of educational policies, plans, and methods. The slogan "education, basis of development" will be realized in the light of a comprehensive and strategic plan. Change in educational system in order to adapting with circumstances of the current era points even more to ever-increasing necessity of creativity. Overall alterations should be considered to revolutionize educational system.

Educational system ought to be creative and creativity-encouraging system where teachers, as the main basis of the system, should convey creative traits. Creativity is not something inherent; of course, some are more creative. In this regard, educational atmosphere should be provided to develop creative thoughts and practices. In other words, a divergent thought should be transformed as a convergent thought and rigid, inflexible rules should be supplemented with smooth, flexible ones. It is noteworthy that the main requirement for revolutionizing educational atmosphere is to change teachers' approach.

No educational system can succeed in lack of a philosophical approach. Therefore, the author believes that it is necessary to determine teachers' philosophical approach and its relationship with their creativity as one of the most evident characteristics of this millennium. Because teachers seem to have their own approach upon which they set their methods.

Since realistic and idealistic approach are seen in all educational systems as two prevailing curricular planning methods, the author tried to answer the question whether there is a relationship between creativity of teachers and their idealistic and realistic approach.

2- DEFINITIONS

2-1- creativity

2-1-1- Theoretical definition

Creativity is the ability of having a novel and different look at a subject; in other words, it is theoretically defined as decomposing and remaking knowledge about a subject and acquiring a new insight toward its essence [1].

2-1-2- operational definition

Creativity in the present study was estimated through Abedi's standard questionnaire containing 60 questions.

2-2- approach

2-2-1- theoretical definition

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Approach consists of mental and emotional preparedness organized by experience and it dynamically affects human's reactions toward the phenomena faced by him/her [2].

2-2-2- operational definition

Approach in the present study is defined as teachers' viewpoint toward themselves which was estimated by use of 30 questions in Hanifi's questionnaire.

2-3- realistic

2-3-1- theoretical definition

A realistic person is the one who believe in existence, objects, or whatever able to be seen [3].

2-3-2- operational definition

A realistic teacher in the present study is the one whose score in the first group of questions in Hanifi's tool exceeded that in the second group.

2-4- idealistic

2-4-1- theoretical definition

An idealistic person is the one who defines mind as the base and states that the truth out of mind is more definable than some statements [3].

2-4-2- operational definition

An idealistic teacher in the present study is the one whose score of the second group of questions in Hanifi's tool exceeds that in the first group.

3- METHODOLOGY

The present study is a descriptive-correlative study. It is descriptive because the variables were studied in the present time and it is correlative because it determined the correlation between the variables.

3-1- statistical population

Statistical population in the present study is all high school teachers of Gorgan (821 teachers, 465 females and 356 males) in the educational year 2010-2011.

3-2- sampling

The sample size was decided to be 262 teachers (148 females and 114 males) according to Kerjsi& Morgan table. Furthermore, the sampling was randomly performed in a discrete categorized fashion.

3-3- data collection

Data collection was performed through library and field methods. In the field method, two questionnaires were adopted in order to collect data.

3-4- tools

The following questionnaires were used in order to determine the correlation between creativity of high school teachers and their idealistic and realistic approach:

(a) Creativity questionnaire (Abedi) contains 60 questions each with three options where the options 1, 2, and 3 stand for 1, 2, and 3 scores. This tool was proposed by Jamal Abedi in 1984 in Iran and was revised by Abedi himself in University of California in 1986.

(b) Idealistic and realistic questionnaire (Hanifi) contains 30 questions each with 5 options (absolutely agree, agree, moderately agree, disagree, absolutely disagree) which stand for 5, 4, 3, 2, and 1 score(s), respectively; the first 15 questions estimate idealistic approach and the second 15 questions evaluate realistic approach. This tool was proposed by Fariba Hanifi (2001).

3-5- validity and reliability of the tools

Validity indicates to the objective of a test. In other words, a test is considered valid when it is suitable for what considered for measurement [3]. Validity of the tools used in the present study were affirmed through showing to domestic experts although it has been approved to be valid in previous studies.

Reliability indicates to precision of a test. A test is considered reliable when the results obtained by frequent administration of a same test are close to each other [3]. Reliability of creativity tool has been approved to be 0.88 in previous studies; moreover, reliability of philosophical approach was found to be around 0.77 in previous studies. However, reliability of this tool was estimated through Cronbach's coefficient and it was found to be 0.876.

3-6- data analysis

The data collected in the present study were analyzed via descriptive and inferential statistics:

Descriptive statistics is composed of abundance distribution and percentage tables, bar charts and central distribution indices (i.e. range, mode, median, mean, variance, standard deviation, skewness, and kurtosis). Furthermore, inferential statistics is composed of Kolmogorov-Smirnov test for data normality, independent t-test,

Pearson correlation coefficient, F_i , and regression for finding significant differences between variables. The statistical analysis was performed via SPSS Software.

4- RESULTS

4-1- descriptive analysis

Table 1: abundance of teachers' gender

| | Abundance | Percentage |
|----------------|-----------|------------|
| Females | 148 | 56.5 |
| Males | 114 | 43.5 |
| Total | 262 | 100 |

According to Table 1, it can be said that the highest abundance is seen in females with 148 teachers (56.5%), while the abundance of males is 114 teachers (43.5%).

Table 2: abundance of approach among teachers

| | Abundance | Percentage |
|-------------------|-----------|------------|
| Idealistic | 88 | 33.6 |
| Realistic | 77 | 29.4 |
| Middle | 97 | 37 |
| Total | 262 | 100 |

The highest abundance was seen in the teachers with middle approach (combination of both idealistic and realistic approach) with 97 teachers (37%) while the lowest abundance was for those with realistic approach (77 teachers, 29.4%).

Table 3: teachers' approach according to their gender

| | Gender | | Total |
|-------------------|---------|-------|-------|
| | Females | Males | |
| Idealistic | 75 | 13 | 88 |
| Realistic | 23 | 54 | 77 |
| Middle | 50 | 47 | 97 |
| Total | 148 | 114 | 262 |

As it can be seen, the highest and lowest abundance of approach in male teachers are for realistic (54 teachers) and idealistic (13 teachers) approach, respectively; also, the highest and lowest abundance for female teachers were in idealistic (75 teachers) and realistic (23 teachers) approach, respectively.

Table 4: determination of distribution of central indices and distribution of teachers' approach

| | Statistical indices | | | | | | | | | |
|-------------------|---------------------|------------------|-------|------|--------|--------|----------|--------------------|----------|----------|
| | Highest abundance | Lowest abundance | Range | Mode | Median | Mean | Variance | Standard deviation | Skewness | Kurtosis |
| Idealistic | 75 | 23 | 52 | 50 | 49.5 | 49.045 | 183.477 | 13.54 | -0.027 | -0.945 |
| Realistic | 74 | 25 | 49 | 50 | 47.5 | 47.141 | 180.957 | 13.45 | 0.165 | 0.976 |

According to Table 4, mode, median, and mean indicate to normal distribution of data because they are closer to each other. The mean idealistic and realistic approaches are 49.045 and 47.141, respectively. In other words, idealistic approach is more among female and male high school teachers of Gorgan. Furthermore, variance of realistic approach is lower than that of idealistic one (180.957 vs. 183.477). Therefore, it can be said that idealistic approach has more natural distribution than realistic approach.

Table 5: determination of distribution of central indices and distribution of teachers' creativity

| | Statistical indices | | | | | | | | | |
|-------------------|---------------------|------------------|-------|------|--------|---------|----------|--------------------|----------|----------|
| | Highest abundance | Lowest abundance | Range | Mode | Median | Mean | Variance | Standard deviation | Skewness | Kurtosis |
| Creativity | 178 | 67 | 111 | 124 | 124 | 122.255 | 809.011 | 28.443 | 0.073 | 0.902 |

It can be seen from the above table that mode, median, and mean indicate to normal distribution due to being closer to each other. The lowest, highest, and range of scores were 67, 178, and 111, respectively. Also, mean and

variance of scores were 122.25 and 809.011, respectively which point to normal distribution of the data. In addition, skewness and kurtosis were <1 which shows that mean can be adopted as central index in parametric statistics.

4-2- data analysis

Kolmogorov-Smirnov test was performed to determine data normality. The results obtained from the test are shown below.

Table 6: the results of data normality test

| | | Realistic | Idealistic |
|--------------------|--------------------|-----------|------------|
| Number | | 262 | 262 |
| Natural parameters | Mean | 47.1412 | 49.045 |
| | Standard deviation | 13.45 | 13.54 |
| Standard deviation | Discrete | 0.063 | 0.056 |
| Difference | Positive | 0.063 | 0.046 |
| | Negative | -0.050 | -0.056 |
| Kolmogorov-Smirnov | | 1.025 | 0.899 |
| Significance level | | 0.244 | 0.394 |

According to Table 6, significance level of data normality test in the mentioned variable is >0.05 ; therefore, it can be said with 95% confidence that the mentioned variables are normal and consequently, parametric tests may be adopted to determine whether there is a correlation between creativity of high school teachers of Gorgan and their idealistic and realistic approach. For this, regression test was performed as follows:

Table 7: regression test

| | Creativity dependent variable | | | | |
|---------------------|-------------------------------|------------------------------|-----------------------------------|--------|--------------------|
| | B | Standard error of estimation | β standardized coefficients | t | Significance level |
| Constant | 146.625 | 12.273 | | 11.947 | 000 |
| Idealistic approach | 0.184 | 0.143 | 0.087 | 2.280 | 0.022 |
| Realistic approach | -0.708 | 0.144 | -0.335 | -4.903 | 000 |

$R^2=0.152$ transformed $R^2=0.145$ $F=23.145$ sig=000
 $R=0.389$

R^2 (0.145) shows that 15% of variations in creativity variance by idealistic and realistic variables are justifiable. R (0.389) shows that the present linear regression model can be used for prediction.

The calculated F (23.145) is significant at the confidence level 99%. Therefore, it can be concluded that there is a significant correlation between creativity of high school teachers of Gorgan and their idealistic and realistic approach; also, considering the idealistic approach ($p<0.05$) and t (-4.903), it can be concluded that there is a positive and significant correlation between idealistic approach and creativity and a negative and significant correlation between realistic approach and creativity.

$$\text{Creativity} = 146.625 + 0.087 (\text{idealistic approach}) - 0.335 (\text{realistic approach})$$

5- DISCUSSION

Regression test was adopted to answer the question whether there is a significant correlation between creativity of high school teachers of Gorgan and their idealistic and realistic approach. The results showed that there is a significant correlation between creativity of high school teachers of Gorgan and their idealistic and realistic approach; also, there is a positive and significant correlation between idealistic approach and creativity and a negative and significant correlation between realistic approach and creativity. This is consistent with the results obtained by Ezzati (2004). In his study termed as “effect of idealistic and realistic approach on performance of teachers of Tabriz, he found that there is significant correlation between idealistic and realistic approaches. He added that idealist female teachers have higher performance than their male counterparts. He also claimed that the teachers with idealistic approach have higher popularity among students and better performance than those with realistic approach.

In another study termed as “determination and evaluation of idealistic and realistic approach and their effects on performance of teachers in Tehran – District 6”, Rahimzadeh (2000) found that realistic teachers devote more attention to personal differences of students compared to idealistic teachers. He also stated that realistic teachers

have better and more effective performance than their idealistic counterparts; however, idealistic teachers are more creative than realistic teachers.

Harvard (2009) stated that success of china in performance is due to defining educational philosophy; education philosophy affects people's philosophical approach and performance. He added that the basis of high performance rates is hidden in idealistic scope.

Cherlin (2008) stated that creativity is the fruit of educational philosophy; if people have a clear educational philosophy, they will be more creative. He also believes that idealistic philosophy is a movement toward progress [4].

The present study was limited by a few problems as follows:

- (1) The population of the present study was not familiar with investigation culture which may have affected precision and sincerity of respondents. However, the author tried to justify the respondents about the possible outcomes of the study.
- (2) Executive problems and lack of cooperation by some authorities made the author to change a high school and opt for another one haphazardly.
- (3) Lack of standard questionnaire to determine realistic and idealistic approach.

In conclusion, because idealistic and realistic teachers are more creative than those without these approaches, it is recommended to provide a competitive atmosphere for these groups to ignite idealistic and realistic beliefs in the teachers and consequently, have more creative teachers.

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