

# WEBAPPENDIX

PART 1: Material and methods

PART 2: The study protocol

PART 3: Results

# PART 1: Material and methods

## Methods

To study the effect on the mental health of university students, a protocol was assembled to gather demographic data and also data pertaining to general health, previous psychiatric history, current symptoms of anxiety (STAI-Y1 state) <sup>1</sup>, depression (CES-D) <sup>2</sup> and suicidality (RASS), <sup>3</sup> as well as a detailed protocol to investigate changes because of the lockdown in sleep, sex, family relationships, finance, eating and exercising and religion/spirituality. Additionally, the beliefs concerning the COVID-19 outbreak, including the measures taken and conspiracy theories, were investigated.

The full protocol is shown in the part 2 of the webappendix.

Each question of the protocol was given an ID code, reflecting the part of the protocol it belongs to with a capital letter and a number to denote its position within that protocol part. Throughout the results these ID codes are used for increased accuracy.

According to a previously developed method, <sup>2,3</sup> the cut-off score 23/24 for the CES-D score and a previously derived algorithm were used to identify cases of probable clinical major depression. Cases of clinical depression were considered those positively identified by both methods. Those identified by only one of them, were considered to be cases of distress (false positive cases in terms of depression).

The data were collected online and anonymously from April 5<sup>th</sup> to May 2<sup>nd</sup>, 2020, during the period of the full implementation of lockdown in the country. Approval was given by the Ethics Committee of the Faculty of Medicine, Aristotle University of Thessaloniki, Greece.

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## Materials and Populations

The study sample included

- 1104 females (71,92%; aged 22.13±5.43) and
- 431 males (28.08%; aged 22.35±3.16)

In terms of type of studies they were as follows (webtable 1)

| <b>A3. Field of studies</b> | <b>Group</b> | <b>N</b> | <b>%</b> |
|-----------------------------|--------------|----------|----------|
| Architecture                | B            | 76       | 4.95     |
| Arts                        | C            | 13       | 0.85     |
| Athletics                   | A            | 11       | 0.72     |
| Biology                     | A            | 38       | 2.48     |
| Chemical engineering        | B            | 18       | 1.17     |
| Chemistry                   | B            | 67       | 4.36     |
| Civil engineering           | B            | 129      | 8.40     |

|                                   |   |     |       |
|-----------------------------------|---|-----|-------|
| Dentistry                         | A | 18  | 1.17  |
| Economics                         | B | 48  | 3.13  |
| Teaching and education            | C | 22  | 1.43  |
| Electric and computer engineering | B | 40  | 2.61  |
| Engineering                       | B | 40  | 2.61  |
| English studies                   | C | 3   | 0.20  |
| French studies                    | C | 3   | 0.20  |
| Geology                           | B | 5   | 0.33  |
| Geoponics                         | B | 15  | 0.98  |
| German studies                    | C | 2   | 0.13  |
| Greek studies and literature      | C | 27  | 1.76  |
| History and archaeology           | C | 57  | 3.71  |
| Informatics                       | B | 24  | 1.56  |
| Journalism                        | C | 20  | 1.30  |
| Law                               | C | 20  | 1.30  |
| Mathematics                       | B | 17  | 1.11  |
| Medicine                          | A | 407 | 26.51 |
| Nursing                           | A | 25  | 1.63  |
| Pharmacy                          | A | 13  | 0.85  |
| Philosophy                        | C | 12  | 0.78  |
| Physics                           | B | 113 | 7.36  |
| Political sciences                | C | 9   | 0.59  |
| Psychology                        | A | 24  | 1.56  |
| Veterinary                        | A | 38  | 2.48  |
| Other                             | C | 181 | 11.79 |

In terms of year of study, they were as follows (wehtable 2)

| <b>A4. Year of studies</b> | <b>N</b> | <b>%</b> |
|----------------------------|----------|----------|
| 1 <sup>st</sup>            | 253      | 16.48    |
| 2 <sup>nd</sup>            | 246      | 16.03    |
| 3 <sup>rd</sup>            | 218      | 14.20    |
| 4 <sup>th</sup>            | 286      | 18.63    |
| 5 <sup>th</sup>            | 244      | 15.90    |
| 6 <sup>th</sup>            | 134      | 8.73     |
| Studies completed          | 154      | 10.03    |

## Statistical Analysis

### *Stratification of the sample:*

The study population was self-selected. The most important problem was that females were grossly over-represented.

A method of simplified post-stratification was used <sup>4-8</sup> in order to create a standardized study sample with characteristics as close as possible to those of the Greek general population.

A method of simplified post-stratification was used <sup>4-8</sup> in order to create a standardized study sample with characteristics as close as possible to those of the Greek general population in terms of sex. The source for data concerning the general population was the National Statistics Authority ([www.statistics.gr](http://www.statistics.gr)). The transformation utilized the multiplication of blocks of data corresponding to the above key variable. More specifically it included the triplication of all male data. This led to the creation of a dataset with 2397 ‘dummy cases’ which was closer to the general population and could be considered to be representative. The utilization of groups of cases ‘en block’ during the creation of this dataset is expected to keep the correlation between variables intact.

Afterwards,

- Descriptive tables were created for the variables under investigation, in order to calculate rates expected to reflect the prevalence of specific characteristics in the general population of university students in Greece during the lockdown
- Chi-square tests were used for the comparison of frequencies when categorical variables were present and for the post hoc analysis of the results a Bonferroni-corrected method of pair-wise comparisons was utilized <sup>9</sup>.
- Factorial Analysis of Variance (ANOVA) was used to test for the main effect as well as the interaction among categorical variables, with Scheffé as post hoc test to investigate which variables could contribute to the development of others.
- Relative Risk (RR) was calculated as the ratio of the incidence in two groups under comparison.

## **PART 2: The study protocol**

### **A. GENERAL DATA**

#### **A1. Sex**

- Male
- Female
- Other/I do not wish to define

#### **A2. Date of Birth written with 4 digits (e.g. 1982)B**

Please enter your date of birth in the form of 4 digits (e.g. 1981, 1968, 1993 etc.)

#### **A3. Field of studies**

- Architecture
- Arts
- Athletics
- Biology
- Chemical engineering
- Chemistry
- Civil engineering

- Dentistry
- Economics
- Teaching and education
- Electric and computer engineering
- Engineering
- English studies
- French studies
- Geology
- Geoponics
- German studies
- Greek studies and literature
- History and archaeology
- Informatics
- Journalism
- Law
- Mathematics
- Medicine
- Nursing
- Pharmacy
- Philosophy
- Physics
- Political sciences
- Psychology
- Veterinary
- Other

#### **A4. Year of studies**

- First
- Second
- Third
- Fourth
- Fifth
- Sixth
- Student pending graduation

#### **B. ANXIETY**

##### **State-Trait Anxiety inventory**

##### **State questions B1-B20**

**B21. How much has your emotional state changed in relation to the appearance of anxiety and insecurity compared to before the COVID-19 epidemic?**

## Trait Questions B22-B42

### C. SADNESS & DEPRESSION/MELANCHOLY

**C1. I was bothered by things that usually don't bother me.**

- Rarely or none of the time (less than 1 day)
- Some of a little of the time (1-2 days)
- Occasionally or a moderate amount of time (3-4 days)
- Most or all of the time (5-7 days)

**C2. I did not feel like eating; my appetite was poor.**

- Rarely or none of the time (less than 1 day)
- Some of a little of the time (1-2 days)
- Occasionally or a moderate amount of time (3-4 days)
- Most or all of the time (5-7 days)

**C3. I felt that I could not shake off the blues even with help from my family or friends.**

- Rarely or none of the time (less than 1 day)
- Some of a little of the time (1-2 days)
- Occasionally or a moderate amount of time (3-4 days)
- Most or all of the time (5-7 days)

**C4. I felt I was just as good as other people.**

- Rarely or none of the time (less than 1 day)
- Some of a little of the time (1-2 days)
- Occasionally or a moderate amount of time (3-4 days)
- Most or all of the time (5-7 days)

**C5. I had trouble keeping my mind on what I was doing.**

- Rarely or none of the time (less than 1 day)
- Some of a little of the time (1-2 days)
- Occasionally or a moderate amount of time (3-4 days)
- Most or all of the time (5-7 days)

**C6. I felt depressed.**

- Rarely or none of the time (less than 1 day)
- Some of a little of the time (1-2 days)
- Occasionally or a moderate amount of time (3-4 days)
- Most or all of the time (5-7 days)

**C7. I felt that everything I did was an effort.**

- Rarely or none of the time (less than 1 day)
- Some of a little of the time (1-2 days)
- Occasionally or a moderate amount of time (3-4 days)
- Most or all of the time (5-7 days)

**C8. I felt full of hope about the future.**

- Rarely or none of the time (less than 1 day)
- Some of a little of the time (1-2 days)
- Occasionally or a moderate amount of time (3-4 days)
- Most or all of the time (5-7 days)

**C9. I thought my life had been a failure.**

- Rarely or none of the time (less than 1 day)
- Some of a little of the time (1-2 days)
- Occasionally or a moderate amount of time (3-4 days)
- Most or all of the time (5-7 days)

**C10. I felt fearful.**

- Rarely or none of the time (less than 1 day)
- Some of a little of the time (1-2 days)
- Occasionally or a moderate amount of time (3-4 days)
- Most or all of the time (5-7 days)

**C11. My sleep was restless.**

- Rarely or none of the time (less than 1 day)
- Some of a little of the time (1-2 days)
- Occasionally or a moderate amount of time (3-4 days)
- Most or all of the time (5-7 days)

**C12. I was happy.**

- Rarely or none of the time (less than 1 day)
- Some of a little of the time (1-2 days)
- Occasionally or a moderate amount of time (3-4 days)
- Most or all of the time (5-7 days)

**C13. I talked less than usual.**

- Rarely or none of the time (less than 1 day)
- Some of a little of the time (1-2 days)
- Occasionally or a moderate amount of time (3-4 days)
- Most or all of the time (5-7 days)

**C14. I felt lonely.**

- Rarely or none of the time (less than 1 day)
- Some of a little of the time (1-2 days)
- Occasionally or a moderate amount of time (3-4 days)
- Most or all of the time (5-7 days)

**C15. People were unfriendly.**

- Rarely or none of the time (less than 1 day)

- Some of a little of the time (1-2 days)
- Occasionally or a moderate amount of time (3-4 days)
- Most or all of the time (5-7 days)

**C16. I enjoyed life.**

- Rarely or none of the time (less than 1 day)
- Some of a little of the time (1-2 days)
- Occasionally or a moderate amount of time (3-4 days)
- Most or all of the time (5-7 days)

**C17. I had crying spells.**

- Rarely or none of the time (less than 1 day)
- Some of a little of the time (1-2 days)
- Occasionally or a moderate amount of time (3-4 days)
- Most or all of the time (5-7 days)

**C18. I felt sad.**

- Rarely or none of the time (less than 1 day)
- Some of a little of the time (1-2 days)
- Occasionally or a moderate amount of time (3-4 days)
- Most or all of the time (5-7 days)

**C19. I felt that people disliked me.**

- Rarely or none of the time (less than 1 day)
- Some of a little of the time (1-2 days)
- Occasionally or a moderate amount of time (3-4 days)
- Most or all of the time (5-7 days)

**C20. I could not get “going”.**

- Rarely or none of the time (less than 1 day)
- Some of a little of the time (1-2 days)
- Occasionally or a moderate amount of time (3-4 days)
- Most or all of the time (5-7 days)

**C21. How much has your emotional state related to the experience of joy or melancholy changed in comparison to before the COVID-19 epidemic?**

- It got a lot worse
- It got a little worse
- Neither better nor worse
- Improved a bit
- It has improved a lot

**D. THOUGHTS ABOUT DEATH**

**D1. Are you afraid that you are going to die?**



- Not at all
- A little bit
- Much
- Very much

**D2. Do you ever think that it would be better if you were dead?**

- Not at all
- A little bit
- Much
- Very much

**D3. Do you think that it is a wonderful thing that you are alive?**

- Not at all
- A little bit
- Much
- Very much

**D4. Have you ever felt that it's worth living?**

- Not at all
- A little bit
- Much
- Very much

**D5. Do you think of harming yourself physically?**

- Not at all
- A little bit
- Much
- Very much

**D6. Do you often think of committing suicide if you have the chance?**

- Not at all
- A little bit
- Much
- Very much

**D7. Do you make plans concerning the method to use in order to end your life?**

- Not at all
- A little bit
- Much
- Very much

**D8. I am thinking of committing suicide, but I won't do it.**

- Not at all
- A little bit
- Much

- Very much

**D9. Do you enjoy your life?**

- Not at all
- A little bit
- Much
- Very much

**D10. Are you feeling tired from your life?**

- Not at all
- A little bit
- Much
- Very much

**D11. How much has your tendency to think about death and/or suicide changed, compared to before the outbreak of COVID-19?**

- Very much increased
- Increased a bit
- Neither increased, nor decreased
- Decreased a bit
- Very much decreased

**D12. Have you ever hurt yourself in any way deliberately, during your whole life so far?**

- Never
- Once
- 2-3 times
- Many times

**D13. Have you ever attempted suicide, during your whole life so far?**

- Never
- Once
- 2-3 times
- Many times

**E. SUBSTANCE ABUSE**

**The following questions refer to your consumption of alcohol and other substances. Your answers will remain secret. Please answer according to your experience, DURING THE QUARANTINE.**

**E1. Did you use alcohol or any other substances (like wine, beer, hard liquor, marijuana, cocaine, heroin or other opioids, stimulants, suppressants, hallucinogen, inhalants) during the quarantine more often than before?**

- Never

- A little
- Moderately
- Much
- Very much

## **F. SEXUALITY**

**For every question, please select the answer best describing the GENERAL degree that represents you during the PREVIOUS WEEK, including the CURRENT DAY.**

### **F1. How easily do you get sexually aroused?**

- I never get aroused
- Difficultly
- Quite easily
- Very easily
- Extremely easily

### **F2. Is your orgasm satisfying?**

- I can't have an Orgasm
- Slightly satisfying
- Quite satisfying
- Very satisfying
- Extremely satisfying

### **F3. How did the above change in comparison to the time before the Covid-19 lockdown?**

- Significantly worse
- Slightly worse
- No change
- Slightly better
- Significantly better

## **G. SLEEP DURING THIS PERIOD**

The following questions address sleep problems. Answer each question by choosing the most appropriate answer, according to what happened during the LAST TWO WEEKS of quarantine.

### **G1. How many hours do you sleep at night?**

- Less than 5 hours
- 6 hours
- 7 hours
- 8 hours

- 9 hours or more

**G2. Is it difficult for you to fall asleep at night?**

- Yes
- No

**G3. Is it difficult for you to wake up in the morning?**

- Yes
- No

**G4. No matter how much you sleep, do you feel tired in the morning?**

- Yes
- No

**G5. At about what time do you wake up?**

- At 8 o' clock or earlier
- At 9 o' clock
- At 10 o' clock
- At 11 o' clock
- At 12 o' clock or later

**G6. How many times do you wake up during a typical night's sleep?**

- None
- Once
- Twice or more

**G7. Do you often snore?**

- Yes
- No

**G8. Are your dreams vivid and full of action?**

- Yes
- No

**G9. Do you have frightening dreams or nightmares?**

- Yes
- No

**G10. Do you wake up suddenly at night or in the morning with an unpleasant feeling of fear, anxiety, worry, tension, sadness, unhappiness or disoriented?**

- Yes
- No

**G11. Do you grit your teeth while sleeping (bruxism)?**

- Yes
- No

**G12. Do you have severe drowsiness during the day?**

- Yes
- No

**G13. Has your sleep duration changed in quarantine due to Covid-19 compared to before?**

- It decreased a lot
- It decreased a little
- Neither decreased, nor increased
- It increased a little
- It increased a lot

**G14. Has the quality of your sleep changed during the Covid-19 lockdown in comparison to the time before?**

- It got a lot worse
- It got a little worse
- Neither better nor worse
- It has improved a little
- It has improved a lot

## **H. INTERNET USE**

Answer the following questions about using the Internet during quarantine due to Covid- 19. The Internet usage refers to anything one does while connected online (e-mail, web browsing, chat rooms, games, online porn/sex, discussion groups, multi-user rooms, list services etc.).

**H1. Has your internet usage changed compared to before the Covid-19 epidemic?**

- It decreased a lot
- It decreased a little
- Neither decreased, nor increased

- It increased a little
- It increased a lot

## **I. ONLINE TEACHING**

**I1. Are your school’s online courses satisfactory (concerning the quantity of hours and the quality)?**

- Not at all
- A little bit
- Moderately
- Much
- Very much
- No courses were done online

**I2. Do they satisfactorily replace the traditional classroom teaching?**

- Not at all
- A little bit
- Moderately
- Much
- Very much
- No courses were done online

## **IA. QUALITY OF LIFE**

**IA1. To help you express how good or bad your quality of life is during quarantine, we have set up a scale in which the best situation you can imagine is at 10 and the worst you can imagine is at 0.**

**We would like you to note on the scale how good or bad your quality of life is TODAY.**

0   1   2   3   4   5   6   7   8   9   10  
 Worst quality of life Best quality of life

**IA2. How did the quarantine affect your family ties?**

- Very negatively
- Slightly negatively
- Not affected
- Positively
- Very positively

**IA3. Has your overall quality of life changed compared to before the quarantine due to Covid-19?**

- It got a lot worse
- It got a little worse
- Neither better nor worse
- It has improved a little
- It has improved a lot

## **IB. GENERAL THOUGHTS**

**IB1. The government is secretly involved in the murder of innocent citizens and/or well-known public figures.**

- Definitely not true
- Probably not true
- I do not know
- Probably true
- Definitely true

**IB2. The power held by the heads of state is smaller than that of small unknown groups that really control the world of politics.**

- Definitely not true
- Probably not true
- I do not know
- Probably true
- Definitely true

**IB3. Secret organizations are communicating with aliens, but they hide it from the public.**

- Definitely not true
- Probably not true
- I do not know
- Probably true
- Definitely true

**IB4. Groups of scientists manipulate or conceal evidence to deceive the public.**

- Definitely not true
- Probably not true
- I do not know
- Probably true
- Definitely true

**IB5. The government allows or commits acts of terrorism on its territory, and covers its involvement.**

- Definitely not true
- Probably not true
- I do not know
- Probably true
- Definitely true

**IB6. A small, secret group of people is responsible for making all the important decisions, such as starting wars.**

- Definitely not true
- Probably not true
- I do not know
- Probably true
- Definitely true

**IB7. Mind control technology is used on people without their knowledge.**

- Definitely not true
- Probably not true
- I do not know
- Probably true
- Definitely true

**IB8. Novel and advanced technology that will harm the existing industry is being suppressed.**

- Definitely not true
- Probably not true
- I do not know
- Probably true
- Definitely true

**IB9. The government uses people as scapegoats to hide its involvement in criminal activity.**

- Definitely not true
- Probably not true
- I do not know
- Probably true
- Definitely true

**IB10. Some important events are due to the activity of a small group who secretly manipulate world events.**

- Definitely not true
- Probably not true



- I do not know
- Probably true
- Definitely true

**IB11. Experiments involving new drugs or technologies are performed systematically on humans without their knowledge or consent.**

- Definitely not true
- Probably not true
- I do not know
- Probably true
- Definitely true

**IB12. Many important pieces of information are deliberately hidden from the public for reasons of interest.**

- Definitely not true
- Probably not true
- I do not know
- Probably true
- Definitely true

**IB13. The spread of certain viruses and/or diseases is the result of deliberate, covert actions of an organization.**

- Definitely not true
- Probably not true
- I do not know
- Probably true
- Definitely true

**IB14. Covid-19 virus is a product of a scientific laboratory.**

- Definitely not true
- Probably not true
- I do not know
- Probably true
- Definitely true

**IB15. The spread of the virus Covid-19 is the result of intentional, covert operations.**

- Definitely not true
- Probably not true
- I do not know
- Probably true

- Definitely true

**IB16. The creation of Covid-19 virus aims to its use as a biological warfare weapon.**

- Definitely not true
- Probably not true
- I do not know
- Probably true
- Definitely true

## **PART 3: Results**

### ***3.1 Demographics***

The stratified study sample included 46,06% females and 53.94% males. Age by sex was identical to that of the raw sample. Group A studies included 37.71%, group B 42.59% and group C 19.69%.

### ***3.2 History of self-injury or suicidal attempt***

History of self-injury: 20.48%

- Males: 17.63%
- Females: 23.82%
- Once: 8.51%
- 2-3 times: 8.51%
- Several times: 3.46%

History of suicidal attempt: 4.46%

- Males: 3.71%
- Females: 5.34% of females
- Once: 3.29%
- 2-3 times: 0.87%
- Several times: 0.29%

Males vs. females concerning

- history of self-injury: Chi-square=14.005, df=1, p<0.001
- history of suicidal attempts: Chi-square=3.704, df=1, p=0.054

### ***3.3 Present mental status during lockdown***

- Increased anxiety (at least 'much') in > 65%
- More depressive feelings (at least 'much') in > 30%

- Suicidal thoughts were increased (at least ‘much’) in 2.59%
- Major depression in 12.43%
- Distress in an additional 13.46%

|   | level      | %     | At least ‘much’ % |
|---|------------|-------|-------------------|
| <b>B21. Change in anxiety</b>           | not at all | 0.00  |                   |
|   | a little   | 8.84  |                   |
|   | moderately | 23.82 |                   |
|   | much       | 22.40 | 67.33             |
|   | a lot      | 44.93 |                   |
| <b>C21. Change in depressive affect</b> | not at all | 12.52 |                   |
|   | a little   | 31.62 |                   |
|   | moderately | 24.91 |                   |
|   | much       | 22.70 | 30.96             |
|   | a lot      | 8.26  |                   |
| <b>D11. Change in suicidal thoughts</b> | not at all | 58.87 |                   |
|   | a little   | 20.19 |                   |
|   | moderately | 18.36 |                   |
|   | much       | 2.59  | 2.59              |
|   | a lot      | 0.00  |                   |

**WebTable 3:** Change in anxiety, depressive feelings and suicidality in the stratified sample

|  | Females |        | Males  |        |
|--|---------|--------|--------|--------|
|  | Mean    | SD     | Mean   | SD     |
| B21. Change in anxiety (0-4)           | 3.21    | 0.96   | 2.88   | 1.04   |
| C21. Change in depressive affect (0-4) | 2.05    | 1.14   | 1.64   | 1.14   |
| D11. Change in suicidal thoughts (0-4) | 4.06    | 18.33  | 2.43   | 13.58  |
| IA1. Quality of Life (0-10)            | 6.02    | 2.13   | 5.99   | 2.12   |
| STAI-S                                 | 46.99   | 13.60  | 41.76  | 12.68  |
| STAI-T                                 | 46.23   | 12.31  | 43.04  | 12.16  |
| CES-D                                  | 19.99   | 7.80   | 17.47  | 7.19   |
| RASS Intention subscale                | 61.76   | 128.81 | 68.17  | 137.65 |
| RASS Life subscale                     | 133.16  | 102.55 | 140.41 | 105.63 |
| RASS History subscale                  | 49.45   | 65.16  | 36.07  | 56.15  |
| RASS Total                             | 244.38  | 241.83 | 244.64 | 241.88 |

**WebTable 4:** Change in anxiety, depressive feelings and suicidality when scores are utilized in a -2 to +2 scale, along with scores in the other scales used, in the stratified sample. ANOVA with sex as grouping and perceived changes in anxiety, depression and suicidality in comparison to the pre-lockdown period, scores in STAI-S, STAI-T , CES-D, QoL, and RASS subscales (Intention, Life and History) returned significant results (Wilks =0.905, F=25.15, effect df=10, error df=2386,  $p>0.001$ ). The Scheffe post hoc test revealed that the two sexes differed in all variables except from Quality of Life, RASS Intention and RASS Life subscales, with females consistently reporting higher scores.

### ***3.4 Lifestyle changes during the lockdown.***

There were lifestyle changes concerning internet use, sex and sleep

There were lifestyle changes, with an increase in internet use in more than 90%, an increase in the quantity of sleep in more than 60% and deterioration of quality in approximately 40% with different patterns between sexes. Sexual function also deteriorated during the lockdown in approximately 35% with females having more problems at before and a worse effect of lockdown. Overall online teaching was considered to be satisfactory but could not substitute face to face teaching. Quality of life worsened in more than half of the study sample (WebTable ).

alcohol use:

- No changes in alcohol use in approximately 80% s
- Any increase in 20%
- Alcohol use increased ‘much’ in more than 5%

Internet use:

- More than 90% used internet more frequently but

Sleep:

- Quantity of sleep increased in 60%
- Quality of sleep worsened in more than 40%.
- Different patterns between sexes with females having more deteriorated sleep (WebTable 5)

Sex

- More than 10% of females never have orgasm
- More than 20% of both sexes have an unsatisfactory sexual life
- In more than 35% sexual life deteriorated during the lockdown
- In approximately 6% sexual life improved during the lockdown
- Frequency of intercourse and satisfaction decreased and
- Are considered to be unsatisfactory by half of cases.

Online teaching

- 20% found online teaching unsatisfactory
- 40% believe it cannot replace face to face teaching

Family relationships during lockdown

- Improved in approximately 45%
- Worsened in approximately 10%

Quality of life during the lockdown

- Worsened in approximately 45%
- Improved in approximately 15%

Differences between sexes

There were significant differences between sexes with females manifesting more internet use, more sleep and sexual problems, but were more satisfied and positive with online teaching, experienced better or less deteriorating family relationships and a relative improvement in the overall quality of life.

|  |                    | Females | Males | Chi-square | df | p      |
|--|--------------------|---------|-------|------------|----|--------|
| <b>Alcohol use</b>   |                    |         |       |            |    |        |
| E1. Did you use alcohol or any illicit drugs during the quarantine more often than before? | Never              | 79.98   | 79.12 | 3.909      | 4  | 0.418  |
|  | A little           | 10.96   | 11.60 |            |    |        |
|  | Moderately         | 5.16    | 4.18  |            |    |        |
|  | Much               | 3.17    | 4.41  |            |    |        |
|  | A lot              | 0.72    | 0.70  |            |    |        |
| <b>Internet use</b>  |                    |         |       |            |    |        |
| H1. Has your internet usage changed compared to before the Covid-19 epidemic?              | Much decreased     | 0.36    | 0.93  | 61.060     | 4  | <0.001 |
|  | A little decreased | 1.18    | 1.62  |            |    |        |
|  | Not at all         | 6.43    | 11.14 |            |    |        |
|  | A little increased | 30.62   | 40.37 |            |    |        |
|  | Much increased     | 61.41   | 45.94 |            |    |        |
| <b>Sleep</b>   |                    |         |       |            |    |        |
| G1. How many hours do you sleep at night?  | 4                  | 5.71    | 6.73  | 26.472     | 4  | <0.001 |
|  | 6                  | 12.86   | 17.40 |            |    |        |
|  | 7                  | 17.93   | 21.35 |            |    |        |
|  | 8                  | 30.53   | 29.70 |            |    |        |
|  | 9 or more          | 32.97   | 24.83 |            |    |        |
| G2. Is it difficult for you to fall asleep at night?                                       | No                 | 39.13   | 53.83 | 51.639     | 1  | <0.001 |
|  | Yes                | 60.87   | 46.17 |            |    |        |
| G3. Is it difficult for you to wake up in the morning?                                     | No                 | 33.06   | 46.17 | 42.601     | 1  | <0.001 |
|  | Yes                | 66.94   | 53.83 |            |    |        |
| G4. No matter how much you sleep, do you feel tired in the morning?                        | No                 | 43.57   | 51.51 | 15.043     | 1  | <0.001 |
|  | Yes                | 56.43   | 48.49 |            |    |        |
| G5. At about what time do you wake up in the morning?                                      | 8                  | 7.97    | 10.67 | 22.430     | 4  | <0.001 |
|  | 9                  | 16.94   | 17.63 |            |    |        |
|  | 10                 | 20.11   | 14.85 |            |    |        |

|   |                         |       |       |         |   |        |
|---|-------------------------|-------|-------|---------|---|--------|
|   | 11                      | 19.02 | 23.90 |         |   |        |
|   | 12 or latter            | 35.96 | 32.95 |         |   |        |
| G6. How many times do you wake up during a typical night's sleep?   | Never                   | 47.01 | 58.93 | 40.258  | 2 | <0.001 |
|   | Once                    | 34.33 | 29.47 |         |   |        |
|   | Two or more             | 18.66 | 11.60 |         |   |        |
| G7. Do you often snore?   | No                      | 91.12 | 82.83 | 35.402  | 1 | <0.001 |
|   | Yes                     | 8.88  | 17.17 |         |   |        |
| G8. Are your dreams vivid and full of action?   | No                      | 36.41 | 45.01 | 18.195  | 1 | <0.001 |
|   | Yes                     | 63.59 | 54.99 |         |   |        |
| G9. Do you have frightening dreams or nightmares?   | No                      | 57.43 | 75.64 | 89.670  | 1 | <0.001 |
|   | Yes                     | 42.57 | 24.36 |         |   |        |
| G10. Do you wake up suddenly during the night or in the morning with an unpleasant feeling of fear, anxiety, tension, sadness or disoriented? | No                      | 62.59 | 79.35 | 82.318  | 1 | <0.001 |
|   | Yes                     | 37.41 | 20.65 |         |   |        |
| G11. Do you grit your teeth while sleeping (bruxism)?   | No                      | 83.15 | 85.15 | 1.791   | 1 | 0.180  |
|   | Yes                     | 16.85 | 14.85 |         |   |        |
| G12. Do you have severe drowsiness during the day?  | No                      | 80.71 | 87.01 | 17.683  | 1 | <0.001 |
|   | Yes                     | 19.29 | 12.99 |         |   |        |
| G13. Has your sleep duration changed in quarantine due to Covid-19 compared to before?  | Much decreased          | 3.35  | 2.78  | 25.774  | 4 | <0.001 |
|   | A little decreased      | 10.33 | 12.06 |         |   |        |
|   | Not at all              | 17.66 | 24.59 |         |   |        |
|   | A little increased      | 44.29 | 42.00 |         |   |        |
|   | Much increased          | 24.37 | 18.56 |         |   |        |
| G14. Has the quality of your sleep changed during the Covid-19 lockdown in comparison to the time before?                                     | Much worsened           | 12.68 | 8.58  | 31.198  | 4 | <0.001 |
|   | A little worsened       | 34.24 | 27.61 |         |   |        |
|   | Not at all              | 36.78 | 43.85 |         |   |        |
|   | A little improvement    | 12.77 | 14.62 |         |   |        |
|   | Much improvement        | 3.53  | 5.34  |         |   |        |
| <b>Sexuality</b>  |                         |       |       |         |   |        |
| F1. How easily do you get sexually aroused?   | Never aroused           | 2.26  | 0.93  | 150.311 | 5 | <0.001 |
|   | Very difficult          | 6.97  | 1.62  |         |   |        |
|   | Moderately difficult    | 19.20 | 8.12  |         |   |        |
|   | Moderately easy         | 46.83 | 48.72 |         |   |        |
|   | Very easy               | 19.02 | 29.93 |         |   |        |
|   | Extremely easy          | 5.71  | 10.67 |         |   |        |
| F2. Is your orgasm satisfying?  | Never orgasm            | 11.96 | 1.86  | 140.133 | 5 | <0.001 |
|   | Minimally satisfactory  | 8.06  | 3.71  |         |   |        |
|   | A little satisfactory   | 14.58 | 12.99 |         |   |        |
|   | Moderately satisfactory | 35.14 | 39.21 |         |   |        |
|   | Very satisfactory       | 19.66 | 27.84 |         |   |        |
|   | Extremely satisfactory  | 10.60 | 14.39 |         |   |        |
|   | Significantly worse     | 17.48 | 12.53 | 12.951  | 3 | 0.004  |

|   |                      |       |       |        |   |        |
|---|----------------------|-------|-------|--------|---|--------|
| F3. How did the above change in comparison to the time before the Covid-19 lockdown?                  | A little worse       | 22.37 | 25.52 |        |   |        |
|   | No change            | 53.99 | 56.15 |        |   |        |
|   | A little better      | 6.16  | 5.80  |        |   |        |
|   | Significantly better | 0.00  | 0.00  |        |   |        |
| <b>Online teaching</b>  |                      |       |       |        |   |        |
| I1. Are your school's online courses satisfactory (concerning the quantity of hours and the quality)? | Not at all           | 8.51  | 12.30 | 22.785 | 5 | <0.001 |
|   | Little               | 12.95 | 16.24 |        |   |        |
|   | Moderately           | 21.47 | 20.42 |        |   |        |
|   | Satisfactory         | 32.25 | 32.25 |        |   |        |
|   | Excellently          | 20.56 | 15.55 |        |   |        |
|   | Not done             | 4.26  | 3.25  |        |   |        |
| I2. Do they satisfactorily replace the traditional classroom teaching?                                | Not at all           | 18.21 | 22.51 | 10.319 | 5 | 0.066  |
|   | Little               | 21.74 | 19.26 |        |   |        |
|   | Moderately           | 20.83 | 21.81 |        |   |        |
|   | Satisfactory         | 21.74 | 21.11 |        |   |        |
|   | Excellently          | 13.86 | 12.76 |        |   |        |
|   | Not done             | 3.62  | 2.55  |        |   |        |
| <b>Family</b>   |                      |       |       |        |   |        |
| IA2. How did the quarantine affect your family ties?  | Very negatively      | 1.45  | 2.09  | 26.785 | 4 | <0.001 |
|   | Negatively           | 8.42  | 8.58  |        |   |        |
|   | No change            | 42.84 | 46.40 |        |   |        |
|   | Positively           | 37.68 | 38.52 |        |   |        |
|   | Very positively      | 9.60  | 4.41  |        |   |        |
| <b>Quality of life</b>  |                      |       |       |        |   |        |
| IA3. Has your overall quality of life changed compared to before the quarantine due to Covid-19?      | Much worsened        | 12.77 | 13.46 | 15.727 | 4 | 0.003  |
|   | A little worsened    | 42.12 | 42.46 |        |   |        |
|   | Not at all           | 26.90 | 30.39 |        |   |        |
|   | A little improvement | 14.49 | 9.51  |        |   |        |
|   | Much improvement     | 3.62  | 4.18  |        |   |        |

**WebTable 5:** Lifestyle changes during lockdown

### **3.5 Beliefs in conspiracy theories**

Beliefs in conspiracy theories seem widely prevalent with acceptance ranging from 20-68%.

Only the belief concerning extraterrestrials had lower acceptance (3.80%).

Interestingly, the beliefs concerning mind-control technology and that the COVID-19 outbreak is the result of deliberate covert action, are accepted by more than 20%.

Less than 50% rejected six out of fifteen beliefs surveyed (40%).

One belief (A lot of important information are hidden in purpose from the public due to interests) was accepted by the majority (68.38%).

|   |                  | N    | %     |       |
|---|------------------|------|-------|-------|
| IB1. The government is secretly involved in the murder of innocent citizens and/or well-known public figures.                     | Definitely false | 843  | 35.17 | 59.24 |
|   | Possibly false   | 577  | 24.07 |       |
|   | Don't know       | 517  | 21.57 | 19.19 |
|   | Possibly true    | 375  | 15.64 |       |
|   | Definitely true  | 85   | 3.55  |       |
| IB2. The power held by the heads of state is smaller than that of small unknown groups that really control the world of politics. | Definitely false | 448  | 18.69 | 38.09 |
|   | Possibly false   | 465  | 19.40 |       |
|   | Don't know       | 596  | 24.86 | 37.05 |
|   | Possibly true    | 687  | 28.66 |       |
|   | Definitely true  | 201  | 8.39  |       |
| IB3. Secret organizations are communicating with aliens, but they hide it from the public   | Definitely false | 1750 | 73.01 | 84.77 |
|   | Possibly false   | 282  | 11.76 |       |
|   | Don't know       | 274  | 11.43 | 3.80  |
|   | Possibly true    | 67   | 2.80  |       |
|   | Definitely true  | 24   | 1.00  |       |
| IB4. Groups of scientists manipulate or conceal evidence to deceive the public.   | Definitely false | 625  | 26.07 | 51.52 |
|   | Possibly false   | 610  | 25.45 |       |
|   | Don't know       | 404  | 16.85 | 31.62 |
|   | Possibly true    | 593  | 24.74 |       |
|   | Definitely true  | 165  | 6.88  |       |
| IB5. The government allows or commits acts of terrorism on its territory, and covers its involvement.                             | Definitely false | 716  | 29.87 | 49.77 |
|   | Possibly false   | 477  | 19.90 |       |
|   | Don't know       | 541  | 22.57 | 27.66 |
|   | Possibly true    | 507  | 21.15 |       |
|   | Definitely true  | 156  | 6.51  |       |
| IB6. A small, secret group of people is responsible for making all the important decisions, such as starting wars.                | Definitely false | 683  | 28.49 | 49.40 |
|   | Possibly false   | 501  | 20.90 |       |
|   | Don't know       | 547  | 22.82 | 27.78 |
|   | Possibly true    | 521  | 21.74 |       |
|   | Definitely true  | 145  | 6.05  |       |



|  |                  |     |       |       |
|--|------------------|-----|-------|-------|
|  |                  |     |       |       |
| IB7. Mind control technology is used on people without their knowledge.  | Definitely false | 992 | 41.39 | 62.45 |
|  | Possibly false   | 505 | 21.07 |       |
|  | Don't know       | 395 | 16.48 |       |
|  | Possibly true    | 350 | 14.60 | 21.07 |
|  | Definitely true  | 155 | 6.47  |       |
|  |                  |     |       |       |
| IB8. Novel and advanced technology that will harm the existing industry is being suppressed.                                     | Definitely false | 508 | 21.19 | 38.80 |
|  | Possibly false   | 422 | 17.61 |       |
|  | Don't know       | 796 | 33.21 |       |
|  | Possibly true    | 553 | 23.07 | 27.99 |
|  | Definitely true  | 118 | 4.92  |       |
|  |                  |     |       |       |
| IB9. The government uses people as scapegoats to hide its involvement in criminal activity.                                      | Definitely false | 631 | 26.32 | 45.97 |
|  | Possibly false   | 471 | 19.65 |       |
|  | Don't know       | 621 | 25.91 |       |
|  | Possibly true    | 532 | 22.19 | 28.12 |
|  | Definitely true  | 142 | 5.92  |       |
|  |                  |     |       |       |
| IB10. Some important events are due to the activity of a small group who secretly manipulate world events.                       | Definitely false | 642 | 26.78 | 45.31 |
|  | Possibly false   | 444 | 18.52 |       |
|  | Don't know       | 619 | 25.82 |       |
|  | Possibly true    | 538 | 22.44 | 28.87 |
|  | Definitely true  | 154 | 6.42  |       |
|  |                  |     |       |       |
| IB11. Experiments involving new drugs or technologies are performed systematically on humans without their knowledge or consent. | Definitely false | 836 | 34.88 | 59.82 |
|  | Possibly false   | 598 | 24.95 |       |
|  | Don't know       | 471 | 19.65 |       |
|  | Possibly true    | 400 | 16.69 | 20.53 |
|  | Definitely true  | 92  | 3.84  |       |
|  |                  |     |       |       |
| IB12. Many important pieces of information are deliberately hidden from the public for reasons of interest.                      | Definitely false | 177 | 7.38  | 18.23 |
|  | Possibly false   | 260 | 10.85 |       |
|  | Don't know       | 321 | 13.39 |       |
|  | Possibly true    | 816 | 34.04 | 68.38 |
|  | Definitely true  | 823 | 34.33 |       |

|   |                  |     |       |       |
|---|------------------|-----|-------|-------|
|   |                  |     |       |       |
| IB13. The spread of certain viruses and/or diseases is the result of deliberate, covert actions of an organization. | Definitely false | 712 | 29.70 | 50.94 |
|   | Possibly false   | 509 | 21.23 |       |
|   | Don't know       | 525 | 21.90 | 27.16 |
|   | Possibly true    | 481 | 20.07 |       |
|   | Definitely true  | 170 | 7.09  |       |
|   |                  |     |       |       |
| IB14. Covid-19 virus is a product of a scientific laboratory.   | Definitely false | 685 | 28.58 | 49.77 |
|   | Possibly false   | 508 | 21.19 |       |
|   | Don't know       | 507 | 21.15 | 29.08 |
|   | Possibly true    | 504 | 21.03 |       |
|   | Definitely true  | 193 | 8.05  |       |
|   |                  |     |       |       |
| IB15. The spread of the virus Covid-19 is the result of intentional, covert operations.                             | Definitely false | 799 | 33.33 | 53.44 |
|   | Possibly false   | 482 | 20.11 |       |
|   | Don't know       | 564 | 23.53 | 23.03 |
|   | Possibly true    | 410 | 17.10 |       |
|   | Definitely true  | 142 | 5.92  |       |
|   |                  |     |       |       |
| IB16. The creation of Covid-19 virus aims to its use as a biological warfare weapon.                                | Definitely false | 866 | 36.13 | 55.57 |
|   | Possibly false   | 466 | 19.44 |       |
|   | Don't know       | 526 | 21.94 | 22.49 |
|   | Possibly true    | 421 | 17.56 |       |
|   | Definitely true  | 118 | 4.92  |       |

**WebTable 6:** Beliefs in conspiracy theories

|   | Males |      | Females |      | Higher belief rate in |
|---|-------|------|---------|------|-----------------------|
|   | Mean  | SD   | Mean    | SD   |                       |
| IB1. The government is secretly involved in the murder of innocent citizens and/or well-known public figures.                     | -0.83 | 1.19 | -0.58   | 1.19 | Females               |
| IB2. The power held by the heads of state is smaller than that of small unknown groups that really control the world of politics. | -0.06 | 1.29 | -0.17   | 1.19 | Males                 |
| IB3. Secret organizations are communicating with aliens, but they hide it from the public.  | -1.50 | 0.90 | -1.57   | 0.84 | Males                 |

|  |       |      |       |      |         |
|--|-------|------|-------|------|---------|
| IB4. Groups of scientists manipulate or conceal evidence to deceive the public.  | -0.52 | 1.29 | -0.24 | 1.28 | Females |
| IB5. The government allows or commits acts of terrorism on its territory, and covers its involvement.                            | -0.60 | 1.29 | -0.29 | 1.27 | Females |
| IB6. A small, secret group of people is responsible for making all the important decisions, such as starting wars.               | -0.53 | 1.29 | -0.34 | 1.24 | Females |
| IB7. Mind control technology is used on people without their knowledge.  | -1.00 | 1.21 | -0.49 | 1.35 | Females |
| IB8. Novel and advanced technology that will harm the existing industry is being suppressed.                                     | -0.33 | 1.21 | -0.20 | 1.13 | Females |
| IB9. The government uses people as scapegoats to hide its involvement in criminal activity.                                      | -0.48 | 1.25 | -0.27 | 1.24 | Females |
| IB10. Some important events are due to the activity of a small group who secretly manipulate world events.                       | -0.43 | 1.29 | -0.29 | 1.24 | Females |
| IB11. Experiments involving new drugs or technologies are performed systematically on humans without their knowledge or consent. | -0.83 | 1.21 | -0.56 | 1.20 | Females |
| IB12. Many important pieces of information are deliberately hidden from the public for reasons of interest.                      | 0.66  | 1.27 | 0.90  | 1.17 | Females |
| IB13. The spread of certain viruses and/or diseases is the result of deliberate, covert actions of an organization.              | -0.63 | 1.27 | -0.27 | 1.29 | Females |
| IB14. Covid-19 virus is a product of a scientific laboratory.  | -0.60 | 1.29 | -0.19 | 1.30 | Females |
| IB15. The spread of the virus Covid-19 is the result of intentional, covert operations.  | -0.76 | 1.23 | -0.36 | 1.28 | Females |
| IB16. The creation of Covid-19 virus aims to its use as a biological warfare weapon.   | -0.85 | 1.22 | -0.40 | 1.28 | Females |

**Webtable 7:** Comparison of sexes concerning the believing in conspiracy theories (on a scale from -2 to +2)

|   | Group A |      | Group B |      | Group C |      | Higher belief rate in |
|---|---------|------|---------|------|---------|------|-----------------------|
|   | mean    | SD   | mean    | SD   | mean    | SD   |                       |
| IB1. The government is secretly involved in the murder of innocent citizens and/or well-known public figures. | -0.98   | 1.13 | -0.59   | 1.22 | -0.49   | 1.19 | B and C               |

|   |       |      |       |      |       |      |         |
|---|-------|------|-------|------|-------|------|---------|
| IB2. The power held by the heads of state is smaller than that of small unknown groups that really control the world of politics. | -0.20 | 1.24 | -0.04 | 1.26 | -0.09 | 1.22 | B       |
| IB3. Secret organizations are communicating with aliens, but they hide it from the public.  | -1.63 | 0.80 | -1.50 | 0.89 | -1.40 | 0.96 | B and C |
| IB4. Groups of scientists manipulate or conceal evidence to deceive the public.   | -0.64 | 1.22 | -0.32 | 1.31 | -0.06 | 1.30 | C       |
| IB5. The government allows or commits acts of terrorism on its territory, and covers its involvement.                             | -0.61 | 1.26 | -0.40 | 1.32 | -0.28 | 1.25 | B and C |
| IB6. A small, secret group of people is responsible for making all the important decisions, such as starting wars.                | -0.58 | 1.21 | -0.38 | 1.30 | -0.30 | 1.29 | B and C |
| IB7. Mind control technology is used on people without their knowledge.   | -0.95 | 1.23 | -0.78 | 1.29 | -0.37 | 1.35 | C       |
| IB8. Novel and advanced technology that will harm the existing industry is being suppressed.                                      | -0.42 | 1.21 | -0.20 | 1.18 | -0.14 | 1.06 | B and C |
| IB9. The government uses people as scapegoats to hide its involvement in criminal activity.                                       | -0.61 | 1.23 | -0.24 | 1.26 | -0.26 | 1.21 | B and C |
| IB10. Some important events are due to the activity of a small group who secretly manipulate world events.                        | -0.49 | 1.22 | -0.31 | 1.31 | -0.26 | 1.25 | B and C |
| IB11. Experiments involving new drugs or technologies are performed systematically on humans without their knowledge or consent.  | -1.00 | 1.13 | -0.58 | 1.22 | -0.41 | 1.23 | C       |
| IB12. Many important pieces of information are deliberately hidden from the public for reasons of interest.                       | 0.65  | 1.26 | 0.81  | 1.23 | 0.91  | 1.17 | B and C |
| IB13. The spread of certain viruses and/or diseases is the result of deliberate, covert actions of an organization.               | -0.76 | 1.20 | -0.35 | 1.33 | -0.14 | 1.27 | C       |
| IB14. Covid-19 virus is a product of a scientific laboratory.   | -0.78 | 1.19 | -0.27 | 1.35 | -0.01 | 1.27 | C       |
| IB15. The spread of the virus Covid-19 is the result of intentional, covert operations.   | -0.91 | 1.14 | -0.49 | 1.31 | -0.14 | 1.25 | C       |
| IB16. The creation of Covid-19 virus aims to its use as a biological warfare weapon.  | -0.96 | 1.17 | -0.51 | 1.29 | -0.32 | 1.26 | C       |

**Webtable 8:** Comparison of School groups concerning the believing in conspiracy theories (on a scale from -2 to +2)

School groups differed from one another in all conspiracy theories except from:

- B vs. C in B12 (Many important pieces of information are deliberately hidden from the public for reasons of interest), IB10 (Some important events are due to the activity of a small group who secretly manipulate world events), IB9 (The government uses people as scapegoats to hide its involvement in criminal activity), IB8 (Novel and advanced technology that will harm the

existing industry is being suppressed), IB6 (A small, secret group of people is responsible for making all the important decisions, such as starting wars), IB5 (The government allows or commits acts of terrorism on its territory, and covers its involvement), IB3 (Secret organizations are communicating with aliens, but they hide it from the public), IB1 (The government is secretly involved in the murder of innocent citizens and/or well-known public)

- A vs C and B vs C in IB2 (The power held by the heads of state is smaller than that of small unknown groups that really control the world of politics).

|   |                  | <b>Group A</b> | <b>Group B</b> | <b>Group C</b> | <b>Group A</b> | <b>Group B</b> | <b>Group C</b> | <b>Chi-square</b> | <b>df</b> | <b>p</b> |
|---|------------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------------|-----------|----------|
| IB1. The government is secretly involved in the murder of innocent citizens and/or well-known public figures.                     | Definitely false | 43.92          | 31.15          | 27.12          | 69.80          | 54.55          | 49.15          | 84.981            | 8         | <0.001   |
|   | Possibly false   | 25.88          | 23.41          | 22.03          |                |                |                |                   |           |          |
|   | Don't know       | 17.70          | 22.53          | 26.91          |                |                |                |                   |           |          |
|   | Possibly true    | 9.51           | 18.90          | 20.34          | 12.50          | 22.92          | 23.94          |                   |           |          |
|   | Definitely true  | 2.99           | 4.02           | 3.60           |                |                |                |                   |           |          |
| IB2. The power held by the heads of state is smaller than that of small unknown groups that really control the world of politics. | Definitely false | 20.24          | 17.92          | 17.37          | 41.81          | 35.85          | 35.81          | 16.318            | 8         | 0.038    |
|   | Possibly false   | 21.57          | 17.92          | 18.43          |                |                |                |                   |           |          |
|   | Don't know       | 23.34          | 24.19          | 29.24          |                |                |                |                   |           |          |
|   | Possibly true    | 27.88          | 30.56          | 26.06          | 34.85          | 39.96          | 34.96          |                   |           |          |
|   | Definitely true  | 6.97           | 9.40           | 8.90           |                |                |                |                   |           |          |
| IB3. Secret organizations are communicating with aliens, but they hide it from the public   | Definitely false | 79.09          | 70.81          | 66.10          | 87.72          | 83.84          | 81.14          | 34.257            | 8         | <0.001   |
|   | Possibly false   | 8.63           | 13.03          | 15.04          |                |                |                |                   |           |          |
|   | Don't know       | 9.18           | 12.54          | 13.35          |                |                |                |                   |           |          |
|   | Possibly true    | 2.43           | 2.45           | 4.24           | 3.10           | 3.62           | 5.51           |                   |           |          |
|   | Definitely true  | 0.66           | 1.18           | 1.27           |                |                |                |                   |           |          |
| IB4. Groups of scientists manipulate or conceal evidence to deceive the public.   | Definitely false | 31.42          | 24.98          | 18.22          | 60.07          | 49.07          | 40.47          | 71.615            | 8         | <0.001   |
|   | Possibly false   | 28.65          | 24.09          | 22.25          |                |                |                |                   |           |          |
|   | Don't know       | 17.04          | 16.55          | 17.16          |                |                |                |                   |           |          |
|   | Possibly true    | 18.69          | 26.74          | 31.99          | 22.90          | 34.38          | 42.37          |                   |           |          |
|   | Definitely true  | 4.20           | 7.64           | 10.38          |                |                |                |                   |           |          |
| IB5. The government allows or commits acts of terrorism on its territory, and covers its involvement.                             | Definitely false | 35.73          | 28.60          | 21.40          | 52.88          | 49.66          | 44.07          | 59.619            | 8         | <0.001   |
|   | Possibly false   | 17.15          | 21.06          | 22.67          |                |                |                |                   |           |          |
|   | Don't know       | 24.00          | 18.90          | 27.75          |                |                |                |                   |           |          |
|   | Possibly true    | 18.69          | 24.19          | 19.28          | 23.12          | 31.44          | 28.18          |                   |           |          |
|   | Definitely true  | 4.42           | 7.25           | 8.90           |                |                |                |                   |           |          |

|  |                  |       |       |       |       |       |       |         |   |        |
|--|------------------|-------|-------|-------|-------|-------|-------|---------|---|--------|
| IB6. A small, secret group of people is responsible for making all the important decisions, such as starting wars. | Definitely false | 30.31 | 28.50 | 25.00 | 54.76 | 47.40 | 43.43 | 32.219  | 8 | <0.001 |
|  | Possibly false   | 24.45 | 18.90 | 18.43 |       |       |       |         |   |        |
|  | Don't know       | 22.46 | 21.65 | 26.06 |       |       |       |         |   |        |
|  | Possibly true    | 18.81 | 24.09 | 22.25 | 22.79 | 30.95 | 30.51 |         |   |        |
|  | Definitely true  | 3.98  | 6.86  | 8.26  |       |       |       |         |   |        |
| IB7. Mind control technology is used on people without their knowledge.  | Definitely false | 48.01 | 41.72 | 27.97 | 68.03 | 63.17 | 50.21 | 70.258  | 8 | <0.001 |
|  | Possibly false   | 20.02 | 21.45 | 22.25 |       |       |       |         |   |        |
|  | Don't know       | 14.60 | 17.24 | 18.43 |       |       |       |         |   |        |
|  | Possibly true    | 13.27 | 12.63 | 21.40 | 17.37 | 19.59 | 31.36 |         |   |        |
|  | Definitely true  | 4.09  | 6.95  | 9.96  |       |       |       |         |   |        |
| IB8. Novel and advanced technology that will harm the existing industry is being suppressed.                       | Definitely false | 26.88 | 19.20 | 14.62 | 44.91 | 36.73 | 31.57 | 44.036  | 8 | <0.001 |
|  | Possibly false   | 18.03 | 17.53 | 16.95 |       |       |       |         |   |        |
|  | Don't know       | 29.42 | 33.20 | 40.47 |       |       |       |         |   |        |
|  | Possibly true    | 21.57 | 23.90 | 24.15 | 25.66 | 30.07 | 27.97 |         |   |        |
|  | Definitely true  | 4.09  | 6.17  | 3.81  |       |       |       |         |   |        |
| IB9. The government uses people as scapegoats to hide its involvement in criminal activity.                        | Definitely false | 32.96 | 23.11 | 20.55 | 53.76 | 41.04 | 41.74 | 55.091  | 8 | <0.001 |
|  | Possibly false   | 20.80 | 17.92 | 21.19 |       |       |       |         |   |        |
|  | Don't know       | 24.56 | 25.56 | 29.24 |       |       |       |         |   |        |
|  | Possibly true    | 17.37 | 26.54 | 22.03 | 21.68 | 33.40 | 29.03 |         |   |        |
|  | Definitely true  | 4.31  | 6.86  | 6.99  |       |       |       |         |   |        |
| IB10. Some important events are due to the activity of a small group who secretly manipulate world events.         | Definitely false | 29.09 | 27.03 | 21.82 | 48.23 | 43.78 | 43.01 | 29.392  | 8 | <0.001 |
|  | Possibly false   | 19.14 | 16.75 | 21.19 |       |       |       |         |   |        |
|  | Don't know       | 27.77 | 24.00 | 26.06 |       |       |       |         |   |        |
|  | Possibly true    | 19.91 | 24.49 | 22.88 | 24.00 | 32.22 | 30.93 |         |   |        |
|  | Definitely true  | 4.09  | 7.74  | 8.05  |       |       |       |         |   |        |
| IB11. Experiments involving new drugs or technologies are  | Definitely false | 45.13 | 30.95 | 23.73 | 70.80 | 54.16 | 51.06 | 103.120 | 8 | <0.001 |

|   |                  |       |       |       |       |       |       |         |   |        |
|---|------------------|-------|-------|-------|-------|-------|-------|---------|---|--------|
| performed systematically on humans without their knowledge or consent.  | Possibly false   | 25.66 | 23.21 | 27.33 |       |       |       |         |   |        |
|   | Don't know       | 15.38 | 23.11 | 20.34 |       |       |       |         |   |        |
|   | Possibly true    | 11.39 | 18.41 | 23.09 | 13.83 | 22.72 | 28.60 |         |   |        |
|   | Definitely true  | 2.43  | 4.31  | 5.51  |       |       |       |         |   |        |
| IB12. Many important pieces of information are deliberately hidden from the public for reasons of interest.         | Definitely false | 8.63  | 7.05  | 5.72  | 21.24 | 17.53 | 13.98 | 22.689  | 8 | 0.003  |
|   | Possibly false   | 12.61 | 10.48 | 8.26  |       |       |       |         |   |        |
|   | Don't know       | 13.05 | 13.71 | 13.35 |       |       |       |         |   |        |
|   | Possibly true    | 36.28 | 31.93 | 34.32 | 65.71 | 68.76 | 72.67 |         |   |        |
|   | Definitely true  | 29.42 | 36.83 | 38.35 |       |       |       |         |   |        |
| IB13. The spread of certain viruses and/or diseases is the result of deliberate, covert actions of an organization. | Definitely false | 36.39 | 27.82 | 20.97 | 61.62 | 47.50 | 37.92 | 92.948  | 8 | <0.001 |
|   | Possibly false   | 25.22 | 19.69 | 16.95 |       |       |       |         |   |        |
|   | Don't know       | 20.13 | 21.45 | 26.27 |       |       |       |         |   |        |
|   | Possibly true    | 14.27 | 21.94 | 27.12 | 18.25 | 31.05 | 35.81 |         |   |        |
|   | Definitely true  | 3.98  | 9.11  | 8.69  |       |       |       |         |   |        |
| IB14. Covid-19 virus is a product of a scientific laboratory.   | Definitely false | 36.39 | 26.74 | 17.58 | 63.72 | 43.88 | 35.81 | 147.571 | 8 | <0.001 |
|   | Possibly false   | 27.32 | 17.14 | 18.22 |       |       |       |         |   |        |
|   | Don't know       | 18.58 | 22.72 | 22.67 |       |       |       |         |   |        |
|   | Possibly true    | 13.61 | 22.92 | 31.14 | 17.70 | 33.40 | 41.53 |         |   |        |
|   | Definitely true  | 4.09  | 10.48 | 10.38 |       |       |       |         |   |        |
| IB15. The spread of the virus Covid-19 is the result of intentional, covert operations.                             | Definitely false | 41.59 | 32.13 | 20.13 | 65.38 | 50.34 | 37.29 | 131.377 | 8 | <0.001 |
|   | Possibly false   | 23.78 | 18.22 | 17.16 |       |       |       |         |   |        |
|   | Don't know       | 21.57 | 23.02 | 28.39 |       |       |       |         |   |        |
|   | Possibly true    | 10.07 | 19.49 | 25.42 | 13.05 | 26.64 | 34.32 |         |   |        |
|   | Definitely true  | 2.99  | 7.15  | 8.90  |       |       |       |         |   |        |
| IB16. The creation of Covid-19 virus aims to its use as a biological warfare weapon.                                | Definitely false | 46.02 | 32.52 | 25.00 | 67.59 | 50.73 | 43.01 | 104.751 | 8 | <0.001 |
|   | Possibly false   | 21.57 | 18.22 | 18.01 |       |       |       |         |   |        |
|   | Don't know       | 17.26 | 23.70 | 27.12 |       |       |       |         |   |        |



|  |                 |       |       |       |       |       |       |  |  |  |
|--|-----------------|-------|-------|-------|-------|-------|-------|--|--|--|
|  | Possibly true   | 12.72 | 19.20 | 23.31 | 15.15 | 25.56 | 29.87 |  |  |  |
|  | Definitely true | 2.43  | 6.37  | 6.57  |       |       |       |  |  |  |
|  |                 |       |       |       |       |       |       |  |  |  |

**Webtable 9:** Comparison of School groups concerning the believing in conspiracy theories (with the use of frequencies and chi-square test)

There are significant differences among groups with group C being the group with higher beliefs

### ***3.6 The effect of lockdown on Mental health***

The comparison of the ‘numbers of cases without’ vs. those ‘with a previous history of suicide attempts’ grouped by sex,

In terms of the development of depression or distress

Chi-square=56.881, df=5,  $p<0.001$ .

- For both sex and history of suicidal attempt independently doubled the risk for the development of depression during lockdown.
- Females were at a double risk to develop depression in comparison to males.
- Females with history of suicidal attempt were at a 5.71-times (44.07:7.71) higher risk to develop depression during the lockdown in comparison to males without such a history.

in terms of changes in current suicidal ideation

Chi-square=17.414, df=7,  $p<0.014$ .

- Females with history of suicidal attempt are at a higher than 2-fold risk to develop suicidal ideation during the lockdown.
- On the contrary, there seems no effect of such a history on males.
- Females with history of suicidal attempt are at a 1.86-fold higher risk to develop suicidal ideation again during the lockdown in comparison to males without such a history ((28.81+8.47):(18.07+1.93)).

The detailed data are shown in table 1 in the manuscript

### ***3.7 Mental health and conspiracy theories***

The use of ANOVA with

Grouping variables: sex and healthy/distress/depression

Dependent variables: the 16 belief variables

Significant results for

- sex (wilks=0.945,  $F=8.640$ , effect df=16, error df=2376,  $p<0.001$ )
- depression/distress (wilks=0.969,  $F=2.378$ , effect df=32, error df=4752,  $p<0.001$ )
- as well as for their interaction (wilks=0.974,  $F=1.996$ , effect df=32, error df=4752,  $p=0.001$ ).

The Scheffe post hoc tests revealed that the interaction between sex and depression/distress was significant in 13 out of 16 conspiracy beliefs with depressed females being the most believing subgroup, along a continuum with non-depressed males being the less believing group.

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