

**Research Article**

## **DETERMINING THE SHARE OF PERSONALITY CHARACTERISTICS IN ANTICIPATION OF PERFECTIONISM AMONG THE STUDENTS OF SHAHREKORD'S UNIVERSITY OF MEDICAL SCIENCES**

**Hamzeh Ganji and \*Sayedeh Mahsan Asgari**

*Department of Psychology, Roudehen Branch, Islamic Azad University, Roudehen, Iran*

*\*Author for Correspondence*

### **ABSTRACT**

The purpose of this research is to determine the share of personality characteristics in anticipation of perfectionism among the students of Shahrekord's university of medical sciences during 2013-14. The present research is of correlative type based on the assumption of descriptive researches. For data collection, two questionnaires of Neo five-factor model and perfectionism by Hill were used. The population of the research includes the entire students of Shahrekord's university of medical sciences among which a number of 190 individuals were selected as the sample. For the purpose of data analysis, the parametric statistical tests of Regression and Kolmogorov-Smirnov were used. Results indicated that positive perfectionism is anticipatable based on personality characteristics of students of Shahrekord's university of medical sciences and also negative perfectionism is anticipatable based on personality characteristics of students of Shahrekord's university of medical sciences.

**Keywords:** *Neo Five-factor Model, Perfectionism*

### **INTRODUCTION**

Personality characteristics are counted as important subjects of psychology and the neo five-factor model is one of the most popular and known personality patterns in terms of factor analysis (Farenham, 2008). In explanation of Neo five-factor model, according to John and Super Stavabrown extroversion indicates the existence of an energetic approach towards the normal and social world in an individual which includes characteristics such as blending with people, being active, decisiveness and courage. Agreeableness is the sign of social orientation against hostile views towards others which includes characteristics such as altruism, amiability, trust and generosity. Conscientiousness describes the power for controlling impulses in a way that's held desirable by the society and facilitates duty oriented behavior and includes characteristics such as thinking before action, postponing the satisfaction of requirements, compliance to rules and norms as well as prioritization of tasks. Neuroticism is defined as orientation towards experiencing negative emotions instead of emotional stability and calmness. Openness to experience describes the deployment, depth and complexity and creativeness of individual's life and experiences against having a closed mind. It could be stated that each of the main five factors of neurotic tendency, extroversion, flexibility, compatibility and consciousness are a separate series of adapted characteristics which could aid an individual or a team to meet their basic needs.

On the other hand, the incentives and effects of perfectionism have been scrutinized by theorists of psychology and psychologists in an all-aspect and deployed fashion. Although perfectionism has a long history, still there are a few experimental researches conducted for analysis of this structure.

Frost *et al.*, have defined perfectionism as a set of high criteria for performance which is accompanied by extreme critical valuation. Such high criteria are usually accompanied by fear of failure (Frost *et al.*, 1990). Hama Check has divided perfectionism into two categories of normal (Positive, healthy, adapted and functional) and abnormal (negative and ill-adapted). Hamache (1987), Stump and Parker have considered three separate dimensions for perfectionism which includes self-centered, else-centered and social centered. Frost *et al.*, have introduced six dimensions of perfectionism which include extreme orientation towards exaggeration, mistakes, having personal standards which are higher than the performance level, comprehending parent's high expectations, critical parents, doubt in terms of quality of self-actions and preference of order and organization (Frost *et al.*, 1990). Hill *et al.*, (2004) have also

### **Research Article**

introduced eight dimensions for perfectionism which include focus on mistakes, high criteria for others, need for confirmation, order and organization, purposiveness, digesting thoughts, comprehending the pressure applied by parents and efforts for being excellent (Hill *et al.*, 2004, Quoted by Aqajani *et al.*, 2010).

During the past two decades, theorists and researchers have tried to investigate and discuss the personality structure of perfectionism and negative consequences of perfectionism, psychological pathology of perfectionism and vulnerability of pseudo perfectionists against psychological turmoil (Hewitt *et al.*, 1996). Clinical researchers believe that perfectionism leads to a persistent feeling of failure, procrastination, uncertainty and infertility and embarrassment (Barns, 1980; Patch, 1984). Results of Kava *et al.*, (2010) indicated that perfectionists experience more problems and difficulties in terms of sleeping. Also Graham *et al.*, (2010) concluded that perfectionist worries such as negative reactions to failure, concerns regarding being criticized and other's expectations and doubts towards oneself are dangerous factors of indication of depression. Most of these individuals hold negative views towards life and perceive danger and barriers larger than the reality. These researches indicate that individuals who possess high concerns regarding perfectionism are exposed to the risk of indications of depression. Results of research conducted by Naris *et al.*, (2010) reveals that there is a relation between addiction to work, perfectionism and the A personality type.

Also high levels of perfectionism are related to high levels of addiction to work and career exhaustion. Also Capan (2010) indicated that self-oriented perfectionism significantly anticipates educational postponing and life satisfaction. Aghajani *et al.*, (2012) showed that between positive perfectionism and negative perfectionism and the element of consciousness among smart students and negative perfectionism and factor of consciousness was less in normal students.

Namjoo *et al.*, (2013) revealed that there was a positive and significant correlation between all three dimensions of perfectionism (self-oriented, else-oriented and society-oriented) and indications of depression and defensive and neurotic styles. In addition, among ill-adapted defensive styles, the immature defensive style has also significant relations with indications of depression and neuroticism. On the other hand, among the two styles of ill-adapted defensive styles, the immature defensive style is also in a significant correlation with indications of depression and neuroticism.

Alizadeh *et al.*, (2011) indicated that there is a significant positive relation between the total score of irrational beliefs and all its related subscales and negative perfectionism. There also a negative significant relation between positive perfectionism and subscales of irrational beliefs including the need for other's approval, failure reaction, lack of emotional responsibility and avoidance of problems. There was also a positive significant relation discovered between tendency to blame and positive perfectionism but there were no significant relations between the rest of subscales and positive perfectionism.

Abbasian (2011) revealed that there was a significant and meaningful relation between self-efficacy in self-esteem, self-regulation and leadership and motivation for making progress among female students. There were also no significant relations between self-efficacy in self-provocation and self-assessment and motivation for making progress among female students. There is a significant relation between perfectionism in self-oriented dimension and motivation for making progress among female students. There are no significant relations between perfectionism in else-oriented dimension and motivation for making progress among female students. There is a significant relation between self-efficacy and perfectionism among female students.

Since perfectionism leaves several positive and negative effects on human's life, and the fact that perfectionists are usually having a hard time making social contacts and having social compatibility with other entities, the present research has tried to determine the share of personality characteristics (through the Neo five-factor model which is consisted of extroversion, agreement, responsibility, neuroticism and openness) in anticipation of perfectionism.

### **Research Hypotheses**

1- Positive perfectionism is anticipatable based on personality characteristics of students of Shahrekord's university of medical sciences.

## Research Article

2- Negative perfectionism is anticipatable based on personality characteristics of students of Shahrekord's university of medical sciences.

## MATERIALS AND METHODS

### Methods

The research method of this study is descriptive-correlative. The population of the research is also consisted of the entire students of Shahrekord's university of medical sciences during 2013-14. The population of the research includes the entire students of Shahrekord's university of medical sciences among which a number of 190 individuals were selected as the sample. For data collection purpose, a questionnaire is used.

For this very purpose the questionnaire of Hill *et al.*, was used for evaluation of perfectionism and respectively, the 60 questions questionnaire of Neo was used for valuation of personality characteristics. The validity and reliability of questionnaires are approved with respect to their usage in other researches and therefore, the mere reliability of questionnaires was approved by some of psychology professors. For the purpose of data analysis, the parametric test of multiple regressions was performed and also the data analysis instrument was the SPSS software.

## RESULTS AND DISCUSSION

### Results

In this section, the data from collected questionnaires are discussed through descriptive statistics as well as inferential statistics which are mentioned in the following.

#### Descriptive Findings

a) Distribution of personality characteristics in studied students:

**Table 1: Statistical indexes of personality characteristics**

Consciousness	Compatibility	Flexibility	Extroversion/Introversion	Neuroticism	Personality Characteristics Variables
190	190	190	190	190	Total
0	0	0	0	0	Unanswered
32/563	29/984	26/542	30/284	25/80	Mean
32	30	26	31	26	Median
31	28	26	34	32	Mode
3/870	3/692	5/220	4/795	5/819	Standard Deviation
14/977	13/635	27/255	22/99	33/865	Variance
24	21	9	19	8	Min
40	38	35	42	37	Max
0/015	-0/131	-0/717	-0/159	-0/441	Skewedness
-0/502	-0/408	0/453	-0/402	-0/044	Elongation

### Research Article

b) Distribution of positive perfectionism in studied students:

**Table 2: Statistical indexes of student's perfectionism (positive and negative)**

Negative Perfectionism	Positive Perfectionism	Type Of Perfectionism Variables
190	190	Total
0	0	Unanswered
114/726	69/378	Mean
115	69	Median
114	67	Mode
6/403	5/119	Standard Deviation
41/004	26/205	Variance
96	58	Min
126	80	Max
-0/794	0/008	Skewedness
0/595	-0/663	Elongation

### Inferential analysis of statistical data (statistical test of research hypotheses)

Discussing the normality of data

**Table 3: Results of normality test related to Neo personality characteristics**

P-Value	Kolmogorov-Smirnoff Statistic	Number Of Variables Input
0/052	1/461	190 Neuroticism
0/120	1/186	190 Extroversion/Introversion
0/053	1/424	190 Flexibility
0/179	1/099	190 Compatibility
0/081	1/267	190 Consciousness

**Table 4: Results of normality test related to variable of perfectionism**

P-Value	Kolmogorov-Smirnoff Statistic	Number Of Variable Input
0/056	1/336	190 Negative Perfectionism
0/532	0/807	190 Positive Perfectionism

With respect to results of tables 3 and 4, and with respect to the fact that obtained P-value for all tests is larger than our significance level (0.05), the normality of data is accepted and therefore, Parametric tests could be used for investigation of hypotheses and in this paper we will use the Pearson's correlation test and a step by step version of Linear regression.

**First hypothesis test: Positive perfectionism is anticipatable based on the personality characteristics of the students of Shahrekord's university of medical sciences.**

In this research, the stepwise (Step by step) approach is implemented. Obtained results indicate that among the anticipator variables, the variables of neuroticism and consciousness are respectively fed into the equation and the results are provided in the following table.

### Research Article

**Tbale 5: Summary of stepwise regression analysis for determination of positive perfectionism based on the anticipator variables (neuroticism, extroversion/introversion, flexibility, compatibility and consciousness)**

Watson Camera Index	Change Sig. Change	Statistics F	Df2	Df1	F Change	Chan ge Of Squar es R	Stand ard Deviat ion	Adjuste d Determi nation Coeffici ent	Determin ation Coefficient (R <sup>2</sup> )	Multiple Correlatio n Coefficient (R)
2/151	0/000	188	1	54/67	0/225	4/517	0/221	0/225	0/475	1
	0/000	187	1	18/61	0/070	4/319	0/288	0/295	0/544	2

As you can see in table 5, the first model which is a factor of neuroticism characteristic justifies approximately 22.5 percent of the dependent variance. Adding the characteristic of consciousness to the second model led to a 7 percent increase in explained variance. It means that in general, this model is able to determine 29.5 percent of the total variance. Therefore, with respect to the adjusted R<sup>2</sup> determination coefficient, it can be stated that approximately 30 percent of positive perfectionism is determined by the changes in independent variables of student's personality characteristics (Neuroticism and Consciousness).

**Table 6: Stepwise analysis of multiple regressions for anticipation of positive perfectionism among the students of Shahrekord's university of medical sciences**

Significance Level	F	Mean Squares	Freedom Degree	Sum Squares	Of Source Changes	Of Model
0/000	54/673	1115/824	1	1115/824	Regression	1
		20/409	188	3836/892	Residue	
			189	4952/716	Total	
0/000	39/199	731/516	2	1463/032	Regression	2
		18/661	187	3489/684	Residue	
			189	4952/716	Total	

As you can see in table 6, the significance level for the aforementioned test in both models is equal to 0.000, therefore it could be claimed that the aforementioned test is significant with assurance level of 95 percent. This conclusion is the result of ANOVA regression analysis and indicates that the first research hypothesis is acceptable (F=39.199, Sig=0.000). It means that the selected model is significant in terms of personality characteristics of Neuroticism and Consciousness.

**Table 7: Regression coefficients for anticipation of positive perfectionism among the students of Shahrekord's university of medical sciences**

P	T-Test	Coefficients After Standardization Weight Of Beta	Coefficients Standardization Standard Dev.	Before Regression Coefficients B	Model
0/000	39/246	-	1/493	58/607	1
0/000	7/394	0/475	0/056	0/418	Neuroticism
0/000	14/591	-	3/177	46/363	2
0/000	8/208	0/508	0/054	0/447	Neuroticism
0/000	4/313	0/267	0/082	0/353	Consciousness

## Research Article

With respect to table 7, it can be seen that both models are significant based on denotative coefficients and levels of significance, therefore the standard regression equation will be as follows:

(Consciousness)  $\times$  (0.267) + (Neuroticism)  $\times$  (0.508) = positive perfectionism

**Second hypothesis test: Negative perfectionism is anticipatable based on the personality characteristics of the students of Shahrekord's university of medical sciences.**

In this analysis a stepwise approach is taken. Results indicate that among the anticipator variables, variables of neuroticism, consciousness and extroversion/introversion are respectively fed into the equation and the results are summarized in the following table.

**Table 8: Summary stepwise regression analysis for determination of negative perfectionism based on anticipator variables (neuroticism, extroversion/introversion, flexibility, compatibility and consciousness)**

Watson Camera Index	Change Sig. F	Statistics Df 2	Df 1	F Change	Changes of Squares R	Stand ard Devia tion	Adjuste d Determi nation Coeffici ent	Determina tion Coefficient R <sup>2</sup>	Multiple Correlatio n Coefficient R
1/977	0/000	188	1	64/45	0/255	5/541	0/251	0/255	0/505
	0/025	187	1	5/134	0/020	5/481	0/267	0/275	0/525
	0/027	186	1	4/949	0/019	5/423	0/283	0/294	0/542

As you can see in previous table, the first model which is a factor of neuroticism justifies approximately 25 percent of the dependent variance. Adding the characteristic of consciousness to the second model leads to a 2 percent increase in explained variance and the final number three model is focused on the factor of extroversion/introversion which has led to a 1.9 percent increase in explained variance.

This model determines 28.3 percent of the total variance. Therefore, with respect to the adjusted R<sup>2</sup> determination coefficient it can be stated that approximately 29 percent of changes in negative perfectionism are determined via changes in independent variables of student's personality characteristics (Neuroticism, consciousness and extroversion/introversion).

**Table 9: Stepwise analysis of multiple regressions for anticipation of negative perfectionism among the students of Shahrekord's university of medical sciences**

Significance Level	F	Mean Squares	Freedom Degree	Sum Of Squares	Source of Changes	Model
0/000	64/453	1978/57	1	1978/57	Regression	1
		30/698	188	5771/19	Residue	
			189	7749/77	Total	
0/000	35/502	1066/39	2	2132/79	Regression	2
		30/037	187	5616/98	Residue	
			189	7749/77	Total	
0/000	25/818	759/46	3	2278/37	Regression	3
		29/416	186	5471/400	Residue	
			189	7749/77	Total	

As you can see in table 9, the significance level of the aforementioned test is equal to 0.000 for all three models, therefore it could be claimed that the aforementioned test is significance with assurance level of 95 percent. This conclusion is the result of regression through ANOVA approach which reveals that the



### Research Article

second research hypothesis is accepted ( $F= 25.818$ ,  $Sig= 0.000$ ). This means that the selected model is significant in terms of personality characteristics of neuroticism, consciousness and extroversion/introversion.

**Table 10: Regression coefficients for anticipation of negative perfectionism among the students of Shahrekord's university of medical sciences**

P	T-Test	Coefficients After Standardization	Coefficients Standardization		Before	Model
		Weight Of Beta	Standard Deviation	Regression Coefficients B		
0/000	54/810	-	1/831	100/382	$\beta$	1
0/000	8/028	0/505	0/069	0/556	Neuroticism	
0/000	22/877	-	4/031	92/222	$\beta$	
0/000	8/334	0/523	0/069	0/575	Neuroticism	2
0/025	2/266	0/142	0/104	0/235	Consciousness	
0/000	21/583	-	4/484	99/776	$\beta$	
0/000	7/633	0/488	0/070	0/537	Neuroticism	3
0/004	2/877	0/188	0/108	0/312	Consciousness	
0/027	-2/225	-0/150	0/090	-0/200	Extroversion/Intro version	

With respect to the findings of table 10, it can be seen that all three models are significant based on denotative coefficients and observed significance levels, therefore the regression equation will be as follows:

(extroversion/introversion)  $\times$  (-0.150) + (consciousness)  $\times$  (0.188) + (neuroticism)  $\times$  (0.488) = negative Perfectionism

### Discussion and Conclusion

The purpose of this research was to determine the share of personality characteristics in anticipation of perfectionism among the students of Shahrekord's university of medical sciences during 2013-14. For the purpose of testing the aforementioned hypothesis, the ANOVA analysis of regression was used. With respect to data analyses and also with respect to adjusted R<sup>2</sup> determination coefficient, it can be stated that approximately 30 percent of changes in positive perfectionism are determined by changes in independent variables of student's personality characteristics. On the other hand, the significance level of the test is equal to 0.000 for both models, therefore it could be claimed that the aforementioned test is significant with assurance of 95 percent. This conclusion is the result of regression analysis through ANOVA method and indicates that the first research hypothesis is accepted ( $F= 39.199$ ,  $Sig= 0.000$ ). This means that the selected model is significant in terms of personality characteristics of neuroticism and consciousness. In other words, results of analysis indicate the correctness of research hypothesis and anticipation of positive perfectionism based on personality characteristics of students of Shahrekord's university of medical sciences.

In terms of the second hypothesis, the multiple regression analysis is used for determination of the share of each personality characteristic for determination of negative perfectionism. With respect to results of data analyses and also with respect to adjusted R<sup>2</sup> determination coefficient, it could be stated that approximately 29 percent of changes in negative perfectionism are anticipatable by changes in independent variables of student's personality characteristics (neuroticism, consciousness and extroversion/introversion). On the other hand the significance level of the aforementioned test is equal to 0.000 for all three models and it can be claimed that the aforementioned hypothesis is significant at assurance level of 95 percent. This conclusion is the result of regression analysis through ANOVA method and indicates that the second research hypothesis is accepted ( $F= 25.818$ ,  $Sig= 0.000$ ). This means

### **Research Article**

that the selected model is significant in terms of personality characteristics of neuroticism, consciousness and extroversion/introversion. In other words, results of analyses indicate the correctness of the research hypothesis as well as anticipation of negative perfectionism based on personality characteristics of students of Shahrekord's university of medical sciences.

At the end, with respect to the findings of this research, it is recommended to perform other tests under the title of level of perfectionism in university students. Also educational authorities are recommended to count for the problem of perfectionism as a serious issue and hold workshops for familiarization of students with the context of personality characteristics. Also, with respect to the findings of this paper which implies that negative and positive perfectionism are anticipatable based on the personality characteristics of students of Shahrekord's university of medical sciences, therefore educational authorities and entrepreneurs are recommended to pay attention to the level of perfectionism of their students.

### **REFERENCES**

- Abasyan Fard Akbar (2011).** *Check between Efficiency and Perfectionism with Achievement Motivation, including the City of Medicine XXI*(1).
- Alizadeh Mohammad Saeed Desert Updates (2011).** Investigate the relationship between irrational beliefs with positive and negative perfectionism students. *Journal of Consulting and Clinical Psychology* **21**.
- Aqajani Saifullah, Narimani Arianpur and Muhammad Saeed (2010).** Compare perfectionism and conscience of female students witted and ordinary. *Iranian Journal of Exceptional Children XI*(88).
- Burns DD (1980).** *Feeling Good; the New Mood Therapy*. New York American Library Info.
- Capan PE (2010).** Relationship among perfectionism, academic proerastination and life satisfaction of university student. *Procedia of Social and Behavior Sciences* **5** 1665-1671.
- Frost R, Marten P, Lahart C and Rosen Later R (1990).** The Dimension of Perfectionism. *Cognitive Therapy and Research* **14**(5) 449-468.
- Furnham A (2008).** Relationship among four bigfive measures of different length. *Psychological Reports* **102** 312-316.
- Graham A, Risherry SB and Stewart SH (2010).** The Existential Model of Perfectionism and Depressive Symptoms: A Short-Term. Four –Wave Longitudinal Study. *Journal of Counseling Psychology* 0022-0167.
- Hamache KDE (1978).** Psyhodinamices of Normal and Norotic Perfectionism. *Psychology* **15** 27-33.
- Hewitt PL and Flett GL (1996).** Deminsion of Prefectionism in Unipolar Depression. *Journal of Abnormal Psychology* **100** 98-101.
- Kobato K, Shimazu A, Kavakami N, Takashi M, Nakata A and Schaufeli WB (2011).** Association between Workaholism and Sleep Problems among Hospital Nurses. *Industrial Health* **48** 864-871.
- Namjoo Cyrus the Great Gorge M and T (2013).** The relationship between perfectionism and defense styles with symptoms of depression and neurosis. *Journal of Psychology of Women*, the second year, no poison.
- Patch ANR (1984).** Reflections of Perfection. *American Psychologist* **39** 386-390.
- Taris Toon W (2010).** Why Do Perfectionists Have a Higher Burnout Risk than Others the Mediational Effect of Workaholism. *Romanian Journal of Applied Psychology* **12**(1) 1-7.