

Comparison of Personality Traits of the Teachers for the Autistic Students and Personality Traits of the Teachers for the Normal Students in Ahvaz City

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Abstract: This study compared the personality traits of the teachers for the autistic students and personality traits of the teachers for the normal students in Ahvaz City. To this end, a causal-comparative research method was used. The statistical population consisted of all the teachers for the autistic students and educational centers of learning disorder and all teachers of the normal students in Ahvaz City. The statistical sample included all the teachers for the autistic students due to the limited statistical population and 60 teachers for the normal students that were selected using the multistage sampling method. NEO Five-Factor Inventory (Costa and McCrae) was used as the research instrument. Results showed that there was no significant difference between the teachers for the autistic students and the teachers for the normal students in terms of personality traits of neuroticism, conscientiousness and agreeableness. However, there was significant difference between these two groups in terms of extraversion and openness and teachers for the normal students showed more extraversion and openness compared to the teachers for the students with autism.

Key words: Personality traits, students with autism, normal students, personality traits, causal-comparative

INTRODUCTION

Personality as a complicated concept that has recently considered in psychology is not limited by a set of certain rules, so that it can be thoroughly defined. It is an evolving concept that is studied in order to explore the individual behaviors and functional aspects. For example, obtaining the knowledge on personal traits of our colleagues improves the quality of the interpersonal relationships and lead to the individual and social success. In the modern era, this kind of knowledge is effective in different situations (Karimi, 2008). Costa and McCrae (1990) proposed a five-factor inventory as a list of causal-personal situations that included extraversion, agreeableness, conscientiousness, neuroticism and openness. Autism is a kind of congenital pervasive neurodevelopmental disorder that is characterized by impaired social, communicative and behavioral interaction and abnormal tendencies or activities. The signs are observed before the third year of the child's life and boys are four or five times more likely to be diagnosed with autism than girls are.

Most of the children with autism suffer from the learning disabilities. Therefore, a successful process of learning for these children depends on the well-designed individual program. There are varieties of studies that concentrate on the structured education of the children

with autism that may positively affect their behaviors and their learning potentials. It is possible that children with autism cannot show a significant reaction against their learning experiences. That is why teachers should consider the time while teaching to give the opportunity to the children to think of what they learn and connect it to their old knowledge. Given the wide range of children with autism, teachers' familiarity with early signs of autism is important because many children with mild forms of this disorder may be present in schools of the normal students. Moreover, teachers need to know which methods they should use to maximize the learning potentials of such children (Milanifar, 2007).

One of the factors may affect the teachers' behaviors with certain learning skills in ordinary schools is their personality traits. Personality is an abstract concept like the concept of energy in the physics that is not tangible and is inferred by combining the behaviors, thoughts, motivations and excitements. It distinguishes the people based on a number of traits, although, there are a high number of personality traits that are common among the people. Therefore, the similar and different aspects are the basis for studying the personality traits of the people (Pervin and Oliver, 2001).

People with different personality traits behave in a certain way and have certain expectations, potentials, skills and needs based on their personality patterns. On

the other hand, organizations satisfy the certain needs and expectations based on their objectives, tasks and activities, too. Therefore, considering different jobs based on different personality traits is of great importance (Rothmann and Coetzer, 2003).

Personality: Personality is a psychological common but extremely complicated concept. In spite of the controversial scientific notion of personality, it has been widely degraded as an individual concept.

There is no consensus on personality, currently. For example, Allport (1937) have collected a series of fifty different definitions for personality. Some scholars consider the biochemical and physio-pathologic aspects of the human actions and use the appropriate research methods. Others study the people's behaviors and personalities or deal with personality with regard to the features such as that the unconscious processes that are not directly observable and should be inferred from the people's behavior. Finally, a number of other scholars discuss personality only through people's social interactions and functions. Therefore, personality is defined in a range from inner processes of the organism to the observable interactive behaviors. As mentioned before, personality has been defined in many ways including:

- Allport defines personality as the dynamic organization of the internal mental-physiologic systems that determines the unique compatibility of the people with the external world
- Sheldon believes that personality is the dynamic organization of the perceptual, emotional, motivational and physical aspects of the people
- Atkinson states that personality is a certain behavioral pattern that determines the people's compatibility with the environment
- Cattell considers personality as a predicting factor for people's behavior in a certain situation (Schultz and Schultz, 1998)
- Eysenck's discusses personality as the sustainable system of the emotional, intellectual and physical traits that help people to be compatible with the environment

Psychological concept of personality focuses on the human nature and individual differences not individual similarities. For example, it deals with the factors playing role in the people's success or failure and seek to explore the complicated relationships between the various

aspects of human actions in order to study their social interactions. Now, the issue is the way personality is defined based on the individual differences. It is associated with the value judgements by the common people, for example, if they like others, they admire their personality. However, for the scholars who regard personality as a psychological concept and for the students of psychology, this is an academic field of the study. Therefore, different definitions of personality indicate different certain issues that should be investigated.

How genetics affect personality? Personality is shaped upon combining the sperm and ovum. During fertilization, thin threads of the chromosomes are paired. Chromosomes result from the particles called gens and gens are the main carriers of the hereditary traits. In the combining process of the sperm and ovum, 23 paired chromosomes in women and 23 paired chromosomes in men are observed. However, the 23th pair is heterologous as the X and Y or XY. Therefore, 23th pair determines the person's sex and personality (Karimi, 2008).

Nervous system and different kinds of personality: The nervous system plays an important role in shaping the personality. It sends signals to the organs by transmission of nerve impulses and using the brain or spinal cord intermediaries and this is an important process by which a high number of human actions are modulated. Although the structure of the nervous system is generally similar in all people, there are differences too. Pavlov studied this kind of differences and introduced four kinds of personality based on the balance, mobility, excitation and inhibition. He believed that a phlegmatic person is strongly inhibited and excited and a sanguine person is equally inhibited and excited. Moreover, a choleric person is strongly motivated and weakly inhibited. Finally, a melancholic person is weakly inhibited and excited (Karimi, 2008).

Hormones and personality: Enzymes and hormones control the personality and behaviors. Endocrine glands play an important role in inner balance of the body, including pituitary gland that controls a high number of other glands. With regard to the importance of the hormones in shaping the personality, Galen the Greek physician has explained this effect as the dominance of one of the four temperaments: Choleric (nervous, short-tempered), melancholic (fantastical and analytical), phlegmatic (relaxed and peaceful), sanguine (cold and emotionally unstable). However, nowadays, the role of the hormones in shaping personality is clearly explained.

Five-factor personality models: McDougall in his first issue of the *Character and Personality* (which later released as *Journal of Personality*), discusses the extent of the special meanings of the character and personality by two different concepts. He proposes a hypothesis at the end of his essay in this journal that claims the personality may be explained based on the analysis of five distinguishable but separable factors including intellect, character, temperament, disposition and temper with their high and complicated variables. Claims that a careful analysis of language is useful in understanding the concept of personality. According to the language or vocabulary hypothesis, the most important differences of the people in their interactions are manifested in the specific terms in all languages.

Allport (1937) followed him and used the second edition of the used the third edition of this dictionary. Thurston first studied the 60 characters using the factor analysis, but did not complete his project. Instead, Guildford reanalyzed these characters. Cross turns of the Guildford's 13 scales led to the seven factors proposed on the Thurston's list. Cattell used the factor analysis to examine personality traits, too. He claimed that he has identified at least a dozen factors. However, when his proposed variables were analyzed by others, only five factors were repeatable. Watson using a bipolar factor analysis of 22 scales failed to achieve more than five combined factors. Allport, (1937) conducted their factor analysis based on the Cattle's 30 bipolar scales of the factor analysis that had used it in their previous studies. They found five major elements in analyzing the memoirs and conducted long-run studies in order to obtain the predictive validity. Goldberg in his initial studies proved the five-factor model using a set of Cattell's variables. He carried out an extensive research program in which five-factor model was replaced by a larger model. He initiated this project by extending a set of terms of personality (in English) that had been collected by Allport. Then, he categorized these terms based on the states, characteristics and roles and eventually obtained the normative data about the 2800 characteristics. The five obtained factors included happiness, agreeableness, conscientiousness, emotionality and culture (Fist and George, 2002). Borgata compared the structures obtained from the self-assessments with the structures obtained from the peer-assessments and found five factors included assertiveness, likeability, conscientiousness, emotionality and intelligence. Smith also compared the structures obtained from the three large samples (N = 324, 521 and 583) and found five strong factors included

extraversion, kinship, strength of character, emotionality and delicacy. Digman used the computer for factor analysis and found a number of different factors (such as 8, 10 and 7). Finally, after a lengthy investigation, he found five factors included extraversion, friendly association, tendency to progress, neuroticism and wisdom (Fist and Gregory, 2002).

Within a decade (from 1975-1985), Goldberg continually analyzed the various data in order to achieve a satisfactory classification. However, there were no two similar analyses and none of the analyses was so different from others that can delineate the five factors. Finally, after several studies, Goldberg found five factors included extraversion, agreeableness, conscientiousness, emotional stability and flexibility.

Currently, there are two five-factor model: one proposed by McCrae and Costa in the NEO-PI questionnaire and the other proposed in the studies based on the language hypothesis by some scholars like Norman, Peabody and Goldberg and Digman. Both models have a high number of similarities:

- The number of dimensions is equal
- The content of the fourth factor is essentially the same, although it is shown in the two models in the opposite directions and therefore, is called "emotional stability vs. neuroticism"
- There are substantial similarities but not identical in the content of the third factor (conscientiousness)

On the other hand, there are at least two differences between models:

- In the NEO-PI, warmth is the extroversive practice, while it is a good practice in the language model;
- The fifth factor in the NEO-PI is openness to the experience while in model language it is supposed as intelligence or imagination.

Dimensions of the personality in the five-factor model

Extraversion (E): Extrovert people focus on the external world. They are interested in sexual arousal and tend to be cheerful. Extraversion includes traits including the talkativeness, assertiveness and activity level, with traits such as silence, openness and introversion.

Agreeableness (A): Agreeableness like extraversion is a dimension of individual tendencies. Agreeable people need the interpersonal support and sympathy. However, disagreeable people are stubborn and are not

sympathetic. Agreeableness includes traits such as kindness, trust, warmth or traits such as hostility, selfishness and distrust.

Conscientiousness (C): The conscientious people are powerful, ambitious and hard working. They try to solve problems and emphasize on accuracy and completeness. Conscientiousness is often associated with perseverance and physical competence. Unconscientious people avoid the necessary subtlety, precision and cleanliness. Conscientiousness includes traits such as organization, accuracy and reliability or traits such as carelessness, negligence and uncertainty.

Emotional stability or Neuroticism (N): The most effective scale of personality is the contrasting compatibility or emotional stability and incompatibility or neuroticism. Neuroticism includes traits such as nervousness, impatience and moodiness.

Openness to the experience (O): Flexible elements such as active imagination, liking the beauty and diversity have been often discussed in theories and measures of personality, but they have been rarely considered in an integrated study on personality. Flexible people are curious about the inner world and the outer world; moreover, they experience an empirical life (McCrae and Costa, 1990). Openness includes traits such as imagination, curiosity and creativity or traits such as shallow or late understanding (Fist and George, 2002).

Theoretical perspective on the five-factor model: A number of theoretical models have considered the five factor model as a communicative structure. The interpersonal theory focuses on the personal relationships. This model regards personality as a relatively stable pattern of interpersonal situations that shapes the human life. Therefore, the five-factor model is a descriptive concept that concentrates on interpersonal and communicative motivations and interprets the five aspects based on the interpersonal implications. Socio-psychoanalytic theory is based on the social functions of the self and other perceptions. Based on this model, traits are social structures that are used to show social functions. Hogan argues that people may distort the performative self-reports using their self-representative methods. Revolutionary perspective is based on a range of detective mechanisms of people that help them to survive and reproduce. Buss and Greiling (1999) consider personality as an adaptive approach that identifies five

important dimensions of the survival needs and concentrates on the personal perceptions and individual differences. Because people are regularly different in their personality traits and because the awareness of other's traits helps them to survive, these traits have adaptive value. People have high potentials for receiving the individual differences to adapt themselves with this perspective. McCrae and Costa introduced the five-factor model as the personal-causal model. The five-factor theory empirically consisted of five categories. This model is based on the finding that states this entire big five factors are genetically based. Therefore, it is to some extent rooted in the biological structures and processes, including specific genes and regions of the brain (amygdala), transmitters (such as dopamine) and hormones (testosterone). This view is similar to that of Allport who considered the traits as the mental-nervous structures and that of S. Eysenck's who regarded the traits as the biological mechanisms.

MATERIALS AND METHODS

Statistical population and sample: The statistical population consisted of all the teachers for the autistic students and educational centers of learning disorder and all teachers of the normal students in Ahvaz City.

Sampling method: The statistical sample included all the teachers for the autistic students due to the limited statistical population and 60 teachers for the normal students that were selected using the multistage sampling method.

Research instrument: NEO Five-Factor Inventory (short form): In the present study, NEO five-factor inventory (short form) was used. This is the revised form of a big five-factor personality questionnaire and both are similar in terms of validity and reliability. NEO Five-Factor Inventory is widely used in measuring the five personality factors and is empirically supported. This is not a time-consuming questionnaire and respondents do not feel tired while answering. It consists of 60 items based on the five Likert scale (from strongly agree to strongly disagree). Each item measure one of the five personality factors including the neuroticism, conscientiousness, agreeableness, openness and extraversion. The scores for each items are separately considered and finally five scores are obtained. It has a high reliability and validity and its long and short forms are similarly reliable and valid. In the present study for determining the reliability

of the big five personality factors, Cronbach's alpha was used (neuroticism 0.89, extroversion 0.72, conscientiousness 0.70, agreeableness 0.83 and openness 0.77) which indicates the desirable reliability coefficients of the questionnaire.

Research design: This causal-comparative study aims to find possible causes of a behavioral pattern. This is often called an after-event method. Since it shows that, something (cause) has occurred before and it is now studied through investigating its effect on other variable. In behavioral sciences, this method is used because the researcher cannot control many relationships that should be studied. This study aimed to compare the personality traits of the teachers for the autistic students and personality traits of the teachers for the normal students in Ahvaz City.

Implementation method: Questionnaire was used as the research instrument in this study. Questionnaires were prepared and distributed to the teachers and necessary explanations on the test and the way questions should be answered were provided. Respondents are asked to answer the questions with no bias. Then, questionnaires were collected and analyzed using the statistical analysis.

Data analysis method: Descriptive statistical indicators and methods including frequency, percentage, mean, standard deviation and inferential statistics indicators including the multivariate analysis, Manova, data variance analysis test (Levine test) were used.

RESULTS AND DISCUSSION

As shown in Table 1, the scores for the personality variable were as follows:

Neuroticism: Mean and SD for the teachers for the normal students were 18.62 and 3.84, respectively, for the teachers for the autistic students were 18.10 and 3.25, respectively and for all teachers were 17.36 and 3.55, respectively.

Extraversion: Mean and SD for the teachers for the normal students were 25.42 and 5.67, respectively, for the teachers for the autistic students were 22.36 and 4.24, respectively and for all teachers were 23.89 and 4.96, respectively.

Conscientiousness: Mean and SD for the teachers for the normal students were 22.08 and 3.34, respectively, for the teachers for the autistic students were 22.00 and 4.26, respectively and for all teachers were 24.04 and 3.81, respectively.

Agreeableness: Mean and SD for the teachers for the normal students were 22.48 and 4.62, respectively, for the teachers for the autistic students were 21.89 and 4.18, respectively and for all teachers were 22.19 and 4.40, respectively.

Openness: Mean and SD for the teachers for the normal students were 23.86 and 4.24, respectively, for the teachers for the autistic students were 26.28 and 6.84, respectively and for all teachers were 25.07 and 5.54, respectively

As shown in Table 2, there is no significant relationship between the teachers for the autistic students and the teachers for the normal students in terms of the neuroticism as a personality trait ($p = 0.685$ and $F = 0.978$). In other words, with respect to the mean of two groups, the teachers for the autistic students and the teachers for the normal students are equally neurotic. However, there is a significant relationship between the teachers for the autistic students and the teachers for the normal students in terms of the extraversion as a personality trait ($p = 0.001$ and $F = 11.580$). In other words with respect to the mean of two groups, the teachers for the normal students are more extrovert compared to the teachers for the autistic students. There is no significant relationship between the teachers for the autistic students and the teachers for the normal students in terms of the conscientiousness as a personality trait ($p = 0.115$ and $F = 1.729$). In other words, with respect to the mean of two groups, the teachers for the autistic students and the teachers for the normal students are equally conscientious.

There is no significant relationship between the teachers for the autistic students and the teachers for the normal students in terms of the agreeableness as a personality trait ($p = 0.334$ and $F = 0.944$). In other words, with respect to the mean of two groups, the teachers for the autistic students and the teachers for the normal students are equally agreeable. There is a significant relationship between the teachers for the autistic students and the teachers for the normal students in terms of the openness as a personality trait ($p = 0.0001$ and $F = 9.729$). In other words with respect to the mean of two groups, the teachers for the normal students showed more openness compared to the teachers for the autistic students.

Table 1: Mean, SD of the score of variables of the personality traits of the teachers for the autistic students and personality traits of the teachers for the normal students

Variables	Statistical indicators subjects	Mean	SD	N
Neuroticism	Teachers for the normal students	18.62	3.84	60
	Teachers for the autistic students	18.10	3.25	60
	All teachers	17.36	2.55	120
Extraversion	Teachers for the normal students	25.42	5.67	60
	Teachers for the autistic students	22.36	4.24	60
	All teachers	23.89	4.96	120
Conscientiousness	Teachers for the normal students	22.08	3.34	60
	Teachers for the autistic students	22.00	4.26	60
	All teachers	22.04	3.81	120
Agreeableness	Teachers for the normal students	22.48	4.62	60
	Teachers for the autistic students	21.89	4.18	60
	All teachers	22.19	4.40	120
Openness	Teachers for the normal students	23.86	4.24	60
	Teachers for the autistic students	26.28	6.84	60
	All teachers	25.07	5.54	120

Table 2: The results of the one-variable variance analysis in MANOVA on the personality traits of neuroticism, extraversion, conscientiousness, agreeableness and openness for the experiences of the teachers for the autistic students and personality traits of the teachers for the normal students

Variables	Sum of square	df	Square mean	F-value	Sig.
Neuroticism	124.76	1	124.76	0.978	0.6850
Extraversion	587.36	1	587.36	11.580	0.0001
Conscientiousness	325.78	1	325.78	1.729	0.1150
Agreeableness	284.44	1	284.44	0.944	0.3340
Openness	415.61	1	415.61	9.729	0.0001

As shown in Table 2, there is no significant relationship between the teachers for the autistic students and the teachers for the normal students in terms of the neuroticism as a personality trait ($p = 0.685$ and $F = 0.978$). In other words, with respect to the mean of two groups, the teachers for the autistic students and the teachers for the normal students are equally neurotic. Therefore, teachers should be emotionally stable and treat the stressful situations with quietness. However, there is a significant relationship between the teachers for the autistic students and the teachers for the normal students in terms of the extraversion as a personality trait ($p = 0.001$ and $F = 11.580$). In other words with respect to the mean of two groups, the teachers for the normal students are more extrovert compared to the teachers for the autistic students. Therefore, it can be said that time pressure (overwork in a short time), teaching techniques and strict working conditions lead to the job burnout for the teachers for the autistic students compared to the teachers for the normal students. Low score shows the introversion. Introvert people tend to be independent and feel free when they are alone.

There is no significant relationship between the teachers for the autistic students and the teachers for the normal students in terms of the conscientiousness as a personality trait ($p = 0.115$ and $F = 1.729$). In other words, with respect to the mean of two groups, the teachers for the autistic students and the teachers for the normal students are equally conscientious. This is

consistent with that of Maleki, Mirzayee and Hatami (2000), Khodaei and Shokri and Ehteshamzadeh *et al.* (2008). Therefore, it can be said that the conscientious people are powerful, ambitious and hard working. They try to solve problems and emphasize on accuracy and completeness. Conscientiousness is often associated with perseverance and physical competence. Unconscientious people avoid the necessary subtlety, precision and cleanliness. Conscientiousness includes traits such as organization, accuracy and reliability or traits such as carelessness, negligence and uncertainty. Obtaining the knowledge on personal traits of our colleagues improves the quality of the interpersonal relationships and lead to the individual and social success.

There is no significant relationship between the teachers for the autistic students and the teachers for the normal students in terms of the agreeableness as a personality trait ($p = 0.334$ and $F = 0.944$). In other words, with respect to the mean of two groups, the teachers for the autistic students and the teachers for the normal students are equally agreeable. This is consistent with that of Mirzayee and Hatami (2000) and Ehteshamzadeh *et al.* (2008). Agreeableness shows the people's interests and attitudes toward the environmental stimulations. Agreeable people are independent, curious, perfectionist and creative. These people are curious about the inner world and the outer world; moreover, they experience an empirical life. Therefore, agreeableness teachers are needed to improve the teaching quality.

There is a significant relationship between the teachers for the autistic students and the teachers for the normal students in terms of the openness as a personality trait ($p = 0.0001$ and $F = 9.729$). In other words, with respect to the mean of two groups, the teachers for the normal students showed more openness compared to the teachers for the autistic students. This is consistent with that of Mirzayee and Hatami (2000) and Ehteshamzadeh *et al.* (2008).

CONCLUSION

Therefore, there were a significant relationship between the teachers for the autistic students and the teachers for the normal students in terms of the openness and extraversion as personality traits. Therefore, it can be said that time pressure (overwork in a short time), teaching techniques and strict working conditions lead to the job burnout for the teachers for the autistic students compared to the teachers for the normal students. Since the autistic students are more forgetful compared to the normal students and need primary skills continuously (that should be taught by the teachers). Naturally, physical burnout leads to the mental burnout, negative attitudes, weak performance, headache, sleep disorder and finally introversion and aggressiveness. People with different personality traits behave in a certain way and have certain expectations, potentials, skills and needs based on their personality patterns. On the other hand, organizations satisfy the certain needs and expectations based on their objectives, tasks and activities, too. Therefore, considering different jobs based on different personality traits is of great importance. Extrovert people focus on the external world. They are interested in sexual arousal and tend to be cheerful. Extraversion includes traits including the talkativeness, assertiveness and activity level with traits such as silence, openness and introversion. Agreeableness like extraversion is a dimension of individual tendencies. Agreeable people need the interpersonal support and sympathy. However, disagreeable people are stubborn and are not sympathetic. Agreeableness includes traits such as kindness, trust, warmth or traits such as hostility, selfishness and distrust. Extrovert people like to be happy, social, realist and competitive. They focus on the clear dimensions of the phenomena. They focus on their individuality and prefer to be different from others and

express this. Most of the extrovert people are independent or even aggressive. Sometimes, they ignore their mistakes or reject it. Introvert people claim that extrovert people are more talkative, shallow and aggressive or indifferent.

REFERENCES

- Allport, G.W., 1937. Personality. Holt, New York, USA., Pages: 181.
- Buss, D.M. and H. Greiling, 1999. Adaptive individual differences. *J. Personality*, 67: 209-243.
- Costa, J.P.T. and R.R. McCrae, 1990. Personality disorders and the five-factor model of personality. *J. Personality Disord.*, 4: 362-371.
- Ehteshamzadeh, P., H. Ahadi, M.S.D. Enayati, M.M. Mazaheri and A.R. Heidari, 2008. The relationship between extroversion, Neuroticism, forgiveness and Islamic coping strategies with happiness in university students of Ahvaz in 2008. *Sci. Res.*, 38: 63-92.
- Fist, H. and F. Gregory, 2002. Theories of Personality. Davan Publication, Tehran, Iran.
- Karimi, Y., 2008. Psychology of Personality. Virayesh Publication, Tehran, Iran.
- Milanifar, B., 2007. Mental Health. 8th Edn., Ghomes Publications, Tehran, Iran.
- Mirzayee, F. and H.R. Hatami, 2010. The relationship between personality traits and happiness in the students. *Andisheh Raftar*, 17: 47-56.
- Pervin, L. and J. Oliver, 2001. Personality. Aeesh Publication, Tehran, Iran.
- Rothmann, S. and E.P. Coetzer, 2003. The big five personality dimensions and job performance. *SA. J. Ind. Psychol.*, 29: 1-296.
- Schultz, D.P. and S.E. Schultz, 1998. Theories of Personality. 6th Edn., Brooks/Cole Publication, New York, ISBN: 9780534341190, Pages: 530.