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## PSYCHOLOGICAL NATURE

OF THE IMPACT OF PANDEMIC ON THE EMOTIONAL STATE OF THE POPULATION IN AZERBAIJAN.

### NATURALEZA PSICOLÓGICA DEL IMPACTO DE LA PANDEMIA EN EL ESTADO EMOCIONAL DE LA POBLACIÓN EN AZERBAIJÁN.

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#### ABSTRACT

The objective of this investigation is to assess the emotional state of the population in Azerbaijan during the pandemic, as well as the psychological impact of the spread of Covid 19 virus on the population. To accomplish this a survey was conducted where 600 respondents participated. Our research has shown that the pandemic has not passed without an impact on the psychological state of Azerbaijani population. The level and degree of expression of this anxiety varies depending on age, gender and social status. Examining the relationship between the 21-character variable "emotional state" and age, gender, who to live with, employment, risk group, and coronavirus risk variables also show that there is a strong relationship between anxiety and age groups. The emotional state is worse in single respondents, but in large families where there are parents and children as well as grandparents, the emotional state and anxiety is lower. The higher the risk group is, the emotional distress is higher as well. Positive emotions were weak in respondents who "infected" or recovered from Covid19 among themselves, their family or kith's. The analysis of the results shows that while health fears are related to age, the fear of worsening of economic fear is more related to gender variable.

**Keywords:** emotional and psychological state during pandemic, psychological security, fear of virus infection, positive and negative emotions, psychological effects of quarantine.

#### RESUMEN

El objetivo de esta investigación es evaluar el estado emocional de la población en Azerbaiján durante la pandemia, así como el impacto psicológico de la propagación del virus Covid 19 en la población. Para lograr esto se realizó una encuesta donde participaron 600 encuestados. Nuestra investigación ha demostrado que la pandemia no ha pasado sin un impacto en el estado psicológico de la población azerbaiyana. El nivel y grado de expresión de esta ansiedad varía según la edad, el sexo y la condición social. Examinar la relación entre la variable de 21 caracteres "estado emocional" y la edad, el género, con quién vivir, el empleo, el grupo de riesgo y las variables de riesgo de coronavirus también muestra que existe una fuerte relación entre la ansiedad y los grupos de edad. El estado emocional es peor en los encuestados solteros, pero en familias numerosas donde hay padres e hijos además de abuelos, el estado emocional y la ansiedad es menor. Cuanto más alto es el grupo de riesgo, la angustia emocional también es mayor. Las emociones positivas fueron débiles en los encuestados que se "infectaron" o se recuperaron de Covid 19 entre ellos, sus familiares o amigos. El análisis de los resultados muestra que mientras los miedos a la salud están relacionados con la edad, el miedo al empeoramiento del miedo económico está más relacionado con la variable género.

**Palabras clave:** estado emocional y psicológico durante la pandemia, seguridad psicológica, miedo a la infección por virus, emociones positivas y negativas, efectos psicológicos de la cuarentena.

## INTRODUCTION

The coronavirus pandemic has caused a fear of death, anxiety, panic, loss of loved ones, self-isolation, lack of communication, economic growth and uncertainty about the future affecting the people's emotional state, mood, behavior, and so on. The isolation, restrictions and prohibitions on free movement and activity, adherence to a certain regime, the state of illness or risk of illness of oneself and others, uncertainty, longing, depression and anger, are states that have affected people. For these reasons people have tried to avoid quarantine and therefore criminal cases have been opened against them, or situations alike. Therefore, when assessing the compulsory quarantine, it is necessary to take into account the possible negative psychological consequences (Brooks et al., 2020; Miles, 2015).

UN Secretary-General Antonio Guterres said: "The COVID-19 pandemic has affected all families and communities. It is an additional psychological stress that affects the general population as well as the elderly, health care workers and some citizens at risk concerning the health problems. We must first help and support them" (Aleksandrova, 2020). The research by E. Shafiyeva, K.Kazimova, M Mustafayev, Y. Valiyeva and N.Nasirova showed that the respondents who stated that they were more likely to experience the "behavioral disorders" related to mood and health spheres preferred the "active-personal struggle" as a way out of stress with emotional behavior (Shafiyeva et al., 2020). Therefore, WHO is currently working with partners to develop a new set of materials on mental health and psychosocial support related to the spread of COVID-19.

Experts are concerned about the results of research conducted by UN in various countries around the world, especially on the mental health of health workers. Deborah Kestel, head of the WHO's Department of Mental Health, said: "According to the studies conducted in Canada study, 47% of health workers say they need psychological support. There are slightly different rates in China, with 50% of doctors suffering from depression and 45% from reported anxiety and 34% reported insomnia" (Aleksandrova, 2020).

Samantha K. Brooks, Rebecca K. Webster, Louise E. Smith, Lisa Woodland, Simon Wessely, Neil Greenberg and Gideon James Rubin have recently studied the psychological effects of quarantine by using three electronic databases. The study found regular stressogenic factors in people in long-term quarantine such as fear of infection, frustration, longing, inaccuracy, financial distress, stigma, despair, insomnia, physical pain, anxiety, anger, sadness,

shock, insecurity, guilt, shame, shock, self-doubt or loss of confidence in others (Barbisch et al., 2015; Brooks et al., 2020; Rubin & Wessely, 2020).

What determines our behavior in a crisis? Recent psychological research has shown that the distortions in cognitive processes increase under the influence of the endless flow of information we receive due to the crisis. At present, there are about 200 distorted perceptions that affect our cognitive abilities every day. Our emotions play a big role in almost every decision we make. This has one advantage: our emotional filter allows us to make complex decisions without having to go through a lengthy analysis of strengths and weaknesses. However, as a result of bad news and distortions of cognitive processes, our stable emotional state is disrupted, and negative emotional reactions increase by creating a destructive behavior in people (Rudow, 2020).

The recent scourge of SARS (severe acute respiratory syndrome), MERS (Middle East Respiratory Syndrome), the rapid increase in the number of patients, the difficulties of health workers to contain the pandemic, and the living after the disease (stress symptoms after PTSS or injury), have increased depression, depressive syndrome, behavioral changes, alcohol overindulgence as well as post-disease psychological health in general (Bai et al., 2004; Hull, 2005; Jeong et al., 2016; Liu et al., 2012; Maunder et al., 2003; Wu et al., 2008). Also, some studies have shown that the Severe Acute Respiratory Syndrome (SARS) is particularly prone to stigma; the stigma affected most residents and led to rejection, sometimes humiliation, and exclusion, negatively affecting interpersonal relationships, access to services, and educational opportunities. Stigma has also been linked to psychosomatic distress. Overall, studies have shown that stigma needs to be minimized within public health interventions to control SARS (Lee et al., 2005).

In 2003, a randomized survey of 549 hospital staff in Beijing was conducted to find out if they had SARS and how it affected their mental health. Respondents' perceptions of SARS-related risks were strongly correlated with PTS symptoms. A negative relationship between altruistic perception of work-related risks and PTS levels was investigated (Wu et al., 2009). A study, conducted in Korea in 2015, focused on the great psychological stress caused by the spread of Middle East Respiratory Syndrome (MERS). The mental health care system for MERS victims consisted of two parts: mental health services for quarantined (isolated) people and services for the families of the dead (or recovering patients). The research has shown that the core value of public mental health services is that

they are adequate, publicly accessible, and should be applied to the psychological problems that arise when communicable diseases spread (Yoon et al., 2016).

Another study conducted in the United States focused on efforts to assess, monitor, and address the fears associated with the acute respiratory syndrome (SARS) epidemic. The authors showed that developing effective behavioral and health education strategies (e.g., developing cultural health education materials, visiting communities to have a positive impact on negative behaviors in communities, panel discussions and media interviews, etc.), and by paying timely attention to the population affected by the epidemic needs, is necessary to limit the epidemic of fear and stigma, regardless of the severity of the infectious disease (Person et al., 2004). The above is a brief summary of research conducted in a number of countries on various types of infectious diseases, which show that the changes in the mental state of people during an epidemic make the psychological care as an important and significant measure.

The spread of coronavirus infection, which has caused a commotion all over the world in recent months, has not gone unnoticed in Azerbaijan, and people have been affected by the process of adaptation to the new quarantine regime. Then, to assess the effects of pandemic on the emotional state of the population in Azerbaijan, i.e., the mood, the ability to adapt to new social requirements, life satisfaction situations, the level of danger to themselves and their loved ones, people's behavior, activities and future plans, and etc. a survey was conducted to people of different ages, genders, educational and social statuses. The survey involved 600 respondents and these questionnaires were analyzed by using the SPSS-20 program. Appropriate analysis models were used to accurately analyze the data (answers), including Descriptive Statistics, Correlate, and comparative (T-Test) analysis.

## DEVELOPMENT

As mentioned above, the survey was carried out with the participation of 600 people. Tables 1, 2, 3 and 4 provide relevant information regarding the distribution of ages, gender, type of residence and marital status of the respondents.

Table 1. Age distribution of respondents by gender

		Age			Total
		18-35	36-65	66+	
Gender	Woman	150	100	50	300
	Man	150	100	50	300
Total		300	200	100	600

Table 2. Gender distribution of respondents by age

Frequency	Percent	Valid Percent	Cumulative Percent	Frequency
18-35	300	50.0	50.0	50.0
36-65	200	33.3	33.3	83.3
66+	100	16.7	16.7	100.0
Total	600	100.0	100.0	

Table 3. Permanent residence distribution of respondents

Response version	Frequency	Percent	Valid percent	Cumulative percent
Village	97	16.2	16.2	16.2
District	74	12.3	12.3	28.5
City	429	71.5	71.5	100.0
Total	600	100.0	100.0	

Table 4. Marital status of respondents

Response version	Frequency	Percent	Valid percent	Cumulative percent
Married	274	45.7	45.7	45.7
Single	256	42.7	42.7	88.3
Divorced	13	2.2	2.2	90.5
Widow	57	9.5	9.5	100.0
Total	600	100.0	100.0	

As can be seen, the sample is quite heterogeneous, which was designed to obtain information from a broad perspective. Respondents answered to the question “Who do you live with?” which show that 35 out of them live alone, 310 live with their spouses and children, and 255 out of them live with their family and elderly parents (Table 5). On the level of education, it is clear from the answers of respondents that most of them (391 people) have higher education, 45 have incomplete higher education and 164 have secondary education (Table 6). On the other hand, when asked about employment, 37 respondents stated they were retired, 170 (including housewives) were unemployed, 233 were employed and 160 were engaged in education (Table 7). And when they were asked whether they keep pets in their homes, 444 respondents answered “Yes” and 156 answered “No” (Table 8).

Table 5. Answers to the question “Who do you live with?”

Response versions	Frequency	Percent	Valid percent	Cumulative percent
Single	35	5.8	5.8	5.8
Family	310	51.7	51.7	57.5
Family+elderly	255	42.5	42.5	100.0
Total	600	100.0	100.0	

Table 6. Education level distribution of respondents

Response version	Frequency	Percent	Valid percent	Cumulative percent
Secondary	164	27.3	27.3	27.3
Incomplete higher	45	7.5	7.5	34.8
Higher	391	65.2	65.2	100.0
Total	600	100.0	100.0	

Table 7. Employment status of respondents

Answer versions	Frequency	Percent	Valid percent	Cumulative percent
Pension	37	6.2	6.2	6.2
Unemployed	170	28.3	28.3	34.5
Employed	233	38.8	38.8	73.3
Student	160	26.7	26.7	100.0
Total	600	100.0	100.0	

Table 8. Answers to the question “Do you keep pets at home”?

Answer versions	Frequency	Percent	Valid percent	Cumulative percent
Yes	444	74.0	74.0	74.0
No	156	26.0	26.0	100.0
Total	600	100.0	100.0	

An analysis of respondents’ responses to whether keeping pets at home increases the risk of people becoming infected with Covid 19 shows that respondents think there is no link between keeping pets at home and the risk of contracting Covid19. More precisely, the analysis of the data (responses) shows that there is no significant correlation between the two variables (keeping animals at home and the risk of infection with Covid19), where Sig = 0.986, which is not statistically significant at 0.05 level (Table 9).

Table 9. Relationship between variables at risk of infection with Covid 19 by keeping pets at home.

Correlations			
		Do you keep pets at home?	Do you relate to the risk group on Covid19?
Do you keep pets at home?	Pearson Correlation	1	.001
	Sig. (2-tailed)		.986
	N	600	598

Also, 431 respondents did not identify themselves as at risk for Covid 19, but 167 respondents did identify themselves as at risk. Out of them, 33 respondents thought they were at risk for chronic illness, 127 respondents for their age, and 7 respondents for pregnancy. Two people did not answer this question (Table 10).

Regarding the extent of danger of the virus to the population, 46 respondents believe that it is a common cold, 173 people consider it dangerous only for some, and 148 people consider it moderately dangerous and 233 people consider the virus dangerous for the population. More precisely, only 7.7% of respondents consider Covid19 to be a common and safe virus and do not believe it is dangerous. However, with the exception of 7.7 percent of respondents, the rest believe that the virus is somewhat dangerous for the population (Table 11).

Table 10. Answers to the question “Do you relate to the risk group on Covid19?”

Answer versions	Frequency	Percent	Valid percent	Cumulative percent
I don't relate	431	71.8	71.8	71.8
Due to chronic illness	33	5.5	5.5	77.3
According to my age	127	21.2	21.2	98.5
Due to pregnancy	7	1.2	1.2	99.7
Unanswered	2	.3	.3	100.0
Total	600	100.0	100.0	

Table 11. Answers to the question “How dangerous is this virus for the population?”

Answer versions	Frequency	Percent	Valid percent	Cumulative percent
Valid Common cold	46	7.7	7.7	7.7
Dangerous for some	173	28.8	28.8	36.5
Moderately dangerous	148	24.7	24.7	61.2
Dangerous	233	38.8	38.8	100.0
Total	600	100.0	100.0	

Eighty-five people said they had difficulty answering the question of how dangerous the virus is for you, 94 people said the virus was not dangerous., 214 people rated the virus as dangerous, 153 as scary and 54 as very scary. As can be seen, 421 respondents (70.2 percent) consider the virus dangerous and frightening for themselves, but 94 people say that the virus is not dangerous specifically for them (Table 12).

Table 12. Answers to the question “How dangerous is this virus for you?”

Answer versions	Frequency	Percent	Valid percent	Cumulative percent
Embarrassed to say	85	14.2	14.2	14.2
Not dangerous at all	94	15.7	15.7	29.8
A little dangerous	214	35.7	35.7	65.5
Dangerous	153	25.5	25.5	91.0
Very dangerous	54	9.0	9.0	100.0
Total	600	100.0	100.0	

As for the Azerbaijan's forecast for the virus, 208 respondents were very optimistic, saying that everything will be fixed soon, 309 people believe that we would return to normal life slowly and gradually, but 80 people said that they thought the situation would get worse. Three people did not answer this question (Table 13).

Table 13. Answers to the question “What is your forecast for our country regarding the virus?”

Answer versions	Frequency	Percent	Valid percent	Cumulative percent
No answer	3	.5	.5	.5
Everything will be fixed soon	208	34.7	34.7	35.2
Slowly return to normal life	309	51.5	51.5	86.7
I think the situation will get worse	80	13.3	13.3	100.0
Total	600	100.0	100.0	

The analysis of the respondents' opinions shows that there is a serious connection between the forecast for the country and those who consider the virus dangerous for themselves and the population, as tensions will remain for some time, according to the forecasts of those who consider the virus is dangerous for themselves and the population. More precisely, there is a correlation between the idea that the virus is dangerous for the population and the forecast of some time of tension in the country, where  $\text{sig} = 0.005$ , which is statistically significant (the current relationship is serious and statistically significant when  $\text{sig} \leq 0.05$ ). At the same time, since the Pearson correlation is 0.155, we can say that there is a positive relationship between the two variables.

At the same time, there is a correlation between the idea that the virus is dangerous for itself and the forecast that the tension with the virus in the country will be sustained for some time. In our analysis  $\text{sig} = 0.030$  which is statistically significant, and since the Pearson correlation is 0.089, we can say that there is a positive relationship (Table 14).

Table 14. On the link between the prognosis for the virus-related country and the threat of the virus to the population and the person himself/herself

<b>Correlations</b>				
		<b>Your country's forecast for the virus</b>	<b>How dangerous is this virus for the population?</b>	<b>How dangerous is this virus for you?</b>
Your country's forecast for the virus	Pearson Correlation	1	.115**	.089*
	Sig. (2-tailed)		.005	.030
	N	600	600	600
*. Correlation is significant at the 0.05 level (2-tailed).				
**. Correlation is significant at the 0.01 level (2-tailed).				

Respondents' predictions for the country about the virus were due to several factors. But also, there is a serious relationship between the level of education and the forecasts. Those with a high level of education prefer the logic that the processes taking place in the world will not pass unnoticed to our country, noting that the situation will be tense based on a more global analysis, noting that the virus will occupy society for a long time and as a result the situation will be complicated. Between the forecast and education variables  $\text{Sig} = 0.024$ , which suggests that the relationship between the variables was significant at 0.05 level. At the same time, a positive Pearson Correlation indicates a positive correlation between the two variables. There is no correlation between the forecast, including the risk group on Covid19, and since  $\text{Sig} = 0.833$  here, the correlation between these two variables is almost meaningless at 0.05.

There is a strong correlation between the respondents' predictions about the virus and the fact that they consider the virus dangerous for the country's population and themselves. In other words, those who predict that we will face difficulties also consider this virus more dangerous for the population and themselves. The difference between the forecast and the variable "how dangerous this virus is for the population" was  $\text{Sig} = 0.005$  and the variable between the forecast and the variable "how dangerous this virus is for you" was  $\text{Sig} = 0.030$ , which means that the relationship between all three variables is significant at 0.05. At the same time, the fact that the Pearson Correlation coefficient is positive for both variables indicates that there is a positive correlation between the three variables (ie, the worse the forecast, the worse the sense of danger).

In recent months, there has been a significant correlation between the frequency of 21 symptoms in respondents (emotional state variable) and the prognosis. Thus, since the prognosis and emotional state variables are  $\text{Sig} = 0.002$  and Pearson Correlation = 0.127, we can say that there is a serious relationship between these two variables, that this relationship is positive and meaningful at the level of 0.05 (Table 15).

Table 15. On correlation table between virus prognosis and education, risk, social, personal danger, and emotional state variables

Correlations							
		Forecast for the country related to the virus	Education	Relating to the risk group on Covid19	How dangerous this virus is for the population	How dangerous this virus is for you	Emotional state
The country associated with the virus	Pearson Correlation	1	.092*	-.009	.115**	.089*	.127**
	Sig. (2-tailed)		.024	.833	.005	.030	.002
	N	600	600	598	600	600	600
*. Correlation is significant at the 0.05 level (2-tailed).							
**. Correlation is significant at the 0.01 level (2-tailed).							

Examining the relationship between the 21-character “emotional state” variable and age, gender, who to live with, occupation, risk group, and coronavirus risk variables also shows that there is a strong relationship between anxiety and age groups. The fact that Sig = 0.000 indicates that there is a serious relationship between these two variables, and this relationship is significant at the level of 0.01. That is, anxiety is higher in the emotional state of older respondents, and since Pearson Correlation = 0.234, it is clear that the emotional state of respondents worsens with age, and anxiety increases with the current situation. There is no significant relationship between gender and anxiety, and since Sig = 0.09, it can be said that the relationship between these two variables is negligible and meaningless at the level of 0.05.

There is also a strong link between the respondents who live with at home and their emotional state. Since Sig = 0.000 and Pearson Correlation = -0.161, it is clear that there is a serious negative relationship between these two variables, which is significant at the level of 0.01. In other words, in response to the question “Who do you live with at home?” the respondents who said that they live alone have a worse emotional state, that is, they have a higher level of anxiety (according to the signs of emotional state X= 17.85), in the nuclear families consisting of parents and children, the emotional state is slightly lower (according to the signs of emotional state X= 17.79), in large families with parents and children, as well as grandparents, the emotional state, ie the level of anxiety is lower (on the signs of emotional state X=13.94). This suggests that those who live alone in a pandemic are in a worse mood and feel more anxious. At the same time, in nuclear families, the situation of the child at home (most likely the only child) in a pandemic situation and the future parent are more concerned. However, in large families, the presence of grandparents along with parents improves the emotional state and creates comfort.

Among those who identified themselves as at risk for Covid19, the 21 signs of emotional distress were at a higher level of anxiety. Here, Sig = 0.000 and Pearson Correlation = 0.217, indicating that there is a significant correlation between the two variables at the level of 0.01. The higher the risk group, the higher the emotional distress. The analysis of the results shows that there is a serious connection between the assessment of the virus as a dangerous problem for the respondent and the population, as well as the emotional state variable. In the emotional state, the relationship between the level of anxiety and the danger of the virus to the population is significant at 0.01 level (Sig = 0.000), where Pearson Correlation = 0.193 (positive correlation coefficient) indicates a direct correlation between the two variables. The same can be said of those who change emotionally with anxiety about “how dangerous this virus is to you.” Here, too, it is possible to say that the relationship between the variables is significant at 0.01 because Sig = 0.000, and that there is a direct correlation between the variables because Pearson Correlation = 0.191. The relationship between emotional state and various variables are shown in Table 16.

Table 16. On the relationship between emotional state and various variables

Correlations									
		Anxiety	Age	Gender	Who do you live with	Employment status	Relating to the risk group on Covid19	How dangerous this virus is for the population	How dangerous this virus is for you
Emotional state	Pearson Correlation	1	.234**	-.069	-.161**	-.251**	.217**	.193**	.191**
	Sig. (2-tailed)		.000	.090	.000	.000	.000	.000	.000
	N	600	600	600	600	600	598	600	600

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

The majority of respondents consider the Covid19 virus to be dangerous to the population (common cold; 7.7%, some dangerous 28.8%, moderately dangerous 24.7% and dangerous 38.8%), which leads to an increase in emotional distress. In other words, it is normal for people who consider the virus to be so dangerous to intensively observe “signs of emotional distress in recent months.” (Table 17).

Table 17. Answers to the question “How dangerous is this virus for the population?”

How dangerous is this virus for the population?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	It is a common cold	46	7.7	7.7	7.7
	It is dangerous for some	173	28.8	28.8	36.5
	Moderately dangerous	148	24.7	24.7	61.2
	It is dangerous	233	38.8	38.8	100.0
	Total	600	100.0	100.0	

At the same time, the majority of respondents consider the Covid19 virus to be dangerous and frightening for themselves (I can hardly say 14.2%, not dangerous at all, 15.7%, slightly dangerous, 35.7%, dreadful, 25.5%, very dreadful, 9%). The virus, which is considered dreadful and dangerous, causes more concern in the emotional state of respondents (Table 18).

Table 18. Answers to the question “How dangerous is this virus for you?”

How dangerous is this virus for you?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I can hardly say	85	14.2	14.2	14.2
	Not dangerous at all	94	15.7	15.7	29.8
	Slightly dangerous	214	35.7	35.7	65.5
	Dreadful	153	25.5	25.5	91.0
	Very dreadful	54	9.0	9.0	100.0
	Total	600	100.0	100.0	

There is also a link between the respondents themselves or those who get this disease around them and the level of anxiety in emotional state. So, in recent months, the people who have experienced an infection in themselves, their family, or those around them have seen more of the 21 symptoms of emotional distress than those who have expressed anxiety. Here, Sig = 0.002 and Pearson Correlation = 0.127, which suggests that there is a serious direct relationship between the two variables, and the existing relationship is significant at the level of 0.01. At the same time, there is a serious and direct link between safety measures and adherence to the principle of self-isolation, with more anxiety in the emotional state, and this relationship is significant at the level of 0.05 (Sig = 0.010 and Pearson Correlation = 0.105).

There is also a link between anxiety and what feelings and emotions people have experienced the most in the last few weeks. Thus, there is no relationship between anxiety and positive emotions (Sig = 0.443, which is not significant at the level of 0.05). However, there is a serious and direct connection between anxiety and negative emotions. Given that here Sig = 0.000 and Pearson Correlation = 0.595, the direct relationship between the two variables is almost significant at the level of 0.01. There is also a serious and direct connection between anxiety and fear variable. Thus, Sig = 0.000 and Pearson Correlation = 0.294 were between the anxiety variables “what is your danger in the current situation”. In the current situation, 5 signs of fear in people (2 signs of health fear and 3 signs of economic loss) have been studied with the question of what your dangers are (Table 19).

Table 19. On the relationship between the anxiety variable and other variables of respondents

Correlations							
		Anxiety	Do you personally know Covid19 infected-dying or recovering?	Safety Precautions: I am at self-isolation	Positive emotions	Negative emotions	Fear
Anxiety	Pearson Correlation	1	.127**	.105*	.031	.595**	.294**
	Sig. (2-tailed)		.002	.010	.443	.000	.000
	N	600	600	600	600	600	600

\*\* . Correlation is significant at the 0.01 level (2-tailed).  
 \* . Correlation is significant at the 0.05 level (2-tailed).

An analysis of the relationship between the variables “how often have you had these situations in recent months” (anxiety) and “what are your dangers in the current situation” (fear) and “in yourself in the last week ...” (emotions) shows that, indeed, there is a strong link between negative emotions, fear and anxiety. Thus, respondents with strong positive emotions (optimists) had lower levels of anxiety and fear, while respondents with strong negative emotions had higher levels of anxiety and fear. That is why, just as there was no relationship between positive emotion and anxiety (Sig = 0.443, which is meaningless at 0.05), there was no relationship between positive emotion and fear (Sig = 0.204, which is 0.05). However, there is a positive link between negative emotions and anxiety, meaning that as negative emotions increase, so do people’s feelings of fear and anxiety. Between negative emotions and anxiety variables were Sig = 0.000 and Pearson Correlation = 0.595. At the same time, between the negative emotion and the fear variable, Sig = 0.000 and Pearson Correlation = 0.218. This suggests that there is a direct link between negative emotion and anxiety and fear, and that negative emotional states are more often observed with increasing feelings of anxiety and fear.

There is no significant correlation between the predominance of positive and negative emotions and the gender variable. There was a Sig = 0.789 (meaningless at 0.05) between the positive emotion and the gender variable, and Sig = 0.731 (meaningless at the 0.05 level) between the negative emotion and the gender variable, indicating that the emotions did not change on the basis of the gender variable in a pandemic. Similarly, there is no connection between positive and negative emotions and changes in marital status. Here, between the positive emotions and the marital status variable, Sig = 0.145 (meaningless at the level of 0.05) and the negative emotion between the family status variable was Sig = 0.415 (meaningless at the level of 0.05). As noted above, those with a higher level of education preferred the prediction that the situation would be somewhat tense, but positive emotions were noted in their emotional state. Thus, there is a direct link between higher levels of education and higher positive emotions, and higher education people have more positive emotions in a pandemic, but there is a negative relationship between higher levels of negative emotions and higher levels of education. Thus, the lower the level of education, the higher the negative emotions. Here, the relationship between positive emotions and education level was Sig = 0.12 and Pearson Correlation = 0.103 (the current relationship is significant at 0.05), while the relationship between negative emotions and education level variable was Sig = 0.25 and Pearson Correlation = -0.091 (current relationship is significant at 0.05). This shows that people with a high level of education behave more calmly and adequately in this situation, becoming more enlightened and familiar with the methods available in world practice on how to protect against the virus. Those with a higher level of education were able to assess the situation more accurately if they became infected, and were more likely to report positive emotional expressions because they were able to arrange treatment for themselves and their loved ones at home and provide first aid (Table 20).

Table 20. On the relationship between emotions and various variables of respondents

		Correlations						
		Positive	Negative	Anxiety	Fear	Gender	Marital status	Education
Positive emotions	Pearson Correlation	1	.098*	.031	.052	-.011	-.060	.103*
	Sig. (2-tailed)		.017	.443	.204	.789	.145	.012
	N	600	600	600	600	600	600	600
Negative emotions	Pearson Correlation	.098*	1	.595**	.218**	.014	.033	-.091*
	Sig. (2-tailed)	.017		.000	.000	.731	.415	.025
	N	600	600	600	600	600	600	600

\*. Correlation is significant at the 0.05 level (2-tailed).  
 \*\*. Correlation is significant at the 0.01 level (2-tailed).

The other two factors that contributed to the high level of negative emotions were whether respondents were “infected, dying or recovering from Covid19 among themselves, their families or acquaintances” and whether the respondents were “at risk for Covid19”. An analysis of the results shows that there is a strong correlation between the respondents’ observation of Covid19 in themselves or in the people around them, and their emotions. Thus, the positive emotions were weak in the respondents who “infected, died or recovered from Covid19 among themselves, their family or acquaintances”, or more precisely, there were Sig = 0.82 and Pearson Correlation = -0.071, which is a positive emotion shows that the relationship between infection and observation at 0.05 is not significant. However, respondents who observed Covid19 in or around him were more likely to have negative emotions, and there is a direct correlation between the presence of Covid19 infection, death, or recovery between himself, his family, or acquaintances, and negative

emotions. Here, Sig = 0.004 and Pearson Correlation = 0.118, which suggests that the direct relationship between negative emotion and infection and observation is significant at 0.01. There is also a strong correlation between negative emotions and disease risk variables (Sig = 0.018 and Pearson Correlation = 0.096). However, there is no difference between positive emotions and disease risk (Sig = 0.818 and Pearson Correlation = -0.009). More precisely, people at risk for the disease have higher negative emotions. The link between negative emotions and disease risk is significant at 0.05, and negative emotions are higher in those who identify themselves as “at risk for Covid19” (Table 21).

Table 21. On the correlations between the emotions of respondents and variables of risk probability

Correlations					
		(Positive emotion)	(Negative emotion)	Do you personally know that someone infected with Covid19, died or cured?	Do you relate to the risk group on Covid19?
Positive emotion	Pearson Correlation	1	.098*	-.071	-.009
	Sig. (2-tailed)		.017	.082	.818
	N	600	600	600	598
Negative emotion	Pearson Correlation	.098*	1	.118**	.096*
	Sig. (2-tailed)	.017		.004	.018
	N	600	600	600	598

\*. Correlation is significant at the 0.05 level (2-tailed).  
 \*\*. Correlation is significant at the 0.01 level (2-tailed).

The five-point question, “What is your fear for your safety in the current situation?” includes both health and economic risks. An analysis of the results shows that while health fears are related to age, economic fears are more related to gender change. Given that the health variable and the gender variable are Sig = 0.875, there is almost no correlation between these two variables. That is, the increase or decrease of one is not accompanied by the increase or decrease of the other. However, there is a strong correlation between economic fear and gender, where Sig = 0.003, which indicates that the correlation between the two variables is significant at 0.01. On the other hand, the analysis of statistical data on the two variables shows that economic fear is higher in men (women X= 1.12 and men X = 2.02).

There is also a strong correlation between health fear and the age variable, where Sig = 0.000 and Pearson Correlation = 0.252, indicating that there is a direct correlation between the two variables, the existing relationship is significant at 0.01, and that age is accompanied by increased health fear. The relationship between economic fear and age is not significant at 0.05 relative to Sig = 0.354. The analysis of the numerical average values also shows that the fear of economic problems was in the age group of 18-35 =X 1.24, in the age group of 36-65 X = 2.24 and in the age group of 66+ X = 1.22. More precisely, the emergence of economic problems during the pandemic (falling incomes, job losses, economic crisis) worries people in the age group of 36-65. Most likely, this can be explained as follows: the fact that the majority of respondents in the 18-35 age group are both students and sometimes single, and receive financial support from their parents, makes them think less about economic issues. Most people in the 66+ age group have a fixed monthly income (pension) because they are retired and have no job to lose. However, people between the ages of 36 and 65 are more afraid of economic problems because they work in different jobs to provide for the family's economic needs (Table 22, 23, 24).

The use of safety precautions (ranging from self-isolation to frequent hand washing with soap) is also associated with various variables. The analysis of the results shows that those who are more concerned about individual issues prefer more serious security measures. At the same time, people with more intense anxiety than the “21 signs of emotional state in recent months” prefer more serious measures. Specifically, there is a strong correlation between safety measures and anxiety levels, and since Sig = 0.010 and Pearson Correlation = 0.0105, the direct correlation between the two variables is almost significant at 0.05. At high levels of pandemic anxiety, people resort to more serious measures (self-isolation, minimization of contact, combined use of protective outfits and disinfectants, use of protective outfits alone, etc.). Responding to the question “What worries you the most today?”, The respondents said that they are more concerned about social or personal issues. The analysis shows that respondents who prefer personal issues also prefer to follow more strict safety rules. The fact that Sig = 0.000 and Pearson Correlation = 0.227 between these two variables suggests that the direct relationship between the two variables is significant at 0.01 (Table 25).

Table 22. The link between health and economic security of respondents and gender, age variables

		Correlations			
		Fear of health	Fear of the economic situation	Gender	Age
Your safety in the current situation (fear for health)	Pearson Correlation	1	.452**	-.006	.252**
	Sig. (2-tailed)		.000	.875	.000
	N	600	600	600	600
Your security in the current situation (fear of the economic situation)	Pearson Correlation	.452**	1	.120**	.038
	Sig. (2-tailed)	.000		.003	.354
	N	600	600	600	600

\*\* . Correlation is significant at the 0.01 level (2-tailed).  
 \* . Correlation is significant at the 0.05 level (2-tailed).

Table 23. On the fear of economic and health hazards in all three age groups (Numerical average).

Descriptive Statistics			
	Age	N	Mean
18-35	HealthQ15	300	.8067
	EconomicQ15	300	1.2433
36-65	HealthQ15	200	1.4900
	EconomicQ15	200	2.2450
66+	HealthQ15	100	2.6600
	EconomicQ15	100	1.2200

Table 24 On respondents' on gender economic and health fears (Numerical average).

Group Statistics			
	Gender	N	Mean
HealthQ15	Female	300	1.3600
	Male	300	1.3267
EconomicQ15	Female	300	1.1233
	Male	300	2.0233

Table 25. Link between security measures of respondents and social, personal issues.

		Correlations			
		Safety Precautions: I am isolated	How often have you had these cases in recent months?	This gun worries you the most - social issues	Today worries you the most - personal matters
Safety Precautions: I am isolated	Pearson Correlation	1	.105*	.067	.227**
	Sig. (2-tailed)		.010	.103	.000
	N	600	600	600	600

\*. Correlation is significant at the 0.05 level (2-tailed).  
 \*\*. Correlation is significant at the 0.01 level (2-tailed).

There is also a strong link between respondents' "satisfaction with different areas of life" and their feelings in recent weeks. Thus, positive emotions predominate in respondents with high levels of satisfaction from different fields of life (since Sig = 0.000 and Pearson Correlation = 0.427, there is a direct correlation between the two variables, meaning 0.01. That is, as one of these two variables increases, the other increases). but there is a correlation between satisfaction and negative emotions from different areas of life (since Sig = 0.000 and Pearson Correlation = -0.145, there is a significant correlation between the two variables at the level of 0.01. That is, as one of these two variables increases, the other decreases). There is no significant correlation at the level of 0.05 between the gender variable (Sig = 0.163) and the age variable (Sig = 0.214) with consent from different areas of life.

There is also a strong direct link between the level of satisfaction from different fields of life and the level of education and employment status. Thus, people with a high level of education have a high level of satisfaction. At the same time, respondents with busy and stable incomes are more satisfied with life, and the existing relationship is significant at the level of 0.01 (Sig = 0.000 and Pearson Correlation = 0.427) (Table 26).

Table 26. On the relationship between the life satisfaction of respondents and various variables.

		Correlations						
		Satisfaction from different areas of life	Feelings you have observed in the last few weeks (positive emotion)	Feelings you have observed in the last few weeks (negative emotion)	Age	Gender	Your education	Your occupation
Satisfaction from different areas of life	Pearson Correlation	1	.427**	-.145**	-.057	-.051	.150**	.134**
	Sig. (2-tailed)		.000	.000	.163	.214	.000	.001
	N	600	600	600	600	600	600	600

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

During the analysis of the relationship between satisfaction and employment from different spheres of life, it became clear that in terms of life satisfaction, it was [X= 50 at retirees, X = 42.14 at unemployed, X= 47.90 at the employed and X = 50.60 at students (Table 27).

Table 27. On the relationship between the life satisfaction of respondents and various social status variables

Descriptive Statistics		N	Mean
Pension	Satisfaction from various spheres of life	37	50.00
Unemployed	Satisfaction from different spheres of life	170	42.14
Employed	Satisfaction from different spheres of life	233	47.90
Student	Satisfaction from different spheres of life	160	50.60

People’s personal qualities also play an important role in compliance with security measures. Thus, the aloofness, sincerity, discipline, etc., which express the characteristics of a person’s character and qualities affect on his/her emotional state, illness, or recovery process. Therefore, the study also examined the impact of personal qualities on the positive or negative changes in people’s emotional state in recent months. The relationship between the changes in their emotional state (surveyed on 21 symptoms) and personal qualities were examined (for 4 types of personal qualities: 1) open-emotional-sincere, 2) aloof-quiet, 3) disciplined, 4) undisciplined) (Table 28)

Table 28. Relationship between the emotional state of respondents and personality traits.

		Correlations				
		How often have you had these cases in recent months?	Open-emotional	Aloof-quiet	Discipline	Undiscipline
How often have you had these cases in recent months?	Pearson Correlation	1	.103*	.038	-.015	.045
	Sig. (2-tailed)		.011	.352	.722	.275
	N	600	600	600	600	600

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The analysis of the data shows that there is a serious direct link between the emotional state and the open-emotional-sincere type of personal quality. Here Sig = 0.011 and Pearson Correlation = 0.103. By drawing the attention to the emotional state of the respondents with open, emotionally aroused personality traits, they were exposed to fear, anxiety, disturbance, sleep disturbances, and other symptoms seemed more pronounced. However, there is no serious link between emotional state and other types of personality traits. Here, Sig = 0.352 between emotional state and closed-quiet type, Sig = 0.722 between emotional state and disciplined type, Sig = 0.275 between emotional state and undisciplined type, these correlation indicators are not considered significant at 0.05 level (Table 28).

It was also examined whether there is a connection between discipline and indiscipline, which are personality traits, and emotions. While there is a serious and direct relationship between discipline and positive emotions (Sig = 0.000 and Pearson Correlation = 0.313), there is a relationship between discipline and negative emotions (Sig = 0.004 and Pearson Correlation = 0.118). It is also clear that the people with a high level of indiscipline in the observance of security

measures also have high negative emotions. In contrast, positive emotions are higher in people with disciplined qualities (Table 29).

Table 29. On the relationship between the personality quality (disciplined and undisciplined) of respondents and their emotions (positive and negative).

Correlations					
		Disciplined	Undisciplined	Feelings you have observed in the last few weeks (negative emotion)	Feelings you have observed in the last few weeks (positive emotion)
Disciplined	Pearson Correlation	1	-.037	-.019	.313**
	Sig. (2-tailed)		.363	.644	.000
	N	600	600	600	600
Undisciplined	Pearson Correlation	-.037	1	.118**	-.025
	Sig. (2-tailed)	.363		.004	.541
	N	600	600	600	600
** . Correlation is significant at the 0.01 level (2-tailed).					
* . Correlation is significant at the 0.05 level (2-tailed).					

## CONCLUSIONS

The research showed that the pandemic did not pass unnoticed to the psychological state of the Azerbaijani population. The level and degree of expression of this anxiety varies depending on age, gender and social status. Thus, the elderly, those who live alone, those in the middle age group, those with little education, those who are undisciplined in character, very emotional, and etc., show problems with compliance with security measures, and negative emotions, fear and anxiety are higher.

167 respondents identified themselves as at risk for Covid19, 33 of whom were chronically ill, 127 were aged, and 7 were pregnant per their perception.

Examining the relationship between the 21-character variable "emotional state" and age, gender, who to live with, employment, risk group, and coronavirus risk variables also show that there is a strong relationship between anxiety and age groups. The emotional state is worse in single respondents, ie the anxiety is higher, but in nuclear families, in large families where there are parents and children as well as grandparents, the emotional state, ie anxiety, is lower. The higher the risk group is, the the emotional distress is higher as well. At the same time, there is a serious and direct link between security measures and adherence to the principle of self-isolation, with greater concern for the emotional state. Positive emotions were weak in respondents who "infected, died or recovered from Covid19 among themselves, their family or kith's".

The analysis of the results shows that while health fears are related to age, the fear of worsening of economic fear is more related to gender variable. There is also a strong direct link between the level of satisfaction from different fields of life and the level of education and employment status. Thus, people with a high level of education have a high level of satisfaction as well. At the same time, the employed respondents and the ones with stable incomes are more satisfied with life.

The study also examined the impact of personal qualities on people's positive or negative emotional state in recent months. The emotional state of the respondents with open, emotionally aroused personality traits attracted particular attention, as they were more likely to experience fear, anxiety, affection, sleep disturbances, and other symptoms seemed more pronounced. While there is a serious and direct connection between the discipline and positive emotions, there is also a connection between discipline and negative emotions. It is also clear that the negative emotions are high in people with a high level of indiscipline. On the contrary, positive emotions are high in people with a disciplined character.

The obtained results show that the pandemic affects people's mood, way of life and thinking, the system of relationships, and so on. In order to improve the emotional state of this group and ensure a comfortable life, a special psychotherapy, psychological support and assistance program should be developed for them.

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