

Does thinking about Coronavirus influence insight and analytical thinking? (#37015)

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1) Have any data been collected for this study already?

No, no data have been collected for this study yet.

2) What's the main question being asked or hypothesis being tested in this study?

Main Question: Does activating the thinking about Coronavirus (COVID-19) negatively influence creativity?

Main Hypothesis: Activating the saliency of Coronavirus (COVID-10) negatively influences the ability to solve the tasks that require insight thinking, while it does not have any detrimental impact on analytical thinking.

3) Describe the key dependent variable(s) specifying how they will be measured.

DV1: Total score denoting the efficiency of insight problem solving (8 tasks)

DV2: Total score denoting analytical thinking (15 tasks)

4) How many and which conditions will participants be assigned to?

Between-group design: $N = 2 \times 250$. Group 1 reads 3 press notes (one about coronavirus), then solve 8 insight and 15 analytical tasks. Group 2 reads 3 press notes (without coronavirus), then solve 8 insight and 15 analytical tasks.

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

Main (predicted) analysis: MANOVA, with analytical and insight thinking scores as dependent variables and group (coronavirus activated versus control) as a between-group factor, followed by two independent sample t-tests, for each variable simultaneously.

Exploratory analysis: MANCOVA followed by two ANCOVAs with age and gender as covariates.

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.

Participants who fail on attention check (3 questions per each condition) will be excluded.

In case if the skewness of any of the dependent variables will exceed 2, the variables will be square root transformed.

Measures: in case of a negative or null item-total correlation of any item/task within an instrument, the item/task will be excluded.

7) How many observations will be collected or what will determine sample size? No need to justify decision, but be precise about exactly how the number will be determined.

Based on power analysis (conducted in Gpower 3.11), with $d = 0.30$ (the lowest effect size of interest), with $\alpha = 0.05$ and $\beta = 0.90$, the expected sample size is 2×235 . We plan to oversample to have 2×250 in case of exclusions.

8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)

None.