
Research Papers



The Study of Relationship between Value Priorities and Creativity among Students of Yasuj University

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Abstract

The Study of relationship between system of values and creativity is the main objective of this project. The subject of study included 100 students (66 girls and 34 boys) of first year of Yasuj University who were selected through the application of Multistage Cluster Sampling Method randomly from among extant educational groups at Yasuj University. The research tool included questionnaire of studying values (Allport, Vernon and Lindzey) and Form "B" was considered as Torrance Test of Creative Video.

Results of Multivariate Correlation Coefficient showed that there is positive significant correlation between aestheticism value and total creativity score on one hand and aestheticism value and subscale scores of elaboration and fluency on the other hand. Also, there is positive significant correlation between economic value and subscale scores of fluency. (P<5%)

Also, there is negative significant correlation between religious value and subscale scores of originality as well as between theoretical value and subscale scores of flexibility. (P<5%)

Also, results of multifunctional variance analysis (MANOVA) showed that relationship of gender variable is not significant with the values and creativity score.

Keywords:

Value Priorities, Value System, Creativity and Students

Introduction:

When the science is progressing with the

incredible speed and leads us towards wonderful age of technological achievements, human beings have to adapt themselves with these fast-paced and unanticipated changes through his or her creative thinking step by step. (Rodgers, 1992)

On the other hand, any type of change and transformation in different dimensions of life requires existence of individuals with new contemplative ideas, the individuals who have found their mental powers and have nurtured their creative talents. Of course, booming human infinite talents requires suitable background and such talents are not obtained unless each of the individuals of society took rational and logical approach in their conduct and behavior. Existence of creative abilities and appropriate facilities help individuals nurture values. In contrast, values are effective on the abilities and talents of individuals but the most important question is: "How values affect modern-day technology?" (Values and Technology, 2004)

Values are usually considered as criterion

of selection and decision-making and determine the way of interaction of individual with the environment through affecting on behavior, feedbacks, requirements and arbitrations. ("Kapel, D. E" and "Deinoka, L, E", 1991)

Values are regarded as oriented processes, based on which, individual responses to the environment with the methods learned at his or her life in previous.

As a matter of fact, values are superiority or priority of individual based on favorable concepts or the most favorable concepts that make life meaningful. (Parashar, Dhār and Dhār, 2004)

Creativity is a mental ability which exists almost in all human beings and is appeared as a new effect. (Hosseini, 1999)

In view of Torrance, E. P (1974), creativity includes being sensitive to the issues, shortages, problems and existing gaps at knowledge, guessing and forming hypotheses with regard to the shortages, evaluating these guesses and hypotheses, correcting and retesting them and eventually, concluding activities.

Creativity is comprised of four subscales as follows:

- 1- Originality: Originality is meant the ability of producing new ideas,
- 2- Fluency: Fluency is meant the ability of producing numerous new ideas,
- 3- Flexibility: Flexibility is meant the ability of producing different and various types of ideas,
- 4- Elaboration: Elaboration is meant the ability of adding details or completing ideas,

On the other hand, based on the definitions posed by Allport G.W., Vernon, P., and Lindzey (1951) on values, they determined six types of values at life of an individual. These values are as follows:

1- Theoretical Value: The individuals ranked at this category are characterized with truth-seeking spirit and also with cognitive feedback. These individuals are also characterized with contemplative ideas and seek knowledge, science and cognition as their main objectives.

2- Economic Value: The individuals with economic value spirit pay due attention to the practical benefits of science and do not seek science due to the technology merely. These individuals are fond of art and aestheticism as long as being at the service of trading.

3- Art Value: Qualified individuals of this group may not be considered as artists, but they have tendency to the artistic concept. These individuals believe that making a beautiful thing is much more importance than creation of a real

thing.

4- Social Value: Qualified individuals of this group honor and respect human beings because of spirit of their humanity. These individuals are very kind, compassionate, and intimate with sense of cooperation and cooperative spirit.

5- Political Value: These individuals are characterized with powerful conditions. Activity of these individuals is not limited to the political arena merely; rather, irrespective of their job and profession, they are after obtaining power and dominance. Competing with others is the most important motivation of their effort at various arenas of life. (Parashar, Dhār and Dhār, 2004)

6- Religious Value: The eligible individuals of this group are characterized with mystical and philosophical tendency and try to find a heavenly element in each event.

Humanist psychologists have referred to the relationship between values and creativity in such a way that they consider existence of values as a factor for creation and creativity which is termed as characteristics of self-actualized individuals. For instance, Frankel (as quoted by Schultz, 1999) considers meaningful values to life, comprised of three parts, as follows:

- 1- Creative Values
- 2- Experimental Values
- 3- Attitudinal Values

Creative values are followed with creativity and generative activity. Life can be meaningful with the act of creation. Experimental values are meant as fascinating at the aesthetic of universe of nature and art. While facing difficult condition like disease and death which life is limited and there is not any opportunity for creativity, attitudinal values are appeared for the clarification of life meaning.

Results of research, made in 1981 by Mohieddin Ahmad (as quoted by Khalifeh, 1999) on value system of creative individuals, showed that creative individuals reach to the highest ranks than noncreative individuals at the values like progress, truthfulness and frankness.

At the study made by Allport, Vernon and Lindzey (1951), which has been carried out with regard to the relationship of values with the creativity, this result was obtained that theoretical and aesthetical values enjoy the highest rank among creative groups and individuals. Theoretical value stands at the top rank for scientist while aestheticism stands at below rank than theoretical value to some extent in view of researcher.

Aestheticism value stands at the top rank for the creative architectures which is identical with the theoretical value while both theoretical and aestheticism values stand at the top rank for the creative mathematicians, effecting almost equally on their creativity. (Anastasia, 1995)

On the other hand, in another study made by Franck and Barron in 1965, they compared characteristics of the creative individuals at three professions of 1- architecture, 2- mathematics and 3- authoring and concluded that the creative individuals enjoy aesthetical, mental and subjective experiences at each of three professions and their tendencies concentrate on the artistic issues. (Kourman, 1991)

Also, based on the study made by Getzels, W. J. and Jackson in 1962 (as quoted by Gallagher, 1988), they concluded that creative families pay due attention to the inner specifications like adherence to the values, interestedness to the affairs and frankly speaking more than external specifications like good family, sense of conduct, and industriousness and these families show high tendency to risk and independency in terms of superficial-behavioral patterns and give more freedom of behavior and decision making to their children and finally, they encourage ideas and activities of their children as well.

Research Execution Method:

Subjects: All daytime first-year students of Yasuj University in 2010-2011 Academic Year included subject of the study. Total number of subjects stood at 1,018 students (including 669 female students (65.7%) and 349 male students (64.3%) between 18 to 27 years.

Sample Volume:

The sample volume of this study was estimated 100 students (including 66 and 34 female and male students respectively) through the application of Cohen, B. H. Formula (1996).

Sampling Method:

Multistage Cluster Sampling was sample selection method. Twelve (12) groups were selected randomly from among extant educational groups at Yasuj University. Then, number of sample individuals were selected based on academic course and gender compatible with the number of subjects.

Data Collection Method and Tool:

Values study questionnaire (Allport, Vernon and Lindzey, 1970) and Form "B" of Torrance Pictorial Creativity Test (1974) was used as research tool.

Values study questionnaire, which

measure six theoretical, economic, aestheticism, social, political and religious values, has been comprised of two parts: its first part includes two-multiple choice 30 articles while its second part include four-multiple choice 15 articles.

Studies showed that values study questionnaire enjoy high validity. (Allport, Vernon and Lindzey, 1970)

Form "B" of Torrance Pictorial Creativity Test includes drawing figures at three sectors of illustration, completion of pictures and circles and drawings are evaluated based on originality, fluency, flexibility and elaboration.

This test enjoys noticeable validity and its reliability coefficient has been estimated 82%, 89% and 86% respectively in different research activities. (Torrance, 1974)

The time duration for answering questions of each of the two tests was set 45 minutes.

Results:

Mean and standard deviation of scores of male and female students at six-category values and creativity scale and also subscales of originality, flexibility, fluency and elaboration have been presented at Table 1.

Table 1: Mean and Standard Deviation of Scores of Male and Female Students at Scales of Values, Creativity and Subscales of Originality-, Fluency-, Flexibility- and Elaboration

variables	boys		girls		total	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Theoretical value	43.80	6.39	42.91	5.71	43.22	5.94
Economic value	39.88	7.56	39.77	5.91	39.81	6.48
Art value	33.04	8.77	34.38	7.68	33.93	8.05
Social value	42.04	5.06	41.68	5.09	41.80	5.07
Political value	39.20	6.42	37.06	5.97	37.79	6.18
Religious value	41.77	8.39	44.16	7.17	43.35	7.65
Originality	35.29	18.32	32.45	10.81	33.42	16.67
Flexibility	13.20	4.89	14.27	4.66	13.91	4.75
Fluency	15.08	5.87	16.57	5.67	16.07	5.57
Elaboration	57.70	30.10	71.54	30.17	66.84	30.70
creativity	121.29	47.72	134.84	43.15	130.24	44.98

Multivariate Variance Analysis (MANOVA) was used with the aim of studying gender relationship with the values and creativity, results of which have been summarized at Table 2.

Table 2: Results of Multivariate Variance Analysis (MANOVA) on the Difference between Values and Creativity Mean Based on Gender

Variable	Dependent variable	Degrees of freedom	f	Error of probability	Square	p.value
Gender	Theoretical value	1	.47	.49	.005	.105
	Economic value	1	.056	.81	.001	.056
	Art value	1	.71	.40	.008	.133
	Social value	1	.25	.61	.003	.079
	Political value	1	2.068	.15	.023	.296
	Religious value	1	1.107	.29	.012	.18
Gender	Originality	1	.32	.56	.004	.87
	Fluency	1	2.01	.15	.024	.28
	Flexibility	1	1.76	.2	.021	.24
	Elaboration	1	1.74	.19	.021	.25
	Creativity	1	.88	.35	.011	.153

As it is observed at Table 2, there is not any significant difference between boys and girls in terms of values and creativity scores. ($P > 5\%$)

Multivariate Correlation Coefficient (Regression) method was used as Step Wise with the aim of studying relationship between values and creativity and also relationship between the values and creativity subscales.

In Step Wise method, each one of independent variables, which has the highest correlation with the dependent variables, entered the equation, then, subsequent variable, which stands at the second rank in terms of correlation with the dependent variable, entered the equation.

Thus, all variables are entered equation one by one. If probability of significance of one of two variables exceeded 10%, it is excluded from the equation and subsequent variable is entered the equation. (Molavi, 2000)

The results have been presented summarily at Table 3.

Dependent variable	Independent variable	Regression coefficient	Standard partition error	Square coefficient of correlation	F	P
creativity	Art value	1.31	.54	.056	2.4	.018
originality	Religious value	.44	.21	.42	-2.07	.041
fluency	Art value	.14	.07	.42	.205	.041
	Economic value	.18	.08	.083	.204	.015
Flexibility	Theoretical value	-.017	.79	.046	-2.18	.031
Elaboration	Art value	.99	.32	.068	2.66	.009

Table 3: Relationship between the Values and Total Creativity Score and also Values and Creativity Subscales (Originality, Fluency, Flexibility and Elaboration) through the Application of Step Wise Method

As it is observed at Table 3, there is

positive significant correlation from among the above mentioned six values between aestheticism value and total creativity score and also aestheticism value and subscale scores of fluency and elaboration. ($P < 5\%$)

That is to say that with the increased rate of aestheticism value among students, their creativity score will be increased in general and in subscales of fluency and elaboration.

As it is observed at Table 3, single-variable correlation coefficient (ANOVA) includes 0.56%, 0.42% and 0.68% for the creativity and fluency and elaboration subscales respectively, that is to say that aestheticism value determines 5.6% of total creativity score, 4.2% of fluency subscale and 6.8% of subscale score of elaboration.

On the other hand, there is negative significant correlation between religious value and subscale score of originality and also between theoretical value and subscale score of flexibility. ($P < 5\%$). That is to say that with the increased score of religious and theoretical values, score of students will be reduced at the originality and flexibility subscales respectively.

At Table 3, single-variable correlation coefficient square stands at $R^2 = 0.046$ for the subscale of originality. In other words, religious value determines 4.2% of subscale of originality while theoretical value determines 4.6% of subscale of flexibility.

Also, there is positive significant correlation between economic value and subscale score of fluency. ($P = 0.015$)

Single-variable correlation coefficient square for the fluency subscale stands at $R^2 = 0.083$, that is to say that economic value clarifies 8.3 percent of fluency subscale.

Discussion and Conclusion

The results obtained from executing meaningfulness test of multi-variate correlation coefficient (MANOVA) through the application of Step Wise method between values and creativity system indicate existence of significant correlation between aestheticism value and creativity among students.

The results of this research are in accordance with the students made by Allport, Vernon and Lindzey (1951) and also studies made by Franck and Barron (1965), as quoted by Kourman (1951).

In studies made by Allport, Vernon and Lindzey (1951), it is observed that the individuals with higher aestheticism value evaluate their experiences from perspective of delicacy,

symmetry, harmony and proportion and enjoy every experience in their life actually. These individuals may not be considered as artist, but they show more tendencies towards artistic issues. The aestheticism-oriented individual considers truth equal to beauty, i.e., in his or her view, everything, which is beauty, is the same truth as well.

On the other hand, Mezlo (1995) believes that creativity is product of cognitive-aestheticism perception, in which, everything is arrayed harmoniously. The creative person acts logically, wisely, and coherently with relation to the subject and comprehends sense of beauty which benefits from simplicity, symmetry and delicacy and tries to obtain it with the aim of showing at his or her works.

It is observed that specifications of creative individuals are harmonious with the specifications of eligible individuals with aestheticism value. Therefore, it can be claimed that aestheticism or artistic value is one of the very important and involved values in the field of creativity.

Also, results obtained from the execution of significance test of multivariate correlation coefficient (MANOVA) between values system and subscales of creativity show that the first subscale i.e. originality has reserve relationship with the religious value. (Table 3)

"Originality" is meant the ability of producing new ideas. We should bear in mind that what is first contacted on religion in our mind differs from the religion exists at other cultures. Secondly, values study questionnaire is a test dependent on culture and its concepts, contents and terms have been made in another culture.

Although its questions have been adapted with the Iranian culture, interestedness to the philosophy, mysticism, ethics, and even study of historical books related to the religion has been considered within the framework of religious value at this test. Hence, adherence to the value and religious principles and importantly faith in God, which is considered as inner and inherent subject and also main and basic pillar in religion, can not be measured with this questionnaire and similar questionnaires accurately and assuredly.

On the other hand, psychological approach to the religion has thus far been very contradictive and controversial.

On one hand, Freud and Ellis consider religion as a type of psychopathology while Allport and Jung consider religious credence as provider of mental health on the other hand.

(Ventiz, 1995)

Also, frameworks, which religion considers for individuals, are the factors which do not allow them to enter some areas. Many of these areas may be effective in growth of creativity. For instance, music and some visual arts are of the cases which religion has spoken about them cautiously and religious scholars have put forward different views on it. (Balaghat Publications, 1993)

It should be noted that role of music is not covered to anyone in improvement of creativity of talented individuals of this group.

Apparently, religious individuals show fewer tendencies to learn; study and teach the courses with restricted religious commands and this issue can be considered as a factor in reduction of their originality and innovation in the mentioned arenas.

Another analysis can be as follows: common religious values should be revised by the religious scholars to specify whether these values are of religion actually or any distortion has been carried out on it?

Since results of many research activities imply this subject, there is not any conflict between religion and technology and new science arenas. (Essie and Nelkin, 2004)

The second subscale of fluency is meant the ability of producing a great number of new ideas. As it is observed at Table 3, the two aestheticism and economic values have positive relationship with the fluency element.

As it was mentioned in above, creativity process is product of aestheticism perception, in which, everything is arrayed harmoniously. In other words, creativity starts growing where there is coordination, cohesion, delicacy and symmetry (which are the very specifications of aestheticism value).

Therefore, creativity results from comprehension of the same sense of aestheticism.

In the same direction, creative individual should be able to present numerous and many ideas i.e. innovative, original, and new ideas.

Since aestheticism value is effective on the creativity, it is also effective on the fluency element which is considered as a part of creativity.

After aestheticism value, economic value is the second value which has positive relationship with the fluency element.

The characteristics of qualified individuals of the economic value are as follows: These individuals with economic value approach intend to participate in practical activities like business,

production and marketing affairs, consuming of goods, financial credit and collection of wealth. Thus, in today world which technology and industry are developing and advancing increasingly, creativity and generation of idea is the sole way to adapt ourselves with these fast-paced changes.

The developed countries, scientific and economic centers and prospective institutions and organizations, which enjoy high economic value and economic boom has been put atop agenda of these organizations, are after seeking new approaches to confront with these comprehensive and widespread developments.

In this line, these organizations and institutions pay due attention to training creativity and selecting creative and innovative individuals who can offer constructive and numerous approaches for the complicated problems and this shows important relationship of economic value and creativity.

Flexibility is the 3rd subscale. "Flexibility" is meant the ability of producing different and various types of ideas.

Based on the data analysis shown at Table 3, theoretical value has the reversed relation with the subscale of flexibility from among the aforementioned six values. Based on the views of Allport, Vernon and Lindzey (1951), qualified individuals of theoretical value are truth-seeking individuals.

These individuals are characterized with cognitive feedbacks and are after seeing similarities and differences.

These individuals show tendencies towards experimental, criticism and individualism aspects. On the other hand, extraordinary flexibility and sensitivity are of the most important specifications of creative individual.

Due to his or her flexibility, creative individual can move forward beyond extant ideas and also can promote his or her creative progresses.

In the field of science, creative individual can use his or her thinking flexibility for finding hidden communications between phenomena in such a way that flexibility thinking will able creative scientist to achieve unexpected results and use it as a base for fundamental changes in his or her mind.

But noncreative scientist, with his or her personality structure and rigid thinking way, shows reactions against unexpected results only with more defending of his or her old theory.

Generally, noncreative individual can not make any progress in the related field. (Wiesenberger, 1999)

Thus, degree and rate of flexibility differs from each other in theoretical value and creativity. The more flexibility of thinking is observed, the more eligible theoretical-value individual will move towards creativeness.

Also, according to the definitions and various stages of creativity, it is concluded that intuitive and sudden thinking will produce idea without logical and rational reasoning. (Beyrami, 1997, Jamali 1998, Anderson 1959 as quoted by Shahraray and Madanipour, 1996, Walas, 1926 as quoted by Souloso, 1992)

Intuitive thinking enjoys of fair flexibility and freedom and has not been restricted with the logical rules while logical thinking is superior to intuitive thinking in theoretical value.

The scientists, as men of science and knowledge who show creativity from themselves, enjoy a deep aestheticism sense. In other words, aestheticism value the learned and thoughtful individuals with theoretical value, if turned creative, is superior to their theoretical value.

Hence, theoretical value is not effective the same as aestheticism value in its components and creativity.

"Elaboration" is the 4th subscale. Elaboration is meant the ability of paying due attention to the details or completion of ideas.

Based on the data analysis shown at Table 3, aestheticism value has the positive relation with the subscale of elaboration from among the abovementioned six values. A comprehensive glance at the specifications of the qualified individuals with aestheticism value shows that these individuals enjoy extraordinary sensitivity to their environment and evaluate each one of their experiences from aspects of delicacy, symmetry and proportion. (Allport, Vernon and Lindzey, 1951)

On the other hand, sensitivity to the issues and innovations, aesthetic popularity and interestedness to the artistic works is the other specifications of the creative individuals.

The aforementioned specifications harmonize with the specifications of qualified individuals of aestheticism value.

Aesthetic individual, who shows creativity from himself or herself, pays due attention to their issues and details (elaboration element) and establishes his or her work based on these details and can transfer his or her feelings to the others

through it.

Finally, aesthetic individual can affect on them. Since creativity is product of aestheticism, its elements are also product of aestheticism.

Insignificance of the differences between male and female students at values and creativity is the other findings of this study. Such insignificance can result from this reality that girls and boys are students at this study and have many similarities in cultural and social terms.

Such similarity can cause their harmoniousness at values and creativity.

On the other hand, with the change of offspring-fostering methods and awareness of families, parents handle identical upbringing methods for their daughters and sons and it may be considered as a factor in unification of values and lessening of score differences of values and creativity.

Since role of aestheticism value in creativity was approved at this study, educational officials of the country are recommended to organize curriculums appropriately with the aim of considering teaching and upbringing through art.

According to Maslow (1995), education through art paves suitable ground for upbringing a new type of human as required in society.

Creative human being enjoys self-confidence, courageous and self-autonomous specifications, because, instant necessity for eternity of each political, social and economic system is this to create more creative individuals and community, which lacks these human beings, will doom to failure.

On the other hand, despite existence of sustainable and important role of family in educating and transferring values, if training centers of the country failed to fulfill their important mission in this field, children will forget what they have learned at house.

It should be noted that many families lack such training of values. Under such circumstances, only training centers are considered as the last opportunity for training and learning belief and ethical values and teachers and university lecturers play a leading role in this respect.

Thus, educational activists should make their utmost effort to select teachers and put value criteria atop their agenda. Also, this study showed that boys and girls do not have any different with each other in terms of existence of hidden talents. Parents are recommended to adopt identical upbringing methods in the course of growth of their children and senior officials of the country are

requested to provide and compile identical cultural, training, welfare and sports programs as well as equal facilities and equipment for each of two genders.

Under such circumstances, girls like boys can have equal opportunity to emerge their capabilities and merits.

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