

## Follow-up prediction of personality types A and B based on Neo personality traits

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**Keywords:** Personality characteristics, Personality type A, Personality type B.

**ABSTRACT.** The current paper was aimed at prediction of follow-up of personality types A and B based on Neo personality traits. Participants in the present article included 100 people referring to diet centers in Tankabon who were selected by simple random sampling method. Neo personality characteristics questionnaire and McCrae and Costa questionnaire (1985) and the Personality types A and B questionnaire by Burn Reuter were used. Findings revealed that there was a significant relationship between personality types A and B Scores and Neo personality characteristics components at the 0/05 level and the latter, i.e. Neo personality characteristics components would predict 65/8% of the personality types A and B variations. Also, results of variance analysis indicate significance of this prediction and from among the Neo personality characteristics components; the component of conscientiousness contributed most to prediction of personality types A and B.

### 1. INTRODUCTION

Interest in using the five factor model in choosing and planning for psychological therapy is on the rise (Haren & Mitchell, 2003), the therapist, by understanding the individual personality can be in a better position for predicting problems and planning for treatment. One of the helpful works could be guidance in choosing the optimal form of treatment. In here, the principle is as people with different personalities in different professions act differently, they may benefit some therapeutic methods better than other methods. For instance, people who score higher in the agreeableness trait, make use of therapy orientedness which encourages discovery and fantasy other than people who get low scores in this trait. The latter people can benefit from a direct therapeutic method including using drugs (Lawrence et al, translated by Javadi, 2003). On the other hand, personality can be considered to be the most fundamental subject matter of Psychology; because the basic debate involves such areas as learning, motivation, perception, thinking, emotions and feelings, intelligence and .... In other words, the above mentioned instances are considered to be elements comprising personality.

Therefore, even study of mental diseases and specifically mental functional diseases- which in accordance with psychologists include most psychosis like schizophrenia, emotional psychosis, all neurosis and all personality and trait disorders, anti-social and anti-morality behaviors, addiction and deviancies- could be regarded as among personality illnesses. In other words, personality is the same container in which lay all psychological phenomena and processes. Generally speaking, this entire subject will be explored for clarification of the debate (Shamloo, 2010). The subject of personality, in a simple experience is the same actual person with the same situation on the street, at work or by the time of leisure. Thus, personality is a psychological totality which determines a special human (Mansoor, 2011). Personality is an abstract concept. Scholars call such a concept structure. This fact that personality is a structure makes its definition difficult. Different psychologists have defined personality differently (Brenha, 2002). Personality is a sustainable set of traits and tendencies which determine similarities and differences of peoples' psychological behaviors (thoughts, feelings and actions) which are temporally continuing and might be realized

because of social and biological pressures or are not comprehended so easily (Karimi, 2009). In early 1970s, McCrae and Costa was busy developing a personality questionnaire named NEO to measure three dimensions of neuroticism, extroversion and Openness. They had started their work by cluster analysis of the Cattell's questionnaire (Schultz & Schultz, translated by Seyed Mohamadi, 2008). Their analysis had primarily revealed two factors of extroversion and neuroticism, however little by little the significance of openness as a factor which had been mentioned by Cattell as initial factors was brought to their attention. In 1983, McCrae and Costa found out that the NEO system was highly corresponding to the three factors of a five model; but it did not involve the traits belonging to areas of agreeableness and conscientiousness. As a result, they expanded their own model based on analyzing questionnaires relating to the measurement of two recent factors and offered a revised version of their own questionnaire under the title of NEO PI-R (Rio, 2007).

McCrae and Costa (2004), by using a factorial analysis found out that one can consider five major dimensions between personal differences in personal characteristics which are known as personality five factors and are: Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness. Neuroticism refers to personal tendency to experiencing anxiety, tension, pity seeking hostility, impulsivity, depression and low self-esteem while extroversion is concerned with individual's inclination to being positive, courage seeking, being fully energetic. Openness refers to personal tendency to curiosity, love of art, artistry, resilience, and knowledge whereas agreeableness is concerned with personal tendency to forgiveness, kindness, magnanimity, empathy and sympathy, altruism and trust. Finally, conscientiousness refers to personal inclination towards being orderly, efficiency, trustable and reliance, self-discipline, progress orientedness, rationality and calmness.

Since the first humans stepped into this earthly planet, they have always been aware of the existence of their individual differences. They found out early that never can two people be found to be similar in any term. From the beginning of creation, there have been strong and gaunt people, weak and strong and intelligence and subnormal people and hence, each has had social capacities and limitations. If we browse into history, we will not see in any period of time that humans have not grouped their own society members either formally or informally. Humans by recognizing their weaknesses and strengths have attempted to compensate for their limitations through various ways. Essentially study of individual differences in various forms has been one of the major human priorities in the direction of progress. Today, individual difference can be seen in all areas. Teacher's employers, army service members and other people are all well aware of individual differences and working efficiency. To explain these differences we can consider various aspects: physical abilities, intelligence, talents, interests and motivation. In addition to this, people may be different from each other in terms of previous learning levels, type of training and other acquisition conditions. Educational and industrial systems especial sensitivity towards proper guidance of people; their goal is to put people under conditions where they have the ability and mentally they can adapt to those conditions (Karimi, 2009).

Humans have different personality types and each of these types involves different characteristics, including Type A who are highly competitive and are extremely inclined to progress; they are hasty and always feel temporal anxiety; staying calm is really difficult for them and when faced with a broken promise they become extremely angry and impatient; although they are apparently self-confidence but they are doubtful in the minds towards themselves and continually pressure themselves so that they can achieve considerable progress. Unlike types a people with type B can stay calm, rest and continue with their work without getting angry.

They are not hasty and have no feeling of temporal anxiety. Naturally, they do not have the impatience resulting from this sense of anxiety. In an experiment, after the researchers kept some type A and B people waiting for no reason, the A and B type people showed themselves like this: Type A people yelled and raised their voices, got angry intensively and engaged in war of words and conflicts with the interviewer who was continually interrupting them; They were clenching their lips continually and defined hostile events with high emotions. To the contrary, type B people were sitting in a comfortable situation and were speaking softly; they could be interrupted and smiled most of the time (Shamloo, 2010). On the other hand, obesity is a situation in which

unnecessary fat saving of the body increases. Some other factors other than the diet could be involved in increasing this chronic problem including personality characteristics and personality types. Although few researches have been done in this regard, Rezaee et al (2013) in a research titled exploring effectiveness of behavioral and cognitive therapeutic method in reducing chronic tension headaches among women found put that adding cognitive behavioral method to drug therapy is effective in reducing chronic tension headaches. Rahnema (2013) in a research with the subject of effectiveness of religious emotional-cognitive therapy on increasing positive psychological states of patients suffering from renal failures demonstrated that positive psychological states of the experimental group was significant in comparison to the control group. Rajabi and Sadat Husseini (2014) indicated that as much as 2/25% off the female student sample at the high school level was suspected of eating disorder. In predicting the diet behavior among female students based on 5 big personality factors by using the multivariate regression analysis, results indicated that simply the component of openness to experience or flexibility could positively predict the diet behavior of the female students. Also, in predicting overeating behavior and mental obsession with food, findings revealed that simply the component of emotional instability or neuroticism could be positively predictive but none of the five big personality factors did not have the ability to predict the female students' oral behavior. This research indicated that the level of suspected instances of overeating was considerable among female students and two personality factors of openness to experience and emotional instability were related with eating disorders among girls.

Mosavat (2014) in a comparative investigation of the effectiveness of reality therapy and existential treatment in a case study on anxiety, depression and self-esteem of the adolescents suffering from epilepsy indicated that though few researches have been performed in regard to psychological problems of patients affected with medical problems, in accordance with the researches we can conclude that existential therapy and reality therapy are applicable in treating and reducing anxiety and depression of people suffering from epilepsy. Amianto et al (2011), in a research on 38 women affected with mental anorexia compared to 35 normal women indicated that the former group of people were reporting such problems as feeling of self-conceit, compulsive obsessive traits, need for confirmation, perseverance, initiative, low self-esteem, need for promotion, stage of anger, seeking thinness, interpersonal lack of trust, and social insecurity more than the normal people. From among these variables, the need for confirmation was the best predictor of mental anorexia.

Vandenberg and Pitoriu (2005) in their research on the relationship between personality and well-being on 290 Romanian engineers concluded that professional satisfaction was positively related with accountability and negatively correlated with neuroticism. Furthermore, depression and physical complaints were negatively correlated with extroversion and positively related with neuroticism. Also, depression and physical complaints were negatively correlated with resilience and positively related with agreeableness. Despite rapid growth of personality characteristics application and personality types in the world and its entrance into different fields, In Iran researches done are few.

## 2. METHODOLOGY

### *Research tools*

NEO five factor questionnaires (NEO-FFI): This questionnaire contains 60 items which measure the five- fold dimensions of a normal personality. These five dimensions are Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness. Each dimension includes 12 items. The subject is asked to specify his or her agreement or disagreement level on a five value Likert scale in accordance with a perception he/she has regarding himself/herself (1= totally disagree, 5=totally agree). Higher scores indicate more Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness. McCrae and Costa (1987) simultaneously used the NEO-PI-R to investigate the validity of type NEO-FFI and reported validity coefficients of 0/75, 0/80, 0/74, 0/71, and 0/77 for the factors of Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness

respectively. Attari et al (2007), reported the reliability of this test by using the retest method on 64 people with an interval of two weeks for the above factors as 0/87, 0/84, 0/79, 0/80 and 0/82. Various researches have used Cronbach's alpha for demonstrating the internal consistency of this instrument. Nilfroushan et al (200) reported the Cronbach's alpha coefficients of 0/76, 0/63, 0/31, 0/48 and 0/81 respectively for the factors.

Personality type A and B questionnaire: This questionnaire was developed by Burn Reuter. It has twenty five 3 choice questions (Yes, No, I don't know). The internal consistency of this questionnaire was reported by the researcher himself as being  $r=0/80$  and  $r=0/70$ . To measure type A and B, each subject is given three scores where the medium score is 13. Score higher than 13 tends to Type A and score lower than 13 tends to Type B (Ramazani Nejad et al, 2010).

### 3. FINDINGS

Analysis of data resulting from Ne questionnaire and personality types A and B was first performed by using the Pearson Correlation Coefficient and then Multiple Regression Analysis. The age average of the subjects with the age range of 18-55, is 22/62 and standard deviation of 4/49. Descriptive data of the current research regarding Personality Types A and B and other Neo personality characteristics components are provided in table (1).

**Table 1. Descriptive data of the current research regarding Personality Types A and B and other Neo personality characteristics components**

Variable	No.	Average	SD
Personality type A and B	100	14.3500	2.85080
Neuroticism	100	30.3000	2.49420
Extraversion	100	36.3500	3.75955
Openness	100	37.8500	4.19618
Agreeableness	100	38.1000	3.59678
Conscientiousness	100	39.5000	4.466625

**Table 2. Pearson correlation coefficient results between Personality Types A and B and other Neo personality characteristics components**

Neo personality characteristics components	Personality Types A and B
Neuroticism	-0/27
Extraversion	0/62
Openness	0/77
Agreeableness	0/38
Conscientiousness	0/326

As seen in the table, the findings obtained by using the Pearson correlation coefficients indicate that there is a significant relationship at the 0/05 level between Personality Types A and B and other Neo personality characteristics components.

**Table 3. Summary of regression model in explaining scores of the Personality Types A and B of Neo personality characteristics components**

R	R squared	Modified R squared	Estimate standard error
0/821	0/675	0/658	8/77

Table 3 results demonstrate that the predicting variables (Neo personality characteristics components) could predict 65/8% of the variations of Personality Types A and B. To indicate whether effects of components are significant or not, the variance analysis table has been formulated as following

**Table 4. Regression variance analysis results for the Personality Types A and B scores on NEO personality characteristics components**

	Sum of squares	Freedom degree	Average averages	F	Sig.
Regression	5925/715	5	1185/143	19/01	0/00
Residual	5863/054	94	62/373		
Total	11788/769	99			

The information set in the table is indicative of the significance of the prediction. On this basis, at least one of the variables has a determining role. Thus, the separate contribution of each variable is provided in the next table. Coefficients for predicting Personality Types A and B out of NEO personality characteristics components are provided in table (5).

**Table 5. Coefficients for predicting Personality Types A and B out of NEO personality characteristics components**

	B	Beta	T	Sig.
Neuroticism	0/195	0/189	2/64	0/13
Extraversion	0/356	0/329	3/185	0/2
Openness	0/461	0/370	3/165	0/2
Agreeableness	0/574	0/551	4/210	-0/0
Conscientiousness	1/053	0/786	7/157	0/00

Information of the table indicates that the variable of Conscientiousness has the highest contribution to the prediction of Personality Types A and B.

#### 4. CONCLUSION

Findings revealed that there was a significant relationship between personality types A and B Scores and Neo personality characteristics components at the 0/05 level and the latter, i.e. Neo personality characteristics components would predict 65/8% of the personality types A and variations. Also, results of variance analysis indicate significance of this prediction and from among the Neo personality characteristics components; the component of conscientiousness contributed most to prediction of personality types A and B. Results of this research are in conformity with results of researches by Rajabi and Sadat Husseini (2014), Mosavat (2014), Amianto et al (2011), and Vandenberg and Pitoriu (2005). To explain the data we can say that Neo personality characteristics components could play a positive role in peoples' personality types and in this regard, the more people are higher in terms of Conscientiousness, i.e. the more he is Conscientious, this issue helps us understand better and predict his personality type. The Neo personality characteristics five factors offer the main personality traits which have been expanded during the past four decades. Various researches indicate that these factors are comprehensive and could explain the peoples' personality in different directions. Each of the factors has been defined by means of some related traits; therefore, by explaining the situation of each person in any of the five factor model, we can provide a comprehensive explanation that can specify emotional, social, empirical, attitudinal and motivational state of the person.

Khormae and Kheir (2007) state personality characteristics result in emergence of behavioral and cognitive consequences via direct, immediate and sometime influencing immediate factors.

Garoosi (2000) states the last branch of NEO personality characteristics is Conscientiousness. The best description for this branch is the concept of will. People with higher scores are conscientious, purposeful, determined and decisive. Higher score in Conscientiousness is followed by professional and educational success. Of other characteristics of these people we can cite accuracy, reliability, Conscientiousness, and attempts for success and self-discipline. On the other hand, the personality of each person can lead to determination of limitations, characters, abilities and their health in life. It is personality that helps the formation of most human life aspects. For example, all the tendencies and desires we want to achieve in life, higher education, spouse and even public health could be influenced by our personality and that of people with which we get engaged and interact (Schultz & Schultz, 1998: translated by Seyed Mohamadi, 2008).

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