

University students' personality profile based on Casta & MaCrea Five factor theory

Abedi G.¹, Mohammadi A.^{2*}, Mohammadi F.², Alizadeh A.², Hosseini H.², Rostami F.¹

¹Health Sciences Research Center, Mazandaran University of Medical Sciences, Sari, Iran

²Students Mazandaran University of Medical Sciences, Sari, Iran

Corresponding Author: Mohammadi, Akbar, Students Mazandaran University of Medical Sciences, Sari, Iran | Email: Mohammadi8194@yahoo.com

ABSTRACT

Background & Objectives: Personality as a determinant can influence all human behaviors in personal & social life areas & sometimes as a result of incompatible traits & characteristics, the person & his/her relatives face him/her with a serious problem. Therefore, this study has been conducted to identify students' personality types in Mazandaran medical university in 2011.

Methods: This is a descriptive & cross-sectional research whose community under study includes all Mazandaran medical science university students in 2011. To perform the research, a Costa & McCrea 5-factor personality questionnaire was used & the collected data was analyzed through Spss V₁₉ software & using descriptive methods & also analytic procedures including statistical tests as t-tests, k², manvitni & one-way variance analysis.

Findings: The psychoneurotic personality type score was almost equal in health care, nursing & medical faculties and less than the other 3 faculties. And in extrovert type, dentistry students were more extrovert than the paramedic ones & the pharmacy students were more extrovert than the other ones. Open-mindedness & conscientiousness personality score was higher in nursing students than the other faculties.

Conclusion: Personality as a whole makes a person distinguished from others and everyone has his/her own unique traits. Thus, to know (recognize) a person's personality types and his/her environmental pattern in order to utilize knowledge on personality types & environmental models for predicting some result of such matching's such as career, occupational changes, career success, personal qualification, educational & social behavior is inevitable.

Keywords: personality, 5-factor pattern, university students

Introduction

Generally, every individual has a series of characteristics that makes him/her show a special behavioral manner regularly & permanently. These traits make up a person's character as a whole (1). Personality is one of the most fundamental psychological concepts that can help human beings recognize themselves & others better (2, 3). Heligard believes that personality is the kind of traits that enable the person to communicate with other ones and facilitate his self-respect realization (6). Alport views personality as an individual's inner dynamic organization made up of physical- psychological systems. These systems generate the characteristic patterns of a person's behavior, thoughts & feelings. On the other hand, Kerech and Kerachifk claim that personality refers to absolutely distinct behavioral patterns & methods mankind utilizes against reactions and facing life daily affairs (6). Moreover, Katel considers personality as an organization assisting people to predict their behavior in various situations (8). It is important to notice that determining personality type, in many cases, clarifies the factors behind psychological disorders, how they develop & their manifestations (9). The study done by Hosseini- nasab et al., on Tabriz- located third secondary level girl students in 2009-2010 showed neurosis (52%) extroversion 55%, flexibility 54%, agreeability 53%, conscientiousness 60% (10). Personality as a whole makes the person distinguished from the other ones & everybody has his/her own unique traits & based on this, of various theories, each emphasizes on different but connected human behavior aspects (11).

One of the most efficient & comprehensive theories proposed about personality is 5- factor theory (12). Costa, McCrea (1987) consider personality made up of 5 major factors, its hypothesized that these 5 factors cover many personality traits, tendency to be nervous (emotional instability) which accompanies anger, anxiety & depression. And the extrovert also tends to physical & verbal activities. Duty- oriented personality is characterized by diligence, discipline & seriousness. An agreeable person is distinguished mainly with modesty, congeniality, forgiveness, kindness, generosity, altruism & finally, openness is identified with qualities like artistic & cultural interests, creativity & wisdom seeking (13). Regarding extensive student population & that students are from talented & selective groups in society & the future builders of every country & on one hand, due to special issues of psychological growth, they are more vulnerable to mental nuisances. Thus, to recognize their personality type is particularly important for learning & scientific knowledge increase. Yet, in recent years, no research was found to study personality types in Mazandaran medical science university students. Therefore, this study had been performed to determine students' personality types in terms of background variables in Mazandaran medical science university in 2011 in order to use its results in better educational & administrative planning and also to present appropriate consultative services in university.

Method

This is a descriptive & cross- sectional study to determine personality types in students after adopting permit from Mazandaran medical university & taking the studied subjects' conscious consent. The community under study in this research includes all students at Mazandaran University of medical science in 2011. Collecting data was done through using 5- factor Costa & McCrea personality questionnaire, the reliability of this test in the U.S sample using α Cronbach

for neurotic factors (N), extroversion (E), open mindedness (D), Agreeability (A), Conscientiousness (C), has been 0.93, 0.87, 0.89, 0.76 & 0.86 respectively (14). And in Iran too, Garoosi has confirmed the 5- factor structure of this questionnaire comprehensively & its internal similarity coefficients using Cronbach's alpha (α) for the original factors were reported 73.86%, 68.56% & 0.87, respectively (15). And Shafiei also in his project has reported this pattern factors validity as 0.87, 0.76, 0.84, 0.73 & 0.78, respectively (16). The number of sample volume regarding the confidence coefficient 95% & error 0.05 was estimated 386 individuals, in which sampling was done randomly in a category type. In such a way that a sample was assigned to 6 faculties & based on the population of every faculty samples were chosen from every faculty using simple random method & the questionnaire was filled in by interview & face- to-face. After data was collected using SPSS Version 19 software, it was analyzed by descriptive methods & also analytic approaches including statistical tests, t- test, K2, manvitni, and one- way variance analysis.

Findings

The statistical sample of the study, i.e., 395 individuals among whom 175 were male (44.2%) & 220 female (55.8%). In terms of age, 30% students were under 20 & 36% were 21-22 years old & 21% 23-24 & 13% over 25 years old. The result obtained showed that 3 factors as marriage, the extent of doing religious duties & using tabacoo products had no meaningful relationship with personality types but among faculty factors, doing sports & having disease records had a significant relationship with "conscientiousness" ($p \leq 0.1$). There was a meaningful relationship ($p \leq 0.1$) between gender factor open- mindedness personality type at 10% error level. Also a significant association was found between hope to future with extroversion & conscientiousness personality type ($p \leq 0.05$).

According to Table 1, examining the relationship between gender & personality suggests that female students have meaningful higher agreeability & conscientiousness than male students.

Pearson correlation test shows remarkable results, there is a meaningful direct relationship between all personality types except open- mindedness.

Data analysis related to personality types of every one of the faculties, according to what is illustrated in Table 3, showed that psychoneurosis personality type score in health care, nursing & medical faculties is almost equal or less than the other 3 ones, that is proportionate to the other 3 faculties, they have more stable emotions and less anxiety, depression & stress. In extroversion type, dentistry students were more extrovert compared with the other ones & paramedical and pharmacy students were more introvert than others. In open- mindedness type, dentistry students compared with other students, were significantly more open- minded while nursing students were less open- minded than the other ones. Agreeability personality type in nursing students was higher than the other faculties and this score was the lowest in dentistry students & in conscientiousness personality type too nursing students had the highest score. That is compared with the other students, they were more conscientious & responsible and after nurses, medical

students & than health care ones had the highest score in conscientiousness & dentistry students got the lowest score.

Conclusion

To recognize personality types of a person & his environmental pattern in order to utilize our knowledge about personality types & environmental models to predict some results of such matching's such as job, occupational changes, career success, personal qualification, educational and social behavior is inevitable. Based on the results achieved, the extent of doing religious duties was meaningfully higher in girl students than the boy ones which is in harmony with Golzari's findings (17). Other various studies have demonstrated that between the two genders, there is difference in piety measure & the scale is heavier on women's pan.

According to this research finding, there is a meaningful relationship between gender factors with open- mindedness personality type; in fact, girl students' open- mindedness score is higher than the boy ones which is congruent with Bashart,s findings (18). In the present study, agreeability in girl students is higher than that of the boys that is absolutely aligned with the results of Costa et al. (19). With Badiu study results indicating that women, compared with men, achieved higher scores in agreeability factor is homogenous; however, it doesn't match with findings by Jalilvand & Ejeei (21). The other research findings indicated that extroversion in girl students was higher than boys. While in Besharat,s study, boy students score mean in extroversion sub measure was more than the girl students' one which is opposite the present research. In conscientiousness sub measure too, findings have suggested that the mean of girl student score was more than that of boy ones score, while Costa et al., study results showed that there was no significant difference between two genders in conscientiousness factor & its aspects, however, the study by Shokri et al., (23) showed the boy students have reported higher scores in conscientiousness factor meaningfully to the girl ones which is in contrast with this study results. Psychoneurosis personality type score in health care, nursing & medical faculties was almost equal or less than the other 3 ones. Neurosis (N) refers to an individual's tendency to experience anxiety, tension, compassion seeking, hostility, depression & low self- esteem (19). In extroversion type, dentistry students were more extrovert than the other ones & paramedical & pharmacy students were more introvert than the other students. Extroversion (E) implies an individual's tendency to be positive, bravery seeking, being energetic and intimate (19). And also in agreeability type, dentistry students had higher agreeability level than the other ones while health care students had lower agreeability level than the other students. Agreeability (A) refers to a person's tendency for generosity, kindness, open- handedness, congeniality & sympathy, altruism & trusting (19). Open- mindedness & conscientiousness personality types in nursing students were higher than the other faculties. Open- mindedness (O) implies an individual's tendency for curiosity, loving art, being artistic, flexibility & seeking wisdom & conscientiousness (C) refers to a person's tendency to be organized & efficient, confidence & dependence potential, self- discipline, progress orientation, being logical and down to earth (19). That is they have higher open- mindedness & conscientiousness & this is the lowest score in dentistry students.

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Conflict of Interest: None

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Table 1: Examining the relationship between gender & personality

Gender personality	Boy (n=174)	Girl (n=220)
Psychoneurosis	36.02±5.79	36.16±5.70
Extroversion	33.95±4.73	34.53±5.11
Open mindedness	36.09±4.79	36.55±4.65
Agreeability	40.74±5.75	42.70±5.41
Conscientiousness	44.69±6.32	46.23±6
	Mean±SD	

Table 2: Pearson correlation between personalities

	Psychoneurosis	Extroversion	Open mindedness	Agreeability	Conscientiousness
Psychoneurosis	—	-.439 ^{***}	.000	-.241 ^{***}	-.405 ^{***}
Extroversion	-.439 ^{***}	—	.025	.294 ^{***}	.278 ^{***}
Open mindedness	.000	.025	—	.082	-.043
Agreeability	-.241 ^{***}	.294 ^{***}	.082	—	.332 ^{***}
Conscientiousness	-.405 ^{***}	.278 ^{***}	-.043	.332 ^{***}	—
Pearson correlation test, ***meaningful at 1%					

Table 3: every personality score by faculty variable separation

Personality types	Health faculty N=56	Nursing faculty N=53	Medical faculty N=127	Paramedical faculty N=97	Pharmacy faculty N=46	Dentistry faculty N=15
Psychoneurosis	35.26±6.19	35.94±5.73	35.93±6.16	36.42±5.55	36.89±4.73	36.73±4.46
Extroversion	34.21±4.73	34.64±5.39	34.53±5.06	33.83±4.98	33.86±4.19	35.20±5.51
Open mindedness	36.46±4.81	35.96±4.06	36.14±5.46	36.25±4.48	36.76±3.82	38.40±3.52
Agreeability	40.94±6.16	43.24±5.07	41.59±5.03	42.50±6.04	41.10±5.74	40.13±6.77
Conscientiousness	45.94±6.35	47.07±5.69	46.07±6.13	45.36±6.21	44.21±5.79	39.66±5.45
One-way Variance analysis Test, meaningful at 1% level						