SUPPLEMENTAL MATERIAL

The Role of Motivated Science Reception and Numeracy in the Context of the COVID-19 Pandemic

Fabian Hutmacher¹, Regina Reichardt², and Markus Appel¹

¹Human-Computer-Media Institute, University of Würzburg, Würzburg, Germany
²Department of Psychology, University of Regensburg, Germany

Author Note

Correspondence concerning this article should be addressed to Fabian Hutmacher, Human-Computer-Media Institute, University of Würzburg, Oswald-Külpe-Weg 82, 97074 Würzburg, Germany. E-mail: fabian.hutmacher@uni-wuerzburg.de.
SUPPLEMENTAL MATERIAL

Contents

1. Distribution of the participants with respect to their attitude towards mask mandates in the final sample \((N = 417)\)
2. Ethnicity
3. Education
4. Correlation between the attitude towards mask mandates in Session 1 and Session 2
5. Analysis of potential order effects
1. Distribution of the participants with respect to their attitude towards mask mandates in the final sample ($N = 417$)

| Attitude towards mask mandates in public | Number of participants |
|-----------------------------------------|------------------------|
| 1 = extremely oppose                    | 65                     |
| 2                                       | 47                     |
| 3                                       | 54                     |
| 4                                       | 48                     |
| 5                                       | 60                     |
| 6                                       | 69                     |
| 7 = extremely favor                     | 74                     |

2. Ethnicity

| Ethnicity                                   | Number of participants |
|---------------------------------------------|------------------------|
| White                                       | 341                    |
| Black or African American                   | 22                     |
| Hispanic or Latino                          | 20                     |
| Asian                                       | 27                     |
| Native American or American Indian          | 3                      |
| Other                                       | 4                      |
3. Education

| Education            | Number of participants |
|----------------------|------------------------|
| No schooling completed | 1                      |
| High school graduate  | 157                    |
| Bachelor’s degree     | 181                    |
| Master’s degree       | 65                     |
| PhD or higher         | 13                     |

4. Correlation between the attitude towards mask mandates in Session 1 and Session 2

\[ r = .81, p < .001 \]
SUPPLEMENTAL MATERIAL

5. Analysis of potential order effects

*Means and Standard Deviations (in parentheses) of Pro-Mask Study Evaluation and Anti-Mask Study Evaluation as a Function of Study Order (Pro-Mask Study first, Anti-Mask Study second vs. Anti-Mask Study first, Pro-Mask Study second) and Study Number Mapping (Pro-Mask Study with *N*<sub>s</sub> = 426, Anti-Mask Study with *N*<sub>s</sub> = 390 vs. Pro-Mask Study with *N*<sub>s</sub> = 390, Anti-Mask Study with *N*<sub>s</sub> = 426)*

| Study Order: Pro-Mask Study first, Anti-Mask Study second |
|----------------------------------------------------------|
| Study Number Mapping:                                    |
| Pro-Mask Study with *N* = 426, 103                       |
| Evaluation of Pro-Mask Study: 3.15 (1.52)                |
| Evaluation of Anti-Mask Study: 4.00 (1.35)               |
| Pro-Mask Study with *N* = 390                            |
| Anti-Mask Study with *N* = 426                           |
| Pro-Mask Study with *N* = 390, 106                       |
| Evaluation of Pro-Mask Study: 3.21 (1.65)                |
| Evaluation of Anti-Mask Study: 3.74 (1.58)               |
| Anti-Mask Study with *N* = 426                           |

| Study Order: Anti-Mask Study first, Pro-Mask Study second |
|----------------------------------------------------------|
| Study Number Mapping:                                    |
| Pro-Mask Study with *N* = 426, 105                       |
| Evaluation of Pro-Mask Study: 3.38 (1.64)                |
| Evaluation of Anti-Mask Study: 3.86 (1.41)               |
| Anti-Mask Study with *N* = 390                           |
| Pro-Mask Study with *N* = 390, 103                       |
| Evaluation of Pro-Mask Study: 3.32 (1.76)                |
| Evaluation of Anti-Mask Study: 4.14 (1.44)               |
| Anti-Mask Study with *N* = 426                           |
SUPPLEMENTAL MATERIAL

Statistics from the univariate 2 (Study Order: Pro-Mask Study first, Anti-Mask Study second vs. Anti-Mask Study first, Pro-Mask Study second) x 2 (Study Number Mapping: Pro-Mask Study with N\textsubscript{schools} = 426, Anti-Mask Study with N\textsubscript{schools} = 390 vs. Pro-Mask Study with N\textsubscript{schools} = 390, Anti-Mask Study with N\textsubscript{schools} = 426) ANOVAS on Evaluation of Pro-Mask Study and Evaluation of Anti-Mask Study.

|                | Evaluation of Pro-Mask Study | Evaluation of Anti-Mask Study |
|----------------|-----------------------------|------------------------------|
|                | \( F \) \( p \) \( \eta_p^2 \) | \( F \) \( p \) \( \eta_p^2 \) |
| (1, 413)       |                             | (1, 413)                     |
| Main Effect Study Order | 1.17 .280 .003 | 0.82 .365 .002 |
| Main Effect Study Number Mapping | < 0.01 .997 < .001 | < 0.01 .959 < .001 |
| Interaction Study Order * | 0.15 .704 < .001 | 3.67 .056 .009 |
| Study Number Mapping |                             |                             |