

## IS THERE A RELATION BETWEEN FIVE FACTOR PERSONALITY FEATURES AND ADVERTISING ALLOWED IN HEALTH?

Okan Anıl Aydın<sup>1</sup>

### Abstract

The health sector is the sector in which the health level of the society is increased, the country's greatest added value is the physical and mental well-being of the people, and many more good development or improvement of bad health conditions are applied. With the increasing competition conditions in the health sector in recent years, more attention has been paid to advertising. In this case, this study has been conducted in order to provide preliminary information about the advertising activities that are available in our country and the possible changes to be made in the future.

The aim of the study is to find out whether there is a relationship between five factors personality traits and freedom of advertising in health. The sample of the study is 400 students studying at Sakarya University. Students was made a questionnaire consisting of three parts. The questionnaire included demographic characteristics, five-factor personality features, and freedom of advertising in health. The resulting questionnaire with SPSS 24 software, Frequency Analysis, Pearson Correlation Coefficient, One-Way Analysis Of Variance and T-Tests were performed.

According to the results of the analysis, a significant relationship was found between the five factors personality features and the freedom of advertising in health. According to demographic characteristics, there was a significant difference between the results freedom of advertising in health according to some variables.

### Keywords:

Health, Advertising, Personality, Five Factors, Freedom

Citation: : Aydın, O.A. (2020) Is There a Relation Between Five Factor Personality Features and Advertising Allowed in Health?, International Health Administration and Education (Sanitas Magisterium), 6(1), 10-17.

---

<sup>1</sup> Beykent University, İstanbul, Turkey, anilaydin@beykent.edu.tr

---

## Introduction

People have been arguing over the concept of personality for centuries, but no definite theory has been put forward about the formation of personality. There are many definitions of personality because it is a comprehensive concept and it has many features related to human attitudes and behaviors (Merdan, 2013). It can be said that the general reason for this is due to the differences in the reflections of an individual's innate characteristics and later characteristics (Merdan, 2013). However, personality, the individual's approaches, behaviors, characteristics, abilities, speech style, physical appearance and the harmony against external influences (Yıldız and Dilmac, 2012). In other words, it can be defined as a different and structured relationship form established by the individual with his inner and outer environment (Ozguner, 2015).

Based on these definitions of personality, it can be said that personality can differ from person to person. It is thought that people with different personalities will not have the same view of life and behaviors and therefore personality traits will be original and unique (Tokat et al., 2013). In such a case, it is assumed that the answers to the question whether advertising should be free in health, which is one of the important issues for health, will also vary from person to person.

One of the commonly used scales to measure personality traits of people is the five-factor personality scale. The five-factor personality scale consists of five dimensions (neuroticism (emotional balance), extraversion, responsibility, openness to experience, and agreeableness). It is an evaluation model that defines this personality in the most comprehensive way (Goldberg, 1990; McCrae and Costa, 2008). Five dimensions that make up the model;

Neuroticism is defined as a tendency to react socially and psychologically. The high level of neuroticism includes repulsive emotions such as tension, hate, boredom, insecurity, anxiety and frustration, while low levels of neuroticism are associated with calmness and compliance (McCrae and Costa, 1987).

Extraversion is defined individuals who are full of life, cheerful, excited, sociable, talkative and social (Sommer Korkmaz and Tatar, 2011) and adventurous, assertive, energetic and brave. The low level of this feature can be explained by the uncommunicative personality traits (Fleeson et al., 2002).

Responsibility refers to the individual's control, discipline perception and control-oriented behaviors. The opposite can be defined by the weakness of self-control and lack of discipline (Arthur and Graziano, 1996).

Openness to experience is defined that a person is sensitive to imagination, art and beauty, is behaviorally flexible and intellectually curious, experiences complex emotions and possesses liberal values. On the other hand, in low scales, it means distance to life and closed to innovation (McCrae and Sutin, 2009).

Agreeableness defines that an individual is lovable, pleasant and harmonious in his relationships with others. People who score high scores are described as self-sacrificing, and otherwise selfish (Graziano and Tobin 2009).

Advertising in health care is one of the issues that has been discussed for decades. While it is seen as an unnecessary cost element by some groups, in others, people are required to be free because they need to be provided with better service and information (Karafakioglu, 1998).

Advertising is an announcement and promotion in which certain advertisers pay for the purchase, sale or rental of certain products or services (Ersoy et al. 2008). There are two most used advertising types in the health sector. One of them is corporate advertising. It aims to regulate patients' relations with the institution and increase their knowledge. The other is covered advertising. Competition among health institutions stands out in this type of advertisement. In this type, the words "the best" and "the best quality" are used (Guler, 2006; Tengilimoglu, 2000).

When we look at advertising in health in depth, some circles see advertising efforts as waste of resources in this area, especially since advertising is not a factor affecting demand in health services (Temel and Akıncı, 2016). In addition, the fact that the technology used in the health sector in recent years has reached very advanced levels and the introduction of technology to service users is considered important in terms of access to service. In other words, healthcare providers want the public to be aware of the high investments they make and that more patients come (Tengilimoglu, 2000). In the light of this information,



the relationship between freedom of advertising in health and five-factor personality traits will be investigated.

### **Purpose**

The aim of the study is to determine whether there is a relationship between personality characteristics of health consumers and freedom of advertising in health.

### **Method**

The questionnaire method was used to collect data in the research. The questionnaire consists of three parts. In the first part, demographic characteristics of the participants are given. The second part of the questionnaire consists of five factors personality trait scale developed by Rammstedt and John (2007) and adapted to Turkish by Horzum et al (2017). The scale consists of 5 factors and 10 questions. Five-Point Likert system was used in the scale. The scale is 5: "Always", 4: "often", 3: "sometimes", 2: "rarely", 1: "never". The third part was composed of 20 questions and 5 factors, which were developed by Ekiyor and Tengilimoglu (2014) to measure the freedom of advertising in health. Five-Point Likert system was used on the scale. The scale is 5: "strongly agree", 4: "agree", 3: "undecided", 2: "disagree", 1: "strongly disagree". The validity of the scales was made by the developers.

The universe of research consists of university students studying at Sakarya University. In the sample of the study, easy sampling which is not based on probability was used. Between March and April 2019, 400 face-to-face students were questioned. Sample size is sufficient (Altunısık et al, 2017). The study is limited to Sakarya University.

Cronbach Alpha was used to analyze the reliability of the scales used in the study. The Cronbach's Alpha value of the five-factor personality trait scale was 0.716. The Cronbach's Alpha value of the freedom of advertising in health scale was found to be 0.744. For this scale, the 19th and 20th questions were not included in the reliability analysis because they included general statements.

SPSS 24 program was used for data analysis. Frequency analysis was performed for the frequency of demographic characteristics. In order to determine whether there is a significant difference between demographic variables and freedom of advertising in health, T Test and One Way Analysis of Variance (Anova) tests were applied. Pearson Correlation analysis was used for the relationship between five factors personality type and freedom of advertising in health.

The following hypotheses were tested in the study.

H1: There is a significant difference between demographic characteristics of participants and freedom of advertising in health.

H2: There is a significant relationship between the personality traits of participants and the idea of participation in the freedom of advertising in health.

### **Results**

54.3% of the participants were male and 45.7% were female. 153 of the participants were 21-22 years old. When education times is taken into consideration, 51.5% have evening education. When the monthly income is considered, 34.8% of the participants have monthly income between 701-1400 TL, 34.3% is 700 TL and below and 31% is 1401 TL and above.

The first hypothesis of the study is the following findings regarding the relationship between the demographic characteristics of the participants and the advertising groups identified in the health sector.

**Table: 1****Results of Freedom of Advertising in Health in Terms of Gender**

DIMENSIONS	Gender	N	X	S	t	Sig. (p)
Introductory	Male	217	3,4217	.94382	.684	0,259
	Female	183	3,3489	.88003		
Informative	Male	217	4,0271	.76229	.116	0,454
	Female	183	4,0168	.76347		
Regulator	Male	217	3,8419	.79501	-2,077	<b>0,020</b>
	Female	183	4,0131	.58676		
Negative Effect	Male	217	2,9857	.87514	.358	0,360
	Female	183	2,9479	.95048		
Impressive	Male	217	3,0883	.99373	-.616	0,270
	Female	183	3,1622	1,07923		

In Table 1, Independent Samples T Test was applied to examine the effect of gender on freedom of advertising in health sector. According to the test results, there is a significant difference between regulatory advertisements ( $t = -2,077$ ;  $p = 0,020$ ). The average score of female students in terms of regulatory advertisements is higher than male students.

**Table 2:****The Results of Freedom of Advertising in Health Sector in Terms of Education Times**

DIMENSIONS	Education Times	N	X	S	t	Sig. (p)
Introductory	Daytime Education	194	3,3196	.11300	.093	0,467
	Evening Education	206	3,3301	.11311		
Informative	Daytime Education	194	3,8557	.11457	-1,345	0,133
	Evening Education	206	4,0097	.11495		
Regulator	Daytime Education	194	3,8093	.11084	.206	0,404
	Evening Education	206	3,7864	.11086		
Negative Effect	Daytime	194	2,7010	.10510	-3,260	<b>0,001</b>



	Education					
	Evening Education	206	3,0437	.10516		
Impressive	Daytime Education	194	3,1804	.12183	1,082	0,132
	Evening Education	206	3,0485	.12201		

In Table 2, since the teaching status variable consists of two categories, Independent Samples T Test, which is one of the parametric tests, was applied. According to the results of the test, there is a significant difference between negative effect advertisements ( $t = -3,260$ ;  $p = 0,001$ ). Evening Education students' average scores for negative effect advertisements is higher than the Daytime Education. Monthly income and age demographic variables were not statistically significant.

The second hypothesis of the study is the following findings for the relationship between the five-factor personality traits of the participants and the advertisement groups in the health sector.

**Table: 3**

**Five Factor Personality Traits Freedom of Advertising in Health Sector**

DIMENSIONS		Extraversion	Agreeableness	Responsibility	Neuroticism	Openness to Experience
Introductory	r	.075	.046	-.013	-.006	-.047
	Sig. (p)	.098	.426	.414	.459	.207
	N	400	400	400	400	400
Informative	r	.395*	.521**	.409*	-.053	-.093
	Sig. (p)	<b>.049</b>	<b>.000</b>	<b>.030</b>	.180	.053
	N	400	400	400	400	400
Regulator	r	.508*	.403**	.074	-.008	-.010
	Sig. (p)	<b>.031</b>	<b>.000</b>	.101	.450	.429
	N	400	400	400	400	400
Negative Effect	r	.012	.024	-.027	.516*	.061
	Sig. (p)	.420	.676	.317	<b>.022</b>	.145

	N	400	400	400	400	400
Impressive	r	.044	.050	-.018	-.061	.060
	Sig. (p)	.226	.390	.381	.152	.152
	N	400	400	400	400	400

According to the above results, there is a significant relationship between informative (r: .395;  $p < 0.05$ ) and regulatory (r: .508;  $p < 0.05$ ) advertising dimensions in the health sector and students with extraversion personality characteristics. There is a weak positive correlation with the informative advertisements and a moderately positive correlation with the regulatory advertisements.

According to the above results, there is a significant relationship between informative (r: .521;  $p < 0.05$ ) and regulatory (r: .403;  $p < 0.05$ ) advertising dimensions in the health sector and students with agreeableness personality. There is a weak positive correlation with informative advertisements and moderate positive regulatory advertisements.

According to the above results, there is a significant relationship between informative (r: .409;  $p < 0.05$ ) advertisement dimension in students with responsibility personality traits. There is a weak positive correlation between responsibility personality trait and informative advertising dimension.

According to the above results, there is a significant relationship between negative effect (r: .516;  $p < 0.05$ ) advertisement dimension in students with neuroticism personality traits. There is a moderate positive correlation between them. Finally, there was no significant relationship between any advertising dimension related to openness to experience personality trait, which is one of the other five factors personality traits.

Finally, in the frequency analysis for the 19th and 20th questions of the freedom of advertising in health scale, the participants stated that they were undecided.

## Discussion and Conclusion

In this study, the relationship between five factors personality type and freedom of advertising in health was tried to be revealed. In addition, a significant difference between the demographic characteristics of the participants and the freedom of advertising in health was investigated. According to the results of the research, the expected results were reached at a certain level.

According to the findings of the study, a significant difference was found between the freedom of advertising in health according to gender and education times, while no differences were found between monthly income and age demographic variables. Similarly, in the study of Ekiyor and Tengilimoglu (2014), no significant difference was found between age variable and advertising dimensions. A significant difference was found between the gender variable and the regulatory advertising factor. This finding is similar to that of Ekiyor and Tengilimoglu (2014) because both studies found significant differences between the types of regulatory advertising. Female participants looked more positively than male participants because of their higher average. Men stated that they were undecided, while female participants preferred to agree. In addition, a significant difference was observed between the education times and with negative effect advertisement.

When we come to the point where the research emphasizes, it is seen that there is a significant relationship between the five factors personality types and the freedom of advertising in health. In particular, there is a moderate positive correlation between extraversion, agreeableness and responsibility personality types and informative advertising types. This means that if there is any increase in these three types of personality, there will be a moderate increase in the level of participation in informative



advertising. So informative advertisement are generally acceptable. Another important finding is the positive correlation between regulatory advertisement types and extraversion and agreeableness personality traits. This means that as these personality traits increase, regulatory advertisement will increase. Finally, there is a moderate positive correlation between negative effect advertisements and individuals with neuroticism personality traits. This will be seen as an unnecessary practice in health advertising as neuroticism personality traits increase. There are no significant differences in factors such as introductory and impressive advertising types and openness to experience. This shows that there is no significant difference between the participants' positive or negative thoughts about these factors.

According to the findings, in the light of the participants, we can talk about the relationship between health advertising and five factor personality scale. This is a situation that needs to be paid attention for future advertising practices in health. However, it is important that the undecided option is selected intensively when the data is examined. This may mean that participants do not have enough information about the subject. The research should be conducted in more depth in the following period and attention should be paid to ensure that the sample has sufficient information about the subject.

The subject freedom of advertising in health is a subject that the health sector needs to focus on in today's competitive conditions and that appropriate regulations should be made. Primarily, the public needs to be informed about this issue and to be allowed to advertise as needed. Because the positive opinions of the participants about informative advertising show that this issue should be considered. It can be foreseen that the progress of health enterprises by setting such a target will have positive results for both sides.

Another important consideration is that there is no significant relationship between introductory and impressive advertising dimensions and five factors personality traits. In such a case, the participants are indifferent to the introductory and impressive advertising of the health sector.

The result from the study; five factors personality traits are related to freedom of advertising in health according to some factors. Attention should be paid to these relations and the legislators of our country should allow the health sector to advertise at a certain level and freedom. In doing so, preventing the public from bad advertisements will increase the effectiveness of correct information and regulations.

### **References**

- Altunisik, R., Coskun, R., Bayraktaroglu, S. And Lightning, E. (2017). *Research Methods In Social Sciences-SPSS Applied*. Sakarya: Sakarya Publishing. 9. Edition 144-147.
- Arthur, W. And Graziano, W. (1996). The Five-Factor Model, Conscientiousness And Driving Accident Involvement. *Journal Of Personality*, 64, 595–618.
- Ersoy, V., Guler, M. And Giritlioglu, H. (2008). *Advertising And Promotion In Health Service Delivery*. Turkish Medical Association Publications, Basak Typography Ltd. Sti. Ltd. Sti., Ankara.
- Horzum, M. B., Ayas, T. And Padir, M. A. (2017). Adaptation Of Big Five Personality Traits Scale To Turkish Culture. *Sakarya University Journal Of Education*, 7 (2), 398-408.
- Fleeson W., Malanos, A. B. And Achille, N. M. (2002). An Intraindividual Process Approach To The Relationship Between Extraversion And Positive Affect: Is Acting Extraverted As “Good” As Being Extraverted?. *Journal Of Personality And Social Psychology*, 83(6), 1409-1422.
- Goldberg, L. R. (1990). An Alternative" Description Of Personality": The Big-Five Factor Structure. *Journal Of Personality And Social Psychology*, 59(6), 1216.
- Graziano, W. G. And Tobin, R. M. (2009). Agreeableness. In M. R. Leary And R. H. Hoyle (Eds.) *Handbook Of Individual Differences In Social Behavior*. (Pp. 46-61). New York, NY: Guilford.
- Guler E. (2006). *The Position Of Legal Dimension Of Advertisements Made For Goods And Services In Health Services In Turkey*. Marmara University, Institute Of Health Sciences, Department Of Health Management. Master Thesis. Istanbul.
- Karafakioglu, M. (1998). *Health Services Marketing*. Istanbul University Faculty Of Business, Publication No: 271, Istanbul.

- 
- Merdan, E. (2013). "Research The Relationship Between 'Five Factor Personality Theory' And Business Values: A Research In Banking". Gumushane University Journal Of Social Sciences Electronic, Issue 7, 141-159.
- Mccrae, R. R. And Costa, P. T. (1987). Validation Of The Five-Factor Model Of Personality Across Instruments And Observers. *Journal Of Personality And Social Psychology*, 52(1), 81-90.
- Mccrae, R. R. And Costa Jr., P. T. (2008). The Five-Factor Theory Of Personality. In O. P. John, R. W. Robins And L. A. Pervin (Eds.). *Handbook Of Personality: Theory And Research* (3rd Ed., Pp. 159-181). New York: Guilford Press.
- Mccrae, R. R. And Sutin, A. R. (2009). Openness To Experience. In M. R. Leary And R. H. Hoyle (Eds.), *Handbook Of Individual Differences In Social Behavior* (Pp. 257–273). New York: Guilford.
- Ozguner, M. (2015). A Study On The Relationship Between Entrepreneurship Types And Personality Types. *Route Educational And Social Science Journal*, 2(1), 148-160
- Temel, K. And Akinci, F. (2016). The Role Of Advertising And Social Media In Health Services Marketing. *Hastane Oncesi Journal*, 1 (2), 27-37.
- Tengilimoglu, D. (2000). Should Advertising Be Free In Health Services?. *Management, Istanbul University Journal Of Institute Of Business Economics*. Year 11, Issue 36, p.7-15.
- Tokat, B., Kara, H. And Kara, M. Yekta (2013). Research On The Predisposition To A Probable Organizational Change Of Workers Who Have A-B Type Personality Features. *Turkish Studies*, Vol 8, Iss 8, Pp 1973-1988.
- Yildiz, M. And Dilmac, B. (2012). Analysis Of The Relation Between Values And Personality Traits Held By Candidate Teachers. *Mersin University Journal Of The Faculty Of Education*, 8 (3), 122-134.