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## Trust and Media: Reflection of the Big Five Factor Personality Traits on COVID-19 Pandemic Communication \*

Güven ve Medya: Covid-19 Pandemi İletişiminde Beş Büyük Faktör Kişilik Özelliklerinin Yansıması

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### Abstract

The pandemic process, in general, is a process that creates anxiety due to reasons such as confusion, instability, misinformation and inadequate planning. Within the scope of this study, the assumption that the personality traits of individuals are effective in getting information and taking the required measures while carrying out the health communication during COVID-19 pandemic, and from the question of whether the individual differences can be associated with the inclination for information receipt or not. This scope of this study aims to measure how the communication of the COVID-19 epidemic towards the Turkish people affects the individuals' preferences for information, the relationships between the sources they trust, and their individual differences based on the Big-5 factors, within the framework of the five major personality traits. This quantitative study, firstly aims to investigate the information-seeking behavior of the Turkish public in relation to their perceptions of COVID-19 and the impact of messages received from the media. Secondly, it is aimed to measure how the COVID-19 pandemic communication affects the relationships among the media sources they trust in their choices of information. While the trust in

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health care professionals and independent health care associations were the highest among the individuals who participated in the survey, those who have the responsibility personality trait, trust in the content of COVID-19 messages for government agencies is low.

**Keywords:** Trust, Big Five, Personality Traits, Pandemic Communication, Covid-19

## Öz

Pandemi süreci genel olarak büyük ölçüde kafa karışıklığı, istikrarsızlık, yanlış bilgilendirme ve yetersiz planlama gibi sebeplerle tedirginlik yaratan bir süreçtir. Bu çalışma kapsamında, COVID-19 pandemisi sırasında sağlık iletişimi sürecinde bireylerin kişilik özelliklerinin bilgiyi arama sürecinde ve gerekli önlemleri almada etkili olduğu varsayımından ve bireysel farklılıkların ilişkilendirilip ilişkilendirilemeyeceği sorusundan yola çıkılmıştır. Çalışma kapsamında Türk halkına yönelik COVID-19 salgını iletişiminin beş büyük kişilik özelliği çerçevesinde, bireylerin bilgi alma tercihleri, güven duydukları kaynaklar arasındaki ilişkileri, Büyük-5 faktörlerine dayalı bireysel farklılıklarını ne şekilde etkilediğini ölçmek amaçlanmıştır. Bu nitel çalışma, öncelikle Türk halkının COVID-19 algısında bilgi arama davranışını ve medyadan gelen haberlerin etkisini araştırmayı amaçlamaktadır. İkinci olarak da COVID-19 pandemi iletişimi ile ilgili bilgi edinme tercihlerinde güvendikleri medya kaynakları arasındaki ilişkileri nasıl etkilediğinin ölçülmesi amaçlanmıştır. Ankete katılan bireylerden sorumluluk kişilik özelliğine sahip olanlarda bireylerin sağlık profesyonellerine ve bağımsız sağlık kuruluşlarına güveni en yüksek saptanırken, devlet kurumlarına yönelik COVID-19 mesaj içeriklerinde güven düşük bulunmuştur.

**Anahtar Kelimeler:** Güven, Beş Büyük, Kişilik Özellikleri, Pandemi İletişimi, Covid-19

## Introduction

In times of natural disasters, pandemics, etc., when chaos, fear, and uncertainty are intermingled, increasing concern and fear, and the propensity for emotion, affect media preferences and the dissemination of information. In a public health crisis such as the COVID-19 pandemic, the media plays a very important role in raising society's awareness of risks and actions (Roslyng & Eskjær, 2017). It can be observed that posts are shared with many misconceptions, such as that the statistical data is not correct, that the number of patients and deaths is not correctly reported, that the vaccines cause death, that the drugs administered kill people, that the crisis arises from a laboratory environment, that it is a planned process to prepare societies for digital transformation, and even that such a virus does not exist. Coombs (2012) stated that honest communication in public health communication is lifesaving. The World Health Organization also emphasized the importance of communication during both the influenza A (H1N1) pandemic in 2009 and the COVID-19 pandemic (WHO, 2021). The organization even places communication on the same level as technical skills when it comes to the basic skills needed to fight the pandemic.

Existing research (Austin, Liu & Liu, 2012; Fraustino, Liu & Yin, 2017; Lu & Jin, 2020) shows that societies have different motivations for seeking information about crises. After learning about a public health pandemic through various channels, from print media to television, radio, and social media, citizens search for information and process the information they find (Moreno, Fuentes-Lara & Navarro, 2020). Clearly, the most reliable among these sources are public institutions. And governments are the leading of these institutions. In public health communication, governments,

public institutions, and specialised sources play an important role in communicating basic information. They anticipate crises such as the COVID-19 pandemic for the benefit of society and citizens and manage the crises by preparing themselves and society and responding to the crises in every way possible. Although government communication has so many important functions, some observations in history have shown that government systems are flawed and fall short (Gu & Li, 2020).

In 2020, the world faced the COVID-19 pandemic that crossed geographic borders and affected masses of people (Kelly, 2011, p. 540). Many countries imposed quarantine, tried to take measures for the state by closing their borders, and minimized the procurement of goods and services by restricting foreign trade. By June 15, 2021, there were 175,987,176 COVID-19 cases worldwide, 3,811,561 people died. And in Turkey, there were 5,336,073 cases and 48,795 deaths (WHO, 2021). COVID-19 pandemic caused uncertainty at the global level, and people who wanted to have access to correct information in the constantly updated information flow sought reliable sources of information. The state of crisis resulting from chaos and confusion affected large masses on a global scale.

In Turkey, authorities have communicated about the pandemic through various channels since the first case occurred on March 11, 2020. The health policy pursued by the government includes certain headings Turan and Çelikyay (2020) found that this policy focuses on four main themes. These themes are (1) social awareness, (2) limiting traffic and circulation, (3) economic measures and arrangements, and (4) strengthening social welfare and social solidarity. In Turkey, the main starting point of the discussion on the effectiveness of state and government communication in the pandemic COVID-19 should be the infrastructural capabilities of the country in the context of the pandemic. The health reforms and modern health infrastructure that Turkey has realized enabled effective and rapid intervention and outbreak of the pandemic. In communicating the pandemic crisis, the fast functioning of the decision-making mechanisms, the helpful position in terms of health infrastructure, and human resources in the health sector had a positive impact on the management of the pandemic period (Turan & Çelikyay, 2020).

In Turkey, The Scientific Advisory Board on Coronavirus was formed specifically for public information and decision making on 10 January 2019. It has had some notable successes, such as ensuring participation in proposal decisions, standing together on expert views and highlighted actions, making statements based on data, sharing sustained and up-to-date information, and ensuring ownership by the responsible institution and organization.

With the detection of the first case in Turkey, information by the government has also started. Government officials and relevant institutions and individuals frequently disseminated messages on various channels in a similar tone. COVID-19 information about “the importance of cleanliness to protect oneself from COVID-19,” “the requirement to wear a mask,” and “the importance of keeping distance from other people to protect oneself from the virus.” The government and public health institutions repeated the discourses of “keep your social distance” and “stay at home” as in the whole world. In Turkey, this discourse of “mask, distance and cleanliness” was repeated and the public was constantly informed. Fahrettin Koca, the Minister of Health, has regularly disseminated information

about the pandemic on official social media accounts since March 13, 2020. He has also kept the public informed of the latest information through nightly press briefings. And the number of daily cases continued to be announced through the social media accounts of the Ministry of Health. They updated their official website on how to protect themselves from the virus. They aired public service announcements featuring famous Turkish actors

Global pandemics entail extensive behavioral changes at the societal and individual levels. For this reason, all institutions keep their communication channels open to inform the public and provide them with access to accurate information. While institutions at the global level, such as the World Health Organization, are reliable sources of information for COVID-19, governments and ministries of health in individual countries are important sources of information. In addition to traditional channels, websites and social media platforms, which are important sources of quick and immediate access to information, have also contributed to the spread of information and disinformation.

Particularly with regard to the pandemic, subject to limited information exchange, individual personality traits differed and adapted to the new life, trying to understand the period of the pandemic COVID-19 (Anglim & Horwood, 2021; Nikčević, Marino, Kolubinski, Leach & Spada, 2021; Weiß, Rodrigues & Hewig, 2020; ). In this context, access to information varied by personality traits. For example, on the Big Five personality axis, media preferences, motivations for receiving information, and ways of benefiting from the information received differed according to the mood and characteristics caused by the personality traits.

In this study, we hypothesised that individuals' personality traits would be effective in receiving information and taking necessary actions in health communication during a pandemic. We aimed to investigate the relationships between five personality traits and individuals' preferences in information intake in the context of communication about the pandemic COVID-19. In Turkey, there are few studies (Söner & Gültekin, 2021; Öngel, Tatlı & Bozkurt, 2020) that assume that personality traits based on individual differences in the population are effective in communicating the COVID-19 pandemic. For this reason, we preferred to use the Big Five Factor (BFF) model as a framework for personality traits. The Big Five model assumes that five factors can adequately define individual differences (John & Srivastava, 1999; McCrae & Costa, 2008).

### **Big Five-Factor Personality Traits on Public Health Communication**

The Big Five Factor (BFF) is a model of personality traits consisting of five dimensions: extraversion, agreeableness, conscientiousness, negative emotionality, and open-mindedness. Many researchers argue that the five-factor personality model is a universal model based on the biological underpinnings of human beings, transcending other differences such as religion, language, race, and culture (Gurven, Von Rueden, Massenkoff, Kaplan & Lero Vie, 2013).

In fact, personality traits are more than just the factors that define the individual. Certain behavioral patterns and transient human behaviors may contribute to personality traits. These factors cannot be generalized. Personality traits, reactions to events, and emotional states represent traits that characterize individuals and distinguish them from other individuals. For this reason,

personality traits are important in understanding individuals, defining their personalities, and understanding their experiences and the reasons for their actions. The conceptual framework of BFF began with the reduction of personality to 4 definitive categories by Allport and Odbert (1936). In subsequent years, new categories of individuals were added to the studies (Cattell, 1946; Digman & Takemoto-Chock, 1981; Fiske, 1949; Goldberg, 1990; Norman, 1963).

In 2008, McCrae and Costa (2008) presented 5 personality traits that form the basis of the BFF model used today, and expanded the personality traits to 5 categories based on the BFF model used today. According to the BFF model, the personality system is a universe of human nature. All people have basic tendencies, characteristic adaptations, and a personality. The BFF treats this system as a framework for defining how personality works. Individuals have basic propensities and traits that can be related to society and biological infrastructure. In principle, our personality traits consist of a system that ensures compatibility with social events and the environment through a preserved distinctive essence (McCrae & Costa, 1999). The theory is based on 3 assumptions. The first is that personality traits are partially consistent over time. The second is that they have a decisive structure toward different circumstances. Finally, each trait of an individual or group is used to estimate the specific behaviors associated with that trait (Abood, 2019).

*Extraversion:* Extraverted personality traits include characteristics such as assertiveness, dynamism, and willingness to talk. Extroverts are known to be energetic and social. *Agreeableness:* They show a conciliatory attitude, believe in cooperation, and their style of speech is harmless. In case of interpersonal conflicts, they agree and show goodwill towards others (McCrae & Costa, 1999). *Conscientiousness:* Their personality traits are reliable, orderly, consistent, and success-oriented. They are also persons in whom impulsiveness is predominant, who love rules, have developed social skills, and whose ego-control is dominant (Barrick & Mount, 1996). *Negative emotionality – Neuroticism:* Negative emotionality is an emotionally sensitive personality trait and tends to cause stress (Laher, 2013). It reflects individual differences in how people experience and express negative emotions. People with negative emotionality traits express common states with negative emotional reactions and disappointment. *Open-mindedness (Openness to Experience):* It includes artistic sensitivity, depth of emotions, behavioral flexibility, intellectual curiosity, and nontraditional attitudes. People with this personality trait claim to be exceptional and special, and some of them really are.

The study of personality traits has been a topic of communication, especially since the search for the effects of personality traits on media preferences, the criteria for audience media preferences and how they are followed have come into the focus of media researchers. In particular, because the utility and gratification approach is paramount, many different approaches have supported the research topics (Lull, 2000; Mehrad & Tajer, 2016). One of the most important reasons for research in areas such as people's media preferences and viewing habits is the widely held view that individuals can influence media use patterns. And BFF is among the significant models in the study of media preferences on the axis of traits defined as representative of personality (Hall, 2005; Weaver, 2003).

Research has shown that individuals with extraverted personality traits have a low preference for TV, listening to the radio, and reading. And while individuals with open-minded personality

traits have a negative attitude toward watching TV, their preference for chatting with others is high (Kraaykamp & van Eijck, 2005; Finn, 1997). In addition to rapid access to the Internet, the relationship between personality traits and preferences in Internet use has also been studied. There is a correlation between the use of computers and the Internet and personality (Swickert, Hittner, Harris & Herring, 2002). And in terms of preferences for Internet-based media, individuals with the personality traits of extraversion, neuroticism, and conscientiousness were found to prefer the Internet more. (Mark & Ganzach, 2014).

In the period of the pandemic COVID-19, it updated access to information through traditional and nontraditional media. In this study, our main research questions were whether trust in government communications regarding the pandemic COVID-19 and whether individuals' media preferences differed according to their personality traits.

## Methodology

As part of the quantitative research methods, we conducted an online survey. First, we conducted preliminary research consisting of focus group studies, expert opinions, and pilot research. Our goal was to identify issues related to cultural and contextual differences and communication barriers that arise during translation. After completing the survey, we used the random sampling method. Individuals answered the questionnaire on Google Forms between October 01 and November 01, 2020, when the 2nd COVID-19 wave had started. 513 individuals from Turkey who were older than 18 years participated in the study. We redirected respondents to the research website via a link, and they voluntarily and anonymously participated in the online survey.

Several research questions and hypotheses developed from Moreno et al. (2020), Hall (2005), and Weaver's (2003) studies were listed below:

H1. Regarding the Big-5 personality traits of the Turkish public, there is a significant difference as per demographic characteristics.

RQ1. Which channels did the Turkish public prefer in their search for information during the pandemic COVID-19?

RQ2. Do the information channels preferred by the Turkish public during the pandemic COVID-19 differ according to the Big 5 personality traits?

RQ 3. How does the Turkish public perceive government communications during the pandemic COVID-19?

RQ4. Is there a difference between the Turkish public's Big 5 personality traits and their opinion of the government's messages during the pandemic?

RQ5. What is the level of trust in the government compared to other institutions during the pandemic COVID-19?

RQ6. Does trust in communication sources differ according to Big 5 personality traits?

RQ7. Do personality traits influence perceptions of basic government messages during the pandemic COVID – 19?

RQ8. Can personality traits contribute to the Turkish public's perception of messages provided during the pandemic COVID-19 as accurate?

#### ***Data Collection Procedure***

After approval by the University Ethics Committee (Date: 09.02.2021/ Number: 04), we conducted the research by collecting data online via Google Forms between November 01 and December 01, 2020, the period of the second wave of the COVID-19 pandemic in Turkey. Through email and social media (Facebook, Instagram, and WhatsApp), people were invited with a link to take the survey for the research.

#### ***Measures***

The survey consisted of seven sections. We adapted the first six sections of the scale from Moreno, Fuentes-Lara, and Navarro (2020)'s study for Turkey.

*COVID-19-related information sources:* The information that the respondents get regarding COVID-19 was tested as traditional mainstream media, Internet, and social media platforms. This section consisted of 7-point Likert statements (1 I never use – 7 I use very frequently).

*Government's Pandemic Communication:* The statements representing their views regarding the communication of the Turkish government (Presidency, Ministry of Health, Coronavirus Scientific Advisory Board) in the process of COVID-19 were measured by 7-point Likert scale.

*Keeping Covid-19 Messages:* Various statements were included for measuring whether the main messages provided by the Turkish government regarding COVID-19 were stuck in minds or not, and they were asked to mark which ones they heard the most. In this section, they were asked to choose three statements that stuck in their minds the most.

*Authority Trust:* The respondents were which authorities they trusted the most in the receipt of information regarding COVID-19. The authorities comprised institutions and organizations of government and local administrations, WHO, etc., and institutions and individuals such as international and national health unions, health personalities, friends, the ones they know through social media, and influencers. Using a 7-point Likert scale measured them.

*Covid-19 Information:* It is rather important to measure what the respondents knew regarding COVID-19. Researchers asked to mark the ones that they believe as true. Twenty-four statements in total were listed, and they were asked if they agree.

*Socio-demographics:* The respondents' socio-demographic data, such as age, gender, education, income, and profession, was collected.

*Personality Traits:* The BFI-2 is a measure of the Big Five personality domains (which we label as Extraversion, Agreeableness, Conscientiousness, Negative Emotionality, and Open-Mindedness), and 15 more specific facet traits. The BFI-2 consists of 60 short-phrase items, and its responses are considered on a 5-point rating scale ranging from strongly disagree (1) to strongly agree (7) (Soto



& John, 2017). Extraversion trait was measured with questions 1, 6, 11(R), 16(R), 21, 26(R), 31(R), 36(R), 41, 46, 51(R), 56. Agreeableness trait was measured with questions 2, 7, 12(R), 17(R), 22(R), 27, 32, 37(R), 42(R), 47(R), 52, 57; conscientiousness trait was measured with questions 3(R), 8(R), 13, 18, 23(R), 28(R), 33, 38, 43, 48(R), 53, 58(R); negative emotion trait was measured with questions 4(R), 9(R), 14, 19, 24(R), 29(R), 34, 39, 44(R), 49(R), 54, 59. Finally, open-mindedness trait was measured with questions 5(R), 10, 15, 20, 25(R), 30(R), 35, 40, 45(R), 50(R), 55(R), 60.

### Limitations

This study had limitations. First, we could verify no causal inferences in the study's design because of the sample. Thus, it will be beneficial to do more research on this subject. Second, we were collected the data between November 01 – December 01, 2000, when the 2<sup>nd</sup> wave was being observed, and for this reason, the data may differ much from the ones obtained during the 1<sup>st</sup> wave and 3<sup>rd</sup> wave. Third, we couldn't collect the data face-to-face because of the pandemic, and the respondents comprised only individuals who could use the Internet. The premise actualized the research that the people don't just have one personality trait, that over one personality trait may be present in the same individual, and that two personality traits may be equal on the other the scale used.

### Data Analysis and Findings

513 respondents completed the questionnaire. It was analyzed by SPSS version 22. Reliability Statistics Cronbach's alpha was .806. The BFI-2 scales showed good internal consistency, and it was  $\alpha = .786, .728, .871, .808, .770$ , for extraversion, agreeableness, conscientiousness, negative emotion, and open-mindedness respectively.

**Table 1.** The General Distribution of The BFI-2

Big Five Personality Traits	N	%	Cumulative Percent	Min	Max	Mean	Std. Dev.
Agreeableness	91	17.7	17.7	2.50	6.00	4.7693	.52067
Conscientiousness	<b>180</b>	<b>35.1</b>	52.8	2.50	6.00	<b>4.8692</b>	.72242
Extraversion	24	4.7	57.5	2.00	5.83	4.4479	.63695
Negative Emotionality	25	4.9	62.4	2.08	5.58	3.6374	.68025
Open-Mindedness	<b>160</b>	<b>31.2</b>	93.6	2.83	6.00	<b>4.9149</b>	.59062
Other	33	6.4	100.0				
Total	513	100.0					

Among the respondents (N=513), the most dominant personality trait became conscientiousness ( $\bar{x} = 4.8692$ ) by 35.1%. Open-Mindedness ( $\bar{x} = 4.9149$ ) ranked second, and agreeableness ( $\bar{x} = 4.7693$ ) ranked third. When the averages of over one personality trait in the same people were equal, s/he included in the group "others".

H1. Regarding the Big-5 personality traits of the Turkish public, there is a significant difference as per demographic characteristics.

**Table 2.** Demographic Characteristics and Big Five Personality Traits

		Agreeableness	Conscientiousness	Extraversion	Negative Emotionality	Open-Mindedness	Other	Total
		N	N	N	N	N	N	
Gender	Female	61	<b>127</b>	15	16	87	23	329
	Male	30	53	9	9	<b>73</b>	10	184
Age	0-20	8	11	9	9	<b>48</b>	6	91
	21-40	29	49	11	10	<b>66</b>	18	183
	41-60	50	<b>108</b>	4	5	43	9	219
	61-80	4	<b>12</b>	0	1	3	0	20
Education	High School or below	13	27	2	7	<b>30</b>	6	85
	Bachelor's Degree	58	<b>113</b>	17	16	94	19	317
	Master's Degree or above	20	<b>40</b>	5	2	<b>36</b>	8	111
Working Status	I'm not currently working	17	<b>46</b>	1	5	14	4	87
	I am self-employed	11	<b>35</b>	4	1	20	1	72
	Public sector work	20	<b>25</b>	2	4	21	3	75
	Private sector work	26	<b>45</b>	5	4	26	14	120
	I am student	13	19	12	11	<b>78</b>	11	144
	I work in healthcare	4	10	0	0	1	0	15
Income	Low	3	2	0	2	7	1	15
	Low-Medium	16	16	3	8	17	6	66
	Medium	44	<b>89</b>	6	11	64	15	229
	Medium-High	23	59	14	4	<b>63</b>	9	172
	High	5	14	1	0	9	2	31

H1.1<sub>0</sub> There is no significant difference between gender and personality traits.

The dominant personality trait of 64.1% of the female respondents was conscientiousness (38.6%), and the dominant personality trait of the male respondents was open-mindedness (39.6%). According to Independent T-Test, we found no significant difference between gender and personality traits ( $x^2(5) = 10.656$ ,  $p > .05$ ). H1.1<sub>0</sub> was supported.

H1.2<sub>0</sub> There is no significant difference between age and personality traits.

It is possible to say that the dominant personality traits differ as per age. One Way Anova test was used. In this context, there is a significant difference between age and personality traits ( $x^2(15) = 92.230$ ,  $p < .05$ ). H1.2<sub>0</sub> was rejected.

H1.3<sub>0</sub> There is no significant difference between education and personality traits.

One way Anova Test was used. And regarding dominant personality traits as per education, it was determined that the dominant personality trait of individuals who graduated from primary/secondary and high schools (16.6%) was Open-Mindedness (35.2%). And the dominant personality

trait of individuals with a university degree and higher was Conscientiousness (35.7%). Yet, there is no significant difference in education and personality traits ( $\chi^2(10) = 7.122, p > .05$ ). H1.3<sub>0</sub> was supported.

H1.4<sub>0</sub> There is no significant difference between professional status and personality traits.

One way Anova Test was used. When the differentiation of personality traits as per professional status were examined, the data shows that there is a significant difference between professional status and personality traits ( $\chi^2(25) = 108.971, p < .05$ ). H1.4<sub>0</sub> was rejected.

H1.5<sub>0</sub> There is no significant difference between income and personality traits.

One Way Anova test was used. The dominant personality traits as we examined per income distribution. Here, the individuals with middle-income level were found to be included in the personality group of conscientiousness (38.8%), and the ones with middle-high income level were found to be included in the personality group of Open-Mindedness (36.6%) (Table 2). The data shows that there is a significant difference between income status and personality traits ( $\chi^2(20) = 35.671, p < .05$ ). H1.5<sub>0</sub> was rejected.

*RQ1. Which channels did the Turkish public prefer in their search for information during the pandemic COVID-19?*

In the period of COVID-19, the process of information seeking intensively continued. We noted that in this period, there was a tendency to use especially non-traditional channels. According to the data in the first section of the questionnaire, while the information received from WhatsApp groups ( $\bar{x} = 5.11$ ), and information from the online press ( $\bar{x} = 5.09$ ), and Instagram ( $\bar{x} = 4.64$ ) ranked as the first three, traditional media ( $\bar{x} = 4.45$ ) and TV ranked as the fourth. And newspapers ( $\bar{x} = 2.13$ ), web/blogs specialized in alternative therapies ( $\bar{x} = 2.37$ ), and radio ( $\bar{x} = 2.45$ ) were the last preferred sources of information.

*RQ2. Do the information channels preferred by the Turkish public during the pandemic COVID-19 differ according to the Big 5 personality traits?*

According to the chi-square analysis performed, there is a significant difference between Facebook ( $\chi^2(30) = 74.911, p < .05$ ), Twitter ( $\chi^2(30) = 44.247, p < .05$ ), YouTube ( $\chi^2(30) = 68.203, p < .05$ ), Television ( $\chi^2(30) = 73.690, p < .05$ ), Printed Press ( $\chi^2(30) = 58.042, p < .05$ ), and Online Press ( $\chi^2(30) = 59.936, p < .05$ ), and Big-5 personality traits.

*RQ 3. How does the Turkish public perceive government communications during the pandemic COVID-19?*

**Table 3.** Perception Regarding Government's Communication on COVID-19 Pandemic

	N	Mean	Std. Dev	Scale density (1:7)	Dominant Personality Trait
<b>Has not revealed all the truth</b>	<b>513</b>	<b>5.40</b>	<b>2.044</b>	<b>74% (5:7)</b>	<b>36% Conscientiousness</b>
Has confused the population	513	5.31	1.868	71% (5:7)	38% Open Mindedness
Has generated social alarm	513	3.50	1.860	50% (1:3)	35% Open Mindedness
Has been scheduled at the appropriate times	513	3.12	1.721	59% (1:3)	36% Open Mindedness
Has always been clear	513	2.70	1.703	69% (1:3)	38% Open Mindedness
Has been the most reliable information	513	2.55	1.748	70% (1:3)	35% Open Mindedness

The Turkish public's opinions regarding government communication in the period COVID-19 pandemic were "Has not revealed all the truth" ( $\bar{x}$  =5.40) and "Has confused put the population" ( $\bar{x}$  =5.31). The Turkish public switched to many channels for clear information about the number of cases. However, there was an atmosphere in which disinformation and infodemic were high. In this study, those with the lowest mean score in assessing government communication were "Has been the most reliable information" ( $\bar{x}$  =2.55) and "Has always been clear and sufficient" ( $\bar{x}$  =2.70) (Table 3).

*RQ4. Is there a difference between the Turkish public's Big 5 personality traits and their opinion of the government's messages during the pandemic?*

According to the results of the survey, the ones finding unsuccessful communication of government in the period of COVID-19 were individuals having the personality traits of conscientiousness (36%) and open-mindedness (38%) (Table 3). The studies made show that as individuals having the personality trait of conscientiousness like obeying the rules (Carvalho, Pianowski & Gonçalves, 2020), they may overcome the uncertain state of pandemic (Weiß, Rodrigues & Hewig., 2020). The interesting point in this data is that the ones having negative perceptions regarding government communication had the personality trait of open-mindedness.

*RQ5. What is the level of trust in the government compared to other institutions during the pandemic COVID-19*

**Table 4.** Trust Level Regarding Sources of Information on COVID-19

	N	MMean	SStd. Dev	Scale density (1:7)	Dominant Personality Trait
Health personnel that I personally know	513	5.65	1.397	83% (5:7)	37% Conscientiousness
Prestigious healthcare personalities (e.g. epidemiologists)	513	5.37	1.513	73% (5:7)	40% Conscientiousness
Associations of health groups (e.g. professional associations of doctors, pharmacists etc.)	513	5.06	1.700	66% (5:7)	37% Conscientiousness
<b>World Health Organization</b>	<b>513</b>	<b>4.82</b>	<b>1.708</b>	<b>65% (5:7)</b>	<b>33% Open Mindedness</b>
<b>Local authorities</b>	<b>513</b>	<b>3.81</b>	<b>1.720</b>	<b>40% (1:3)</b>	<b>40% Open Mindedness</b>
<b>Friends on social networks</b>	<b>513</b>	<b>3.59</b>	<b>1.649</b>	<b>46% (1:3)</b>	<b>34% Open Mindedness</b>
<b>Health influencers</b>	<b>513</b>	<b>3.37</b>	<b>1.753</b>	<b>48% (1:3)</b>	<b>35% Open Mindedness</b>
Media	513	3.26	1.582	52% (1:3)	37% Conscientiousness
<b>Regional Authorities</b>	<b>513</b>	<b>3.21</b>	<b>1.663</b>	<b>55% (1:3)</b>	<b>35% Open Mindedness</b>
<b>Unknown health personnel who have spread on social networks (e.g. WhatsApp videos)</b>	<b>513</b>	<b>3.18</b>	<b>1.757</b>	<b>57% (1:3)</b>	<b>34% Open Mindedness</b>
<b>Government</b>	<b>513</b>	<b>2.89</b>	<b>1.818</b>	<b>63% (1:3)</b>	<b>37% Open Mindedness</b>
Other	462	2.68	1.514	61% (1:3)	33% Conscientiousness
Influencers on alternative therapies	513	2.54	1.626	71% (1:3)	34% Conscientiousness
Influencers of other topics (not health) on social networks	513	1.90	1.359	84% (1:3)	35% Conscientiousness
Valid N (listwise)	462				

For RQ5, when asked about respondents' trust in institutions and individuals, we found that trust in government was very low ( $\bar{x} = 2.89$ ), trust in known health professionals was highest ( $\bar{x} = 5.65$ ), followed by respected health professionals ( $\bar{x} = 5.37$ ), and trust in associations of health care professionals was highest ( $\bar{x} = 5.06$ ). Similar to the government, trust in local authorities ( $\bar{x} = 3.81$ ) and trust in regional authorities ( $\bar{x} = 3.21$ ) were also found to be relatively low (Table 4).

The researchers indicated individuals trust the health organization more than the government (Peterson, Chou, Kelley & Hesse, 2020). Within the present research, the trust in WHO was high. While the researches showed that trust in interpersonal sources was more (Thai et al., 2018), this research indicated that trust in institutions such as WHO, the association of health care professionals was more compared to interpersonal.

*RQ6. Does trust in communication sources differ according to Big 5 personality traits?*

According to the data, trust in health care professionals known in person, in prestigious health care professionals, and independent health associations was high, and these individuals were one's having the personality trait of conscientiousness (Table 4).

The trust in national and local government and government officials was very low. In addition, it is possible to say that the individuals who didn't trust these institutions were ones having the personality trait of open-mindedness (Table 4).

*RQ7. Do personality traits influence perceptions of basic government messages during the pandemic COVID-19?*

**Table 5.** The Perception of Main Messages of Government Communication on COVID-19 Pandemic

The key messages based on the government communication retained in the of COVID-19	%	Dominant Personality Trait
You must stay home to protect the elderly and sick	30.8%	36% Conscientiousness
You must stay home so that the economy does not suffer a longer interruption	23.4%	36% Conscientiousness
COVID-19 only affects elderly and sick people	20.0%	36% Conscientiousness
COVID-19 is dangerous and borders should have been closed to persons from countries	14.8%	32% Conscientiousness
<b>You must be calm because COVID-19 is not dangerous</b>	<b>7.30%</b>	<b>38% Open Mindedness</b>
<b>For COVID-19 the most important thing is to have food at home</b>	<b>3.70%</b>	<b>34% Open Mindedness</b>

According to the data, the message "COVID-19 spreads easily, and you must stay at home to protect the elderly and sick" stuck in mind with a rate of 30.80%, and the message "COVID-19 spreads easily, and you must stay at home so that the economy does not suffer a long interruption" stuck in mind with a rate of 23.60% (Table 5).

It was determined that the main messages communicated to the public by the Turkish government during the COVID-19 pandemic were perceived as correct by the individuals having personality trait of Conscientiousness (36%) and that the messages were least perceived as correct by the individuals having the dominant personality trait of open-mindedness (38%) (Table 5).

*RQ8. Can personality traits contribute to the Turkish public's perception of messages provided during the pandemic COVID-19 as accurate?*

The respondents had to choose from among 24 statements regarding risks, treatment, or prevention of COVID-19, which they believed to be correct. In the analysis, we found that most of the respondents (13.6%) believed that the information of “Washing hands, and keeping your distance are effective ways to protect yourself” was correct. These results are consistent with the Ministry of Health's message that has continuously given in communication on the pandemic. In the results of the data, these true differed as per personality traits. In the perception of messages, the personality traits of conscientiousness and open-mindedness came to the forefront. The individuals considering the messages as correct the most were the ones having the personality trait of conscientiousness. In addition, the individuals underestimating the risk of COVID-19 risk, believing that the risk was being exaggerated, believing that travel restriction is not required, and identifying the virus with flu were the ones having the personality trait of open-mindedness. The data shows that the perception of messages as true by the individuals differs as per their personality traits.

### **Conclusion and Discussion**

The COVID-19 pandemic affecting the entire world has been the subject of many scientific studies. In this study, we questioned the relationship between the Turkish public's Big-5 personality traits and the Turkish government's messages in health communication in the pandemic period, media preferences, and trust in government. The countries' communication on uncertainty and risks of the COVID-19 pandemic may have short and long-termed economic effects, it may affect the course of the pandemic, and it may even cause completely different consequences in terms of death, trust and reputation. In many developing countries, such as Turkey, effective communication during a pandemic is a difficult process. Because similar high rurality, low education gain, limited access to social and technological facilities, fluctuating economic course, and political polarization are factors making communication difficult in a period of crisis. In this context, despite the personality traits are universal factors, it is proper to discuss them in terms of the characteristics of the present society.

In this research, significant findings were revealed. The finding regarding the question of “What are the channels that the Turkish public prefer in their information-seeking behaviors during the COVID-19 pandemic?” was that traditional media (print media) and radio are the least preferred information sources. In the COVID-19 pandemic, the process of information pursuit continued intensely in Turkey. In this period, individuals have intensely used especially the internet and social media rather than traditional media. According to the findings got from the research, respectively, online media and Instagram followed the information received from WhatsApp groups. More precisely, the individuals preferred to get information from these environments. Television representing the traditional media ranked the 4<sup>th</sup> in this order. It is a dominant view that the use of the internet and social media was similar in the entire world in the pandemic period. Some studies indicated that the internet is preferred in access to information on subjects regarding to health (Zhao et al., 2020; Majid & Rahmat, 2013).

It is required to discuss in terms of Turkey what the source of this preference is. Today, most mainstream Turkish media institutions are in the hands of significant capital groups or the hands of organizations being close to the government. These groups work to create an agenda for the government in power, thus affecting it (Şimşek, 2009). Today, the Turkish public uses social media environments for many purposes, such as accessing information and following up on news. 56% of the Turkish public is considering social media as a “free source of getting news”. In this process, social media is also being used for getting and confirming information (Nalçaoğlu, 2020). The period of the COVID-19 pandemic became one speeding up access to information also for countries that intensely use the internet, such as Turkey, and where trust in mainstream media channels gradually decreased. Of course, it is not so correct to link this circumstance only to a decrease of trust in traditional media. In Turkey, an increase in internet and social media usage occurred during the COVID-19 pandemic, also because of reasons such as spending more time at home, quarantine process, and working from home compared to the period before lockdown (Bruns, 2018).

*“How is the Turkish public’s perception of government communication during the period of the COVID-19 pandemic”* “, is one of the research questions of the research. Of course, the main problem here is not the problem of trust in the Turkish government. Because not only in Turkey but in the entire world, the government’s communication process regarding public health was difficult during the process of the COVID-19 pandemic. The literature (Gu & Li, 2020) also suggests that the governance systems developed for the public can be defective and insufficient against pandemics. Especially because of high infection and death rates, the daily lives in business, education, social, etc., were affected. This process became a period in which the individuals had economic and social concerns regarding their physical and psychological health. To fight these concerns, the individuals want to get news and learn the current information from reliable sources during the pandemic process. The global pandemic brought along an obligation for the government to reveal its ability of effective planning and coordination and reveal its ability to communicate clear messages with a tone developing empathy (McGuire, Cunningham, Reynolds & Matthews-Smith, 2020, p. 361). The tone used by the state leaders causes the shaping of individuals’ concern levels and behaviors, and the tone of messages is intended to eliminate the concerns of the masses while giving confidence (Burdett, 1999, p.7). Therefore, the public’s negative perception of the government in the period of COVID-19 is related to the most accurate perception of the public, depending on the general state of the government in recent years.

There are many types of research regarding the difference between personality traits and social media usage preferences (Gil De Zuniga, Diehl, Huber & Liu, 2017; Hughes, Rowe, Batey & Lee, 2012; Kurenkova, 2016; McElroy, Hendrickson, Townsend & DeMarie, 2007; Seidman, 2020). The individuals with the personality trait of open-mindedness, who are more curious and open to new things, prefer online activities to satisfy their curiosity and discover new adventure forms and innovations. The ones with negative personality traits prefer the internet less for access to information, education, and learning (Tuten & Bosnjak, 2001). In this research, the findings are parallel to the literature. While mainly the ones with the personality trait of Conscientiousness preferred getting



information through the internet on the subject regarding the COVID-19 pandemic, the ones with the personality trait of open-mindedness became the ones preferring YouTube most.

One of the most significant questions asked was, “What is the Turkish public’s opinion of the Turkish government’s communication management?” Here, the findings are negative. The considerations of the Turkish public regarding the communication of government in the period of COVID-19 were found high by “Has not revealed all the truth”, and “Has confused the public”. These findings are consistent with the higher preference for social media by the public in information pursuit. In this period, the Turkish public turned to many channels to reach clear information regarding the number of cases.

In this study, the question of “Are the personality traits effective in the perception of basic messages provided by the government in the period of COVID-19 pandemic?” was also questioned. In periods of the pandemic, governments’ crisis communication management is also related to their other successes. In the period of the COVID-19 pandemic, having trust in the ‘government’s decisions and actions was highly difficult throughout the entire world. The practice of political decisions also brought along the negative and permanent consequences of the public’s trust and the risks regarding their behaviors (Fancourt, Steptoe & Wright, 2020). Trust in government is only possible through the transparent presentation of information and the decision-making process. Transparent communication in health communication crises covers the use of evidence for communicating the public health recommendations, clear revealing of individuals consulted, and expression of future scenarios (Hyland-Wood, Gardner, Leask & Ecker, 2021). During the pandemic, successful crisis communication covers a sense of trust regarding the actualization of future developments as expected (Siegrist & Zingg, 2014).

Briefly, overcoming the measures taken and restrictions regarding the COVID-19 pandemic is not just related to the government’s sanction, trust in government, and the effect of media, but it is also related to the personality traits of individuals (dependency on rules, open-mindedness, creativity, etc.), it may be thought that personality traits have a positive effect in obeying the rules, fighting with the restrictions, and overcoming the pandemic by the self-disciplined modes. Not only the personality traits but also the countries’ cultural, political, and economic status also affect the trust in the messages. But as personality traits are universal constructs and the basis of humanitarian attributes, they are in the study’s essence. The results got as peculiar to the Turkish public as may be compared by other researchers with the personality traits of different societies.

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