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RESEARCH ARTICLE

Comparative Evaluation of Personality traits among Isfahan and Tehran Citizens

Azam Golabdar¹, Kazem Rasoolzadeh Tabatabaie²*, Maryam Esmaeilinasab³

¹M.A. in General Psychology, Tarbiat Modares University, Tehran, Iran ²Associate Professor in Psychology, Tarbiat Modares University, Tehran, Iran ³Assistant Professor in Psychology, Tarbiat Modares University, Tehran, Iran *Corresponding Author E-mail: rasoolza@modares.ac.ir

ABSTRACT:

The present study compares the personality traits between two subcultures of Isfahan and Tehran in different age groups using a causal-comparative assessment. The participants included 661 individuals aged 20 years old who were selected from the citizenry of Tehran (region 6) and the citizenry of Isfahan (region 3) using stratified random sampling method in five different age groups. To collect data, NEO-FFI and for data analysis independent t-test were used. The results indicated that conscientiousness of the 20-30 years old age group in citizenry of Isfahan was significantly higher than their peers with citizenry of Tehran. Agreeableness in the age group of 65 years old and neuroticism in the 30-40 years old age group in citizenry of Tehran were significantly higher than the citizenry of Isfahan. The traits of extroversion and openness to experiences were significantly different between citizenry of two subcultures. Further studies on cultural psychology and on other subcultures seem necessary.

KEYWORDS: Personality, Traits, Age groups, Isfahan, Tehran.

INTRODUCTION:

Personality is the totality of psychological functions, used to describe coherent patterns in emotion, cognition, attitudes, and behaviors(1). There is no census on definition of personality provided by psychologists; therefore, this concept can be interpreted in many ways. While All port (1949) was able to collect 50 different descriptions of personality, this variety in meaning is not related to the main principle of personality but to the defition made for the concept(2).

According to All port, the dynamic structure within an individual character consists of psychophysical systems, which determine the specific behaviors and thoughts of a person(3). Eysenk (1985) defines personality as more or less stable structure of traits, mood, thinking and even physical features of a person, which determine the unique compatibility of the individual with the environment(4). However, researchers have agreed upon big five factors of personality(5), including neuroticism, extroversion, openness, conscientiousness and agreeableness(6). All of these factors can be observed in various age, gender and cultural groups(7).

The factor of neuroticism contains the aspects of anxiety, aggression, depression, timidity, precipitancy, and vulnerability. In fact, basis of this indicator is form by having negative feelings, including fear, sadness, excitement, anger, guilt, and permanent and pervasive sense of frustration(8). People with these features tend to have irrational thoughts, have low self-esteem, and use

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ineffective coping strategies(9). Extraversion is determined with social, talky, seeking, and loving traits(3). In other words, high levels of extraversion are related to being active, optimist, brave, sociability, and high sense of self-efficacy(10, 11).

The concept of openness is indicative of acceptance of new opinions, approaches, and experiences. The main characteristic of people, who are closed to experience. prefers familiar, practical, and realistic items and no willingness to experience new things(12). On the other hand, those with high level of openness are smart, creative, imaginative, and flexible and demand to different topics(9). experience agreeableness is related to altruism, gratitude and appreciation, agreement and kindness(13). This concept is actually characterized by traits of heartedness, compassion, politeness and simplicity(3), significantly associated with positive social behaviors, such as helping others, emotion regulation and collaboration with others(14). Opposite behaviors include aggression, selfishness and mistrust(15).

Factor of conscientiousness is a dimension of individual differences in organization and development, related to dutifulness, self-discipline, ambition, thinking before acting, compliance with laws, and norms and diligence. People with low levels of consciousness are lethargic and indifferent(12, 16) and their behaviors could harm organizations or society members(17). On the other hand, highly conscientious people are less distracted, have more ideas, are disciplined and well organized, and have the tendency to have progress(18).

Given the association of these traits with other important psychological topics and their effects on all mental and physical aspects of an individual, conduction of a research in this regard is of paramount importance. These factors can be predictors of health(19-21), life style(22), creativity, and educational function and motivation(23-26), drug use(27) and satisfaction with life(28, 29). In addition, personality traits can determine solidarity of physical activity(30), preferred dietary choice and using special regimes by individuals(31, 32). According to the literature, extraversion conscientiousness are strong co-morbid of healthy behaviors(21), and changes in personality traits and interaction among them can predict physical and mental health of a person. For example, increased neuroticism is associated with weakened health(33).

In general, personality of each person is affected by two groups of social and biological factors. In this regard, the social factors include age, gender and glandular-nervous factors, whereas the biological factors include environment, family and culture(34). Among the

determinants of personality, factor of culture is of paramount importance(35). Culture is an important component of life that has been given to us, and our daily behavior, cognition and function are the result of everything we can learn in our living environment(36). Kleinburg (1963) quoted from MohammadiAsl (2012) emphasizing that character is caused by cultural streaming and the concept of character is somewhat the representative of attracting environmental components. In other words, personality of members of a society is related to their culture, components of which have specific impacts of characteristics of a person(37). In order to confirm whether it is culture that determines difference in personality traits of people or personal characteristics that explain cultural traits, Hofstede (2004) has marked that culture affects personality traits. On the other hand, McCrae (2004) expressed that cultural values reflect personality traits of people(12, 38). Clark (1990) quoted the same reference and pointed out the national personality of a person, marking that people of a nation have a stable and distinctive pattern of behavior and personality traits. In this regard, several studies have evaluated the differences between nations in terms of personality traits. For example, Lester (2005) have expressed that Portuguese are neurotic and introverted and Danes are neurotic and extroverted(39). Moreover, there are various patterns in a culture known as sub-cultures, which are in fact the culture of a specific group or stratum linked to the whole culture of a society(37). While there is a great number of studies on personality traits and role of cultural factors in different countries, a few studies have been conducted in this regard in Iran. In fact, the majority of studies in Iran are limited to different stratums, including Kurds, Lors and Baluchis with various languages. In a study by Shahidi, Nejati and Kamari (2015), the effect of stratums and climates on personality traits of adolescents was evaluated and a significant difference was observed in this regard(40).

Meanwhile, no such research has been conducted to evaluate sub-cultures with mutual language, such as citizens of Isfahan and Tehran, even with remarkable cultural differences in various age groups. With regard to the available studies and significant impact of personality on all aspects of individual and social life and given the increased knowledge of people about these components, which affects the quality of interactions, treatment results and policy-makings, conduction of more research in this regard is of paramount importance. This type of research can facilitate the planning of organizations and institutes, helping the officials and authorities have more effective functions based on differences in characteristics in the two mentioned subcultures and create a situation to improve the quality and quantity of life of these people, leading to increased satisfaction with life. Moreover, the present study can lead to development of fundamental research, creating the foundations for further studies in this area in the country. With this background in mind, this study aimed to compare different personality traits of citizens of two sub-cultures of Tehran and Isfahan based on the age of the participants. In addition, it is aimed to answer the following questions:

- What are the differences between citizens of Isfahan and Tehran in terms of neuroticism feature?
- What are the differences between citizens of Isfahan and Tehran regarding extroversion feature?
- What are the differences between citizens of Isfahan and Tehran in terms of agreeableness feature?
- What are the differences between citizens of Isfahan and Tehran regarding openness feature?
- What are the differences between citizens of Isfahan and Tehran in terms of conscientiousness feature?

MATERIALS AND METHODS:

This causal-comparative study was conducted to evaluate and compare the personality traits of two groups (Isfahan and Tehran) and no change has been applied on the independent variable by the researcher.

Study Population:

The present study assessed two statistical societies of Isfahan (residents of the three region) and Tehran (residents of the six region), selected due to their popularity. In total, 323829 individuals were assessed, among whom 103295 people were living in the region three of Isfahan and 220534 individuals were residents of the region six of Tehran.

Sample size Estimation and Sampling Method:

Considering the age of the participants, stratified random sampling was used to collect the subjects. In addition, sample size was estimated by using Morgan table and based on the study objectives. With regard to the nature of the research (causal-comparative design), in line with theory of psychosocial development and considering the division of the subjects into five age groups, sample size was estimated at 300 in each city (600 in total). The selected subjects were divided into five age groups of 20-30, 30-40, 40-50, 50-65 and >65. Afterwards, sample size increased to 661 (325 citizens of Isfahan and 326 residents of Tehran) according to statistical center of Iran and relative abundance in both regions.

Research tools:

NEO-Five Factor Inventory:

In this research, the short form of NEO-Five Factor Inventory (NEO-FFI) was applied to collect data and evaluate five major traits of personality. This 60-item scale was first designed by McCrae and Costa and score

of 0-4 is allocated to each item. Each item is indicative of one of the big five factors of personality, including neuroticism (N), extroversion (E), openness (O), agreeableness (A) and conscientiousness (C). Each factor was allocated 12 items of the scale and each subject could obtain a score within the range of 0-48. In terms of validity of NEO-FFI, results of several studies were indicative of good internal consistency between its subscales. In this regard, Mooradian and Nezlek (1995) quoted Fathi Ashtiani (2014) and estimated the Chronbach's alpha of neuroticism, extroversion, openness, agreeableness and conscientiousness at 0.84, 0.75, 0.74, 0.75 and 0.83, respectively(8).

This questionnaire has been validated in Iran and its reliability was confirmed in 208 students from using test-retest within three months, estimated at 0.83, 0.75, 0.80, 0.79 and 0.79 for factors of N, E, O, A and C (41). There have been some reports on validity of NEO-FFI factors. It is noteworthy that the shortened form of NEO is an exact match of its full version. Scales of the short form had correlation of >0.68 with the scales of the full version of questionnaire (the same reference). In addition, validity of the questionnaire was estimated at Cronbach's alpha of 0.5 and 0.8 in the present study.

Data analysis:

After scoring the questionnaire based on relevant keys, data analysis was performed in SPSS using descriptive methods (central and dispersion indicators), and independent t-test based on the nature of the article and application of two independent groups with variable distance.

RESULTS:

At first, descriptive indicators of five big factors of personality were evaluated based on the five age groups. Then, level of significance in each age group was determined using independent t-test. In this section, only the statistical significant differences between the two groups of Isfahan and Tehran residences are provided. In addition, mean difference in personality traits of citizens of the two cities are presented in Figure 1.

Table 1.Descriptive indicators of neuroticism score

Age group (year)	Sub-cultures	Number	Mean	Standard deviation
20-30	Tehran	93	22.98	6.04
	Isfahan	89	22.63	6.82
30-40	Tehran	58	20.4	7.72
	Isfahan	68	22.85	6.55
40-50	Tehran	59	22.19	6.85
	Isfahan	63	21.73	7.78
50-65	Tehran	82	21.17	5.78
	Isfahan	59	20.83	6.3
> 65	Tehran	44	20.77	6.03
	Isfahan	46	20.71	6.5

Table 2.Results of independent t-test for neuroticism variable

	Statistics	F Levine	Level of significance	T	Degree of freedom	Level of significance
Age group(yea	r)					
20-30		1.971	0.162	0.367	181	0.714
30-40		1.102	0.296	-1.933	124	0.05
40-50		0.432	0.512	0.343	120	0.732
50-6		0.671	0.414	0.332	139	0.740
> 65		0.021	0.885	0.042	88	0.967

Results of Table 2 indicated that assumption of the level of neuroticism was more significant in citizens homogeneity of variance in relation to the characteristics of Tehran within the age range of 30-40 years, compared of neuroticism was observed in all age groups. In to the residents of Isfahan within the same age range addition, the results of independent t-test were only (P=0.05). significant in age group of 30-40 years. In other words,

Table 3. Descriptive indicators of conscientiousness score

Age group (year)	Sub-cultures	Number	Mean	Standard deviation
20-30	Tehran	93	32.72	6.58
	Isfahan	89	34.70	5.99
30-40	Tehran	58	34.69	6.23
	Isfahan	68	32.93	6.30
40-50	Tehran	59	36.37	5.37
	Isfahan	63	35.82	7.68
50-65	Tehran	82	37.04	5.70
	Isfahan	59	37.04	6.02
> 65 years	Tehran	44	36.11	5.20
•	Isfahan	46	34.80	6.87

Table 4.Results of independent t-test for conscientiousness variable

	Statistics	F Levine	Level of significance	T	Degree of freedom	Level of significance
Age group(yea	ır)					
20-30		0.623	0.431	-2.128	181	0.035
30-40		0.091	0.763	1.576	124	0.118
40-50		9.077	0.003	0.454	120	0/651
50-65		0.473	0.493	0.003	139	0.998
> 65		3.521	0.064	1.016	88	0.313

Table 5.Results of Mann-Whitney U for conscientiousness variable							
	Statistics Mann-Whitney U	Z	Level of significance				
Age group(yea	ar						
40.50	1856	0.015	0.088				

five age groups of citizens of Tehran and Isfahan are provided in Table 3. As observed in Table 4, assumption of homogeneity of variance in the age group 50-40 years has not been met, for which we used non-parametric Mann-Whitney U (Table 5). However, the results were not significant. On the other hand, the results of

Mean and standard deviation of conscientiousness in the independent t-test were significant regarding age group of 20-30 years (P<0.05). In other words, the trait of conscientiousness was more in citizens of Isfahan within the age range of 20-30 years, compared to the residents of Tehran within the same age range, which was indicative of a significant difference in this regard.

Table 6.Descriptive indicators of agreeableness score

Age group (year)	Sub-cultures	Number	Mean	Standard deviation
20-30	Tehran	93	29.81	5.71
	Isfahan	89	29.72	5.58
30-40	Tehran	58	32.15	5.05
	Isfahan	68	32.19	5.10
40-50	Tehran	59	32.49	5.69
	Isfahan	63	32.55	5.76
50-65	Tehran	82	32.33	5.11
	Isfahan	59	32.15	5.71
>65	Tehran	44	33.68	5.42
	Isfahan	46	30.24	6.23

Table 7.Results of independent t-test for agreeableness variable

	Statistics	F Levine	Level of si	gnificance T	Degree of freedom	Level of significance
Age group(yea	r					
20-30		0.007	0.935	0.107	181	0.915
30-40		0.010	0.922	-0.040	124	0.968
40-50		0.049	0.826	-0.062	120	0.951
50-65		1.157	0.284	0.193	139	0.847
>65		0.373	0.543	2.797	88	0.006

agreeableness trait was determined in all age groups of the two groups of citizens from Isfahan and Tehran. According to Table 7, homogeneity of variances was observed in all age groups and independent t-test

Table 6, mean and standard deviation of indicted a level of significance in age group of >65 years (P<0.05). In fact, the agreeableness trait was more observed in citizens of Tehran aged >65 years, compared to residents of Isfahan in the same age, demonstrating a significant difference in this regard.

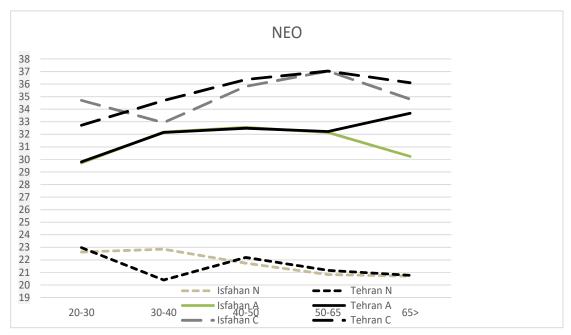


Figure 1.Mean personality traits (A, C, N) disaggregated by age and city of residence

DISCUSSION AND CONCLUSION:

The present study was conducted to comparatively evaluate the personality traits of citizens from Isfahan and Tehran, divided into five age groups. According to the results of independent t-test, significant differences were observed in some of the age groups between the citizens of Isfahan and Tehran in terms of neuroticism, conscientiousness and agreeableness. In this regard, the traits of conscientiousness in citizens of Isfahan aged 20-30 years, neuroticism in residents of Tehran aged 30-40 years and agreeableness in Individuals aged >65 years from Tehran were observed, compared to the other personality traits. According to the results by Najarpourian et al. (2012), the highest frequency of personality trait in citizens of Isfahan was entrepreneur personality type, whereas the lowest frequency was related to hedonist and impulsive personality types in the mentioned individuals(42). We can explain our findings

based on the results of the mentioned study since both of the studies can point out the family and social culture of residents of Isfahan. Experienced people would suggest the younger population to work hard to achieve their goals and have a forward-looking and economic thinking. In addition to internalization of these issues by young people, the religion and beliefs of these individuals causes the adherence to ethical principles and accurate performance of ethical commitment. As a result, conscientiousness traits are prominently observed in their social behavior. This result is incongruence with Javadian et al. (2013), in which there was a positive relationship between conscientiousness trait and favorable social behavior and mean acceptable social behavior of young population of Isfahan was higher than medium(43). On the other hand, high score in conscientiousness leads people toward more responsibility about themselves, nutrition and physical

fitness. All of the mentioned features, along with order and management, can decrease stress in individuals and they can face with disasters more reasonably and finish their incomplete works, which reduced their level of stress(22). These features are more observed in citizens of Isfahan, compared to Tehran, due to higher frequency of conscientiousness. On the other hand, traditional social life and social interactions based on collectivism have a special place among the citizens of Isfahan, giving them a sense of belonging and not being alone. Furthermore, since Tehran's population is larger and the percentage of indigenous people is lower, compared to Isfahan, residents of Tehran more encounter with social issues, employment and traffic. The impact of the mentioned issues is more observed in individuals aged >40 years, which could be an indicative of higher frequency of neuroticism in the group from Tehran. High incomes also lead to increased social class and economy, resulting in more access to amenities, sports, health care and better nutrition. In this regard, it was observed that citizens of Isfahan had lower incomes, compared to individuals from Tehran, and could benefit from less facilities and amenities, which can significantly impact the trait of agreeableness.

However, it should be mentioned that the majority of citizens of Isfahan are more conservative and cautious in their interactions, which is more observed in the elderly, justifying the low level of agreeableness in these individuals. The mentioned results are in line with the results obtained by Hosseini Zare et al. (2014), conveying a significant relationship between social support and mental, physical and social health of the elderly. This type of support improves the emotional, cognitive and physical aspects(44), leading to reduced economic and emotional problems and causing more satisfaction with life(45).

Attention to the mentioned subjects confirmed the higher level of agreeableness in citizens of Tehran. Our findings, which yielded a significant difference between personality traits of two sub-cultures of Isfahan and Tehran, can help other researchers design required intervention programs and aid policy-makers create suitable strategic plans, which eventually leads to enhanced quantity and quality of life and increased satisfaction of our nation. One of the major drawbacks of the present study was lack of completion of the full version of NEO questionnaire due to the large sample size of the research, which led to the use of the short form of NEO. In addition, only two sub-scales were compared in this study; therefore, it is recommended that the full version of the questionnaire be used and other sub-scales be evaluated in further studies to obtain more accurate results.

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