ATTITUDES TOWARDS COVID-19 AND ANXIETY LEVEL

Mensur Nuredin, Zumera Alili, page 61-73

ABSTRACT

The aim of this research is to verify the relationship between attitudes towards Covid-19 and the level of anxiety, to observe the differences between demographic factors and the level of anxiety, as well as to see the difference between demographic factors and attitudes towards Covid-19.

The purpose of this research is to ascertain whether there is a relationship between attitudes towards Covid-19 and the level of anxiety and to extract data on sociodemographic factors on the level of anxiety and to extract data on demographic factors of attitudes towards Covid-19.

The instrument we used to measure attitudes towards Covid-19 is a scale constructed from 20 items, with 8 items on personal belief, 5 on knowledge attitude, 2 on normative attitude, and 2 on managerial attitudes. The scale of attitudes towards Covid-19 was developed in 2021 by Mihyeon Seong, Juyoung Park, Soojin Chung, and Sohyune Sok. This instrument has gained high reliability in various studies, even up to 0.92. The instrument that measures the level of anxiety is the Beck questionnaire, consisting of 21 items that specifically measure individual anxiety symptoms. The responses provided range from 1 to 4.

The data obtained show that there are statistically significant differences between gender and the level of anxiety, with females having a higher level of anxiety compared to males who have a lower level, while regarding the place of residence, we found no differences.

Keywords: Attitudes towards Covid-19, Anxiety, Sociodemographic factors, Beck questionnaire and Covid-19 beliefs.

Prof. Dr. Mensur Nuredin
International Vision University, Gostivar, North Macedonia

e - mail:
mensur@vision.edu.mk

Zumera Alili, PhD Candidate
International Vision University, Gostivar, N.Macedonia

e-mail:
zumera.alili@vision.edu.mk

_____
Declaration of interest:
The authors reported no conflict of interest related to this article.

I.   Introduction

Anxiety is defined as a mixture of sadness and worry, as a kind of worry. Anxiety, which we can also call boredom or worry, is a different feeling, a group of feelings that is experienced from time to time by everyone, that leaves you breathless and leads suddenly to the need to take a deep breath (Burkovik, 2009).

According to Lala (2016) anxiety is a natural emotion, beneficial for human adaptation to the natural and social environment. Without anxiety and fear, man would not have survived and would not have survived bullying and dangers. (Nuredin & Nuredin, 2023)

Kierkegaard, Heideger, and other existentialists use the word anxiety (angst) to refer to the fear we feel when we move into the uncertainty of our future (Boeree, 2004).

Excessive activity of the noradrenergic system, which is one of the substances that provide messages between nerves in the brain, causes anxiety and fear (Burkovik,). According to Burkovik, Freud defined three types of anxiety: reality anxiety, neurotic anxiety, and guilt anxiety. Reality anxiety is the fear or anxiety felt in dealing with real dangers in the outside world. The person is aware of the cause of the anxiety.

Neurotic anxiety is the fear of exhibiting behaviors that will result in retribution by losing control over one's inner instincts.Anxiety of guilt: The person is afraid of his conscience, the reason for anxiety is known.

According to (Ajzen & Fishbein , 2000), attitudes are summary assessments of a psychological object in dimensions such as good – bad, harmful - beneficial, pleasant - unpleasant - and pleasurable - unpleasurable.

Motivation in education plays a crucial role in shaping attitudes towards Covid-19 and anxiety levels among students (Selim & Saračević, 2017). Understanding the relationship between knowledge acquisition and attitudes towards Covid-19 can inform educational strategies aimed at promoting public health awareness (Selim & Saračević, 2017).

Utilizing digital tools for educational purposes may influence students' attitudes towards Covid-19 and their anxiety levels, highlighting the importance of technology integration in academic settings (Selimi &

Üseini, 2019). Exploring students' motivation in utilizing digital tools for learning can provide insights into their attitudes towards Covid-19 and their mental health outcomes (Selimi, Saracevic, & Useini, 2020). Enhancing students' motivation through tailored educational approaches may positively impact their attitudes towards Covid-19, anxiety levels, and overall well-being.

II.   Research methodology

2.1. The problem issue in this research is:

The relationship between COVID-19 attitudes and anxiety levels?

The purpose of this study is to:

- The relationship of attitudes towards COVID-19 and the level of anxiety is verified.
- To look at the differences between demographic factors and anxiety levels.
- To see the differences between demographic factors and attitudes towards COVID-19.

2.3 Tasks of research:

- To determine if there is a relationship between COVID-19 attitudes and anxiety levels
- To extract data on sociodemographic factors at the level of anxiety
- To extract data on demographic factors in attitudes towards COVID-19

2.4 Research hypotheses

H.1 There is a correlation between attitudes towards Covid-19 and anxiety levels. Individuals with more negative COVID-19 attitudes have lower levels of anxiety compared to individuals with more positive COVID-19 attitudes who have higher levels of anxiety.

H.2 There are differences between sociodemographic factors and anxiety levels.

H2.1 Women have higher levels of anxiety compared to men

H2.2 Individuals of rural settlements have lower levels of anxiety compared to individuals from urban settlements.

2.5 Population and sample

The research population consists of citizens of the Republic of Macedonia, specifically citizens of the city of Gostivar. The selected sample is purposive. In total, there are 122 participating subjects in our research.

2.6 Measuring instruments

The instrument we have used for measuring attitudes towards Covid-19 is a scale of 20 items of which 8 items of personal confidence, 5 items of knowledge attitudes, 2 items of normative attitudes, 3 items of emotional attitudes and 2 items of managerial attitudes. The scale of attitudes towards Covid-19 was built in 2021 by Mihyeon Seong 1, Juyoung Park 2, Soojin Chung 3 and Sohyune Sok. This instrument in various studies has gained a high reliability even that of 0.92.

The instrument that measures the level of anxiety is Beck's questionnaire, built from 21 items that specifically measure the symptoms of anxiety in the individual. The answers are from 1 to 4. 1 - Not at all, 2 – Little, but not disturbing, 3 – Medium, but disturbing in some cases, 4 – Very, it has been extremely disturbing.

III.   Results

In this part of the study are presented the statistical data for the description of the variables (main variable and demographic variables), the corresponding statistical analysis of hypothesis testing. The obtained data are presented with tables and graphs, having such an order as starting from the descriptive data on demographic factors, reliability analysis and then testing each hypothesis in the study within the relevant variables.

3.1 Descriptive data on sociodemographic variables

IV.   Tabela 1. Gender related descriptive data

	Frequency	Percent	Valid percent	Cumulative percent
Valid Men	54	44.3	44.3	44.3
	68	55.7	55.7	100.0
Woman	122	100.0	100.0	
Total				

Table 1 shows the number of participants by gender. The number of male subjects who participated in this study is 54 with 44.3%, while 68 are female with 55.7% which is also presented in chart 1.
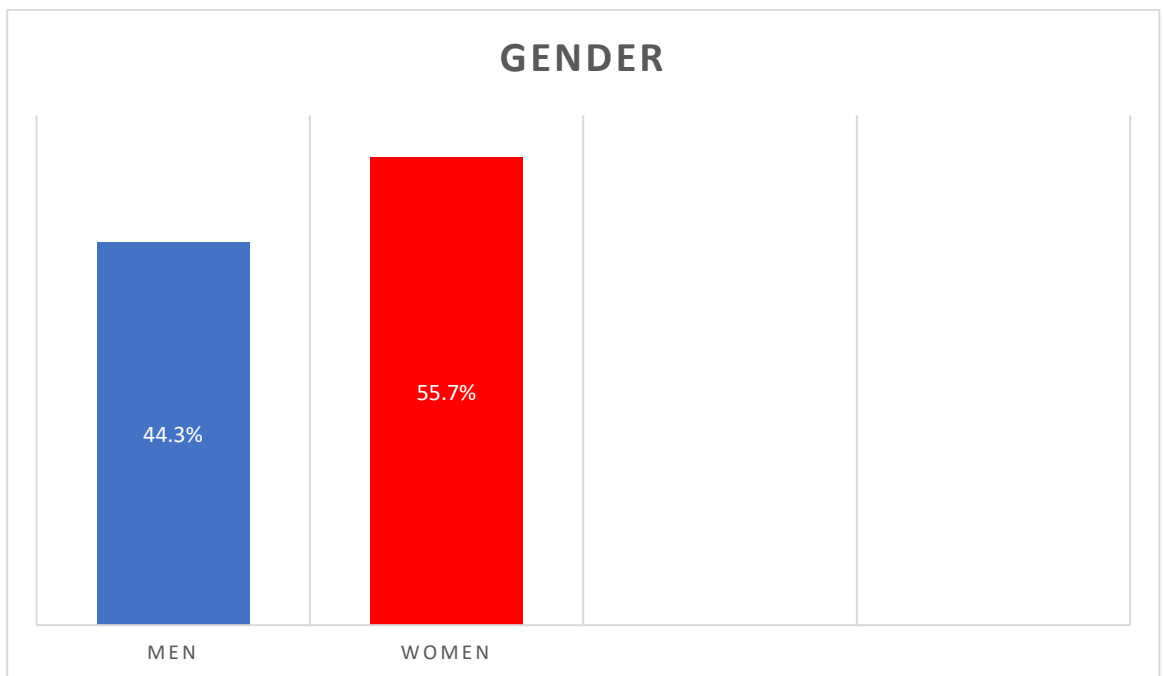
Chart 1. Residence related descriptive data

	Frequency	Percent	Valid percent	Cumulative percent
Valid Village	60	49.2	49.2	49.2
	62	50.8	50.8	100.0
City	122	100.0	100.0	
Total				

Referring to the residence of the subjects participating in the research, which has been operationalized with a village or a city, 62 subjects or 50.8% live in the city while 60 subjects or 49.2% live in the village out of a total of 122 subjects participating in the research, which is shown in chart 2.
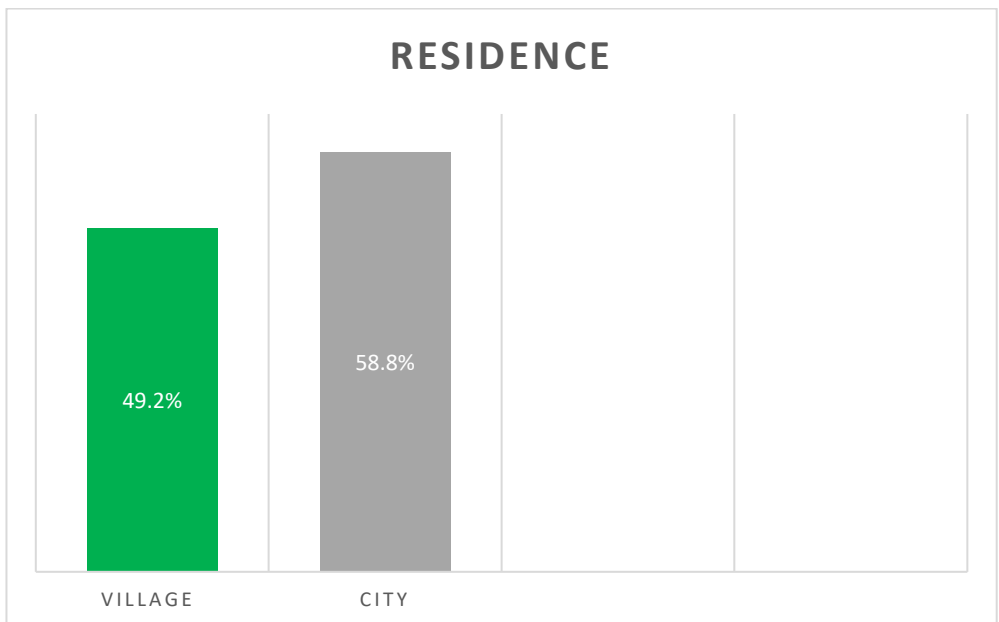
RESIDENCE

49.2%   58.8%

VILLAGE   CITY

Chart 3. Economical status descriptive data

	Frequency	Percent	Valid percent	Cumulative percent
Valid low	11	9.0	9.0	9.0
	99	81.1	81.1	90.2
	12	9.8	9.8	100.0
mid	122	100.0	100.0	
very good				
total				

Table 3 shows the number of participants according to economic status. The number of subjects with low economic status who participated in this study is 11 with 9.0%, 99 subjects are with an average economic status 81.1% while 12 are with very good economic status with 9.8% results which are presented in chart 3.
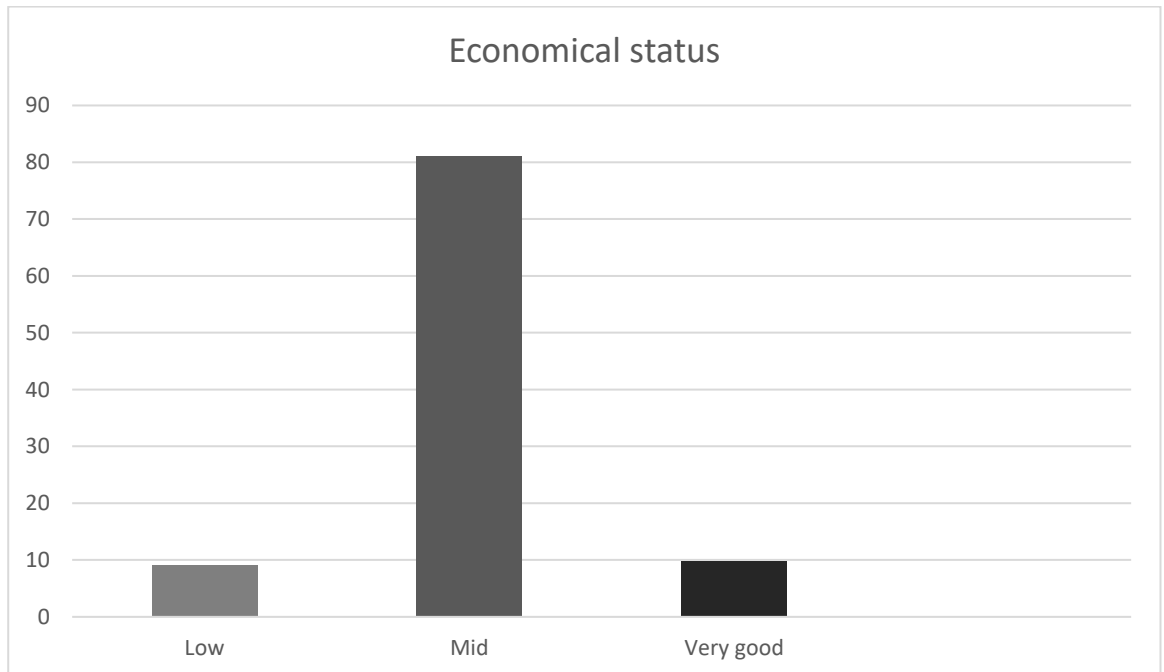
3.2 Analysis of the Reliability of the Level of Anxiety and Attitudes towards COVID-19

Table 4. Reliability of the measuring instrument on COVID-19 Attitudes

Cronbach's Alpha	The number of items
.818	19

The reliability of the questionnaire for measuring attitudes towards covid-19 according to the statistical method - Alpha Cronbach is 0.818, a satisfactory coefficient compared to world standards ranging from over 0.70. The instrument that measures attitudes towards covid-19 is considered a reliable instrument.

Table 5. The instrument's measure reliability on the anxiety level

Cronbach's Alpha	The number of items
.871	21

The reliability of the questionnaire for measuring the level of anxiety according to the statistical method - Cronbach's Alpha is 0.871, a satisfactory coefficient compared to world standards that ranges from over 0.70. The instrument that measures the level of anxiety is considered a reliable instrument.

3.3 Correlational Analysis of Anxiety Levels and Attitudes Towards COVID-19

Table 6. Pearson correlation anxiety level/COVID19 attitudes

		Level - Anxiety	Attitudes towards covid19
Level – Anxiety	Pearson Correlation	1	.015
	Sig. (2-tailed)		.869
	N	122	122
Attitudes towards covid 19	Pearson Correlation	.015	1
	Sig. (2-tailed)	.869	
	N	122	122

According to Perason's correlation, there is no correlation between anxiety levels and attitudes toward COVID-19. The correlation is r=.015, and the level of sig p=.86 indicates that it is not statistically significant. This means that our hypothesis is rejected.

3.4 Gender differences above anxiety level

Table 7 Descriptive data on gender and anxiety level

	Gender	N	Mean	Std. Deviation	Std. The meaning of the error
Level - Anxiety	Male	54	27.9630	5.17601	.70437
	Female	68	31.0735	8.51744	1.03289

Table 8. T- test, comparison of averages by sex.

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	1	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Level - Anxiety	Equal variances assumed	10.040	.002	-2.359	120	.020	-3.11057	1.31867	-5.72145	-.49969
	Equal variances not assumed			-2.488	112.931	. 014	-3.11057	1.25020	-5.58745	-.63368

To find the differences in the level of anxiety by gender, the analysis of the comparison of averages through the Test (t) was used. Referring to statistics on the homogeneity of variance through the Levin test, it was found that the groups among themselves are not homogeneous as the obtained result (p = 0.002) does not meet the condition of comparison statistically. In Table 7 in the descriptive data of anxiety level averages, it is seen that males have averages (M=27.96 SD=5.17) and females have averages (M=31.07 SD=8.51). From the descriptive results we see that the groups have a difference in average, this is also verified by the result obtained through the comparative analysis of the T-test in table 8 from where we have df= 120, t= - 2.359, sp= 0.02 of the result which confirms that between the groups of gender and the level of anxiety there are valid statistical differences. Our hypothesis is accepted.

3.5 Gender differences on residence and anxiety level

Table 9. Descriptive data on gender and anxiety level

	Place of residence	N	Mean	Std. Deviation	Std. The meaning of the error
Level - Anxiety	Village City	60 62	30.8000 28.6290	8.22110 6.32516	1.06134 .80330

Table 10. T- test, comparison of averages by place of residence

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
			ig.		f	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Level-Anxiety	Equal variances assumed	.605	109	.638	20	.104	2.17097	1.32543	-.45330	4.79523
	Equal variances not assumed			.631	10.792	.106	2.17097	1.33106	-.46667	4.80861

To find the differences in the level of anxiety by residence, the analysis of the comparison of averages through the Test (t)was used. Referring to statistics on the homogeneity of variance through the Levin test, it was found that the groups among themselves are not homogeneous as the obtained result (p = 0.10) does meet the condition of comparison statistically. In Table 9 in the descriptive data of anxiety level averages, it is seen that subjects from rural settlements have averages (M=30.80 SD= 8.22) and subjects from urban settlements have averages (M= 28.62 SD= 6.32). From the descriptive results we see that the groups don't have a difference in average, this is also verified by the result obtained through the comparative analysis of the T-test in table 8 from where we have df= 120, t= - 1.638, sp= 0.10 of the result which confirms that between the groups of gender and the level of anxiety there are no valid statistical differences. Our hypothesis is rejected.

V. Conclusion

In this study we worked to find a correlation between the level of anxiety and attitudes towards Covid-19, where according to the correlation realized we found that there is no such correlation. There is no significant correlation between the level of anxiety and attitudes towards COVID-19.

Then we looked at the differences in the level of anxiety – gender and residence. According to the t-test (statistic of difference) we found that between gender and anxiety level there are statistically significant differences and that women have higher level of anxiety compared to men who have lower level.

Regarding the residence and the level of anxiety, we find that there is no difference between the residence and the level of anxiety.

REFERENCES

Ajzen, I., & Fishbein , M. (2000). Attitudes and theattitude-behavior relation: reasoned and au-tomatic processes. In *In European Review of Social Psychology.* Chichester, England: Wiley: Wiley. In press.

Boeree, D. (2004). *Theories of personality.* Plejad.

Burkovik, Y. (2009). *Anxiety (Causes, consequences and methods to cure it).* TİMAŞ.

Selim, A., & Saračević, M. (2017). MAKEDONYA CUMHURİYETİNDE DEVLET MATURA SINAVINDA MATEMATİK SINAVLARININ DEĞERLENDİRİLMESİ. *ARAŞTIRMA DERGİSİ, 88.*

Selimi, A., & Üseini, A. (2019). Yenilikçi eğitim ile dijital yetkinlik ve girişimcilik becerilerinin geliştirilmesi–Kuzey Makedonya örneği. *ICEB'19-International Congress of Economics and Business*, (pp. 204-213). Bursa.

Selimi, A., Saračević, M., & Rushiti, A. (2018). İNTERAKTİF MATEMATİK EĞİTİMİNDE MULTİMEDYA CİHAZLARIN ÖNEMİ – MAKEDONYA ÖRNEĞİ. In *Balkan Eğitim*

Araştırmaları 2018/ Balkan Educational Studies 2018 (pp. 31-41). Balkan Eğitim Araştırmaları 2018/ Balkan Educational Studies 2018.

Selimi, A., Saracevic, M., & Useini, A. (2020). Impact of using digital tools in high school mathematics: A case study in North Macedonia. *Universal Journal of Educational Research*, 3615-3624.

Nuredin, A; & Nuredin M. (2023) Farklı Alanlarda Etik, International Vision University Press