

## Effect of Personality Types and Educational Enthusiasms on Course Selection and Educational Development Students

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**Abstract:** For considering the personality types and educational enthusiasms, course selection and educational development, we selected 225 female students in middle school second degree at Golestan district in three educational course of humanity sciences, experimental sciences and mathematic with multi sampling method and they were studies. Number of students in each of three educational courses, separately is 75 students. Data gathering was performed by use of Big five Inventory, enthusiasm measuring test of Harland and their educational average. Results of Manova, ANOVA, Token, Pierson, Regression and Khey2 tests showed that: students of different educational courses from educational enthusiasms and personality types dimension, are different with each other, as we see that between real, researching and social educational enthusiasms among students of all three educational courses, there is meaningful difference. So difference among real, researching and social educational enthusiasms among students of mathematic and experimental sciences courses, was higher than humanity sciences and difference between social educational enthusiasms among experimental sciences students, was higher than humanity sciences. Also among personality feature of conciseness among students of all three educational courses, there is meaningful difference and conciseness among humanity sciences students was higher than mathematic course. Also relationship between personality feature excitement instability with negative educational enthusiasms and other personality types, (to be open, agreement, having conciseness and extroverting) with educational enthusiasms, there is positive meaningful relationship. Between personality types and educational enthusiasms with educational development, there is not any linear meaningful relationship and among selected educational course by consolors and final selected course by students, there is meaningful relationship.

**Key words:** Personality types • Educational enthusiasms • Course selection and Educational development

### INTRODUCTION

Foremost and most important determinant factor in decision making process and providing a situation for producing "constructive work" is comprehension of self identity including "who am I? What kind of personality do I have? What are my interests, desires and talents? Given all these factors, how should I determine my own today, future and personal destiny with right choosing of field?" nowadays place of consoling and educational guidance for student possess special importance. So talents and desires must be directed in the direction that transition and development of society has prepared their necessity [1]. One method for understanding characteristic traits for the purpose of choosing field is studying psychological traits of people. Since a long time ago psychological theoreticians have paid attention to characteristic traits.

One basis for choosing field is considering characteristic traits and desires. The importance of coordination between these two factors for achieving success and educational progression caused the researcher to get results in this context by considering and comparing characteristic traits and educational desires in students of different educational fields so it may become possible to do something for reducing wasting of human and material and national capitals. Generally development of society depends on optimum usage of human capital of that society. People are different from view point of abilities, talents, interests and other characteristic traits and educational achievement requires recognition of character, abilities and desires. There should be coordination and relation between people's characters and desires with the field they choose. If it be possible to find the relation between these factors by proper educational

guidance provided by elite and sympathetic consolers, either it would provide satisfaction for the person and worthy help to the progression of the society. Parand [1] shows that people who choose their fields on the basis of cognition and abilities, values and skill, talents, interests and characteristic types, have more successful function in this context and will have more progression in education. Choosing field and educational progression is an important determinant factor of character and according to different educational progression experiences one can explain personal differences. Tavakoli [2] so considering factors and reasons affecting choosing of field is necessary and so important. Desire and interest result from experience and to large extent it is learnable. In other word interest can be like a tendency which is developing by experience. This definition is used for contexts such as habitude [3]. Findings of Tajoldini research [4] on the basis of descriptive research assured implementation of a questionnaire and data was collected by using educational files of 170 students who were chosen by floor method. Results of these studies shows that rate of relation between characteristic types and choosing field in females was 27 percent and between males was 41%. Firoozabadi [5] by considering characteristic traits and stress mathematic and educational progression in male students of Bojnurd find out that there is a significant relation between characteristic traits and stress mathematic and educational progression. Moosavi [6] by considering characteristic traits of police officers in Ahvaz and their academic success find out that there is significant positive relation between characteristic traits and job preference and educational success. Holland [7] in one of early single compose, considered two big sample of smart high school graduates in one-year and two year periods and by using their marks and choose of field for determining student's type, find out that a large range of personal traits which usually approve this theory is in relation with characteristic types. Holland [8] in a research called personal traits and academic educational success between Mexican, American students find out that obtaining experimental science about relation between personal traits, level of culture and educational success, in Mexican, American children is a context for recognizing proper solutions for improving function of schools [9]. Halland [10] indicate that students leave educational environment that they do not like them. They studied a sample of high school students (332 male and 181 female) by measuring educational desire, character, initiative, educational progression and intelligence. They studied these students again in college

and compared their goals before and after college. Staying in a field depends on having special characteristic traits for that field. For example males who left realistic fields (such as engineering) were creative, irresponsible and ambiguous with complex thinking but males who stayed in realistic fields were frank, responsible with simple thinking [11]. Sakhar and Polos [12] perceived that if college students had the right to choose, they choose situations which are congruent with their characteristic traits and Holland [7] prediction based upon this fact that people choose their jobs proportionate to their character was proved here [11]. Karimi [13] in their research asked 202 college students to grade 32 measures pertain to science and college education. They also completed measures about character, job interests and ability. Results approved a pattern about positive correlation between art science and humanities with intellectual occupation and flexibility and indicate that there is correlation between physics in mathematics and interests of explorer and realistic types. So this research approved traits about Holland [7] characteritic types in range of research [14]. Holland [7] in descriptive research considered some differences between characteristic traits in male and female college students of different educational fields (arts, medical science and technical science). He used Minnesota character test to accomplish a descriptive research. Results showed that in level of 5% from the viewpoint of static, there is a significant relation between characteristic types and educational fields. So considering people's characters helps us to find out that people with what kind of character prefer which educational field? Does this preference affect their educational progression? We want to understand the relation between character and educational tendencies. Given that an important and central factor in choosing educational field is degree of one's interest and abilities and desire and also characteristic type.

## **MATERIALS AND METHODS**

Research pattern with regard to its topic, the effect of characteristic type and educational desire on choosing field and educational progression in students of three fields (humanities, natural science and mathematics), is compare-based or post-event. In this study, statistical universe include all female students of second grade of high school studying mathematics, humanities and natural science in school year 88-89 and living in Robatkarim in Golestan region. Sample of this research consist of 225 female students of second grade of high school in

educational fields include humanities, mathematics and natural science (75 students in humanities, 75 humanities and 75 natural science) sample was chosen by using multistage sampling. First list of all schools (high schools for females) in Golestan was taken from education organization "5 high schools had necessary qualifications for research" 3 high school were chosen from all 5 high schools accidentally. From each high school accidentally 25 students from humanities, 25 students from natural science and 25 students from mathematics were chosen. In this Research Following Materials Were Used:

**Five Major Characteristic Factor Questionnaires (New Revised Form):** this test includes 60 questions for considering different aspects of character which is reported by replier. Neo character test, is one of the extensive tests that considers five original aspects of character (instability, excited, extrovert, openness, compatibility and conscionable) and traits which are in relation with them and make it possible to consider character of adolescence. Two forms of neo test were obtained by authors and are available in English. neo Early test (240 questions) in 1985 was provided by Caste and Mack. This test is enforceable individually or in group. crunbakh Coefficient of alpha for excited, extrovert, openness, compatibility and conscionable was 0/65, 0/47, 58/63, 0/0 and 0/74, respectively.

**Holland Desire Test:** Holland job questionnaire is used for considering job interests and characteristic types. This questionnaire consists of four parts, activities, experiences, jobs and self-evaluation. According to last report provided by Holland [7], validity and reliability is considered by decreasing crunbakh alpha, koder Richardson and even and odd splitting. Results indicate that reliability of measure in subtest and test decrease by omission and question that is each question with whole score has the same internal equal measure. Reliability and validity for parts and subtests is reported 0/50 to 0/92 and for all measures is reported 0/84 to 0/92. Simultaneous validity of test has been 0/54 to 0/74 [15]. Standardization of test has been considered in different environments. In a research about standardization and validation of Holland [7] questionnaire accomplished by Holland [8] based on spearman coefficient of correlation via odd and even following results was obtained. Realistic 0/81, explorer 0/87, social 0/90, fearless 0/76 and conventional 0/75. In order to gathering data for research, first neo questionnaire was given to students. Then by the help of consolders, educational desire form of students

was taken from their files and was used by researcher. Finally in February 2010, grade average of first term was obtained from their report card.

## RESULTS

For considering research hypothesis based upon this topic that student who have special educational desire, are attracted by special educational fields, significant multi vitiate analysis tests were used.

Table 1: results of significant multi vitiate analysis tests for main affect of educational field on educational desire indicated significant tests in relation to affect of educational field on educational desire in level lower than 0/01 was significant.  $P=0/001$ ,  $F=4/636$ , walk's  $\lambda=0,875$ . So the effect of educational field on educational desire is significant and students of different educational fields are different from each other from the viewpoint of educational desire.

As you see in Table 2, about educational field F for realistic educational desire  $P=0/003$ ,  $F(221, 2)=5/093$  and explorer educational desire  $P=0/001$ ,  $F(221, 2)=18/259$  and social educational desire  $P=0/019$ ,  $F(221, 2)=4/047$  is significant so there is significant difference between realistic, explorer and social educational desire of students in mathematics, natural science and humanities.

Results of Table 3 indicate that there is significant difference between realistic and explorer educational desire in mathematics and natural science with humanities students so that explorer and realistic educational desire in mathematics and natural science students is upper than humanities students. Also there is significant difference between social educational desire between natural science students and humanities students so that social educational desire in natural science students is upper than humanities students.

\*for considering research hypothesis about this matter that students with special characteristic types are attracted by special educational fields, significant multi viriate analysis tests are used.

Results of significance tests in relation to effect of educational field on characteristic types in level lower than 0/05 is significant. (walk's  $\lambda=0,92$   $F=1/98$ ,  $P=0/05$ ) so effect of educational field on characteristic types is significant and students of different educational fields are different from each other from viewpoint of characteristic types. With regard to significance of significant multi viriate analysis tests, results for analysis of single variate variance for analysis of each dependent variate is shown in Table 5.

Table 1: Results of significant multi viriate analysis tests for main affect of educational field on educational desire

Test	Rate	F	Freedom degree	Significance level
Pilli- bartlet	0/219	4/46	12	0/001
Lambda wilks	0/875	4/63	12	0/001
Hetling –Lali	0/268	4/79	12	0/001
roy	0/244	8/81	6	0/001

Table 2: Summary of results of single variate analysis for each educational desire

Source of variations	Dependence variate	Sum of squares	Freedom degree	Square average	F	Significance level
Educational field	Realistic	435.2740	2	217.637	5.903	0.003
	Explorer	1.854596	2	927.298	18.259	10.00
	Artistic	223.2770	2	11.639	1.418	0.244
	Social	436.293	2	218.146	4.047	0.019
	Fearless	227.757	2	113.878	2.102	0.125
	conventional	88.525	2	44.263	0.760	0.469

Table 3: Summary of results of Toki test

Educational desire	Educational field	Difference of averages	Standard error	Significance level
Realistic	Mathematics- humanities	2.45*	99	0.031
	Mathematics- natural science	-0.704	99	0.759
	Natural science- humanities	3.24*	99	0.004
Explorer	Mathematics- humanities	6.33*	1.16	0.001
	Mathematics- natural science	0.488	1.17	0.908
	Natural science- humanities	5.84*	1.16	0.001
Social	Mathematics- humanities	2.45	1.20	0.105
	Mathematics- natural science	-0.82	1.20	0.772
	Natural science- humanities	3.28*	1.198	0.018

\*=P>0/05

Table 4: Results of significant multi viriate analysis tests for main effect of educational field on educational desire

Test	Rate	F	Freedom degree	Significance level
Pilli- bartlet	0.09	1.97	10	0.034
Lambda wilks	0.92	1.98	10	0.034
Hetling –Lali	0.09	1.98	10	0.034
roy	0.07	3.03	5	0.012

Table 5: Summary of results of analysis of single variate variance for each characteristic type

Source of variations	Dependence variate	Sum of squares	Freedom degree	Square average	F	Significance level
Educational field	Instability	262.20	2	131.10	2.74	0.067
	Openness	9040	2	4.70	0.19	0.827
	Extravert	87.23	2	43.61	1.04	0.355
	Compatibility	187.10	2	93.55	2.45	0.089
	Conscionable	366.43	2	183.21	3.56	0.030

As you see in Table 5, about educational field F for conscionable  $P=0/03$ ,  $F(222, 2) = 3/56$  in level lower than 0/05 is significant, so there is significant difference between conscionable in mathematics, natural science and humanities.

Results of Table 6 indicate that difference of conscionable between mathematics and humanities students is a significant difference so that conscionable in humanities students is upper than mathematics,

\*There is a relation between characteristic types of students with their educational desire.

Results in Table 7 shows that instability has a negative relation with realistic and explorer educational desires. Openness has a positive relation with realistic, explorer, artistic and social educational desires. Extrovert has a significant positive relation with realistic and explorer educational desires. Generally we can say that relation between instability and educational desires is

Table 6: summary of results of Toki test

Characteristic type	Educational field	Difference of averages	Standard error	Level of significance
Conscionable	Mathematics- humanities	*3.01-	1.17	0.03
	Mathematics- natural science	-2.23	1.17	0.14
	Humanities- natural science	0.79	1.17	0.78

\*= $P>0/0$ 

Table 7: Results of coefficient of correlation for relation between types (characteristic traits) and educational desires

Character	Desire					
	Realistic	Explorer	Artistic	Social	Fearless	Conventional
Instability	-0.202**	-0.201**	-0.113	-0.063	-0.066	-0.045
Openness	0.160*	0.159*	0.252**	0.180**	0.068	0.015
Extrovert	0.111	0.115	0.146*	0.157*	0.089	0.065
Compatibility	0.222**	0.161	0.106	0.086	0.027	-0.007
conscionable	0.037	0.029	0.096	0.135*	0.045	0.038

\*\*= $P>0/01$  \*= $P>0/05$ 

Table 8: Results of significance of regression model

Source of changes	Sum of squares	Degree of freedom	Average of squares	Abundance	Significance level	R	R <sup>2</sup>
Regression	50.70	11	4.613	0.885	0.566	0.21	0.04
Remainder	1104.89	212	5.212				
Total	1155.64	223					

Table 9: Results of Khido tests for relation between educational field determined by consolors and educational field chosen by students

		Student choice mathematics		Humanities	Natural science	Total
Consolor choice	Mathematics	Abundance percent	20	5	6	31
			8.9%	2.2%	2.7%	13.8
	Humanities	Abundance percent	16	50	29	95
			7.1%	22.2%	12.9%	42.2%
	Natural science	Abundance percent	39	20	40	98
			17.3%	8.9%	17.8%	43.6%
Total	Abundance percent		75	75	75	225
			33.3%	33.3%	33.3%	100.0%

negative but other characteristic traits have positive relation with educational desires.

For considering research question that which characteristic types and educational desires are predictors for students' educational progression, multi variate simultaneous regression was used.

Results indicate that level of significance calculated in F test in level 0/0 is not significant so linear regression model is not significant and consequently there is no significant linear relation between characteristic types and educational desires with students' progression. So regression analysis in relation to considering regression coefficient is not accomplishable.

\*\*For considering this question that is there any relation between educational field determined by consolors and educational field chosen by students, Khido square test was used.

With regard to that calculated Khiso ( $P=0/001$ ,  $df=4$ ,  $X^2=39/82$ ) in level lower than 0/01 is significant, so there is significant relation between educational field determined by consolors and educational field chosen by students. Cramer coefficient for considering intensity of relation was 0/298 that in level 0/001 is significant. With regard to quantity of Cramer coefficient this relation is average. Comparing abundance of field choice performed by consolor's reveals that consolors have more frequently chosen natural science and humanities fields for students and they choose mathematics less.

## DISCUSSION

Students with special educational desires are attracted by special educational fields. Result of this research indicates that generally students with different

educational desires are attracted by different educational fields. In other words results shows that there is significant difference between special educational desires and special educational fields. However this result is similar to findings of similar contexts. Holland [7], nickels and Halland [10] stated that there is relation between students' educational desires and their field choice. There is significant difference between realistic, explorer and social educational desires of students in all three fields (humanities, mathematics and natural science). Although there is a few research in this context but it is clear that people with realistic educational desire have traits such as: asocial, frank, nobly-born, stubborn, insistent, active, self-directed and inflexible and people with explorer educational desire have traits such as: analyzer, aware, criticizer. Dependant, open minded, logical, having self-control and people with social educational desire have traits such as: predominant, cooperative, patient, friendly, generous and helper. On the other hand Holland [7] in his educational desire questionnaire for above-mentioned fields states effects of explorer, realistic and social desires. Result of recent research is similar to Holland's findings. Holland in his desire questionnaire defines conditions for entering educational fields like this. It's notable that social educational desire in humanities has coefficient 2 so it is more important in choosing this field [7]. Results shows that there is significant difference between students with realistic educational desire and mathematics, humanities and natural desire educational fields and this difference in mathematics and natural science is more than humanities. More accurately this difference in natural science students is more than mathematics students. So we can conclude that students with realistic educational desire have more tendencies to choose natural science. There is significant difference between explorer educational desire and mathematics, humanities and natural science and this difference in mathematics and natural science is more than humanities and in mathematics it is more than natural science. So students with explorer educational desire are interested in mathematics and natural science and especially in mathematics. It is interesting that finding of recent research is congruent with what Holland has addressed in his educational desire questionnaire. (As we mentioned above Holland considers explorer educational desire suitable for mathematics and natural science.) Students with especial educational desires are attracted by special educational fields. Generally results indicate that there is significant difference between students of different educational fields and characteristic types. In

other word: students of different educational fields are different from viewpoint of characteristic types. Results of all mentioned researches indicate that there is significant relation between educational field and characteristic type. But the important point is that between all five items (instability, openness, extortive, Compatibility, conscionable) only conscionabl in students of all three fields had significant difference. And especially it was significant in students of mathematics and humanities fields in such manner that conscionable in humanities was upper than mathematics. There is relation between characteristic types and educational desires. Results of research reveals that generally relation of instability and educational desires is negative and other characteristic types have positive relation with educational desire. On the other hand instability has a negative relation with realistic and explorer educational desires. So about instability hypothesis is approved in negative direction. Openness has a positive relation with realistic, explorer, artistic and social educational desires. Extroversive has a positive significant relation with artistic and social educational traits. Compatibility has a significant positive relation with realistic and explorer educational traits. Conscionable has a positive relation with social educational trait. Generally this finding is similar to results of Zangane [16] findings about relation between characteristic types and job preferences. As we considered traits of people with different educational desires, comparing people's traits with instability characteristic type is not congruent with different educational desires. We can say that as instability increases in people, realistic and explorer traits decrease. That is their relation is negative. There is positive relation between openness and realistic, explore, artistic and social educational desires. People with openness characteristic type have traits such as creative, emotional, imaginative thinking, dependence judgment, abundant negative and positive feelings, interested in freedom in ethics, social and political matters, fewer tendencies to tradition, healthy attention to inner emotional experiences, active thinking, patient, interested in questioning power source [17]. People with realistic educational desire have traits such as normally, active, self-directed, legal, fearless, asocial. People with explorer educational desire have traits such as analyzer aware, criticism, dependant, legal) people with artistic educational desire have traits such as dependence, freedom-loving, sensitive , idealist, emotional. People with social educational desire have traits such as helper, patient, friendly, idealist, kind, responsible, wise, tendency to freedom in social contacts

[7]. Through an exact consideration it becomes clear that characteristic traits are similar to characteristic traits of realistic and explorer desires. On the other hand we can say that because criterion of researcher for considering educational progression is students' first term grade average (and because grade average is not a proper and exact index) so there is no significant linear relation between characteristic types and educational desires. However Yazdani [18] in his research find a significant relation between characteristic traits and educational progression and job success and also results indicate that there is significant relation between fields chosen by consolors and those chosen by students themselves. In other words students trust on consolors' choice. It's notable that consolors' choice is according to educational desire questionnaires. So we dare say that accomplishing this questionnaire for field choice in the end of first grade of high school is useful. In other word performing this questionnaire is a proper basis for choosing field. Findings of current research is congruent with results of Holland [7], Halland [10] research. Aforementioned researches have declared a significant relation between educational desire and final field choice.

## REFERENCES

1. Parand, K., 2009. Choosing field, choosing future, Tehran, National Examining Organization.
2. Tavakoli, Y., 2006. Consoling and directing programs and activities. First edition, Tehran: Varaye Danesh.
3. Noruziaghdam, M., 1992. Relation between job interest and educational progression of students and teachers, M.S thesis, Tarbiat Moalem university, Tehran.
4. Tajoldini, M., 2003. Considering relation of family emotional environment with desire to jobs and comparing them, M.S. thesis, Tarbiat Moalem University.
5. Firoozabadi, M., 2003. Considering relation between educational field and success in university entrance test, M.S thesis, Psychologic and sociology university, Tehran Markazi.
6. Moosavi, M., 2005. Considering characteristic traits of police officers and their academic success. M.S thesis, Ahvaz TArbiat Moalem University.
7. Holland, J.L., 1962. The psychology of vocational choice. Waltham mass: Blaisdell.
8. Holland, J., 1997. What is your proper job? (Translated by Hoseinian, S. and Yazdi, S.) Second edition, Tehran: Kamale tarbiat with help of Taban.
9. Seyedsalehi, A., 2002. Considering characteristic traits in job interests of defense staff. M.S. thesis, Azad University, Psychological and sociology university, Tehran Markazi.
10. Halland, J.L., 1977. Some Explorations of a theory of vocational choice: I. one-two year longitudinal studies. Psychological monographs, NO: 26 (wholeNO.545).
11. Gholami, T. and M. Poshti, 2001. Standardization of Holland desire test SDS in students universe, M.S thesis, Psychologic and sociology university, Tehran Markazi.
12. Sakhar, T. and W. Pulos, 1991. Instruction for analytical development of investment selections (Translated by Vahidi and Sohrabi) Tehran: plan Organization.
13. Karimi, Y., 2005. Characteristic psychology, Tehran: Edition1.
14. Hamzei, M., 1997. Standardization of Holland job test SDS, M.S thesis, Alzahra University.
15. Alhoseini, R., 2000. Considering affective factors in strengthening students' desire to Qoran activities, Central Education Office.
16. Zangane, M., 1996. Considering relation between conception of future educational field and job and educational function, M.S thesis, Azad University, Psychological and sociology university, Tehran Markazi.
17. Haghshenas, A., 1999. Standardization of neo characteristic instruction, modified form andishe o Raftar Magazine. 16: 37-47.
18. Yazdani, M., 2001. Relation between Holland job desires and job satisfaction of TV staff, M.S thesis, Azad University, Chabahar.