

Survey | August 2020

Covid-19: Changes in daily habits

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DAFT Jun 2020, Ironhack Lisbon

Survey and statistical analysis process

- **Phase 1**
Define the problem and formulate questions
- **Phase 2**
Disseminate survey on-line
- **Phase 3**
Data cleaning (e.g., eliminate duplicates)
- **Phase 4**
Univariate and bivariate analysis of the responses
- **Phase 5**
Hypothesis testing

Dissemination and Respondents

Dissemination

The survey was conducted online, using Google Forms.

Respondents

In total, there were 52 respondents.

Sampling bias?

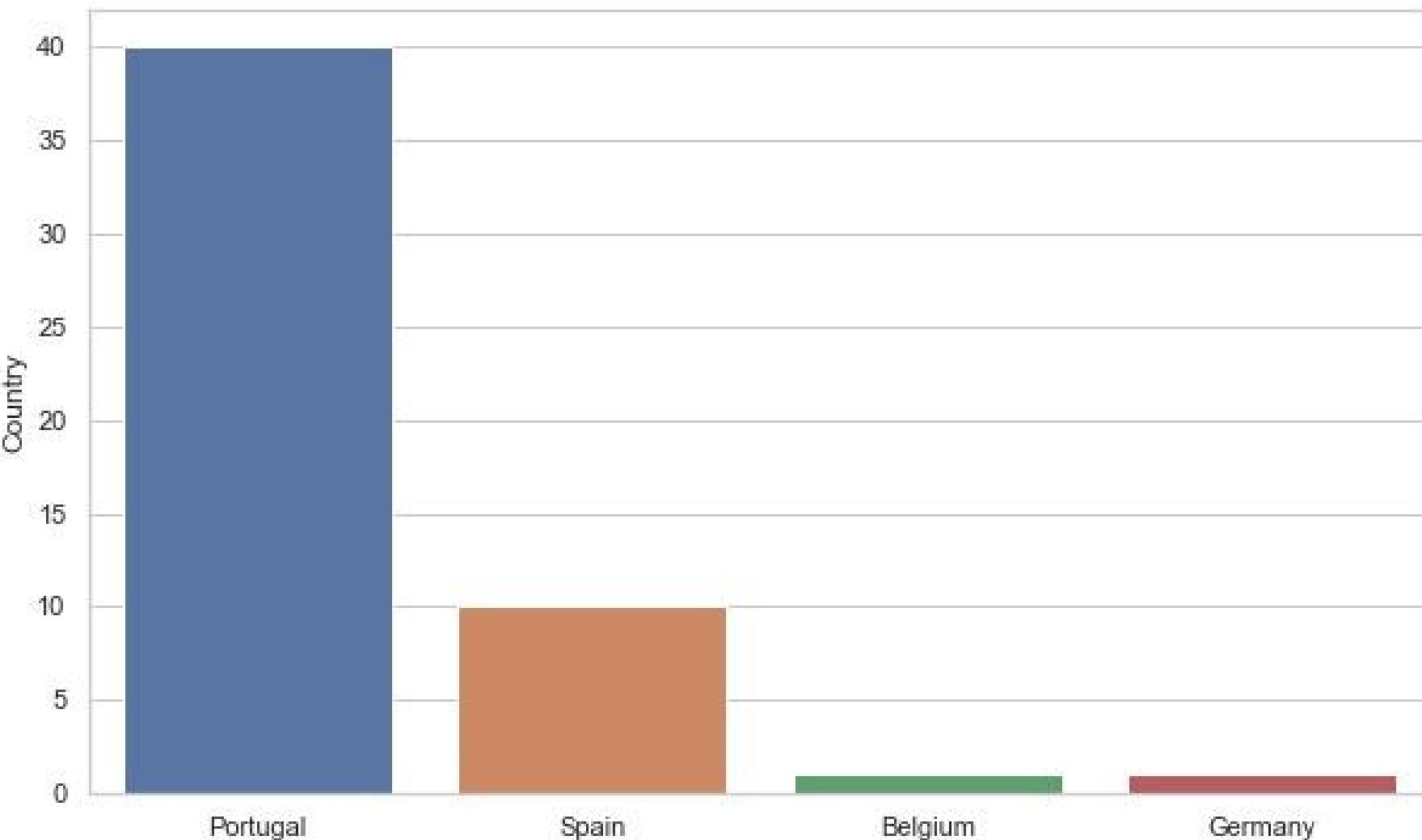
Sample may be biased due to dissemination and promotion methods.

Dissemination and Respondents



Countries

The majority of the respondents reside in Portugal, and a sizeable minority resides in Spain.



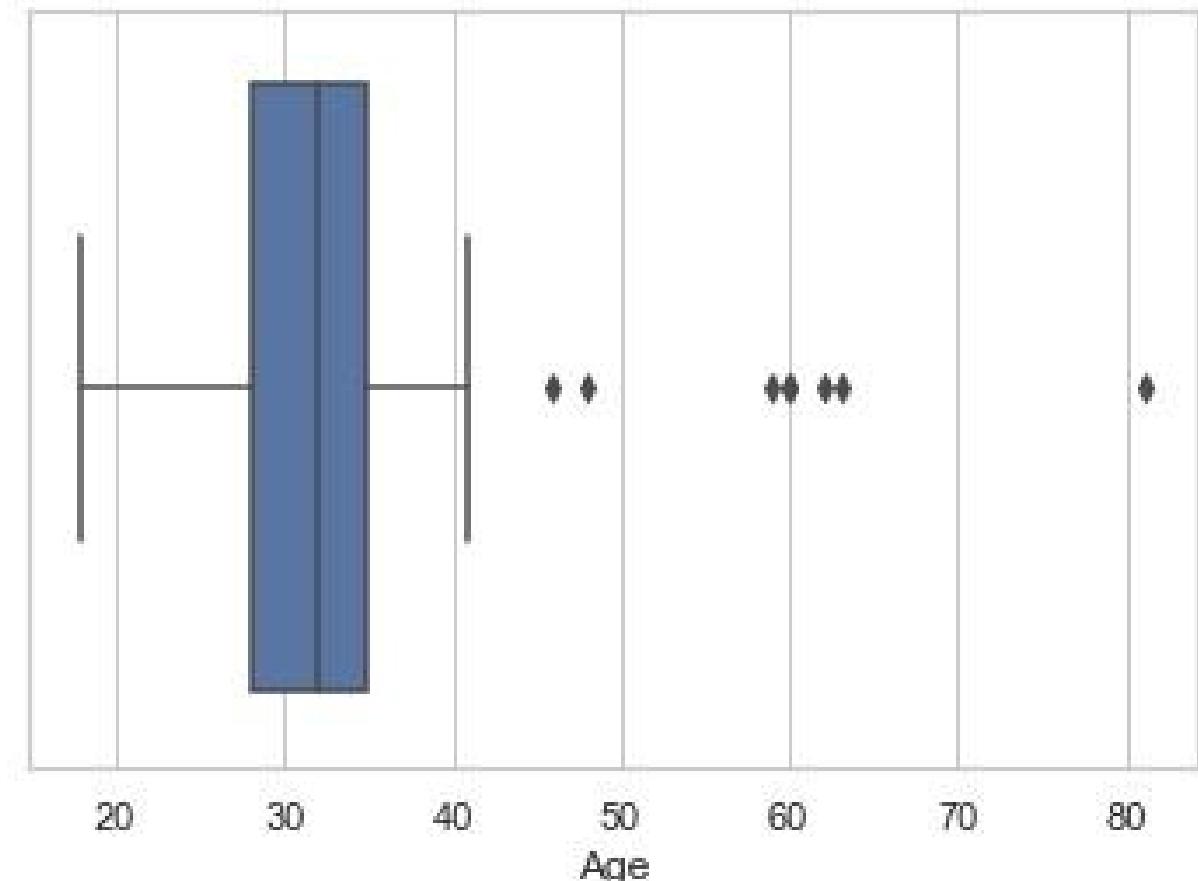
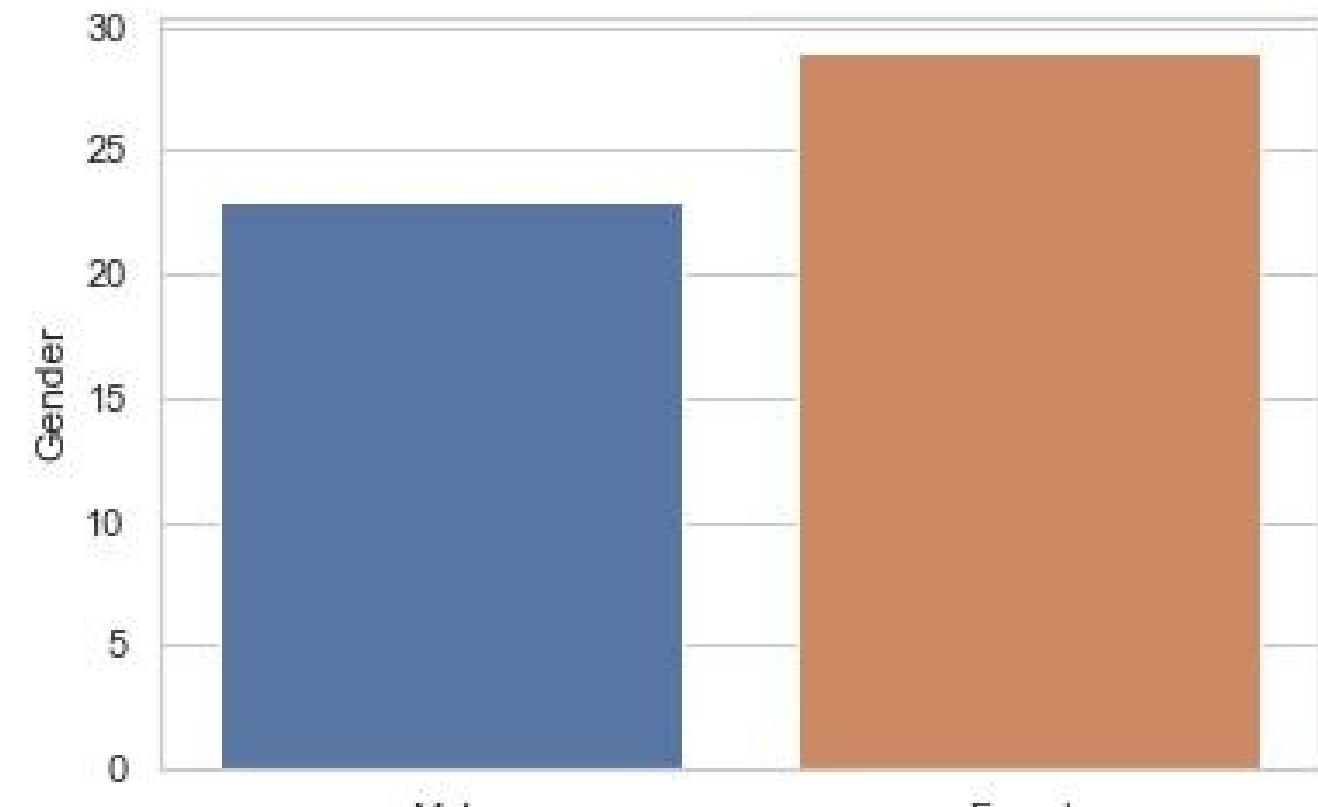
Dissemination and Respondents



Gender and age

The sample is balanced wrt gender distribution, with 29 women and 23 men.

The majority of the respondents is in their late twenties to early thirties (sampling bias).



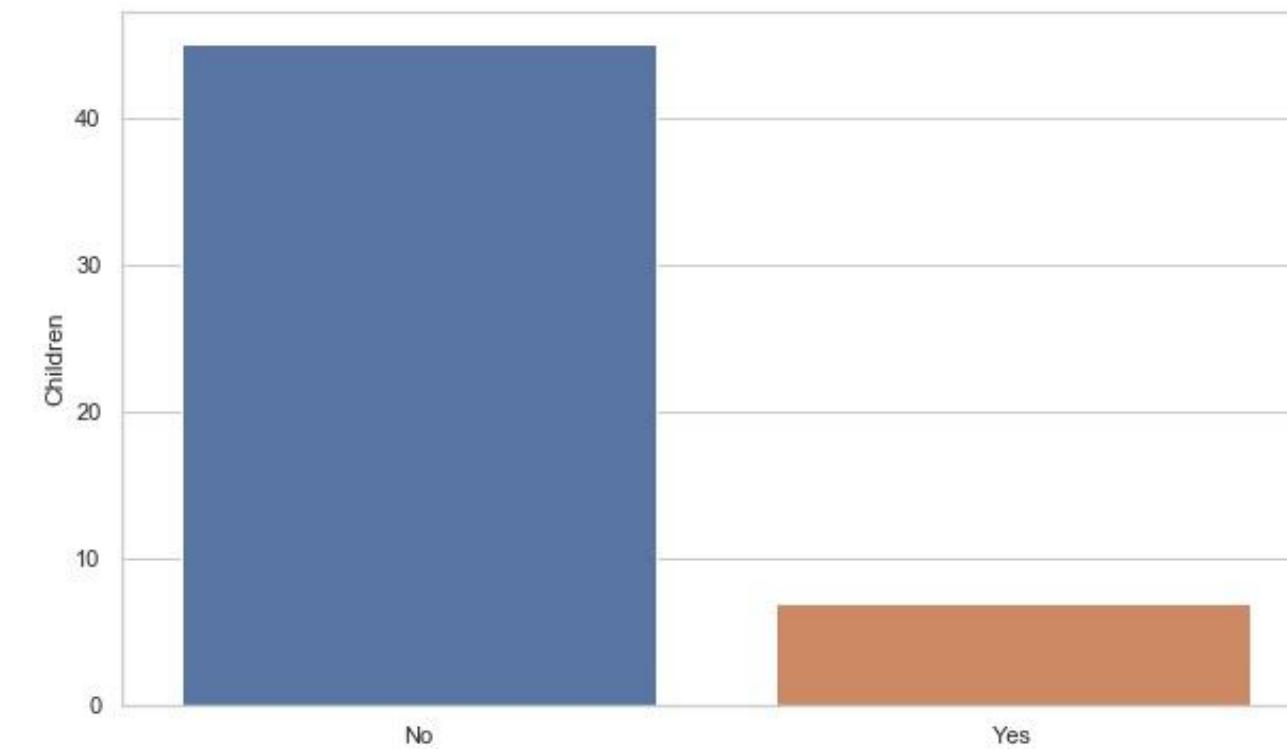
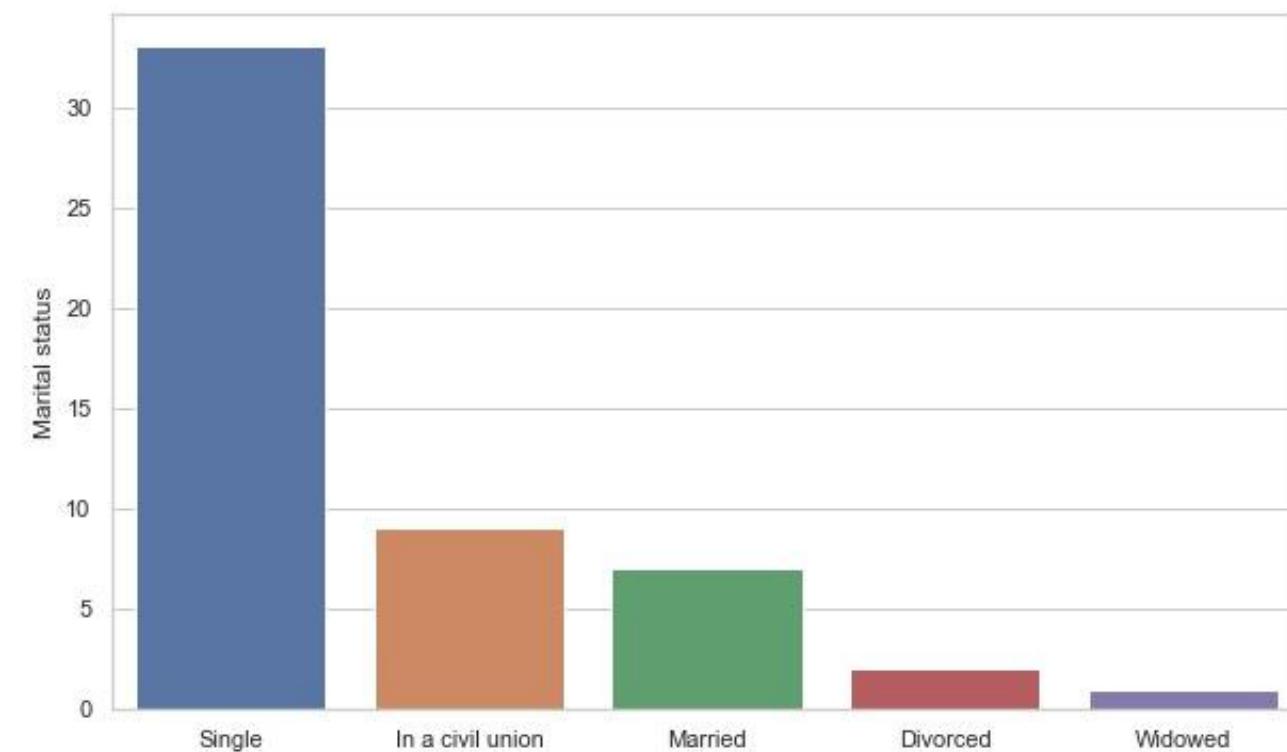
Dissemination and Respondents

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Marital status and children

The majority of respondents is single, a sizeable minority is in a civil union and another sizeable minority is married.

The majority of the respondents does not have children (only 7 out of 52 respondents reported having children).



Does higher perceived threat to self and others predict adherence to recommendations?

Means (values are 1 - 4)

Threat to self: 2.826923

Threat to others: 3.384615

Standard error

Threat to self: 0.984610

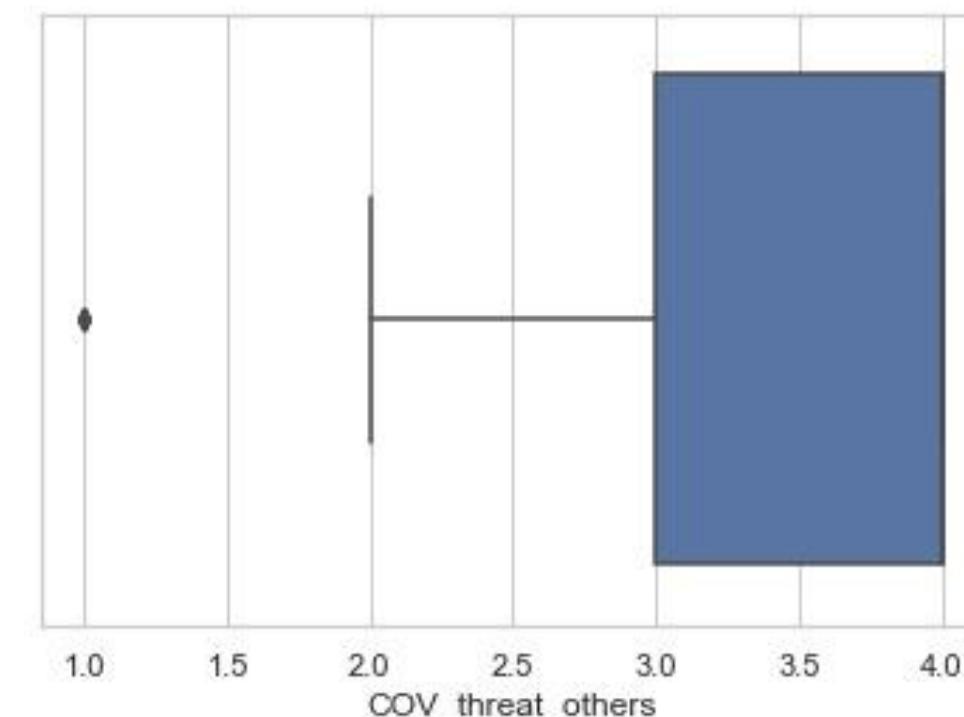
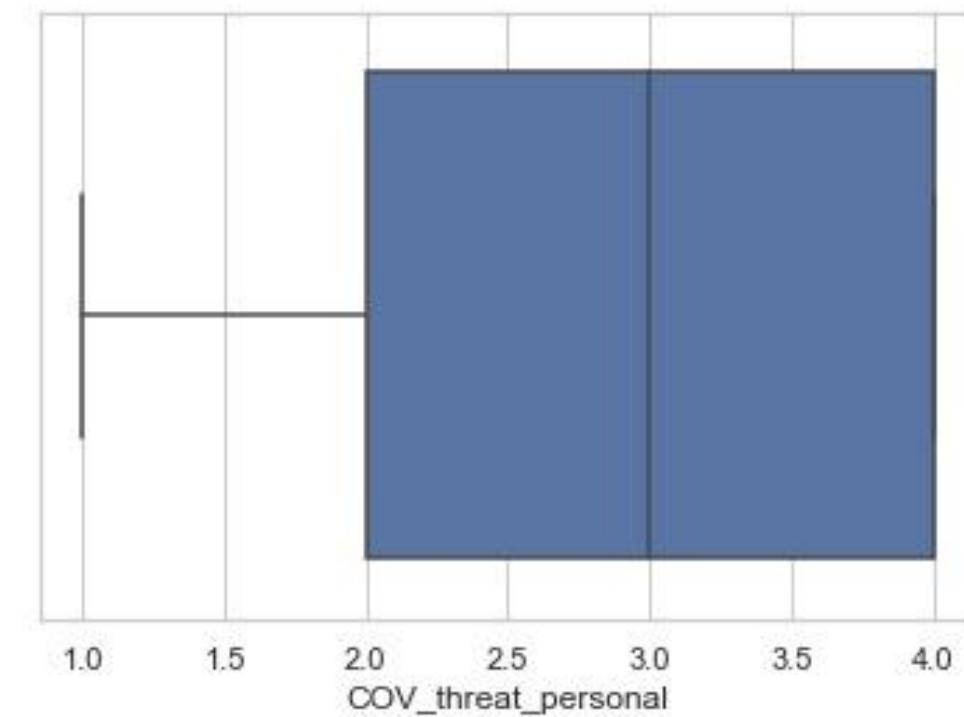
Threat to others: 0.889015

Linear regression

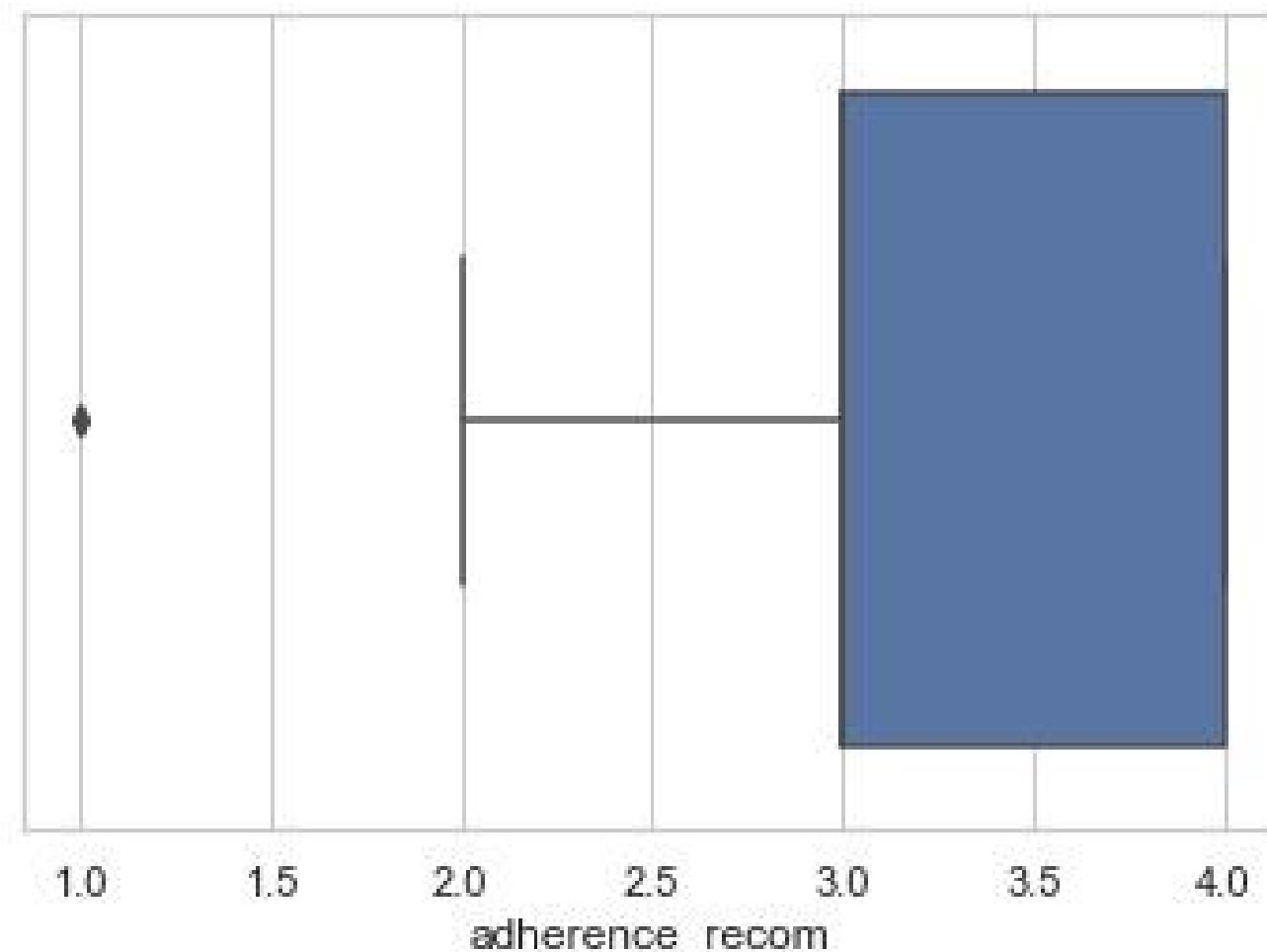
Perceived threat to self also strongly predicts perceived threat to others (R-squared: 0.946).

The two variables are strongly correlated: (0.7).

Questions 1, 2 & 3



Does higher perceived threat to self and others predict adherence to recommendations?



Questions 1, 2 & 3

Mean (1 - 4) and standard error

Mean: 3.096154

Standard error: 0.822708

Linear regressions

Perceived threat to self strongly predicts adherence to recommendations (R-squared: 0.887).

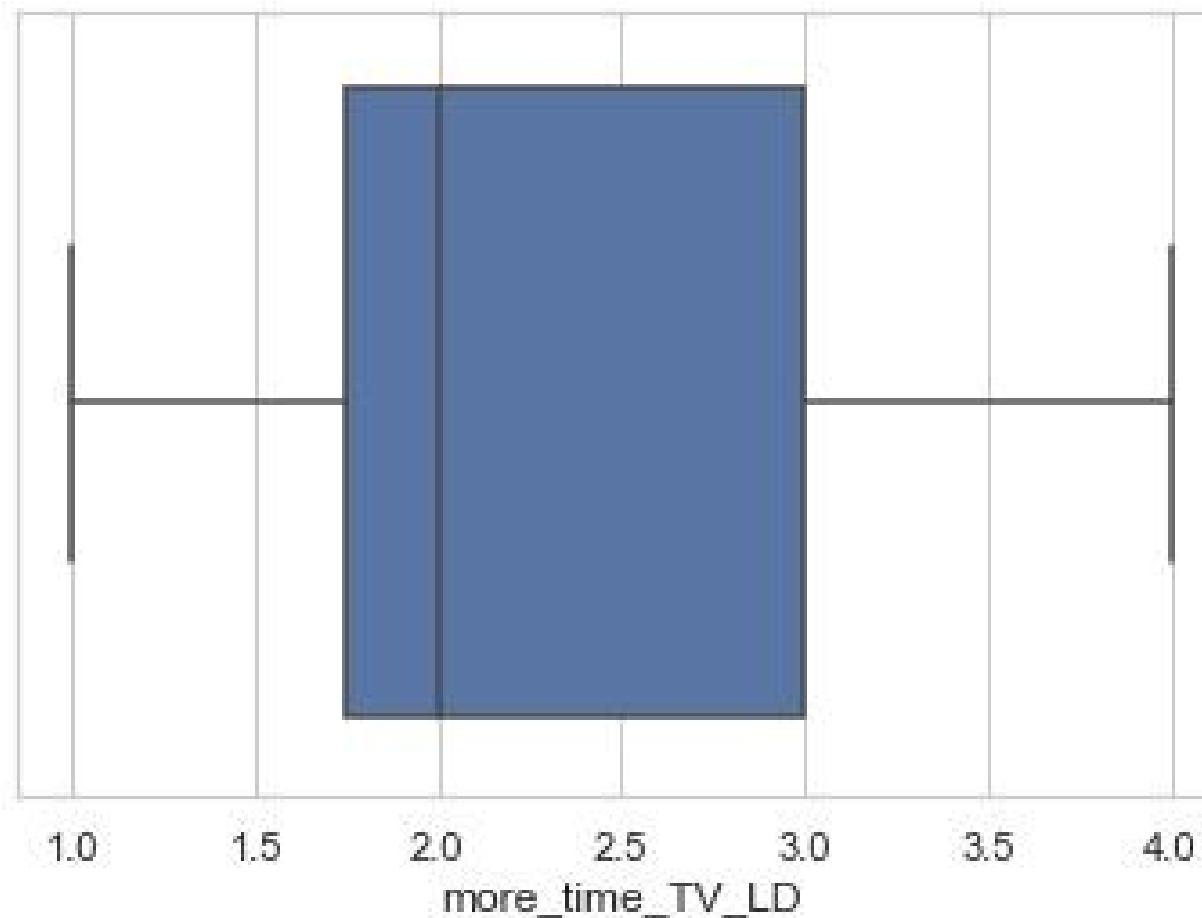
Perceived threat to others strongly predicts adherence to recommendations (R-squared: 0.915).

Multilinear regression

Perceived threat to self and others strongly predicted adherence to recommendations from official health authorities to avoid Covid-19 (R-squared: 0.918).

Questions 5 & 6

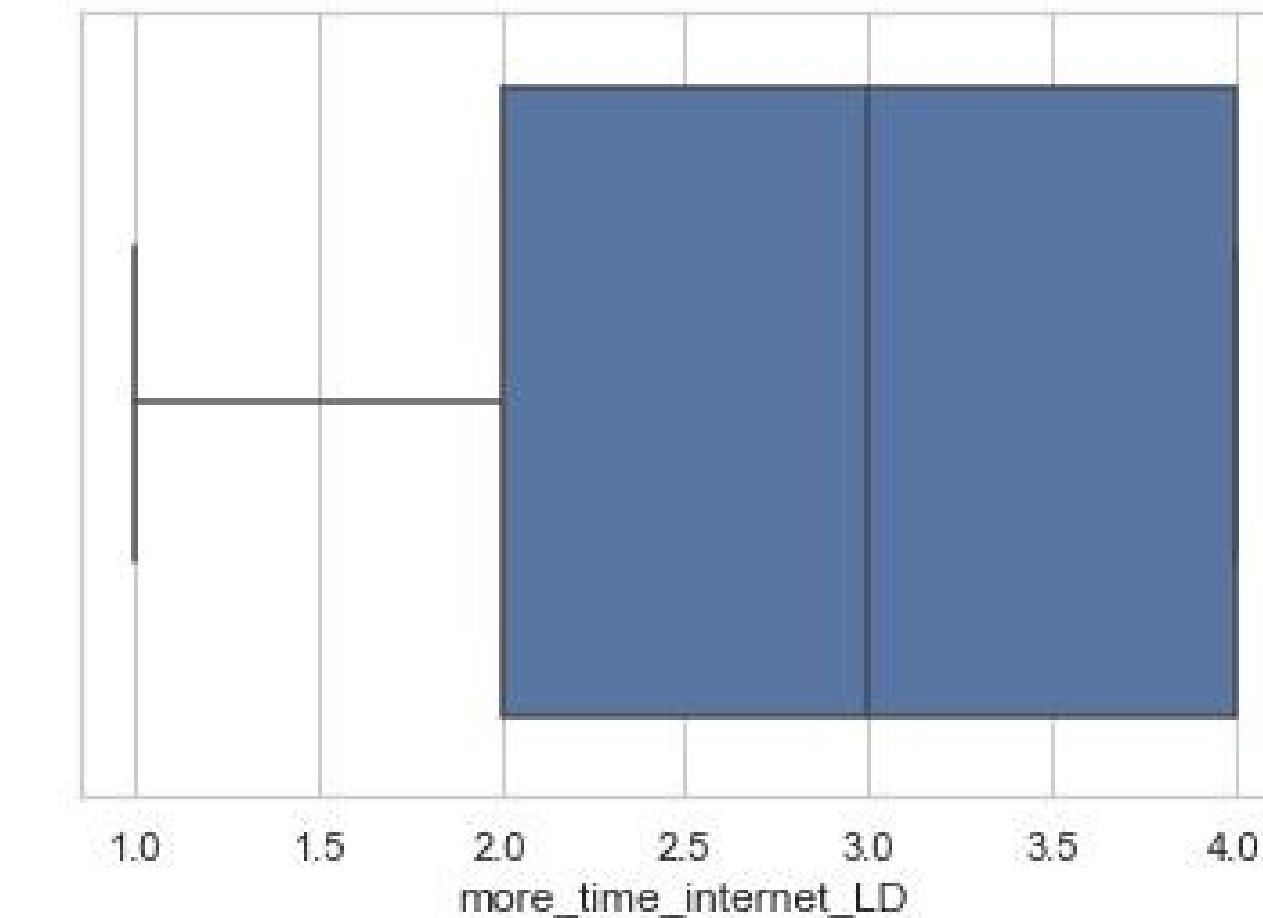
Do we observe perceived increase or reduction of average hours dedicated to sedentary activities?



Means (values are 1 - 4)

More time watching TV: 2.326923

More time on the internet: 2.942308



Standard error

More time watching TV: 1.004327

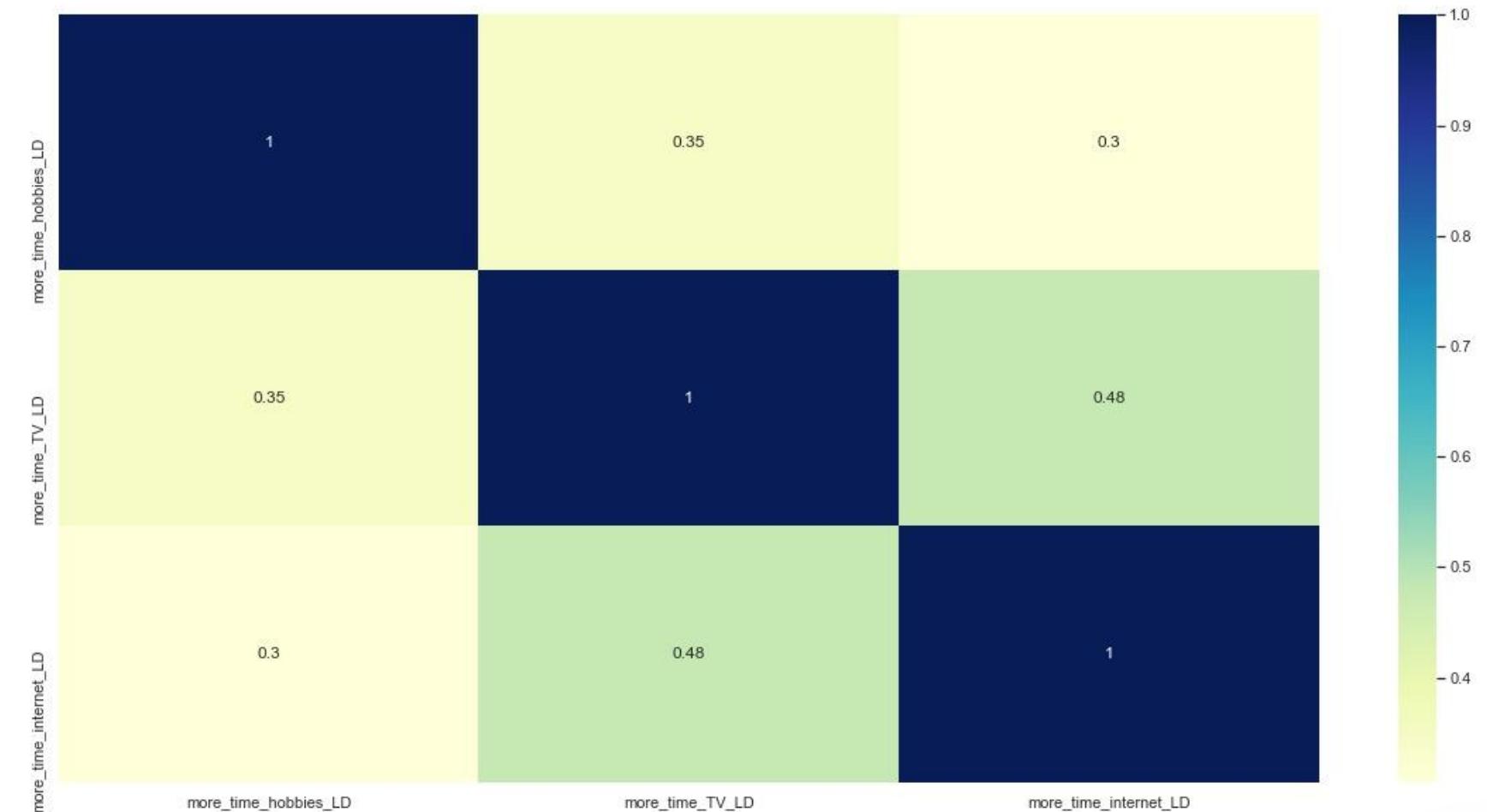
More time on the internet: 1.017753

Questions 5 & 6

Do we observe perceived increase or reduction of average hours dedicated to personal or sedentary activities?

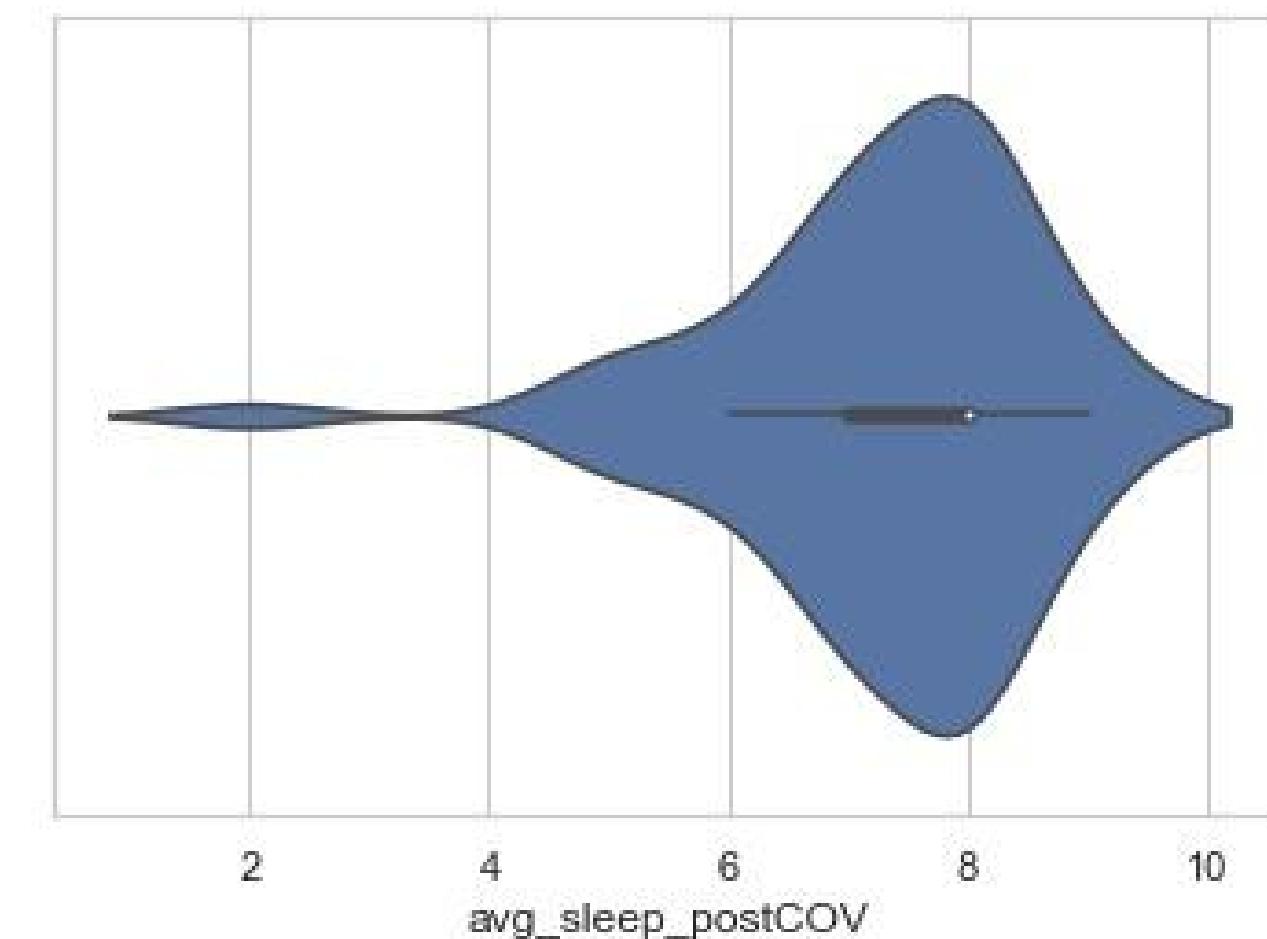
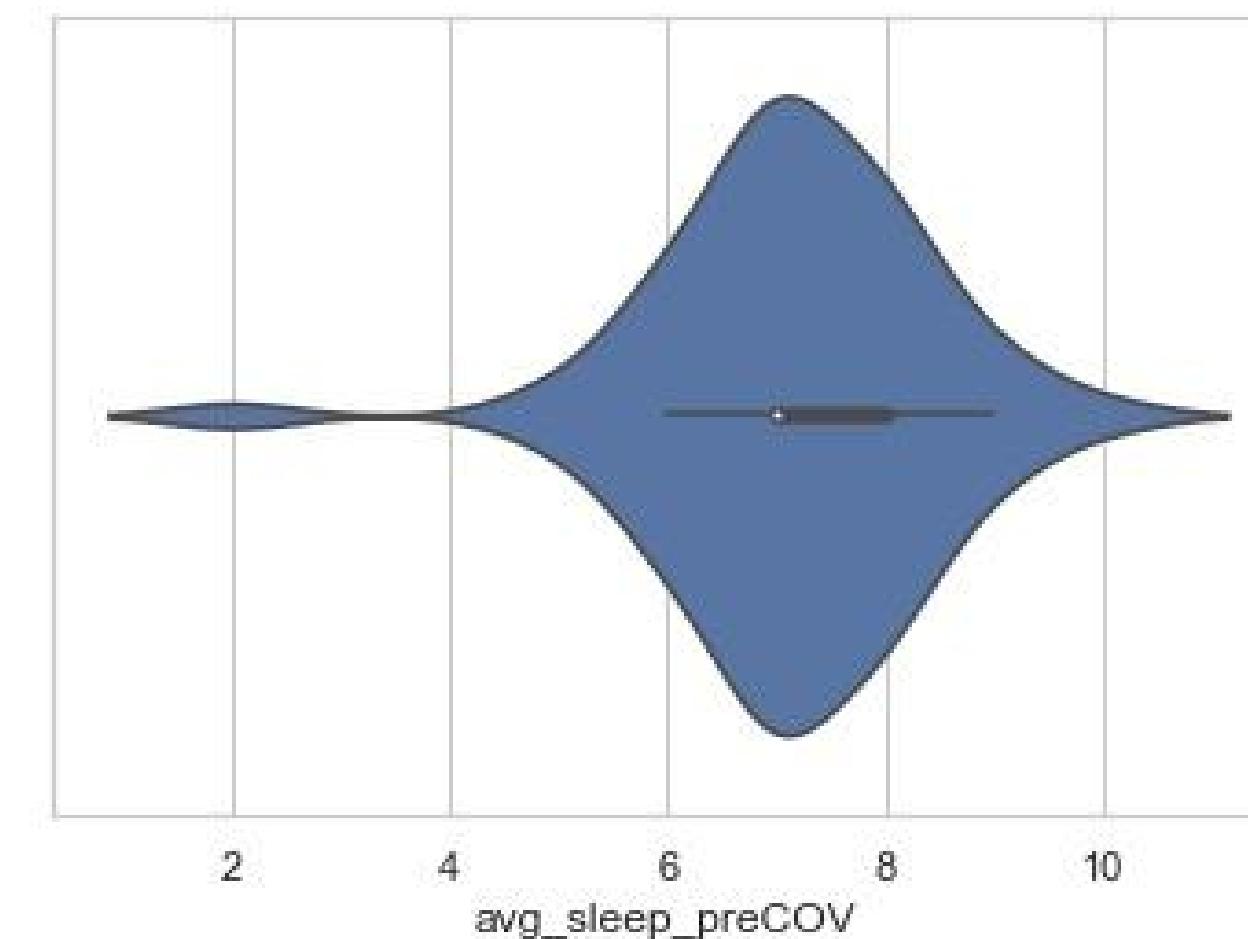
Correlations

There is a moderate positive correlation between more time watching TV and more time on the internet (0.48). This may indicate a general tendency towards sedentary habits in some respondents.



Questions 7 - 8

Do respondents report increase or reduction of hours of sleep per night?



Means (values are 1 - 10)

Pre-Cov: 7.134615

Post-Cov: 7.269231

Standard error

Pre-Cov: 1.252900

Post-Cov: 1.285140

Questions 7 - 8

Do respondents report increase or reduction of hours of sleep per night?

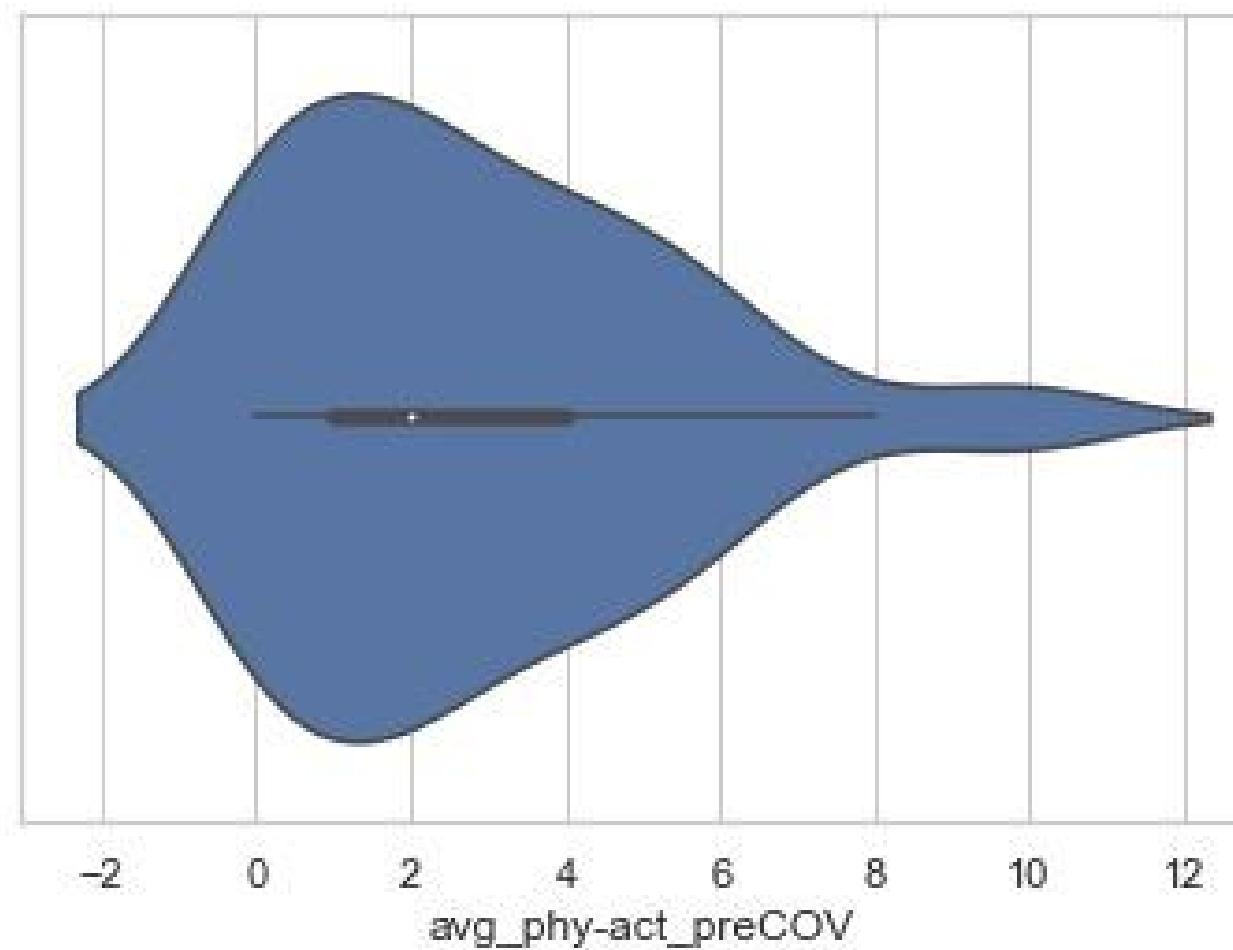
Dependent t-test (C.I. 95%)

Null hypothesis cannot be rejected: no statistically significant difference in mean hours of sleep per night is found (confidence interval: -0.3184996368586612, 0.3184996368586612; sample mean = 0.1346153846153846).

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Questions 11 - 12

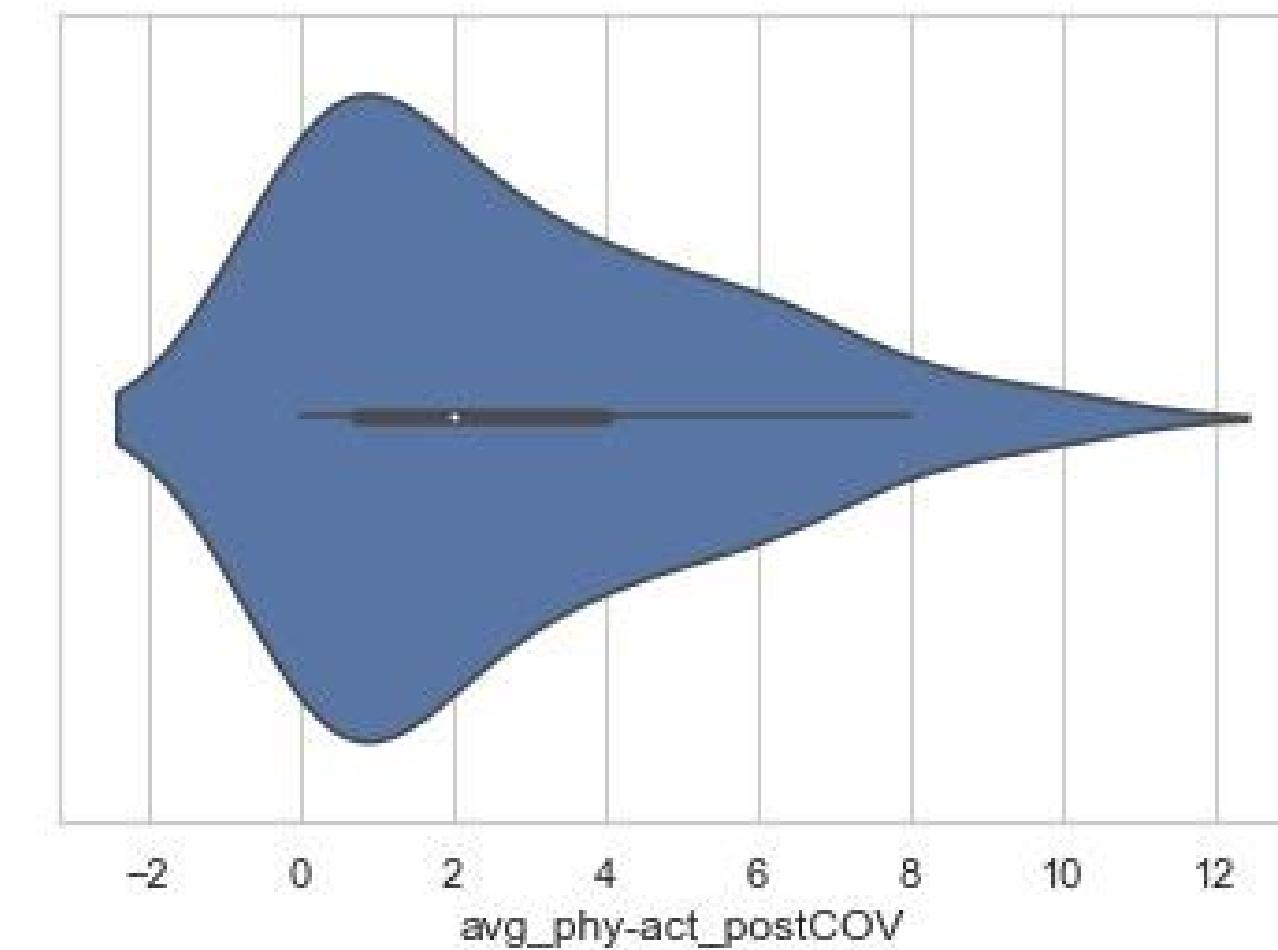
Do respondents report increase or reduction of number of hours of physical activity per week?



Means (values are 1 - 10)

Pre-Cov: 2.807692

Post-Cov: 2.711538



Standard error

Pre-Cov: 2.551727

Post-Cov: 2.659327

Questions 11 - 12

Do respondents report increase or reduction of number of hours of physical activity per week?

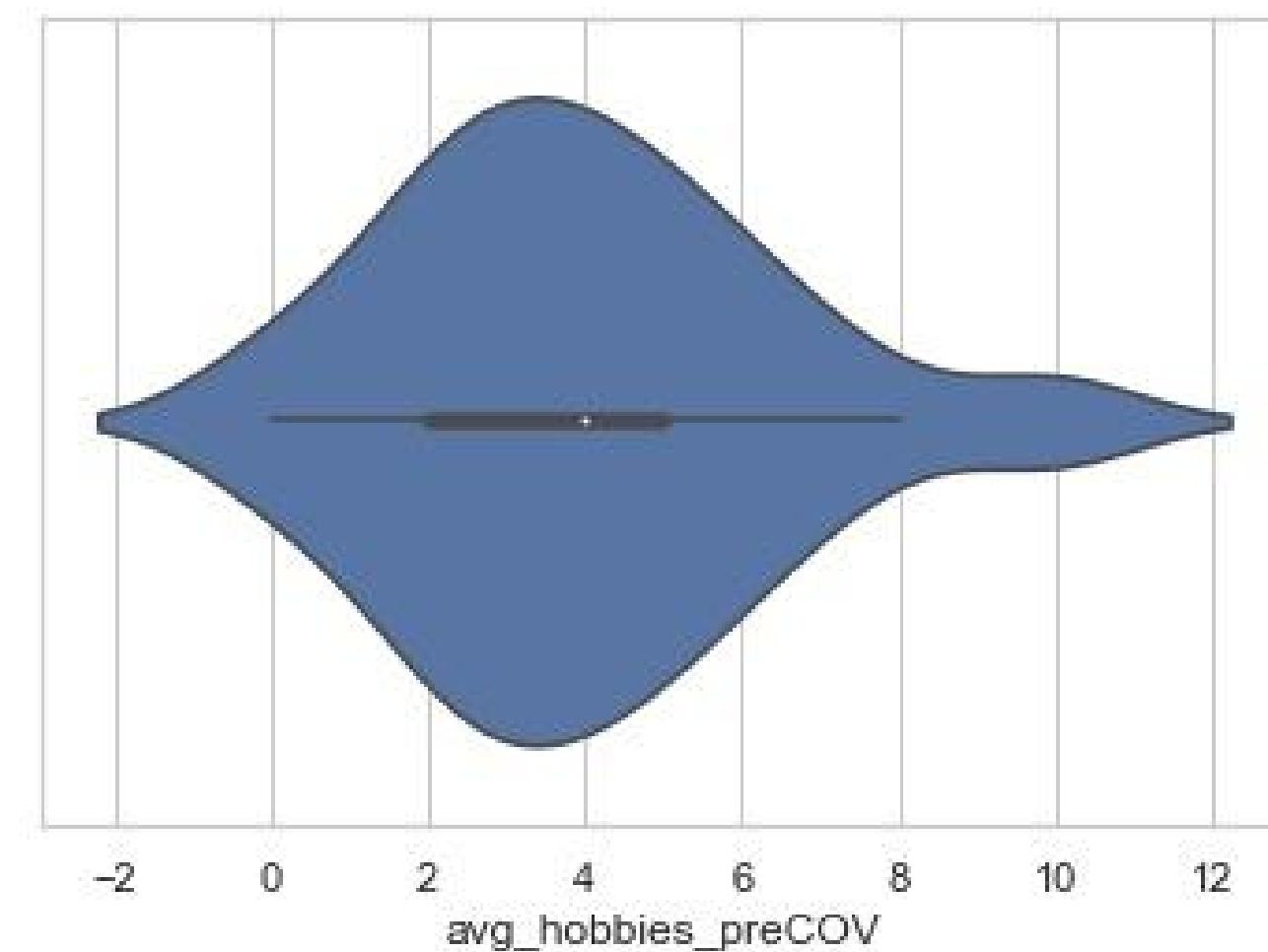
Dependent t-test (C.I. 95%)

Null hypothesis cannot be rejected: no statistically significant difference in mean hours of sleep per night is found (confidence interval: -0.6603094965907057, 0.6603094965907057; sample mean = 0.1346153846153846).

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Questions 13 - 14

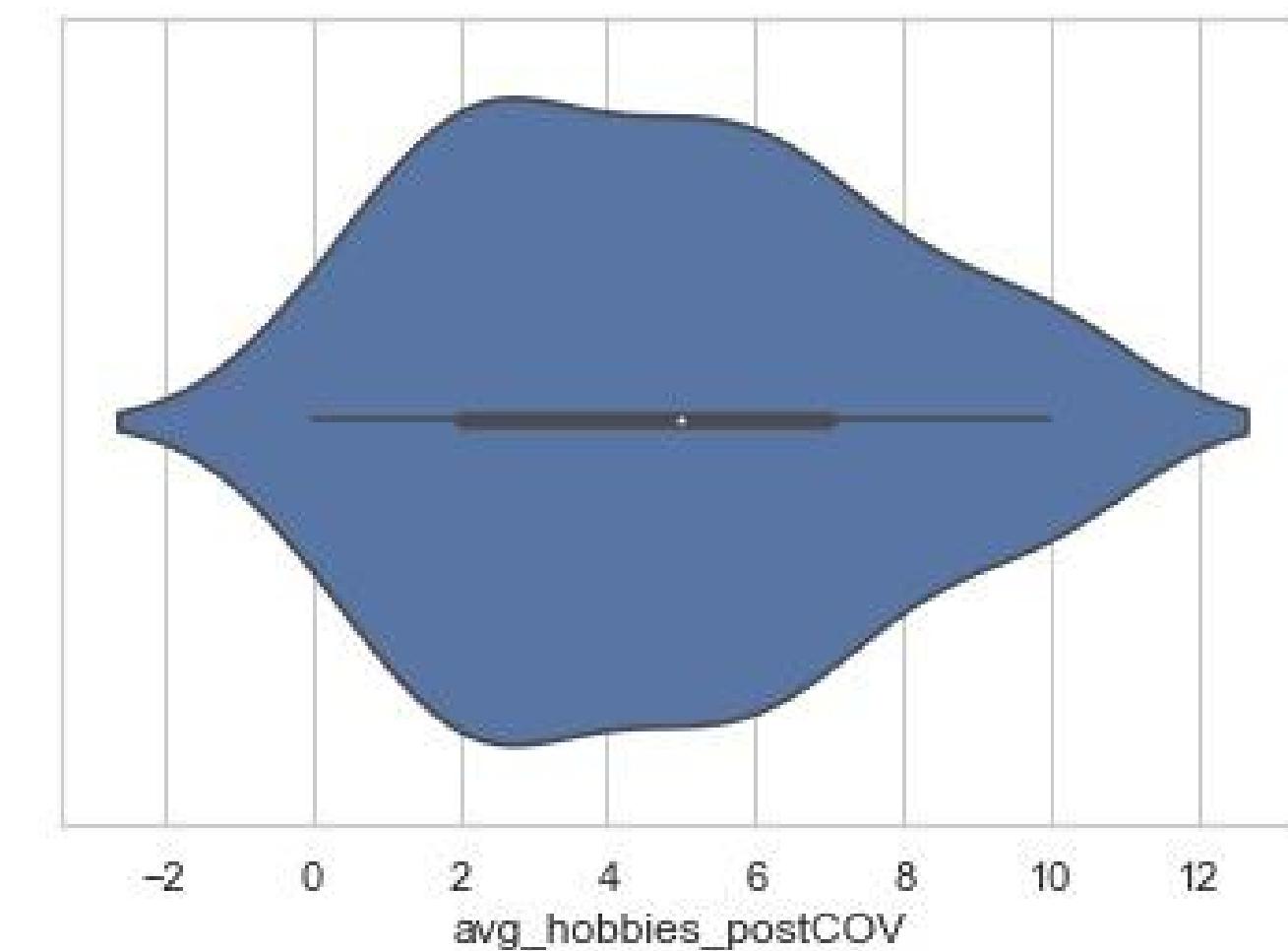
Do respondents report increase or reduction of number of hours per week dedicated to personal hobbies?



Means (values are 1 - 10)

Pre-Cov: 3.980769

Post-Cov: 4.653846



Standard error

Pre-Cov: 2.445407

Post-Cov: 2.902903

Questions 13 - 14

Do respondents report increase or reduction of number of hours per week dedicated to personal hobbies?

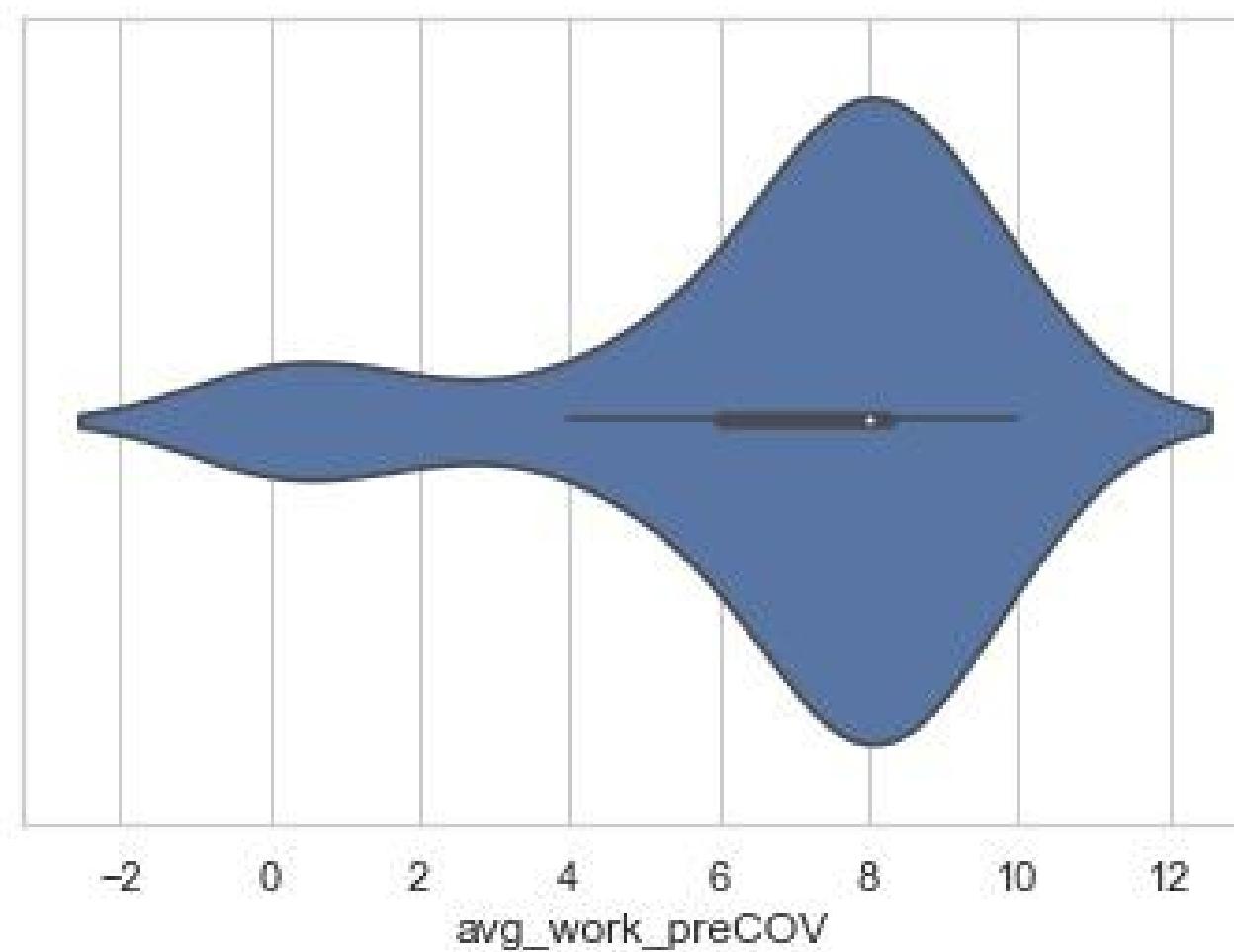
Dependent t-test (C.I. 95%)

Null hypothesis can be rejected: there is a statistically significant difference in mean hours of sleep per night is found (confidence interval: -0.6337284826248419, 0.6337284826248419; sample mean = 0.6730769230769231).

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Questions 15 - 18

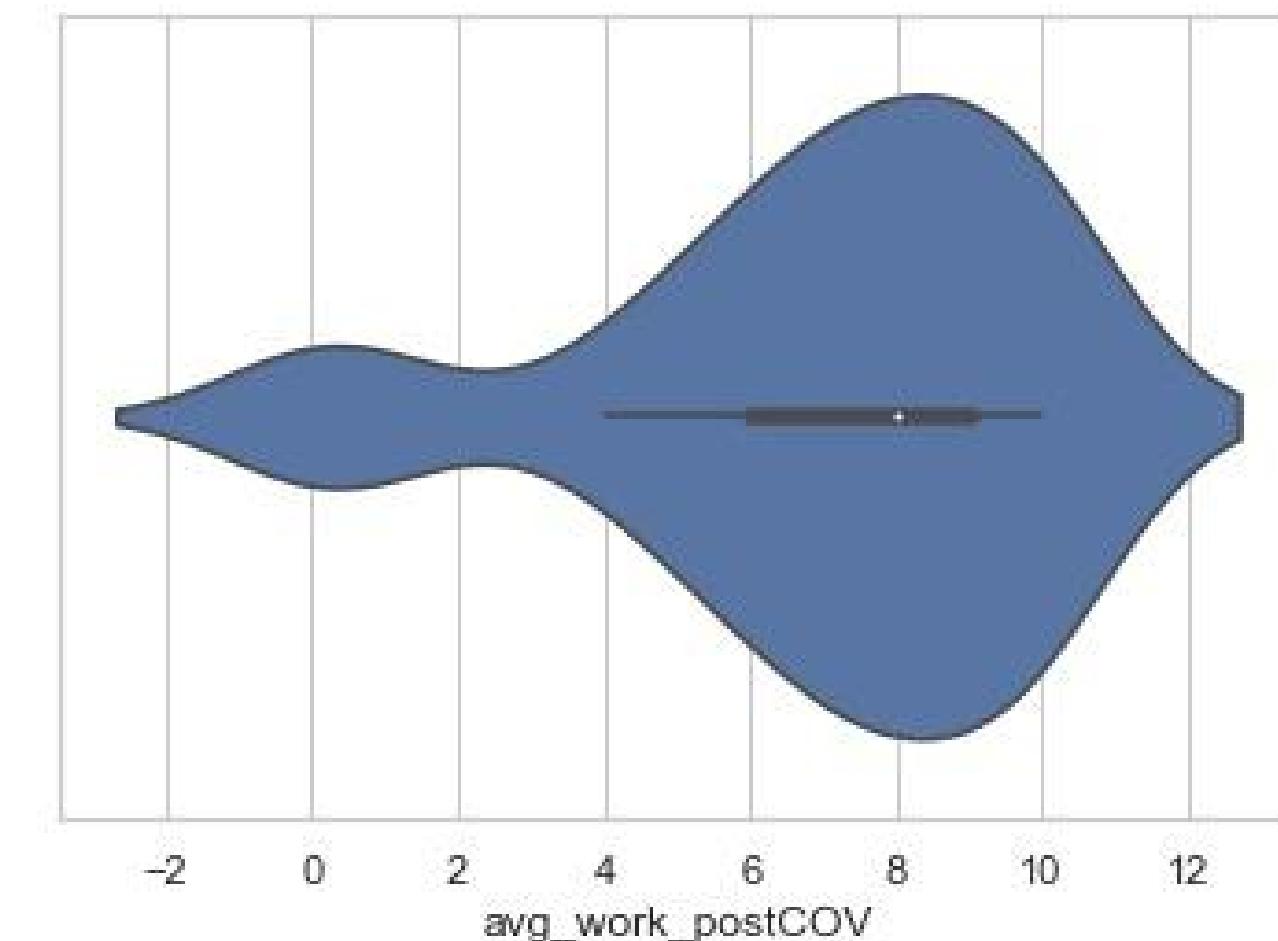
Do respondents report increase or reduction of working hours?



Means (values are 1 - 10)

Pre-Cov: 6.826923

Post-Cov: 6.961538



Standard error

Pre-Cov: 2.805605

Post-Cov: 2.963580

Questions 15 - 18

Do respondents report increase or reduction of working hours?

Dependent t-test (C.I. 95%)

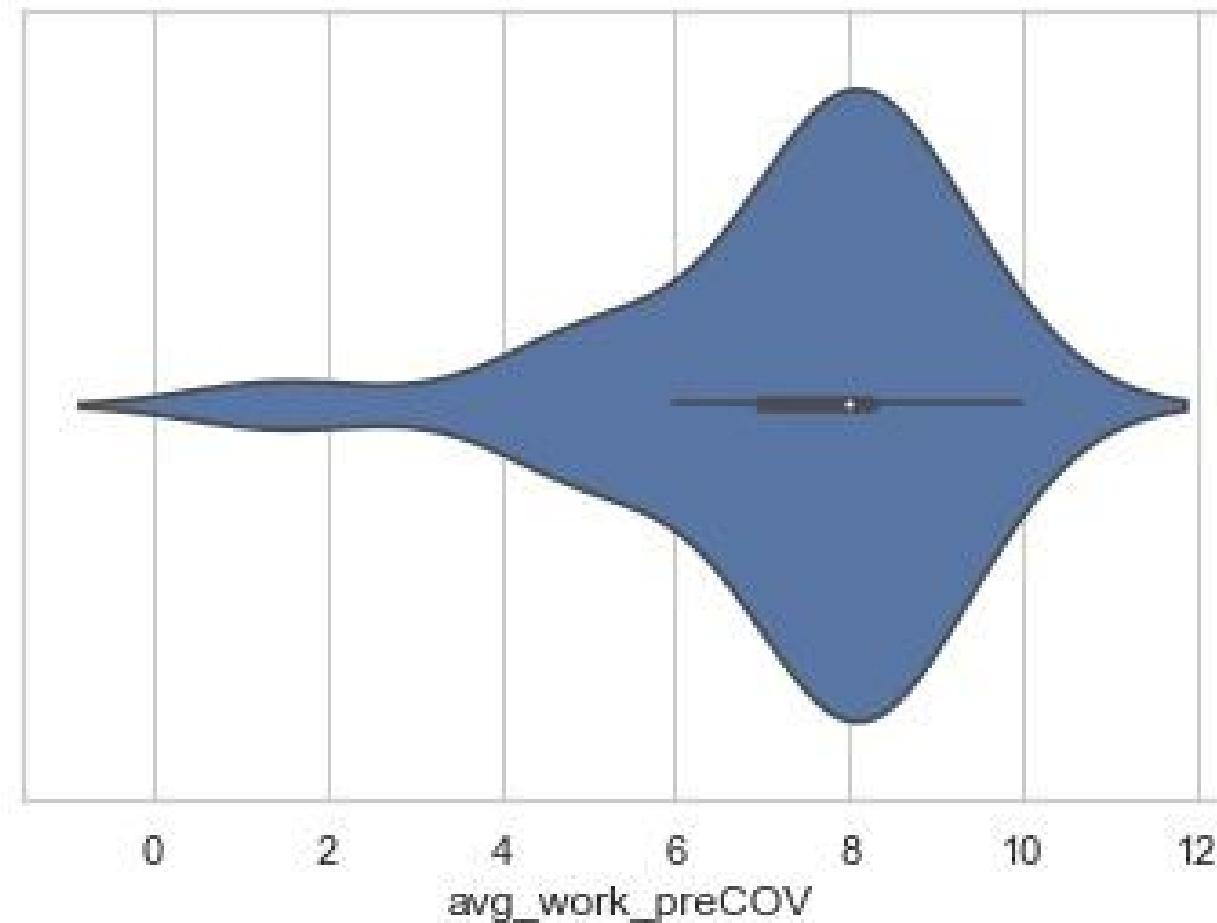
Null hypothesis cannot be rejected: there is no statistically significant difference in mean hours of sleep per night is found (confidence interval: -0.4914792163674422, 0.4914792163674422; sample mean = 0.1346153846153846).

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Questions 17 - 19

Does transition to remote predict increase or decrease of working hours?

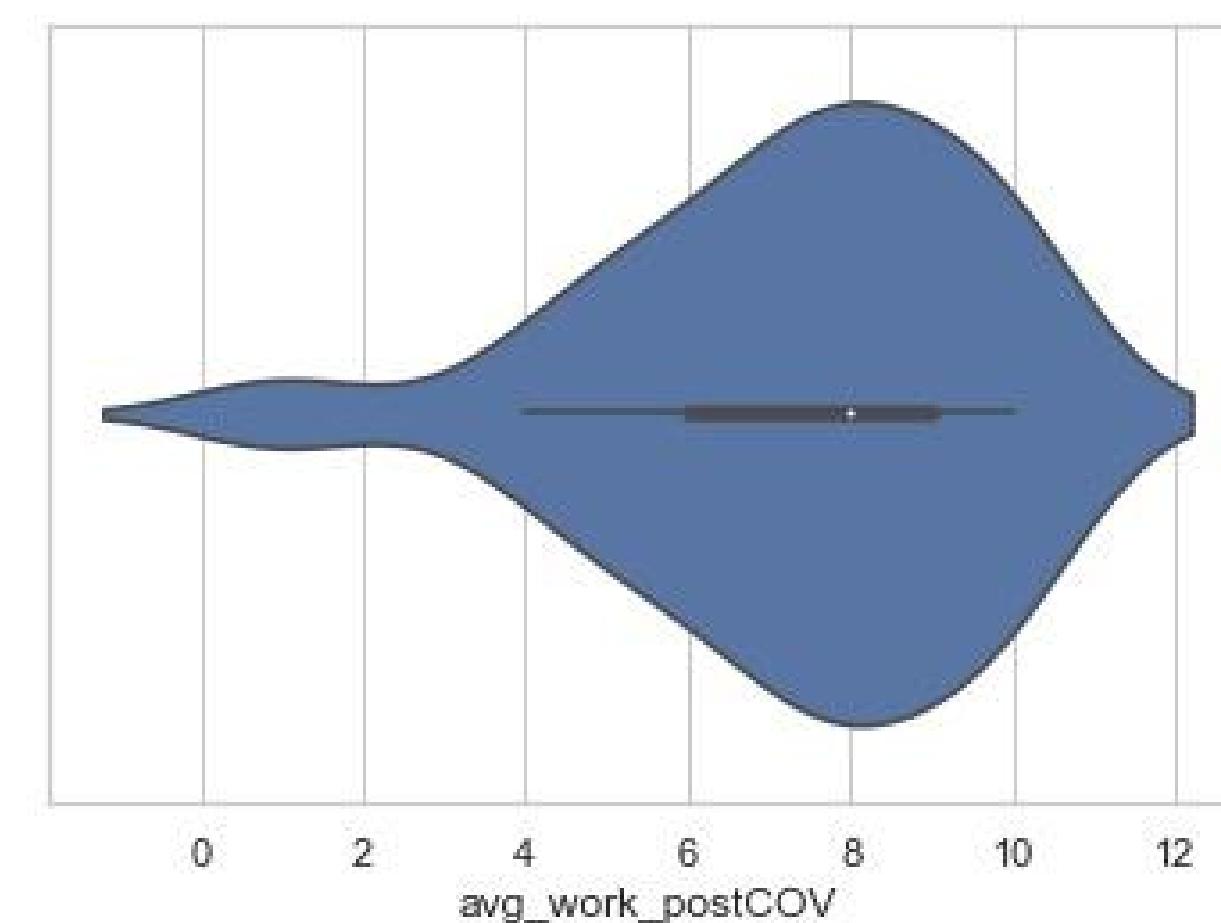
40 of the 52 respondents reported transition to remote at work during lockdown



Means (values are 1 - 10)

Pre-Cov: 7.325000

Post-Cov: 7.325000



Standard error

Pre-Cov: 1.953137

Post-Cov: 2.302591

Questions 17 - 19

Does transition to remote predict increase or decrease of working hours?

40 of the 52 respondents reported transition to remote at work during lockdown

Dependent t-test (C.I. 95%)

Null hypothesis cannot be rejected: there is no statistically significant difference in mean hours of sleep per night is found (confidence interval: -0.5809737328521634, 0.5809737328521634; sample mean = 0.0).

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Conclusions

Adherence to recommendations

Adherence to recommendations from official health authorities seems to be driven principally by perceived threat to others (role of age?). Perceived threat to self does not add explanatory power to model.

Working hours per day

Overall, there are no statistically significant differences between pre- and post-Covid periods.

This result is maintained when respondents who did not transition to remote are removed from the sample.

Hours per week dedicated to hobbies

Respondents report more hours per week dedicated to personal hobbies after Covid-19. The difference between pre- and post-Covid periods is statistically significant.

Sleep & physical activity

Respondents do not show significant differences in hours of sleep and physical activity between pre- and post-Covid periods (many respondents report few hours of physical activity per week regardless of Covid).

Survey_questions

Questions 1, 2 and 3

1. Perceived threat of Covid-19 to self
2. Perceived threat of Covid-19 to close relations
3. Adherence to recommendations by official health authority

Questions 4, 5 and 6

4. Perceived change in time dedicated to hobbies
5. Perceived change in time spent watching TV
6. Perceived change in time spent browsing the internet

Questions 7 - 14

7. & 8. Hours of sleep per night before and after Covid-19
9. & 10. Number of cigarettes per day before and after Covid-19
- 11 & 12. Hours of physical activity per week before and after Covid-19
13. & 14. Hours dedicated to hobbies per week before and after Covid-19

Questions 15 - 18

15. & 16. Minutes of commute per day before and after Covid-19
17. & 18. Number of working hours per day before and after Covid-19

Questions 19 - 22

19. Transition to remote at work
20. Reduction of work hours
21. Loss of income
22. If yes on 21, percentage of income lost

Questions 23 - 28

23. Gender
24. Age
25. City of residence >> country of residence
26. Marital status
27. Number of children >> have children
28. Profession



Any questions?