ZAGREB CHILD AND YOUTH PROTECTION CENTER

REPORT: SOME ASPECTS OF MENTAL HEALTH DURING THE COVID-19 PANDEMIC

PRELIMINARY RESULTS

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The report was prepared by psychologists from the Zagreb Child and Youth Protection Center

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Dear citizens and colleagues,

Trying to connect science and practice, in order to understand the emotional state and the needs of citizens, as well as to provide even better professional help, Zagreb Child and Youth Protection Center decided conduct research on mental health during a pandemic covide-19 or corona virus. In the meantime, earthquakes have happened to us in Zagreb, and as experts we are constantly wondering how our (past, present and future) patients and clients are.

On this occasion, we present the preliminary results collected from March 19 to April 7, based on the answers of 1314 participants, whom we thank from the bottom of our hearts for investing their time and effort in completing the questionnaire.

I invite all of you to get involved in filling out our questionnaire (on Croatian language) and help us to hear, understand and support you in the times which come.

https://docs.google.com/forms/d/e/1FAIpQLSdWbCNNHp2oINP3GFQuAHJ-uQ9MhrADWh0NdVePGBLocutP7w/viewform

Professor Gordana Buljan Flander, PhD, director of the Zagreb Child and Youth Protection Center

Participants through some basic information

Number of participants: 1314

Average age: 32 years (SD=12,1)

Gender: 202 males, 1083 females

Average number of household members: 3.73 (SD=1,56)

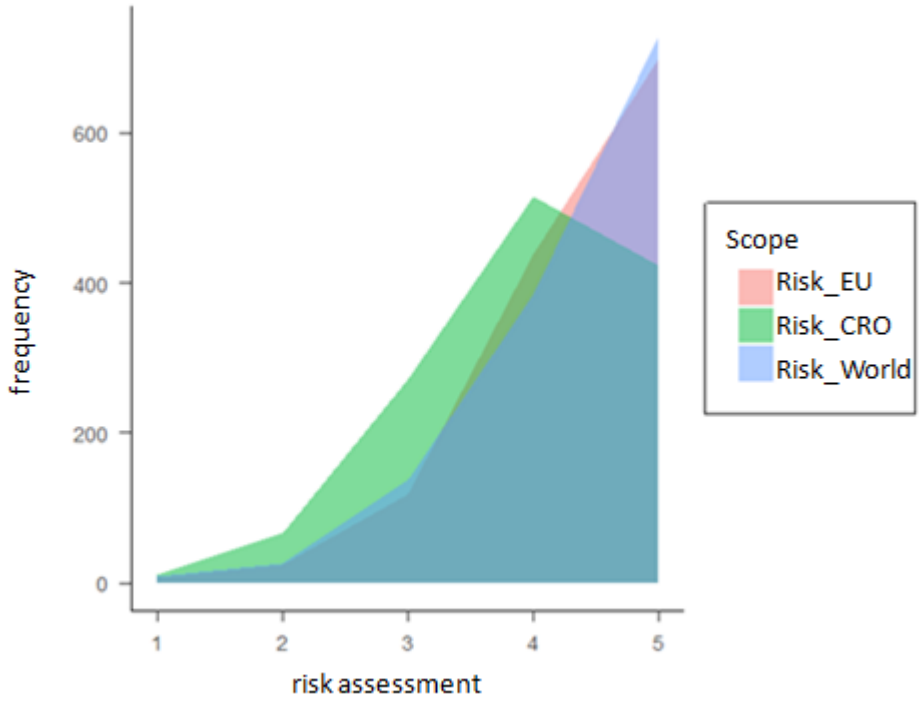
Chronic diseases: 167 have, 1121 not have

Currently in self-isolation: 291 yes, 997 no

"WE" and "THEY": How much are we at risk?

On the **pandemic risk assessment** scale from 1 to 5, average pandemic risk in Croatia are 3.99 (SD=0,91), in Europe 4.4 (SD=0,78) and in the world also 4.4 (SD=0,81), which are all high estimates.

Figure 1. Distributions of risk assessment depending on the scope



In order to check whether the perception of risk differs depending on the scope (Croatia, Europe, world), an analysis of variance was performed for dependent samples with a range of risk (Croatia, Europe, world) as an independent variable and risk assessment as a dependent variable. It was found that the perception of risk differs significantly depending on the range: F (2, 2574) = 323,29; p <,001.

In order to examine these differences in more detail, Bonferronis' post-hoc tests were performed. They found that there is a statistically significant difference in risk assessment between Croatia and Europe (p<,001) and between Croatia and the world (p <,001), but not between Europe and the world (p>,99).

In other words, **the participants estimate that the risk of a pandemic is lower in Croatia than in Europe and the world, although overall they perceive that the risk is high, both in our country and in Europe and the world.**

How serious is it?

To check how **seriously** participants take the situation around the COVID-19 pandemic, they were asked to mark one statement that best fits their experience of the seriousness of the situation. The results show that over 90% of participants perceive the situation as serious, about 3% are undecided, and about 5% do not perceive the situation as serious.

Table 1. Number (f) and percentage (%) of responses in each category of perceived severity of the situation

Category	*f*	%
I don’t take it too seriously, it’s very similar to the flu	11	0,9%
I don't take it seriously, but you have to be careful	50	3,9%
I neither take it seriously nor take it seriously	43	3,3%
I take the situation seriously, but I think others are exaggerating	549	42,6%
I take it very seriously, the situation is not harmless at all	635	49,3%

Legend: f - frequency

News, fear, measures and conspiracies

Aspects of the pandemic defined as: exposure to news and information, subjective experience of fear of infection, adherence to prescribed measures, and experience of corona virus as a conspiracy.

More than 50% of participants estimated **that their choice to gather news** around Covide-19 more than the average, and about 25% of participants has **increased fear** of possible infection of corona virus. Every tenth participant in the *intensified measure* considers the corona virus "**invented or at least over-inflated story** by pharmaceutical companies and

government". It is important to point out that slightly **more than 30% of participants estimate that they do not fully follow the instructions of the competent institutions** in the current situation regarding the pandemic COVID-19 (corona virus).

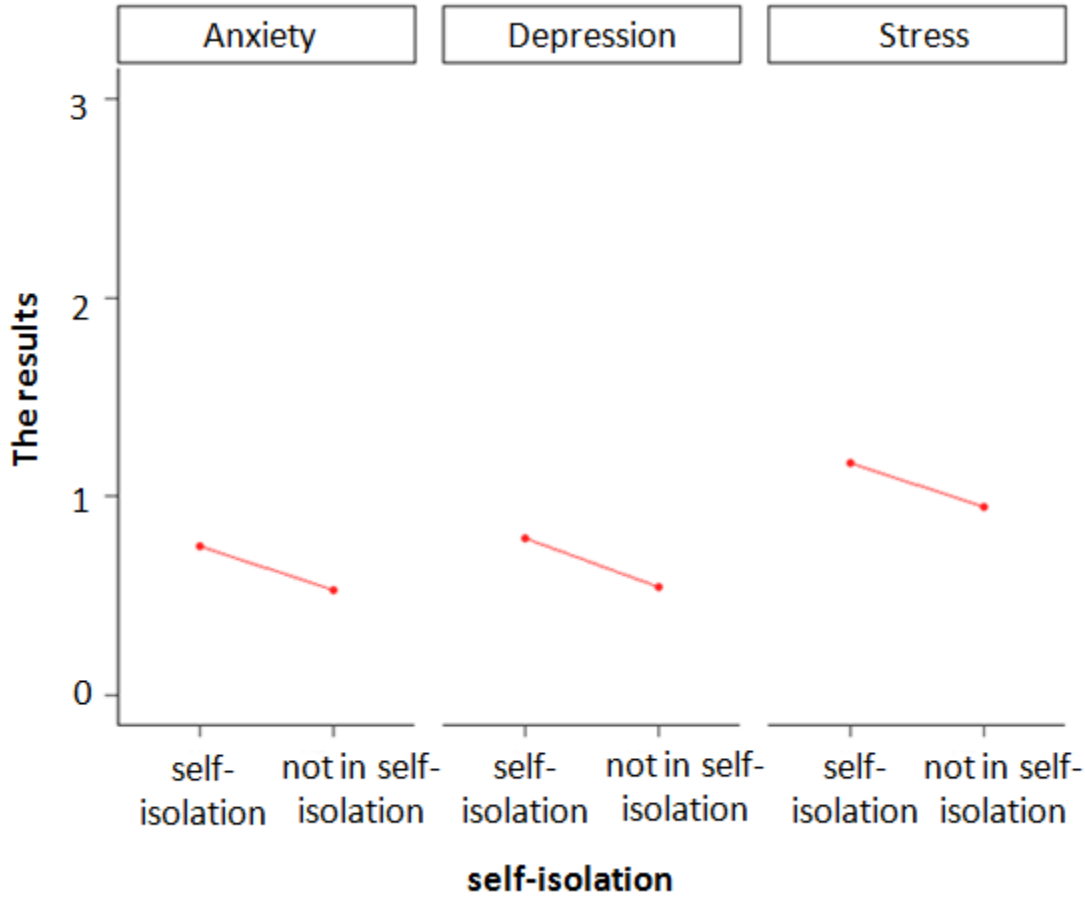
How are we behind closed doors ?

WE ARE GENERALLY GOOD

To examine the hypothetical impact of self-isolation on some aspects of mental health, a series of Welch t-tests were conducted with self-isolation as an independent variable and anxiety, depression, and stress as a dependent variable.

It was found that persons who are in self - isolation have a statistically significantly higher score on the **anxiety** scale than persons who are not in self - isolation: t(413,73)=5,57, p<,001. People who are in self-isolation also have a statistically significantly higher score on the **depression** scale than people who are not in self-isolation: t(409,5)=4,85, p<,001. Finally, persons who are in self-isolation have a statistically significantly higher score on the **stress** scale than persons who are not in self-isolation: t(435,5)=4,37, p<,001 .

Figure 2. The average and results on scales of anxiety, depression and the stress and due to the fact that the person in self-isolation



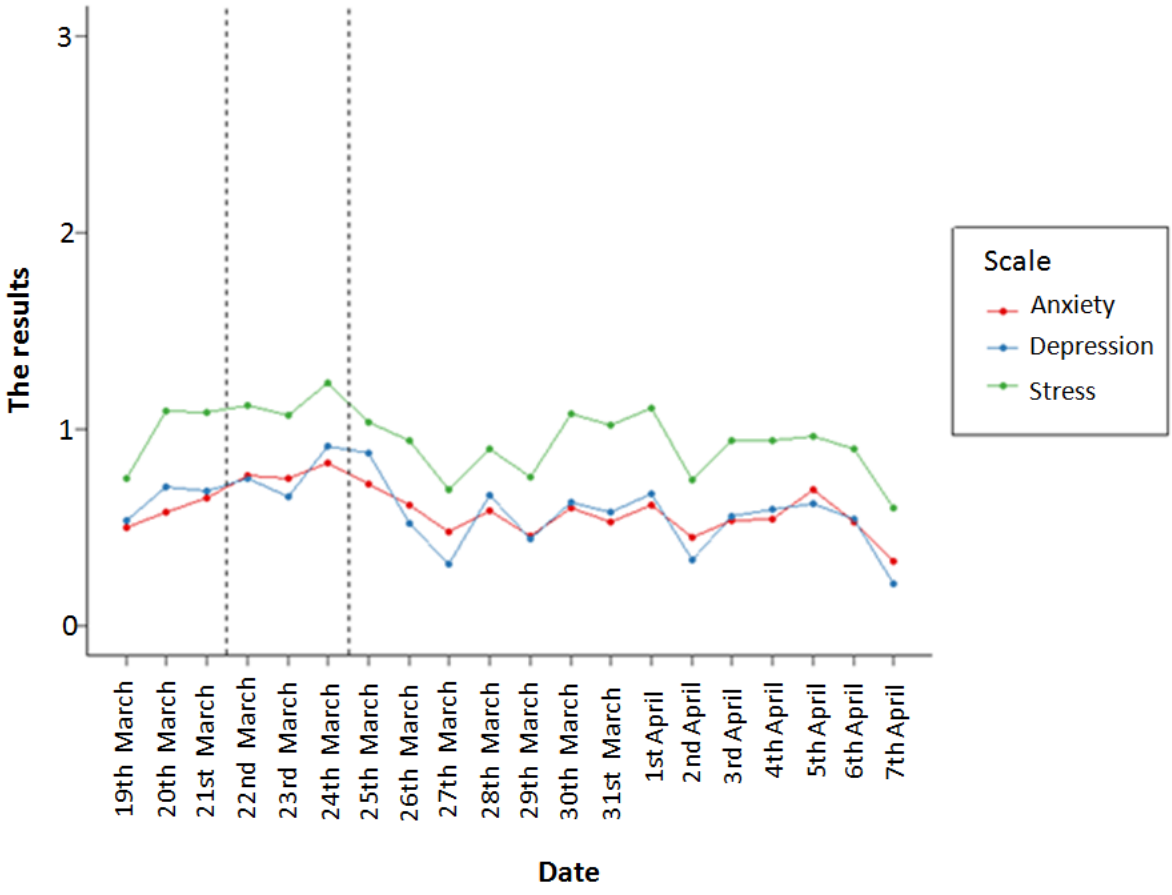
The LOESS method (local regression) shows that depression shows a mild sinusoidal trend, as a function of the duration of self-isolation. This is an interesting finding that will be further examined in the coming period, and could be related to deviations in bio - psychological rhythms in the contexts of day, week and month.

Shaken by an earthquake

During this research, Zagreb was hit by a strong earthquake of magnitude 5.5 according to Richter on March 22 at 6 hours and 24 minutes, followed by another at 7 hours and 1 minute of magnitude 5.0 according to Richter (PMF, 2020).

To examine the effect of the earthquake, data on anxiety, depression, and stress trends were grouped into the earthquake period (March 22nd, 23rd, and 24th) and outside the earthquake period. In addition, three Welch t-tests were performed with an earthquake period/outside the earthquake period as an independent variable and anxiety, depression, or stress as a dependent variable.

Figure 3. Daily averages of anxiety, depression, and stress
Note: Dashed lines indicate the period of an earthquake.



The results showed that there was a statistically **significant increase in anxiety immediately after the earthquake**: t(63,81)=-2,44; p=,02 with large effect size, d=0,27. However, there was no statistically significant difference in depression: t(63,87)=-1,56; p=,12 nor under stress: t(65,63)=-1,56; p=,12. Unfortunately, we do not have data on whether and which respondents were directly affected by the earthquake. Additional analyzes will be performed on this data.

Hope for the future

To verify the association between future hope and adherence to measures, a Pearson correlation coefficient was calculated that was statistically significant n(r=,14; p<,001). People who estimate that they **adhere more to the measures** achieve significantly higher results on the scale of **hope for the future**. It is important to note that previous research has shown that resilient individuals have greater hope for the future, and adherence to measures could indicate greater hope for the future and potentially, among other relevant factors, lead to greater resilience when facing difficult and challenging situations and life events.

Get involved in this research and help us learn more!

https://docs.google.com/forms/d/e/1FAIpQLSdWbCNNHp2oINP3GFQuAHJ-uQ9MhrADWh0NdVePGBLocutP7w/viewform