**Debriefing works: Successful retraction of misinformation following a fake news study**

**Supplemental materials**

**Effects of time (T1/T2) and warning condition on true memory rate: the proportion of true stories for which participants reported a memory.**

| **Within Subjects Effects**  |
| --- |
| **Cases** | **Sum of Squares** | **df** | **Mean Square** | **F** | **p** | **η²p**  |
| Time |  | 5.006e-4 |  | 1 |  | 5.006e-4 |  | 0.007 |  | 0.935 |  | 4.363e-6 |  |
| Time ✻ WarningCondition |  | 0.388 |  | 3 |  | 0.129 |  | 1.739 |  | 0.157 |  | 0.003 |  |
| Residuals |  | 114.724 |  | 1543 |  | 0.074 |  |  |  |  |  |  |  |
|  |
| *Note.*  Type III Sum of Squares |

| **Between Subjects Effects**  |
| --- |
| **Cases** | **Sum of Squares** | **df** | **Mean Square** | **F** | **p** | **η²p**  |
| WarningCondition |  | 0.421 |  | 3 |  | 0.140 |  | 1.393 |  | 0.243 |  | 0.003 |  |
| Residuals |  | 155.515 |  | 1543 |  | 0.101 |  |  |  |  |  |  |  |
|  |
| *Note.*  Type III Sum of Squares |

| **Descriptives**  |
| --- |
| **Time** | **WarningCondition** | **Mean** | **SD** | **N** |
| T1 |  | negative warning |  | 0.660 |  | 0.247 |  | 401 |  |
|   |  | no misinformation warning |  | 0.690 |  | 0.235 |  | 377 |  |
|   |  | no posters |  | 0.688 |  | 0.235 |  | 383 |  |
|   |  | positive warning |  | 0.675 |  | 0.247 |  | 386 |  |
| T2 |  | negative warning |  | 0.661 |  | 0.360 |  | 401 |  |
|   |  | no misinformation warning |  | 0.664 |  | 0.343 |  | 377 |  |
|   |  | no posters |  | 0.675 |  | 0.331 |  | 383 |  |
|   |  | positive warning |  | 0.710 |  | 0.332 |  | 386 |  |
|  |

**Effects of time (T1/T2), warning condition and story type (true/fake) on truthfulness ratings.**

| **Within Subjects Effects**  |
| --- |
| **Cases** | **Sum of Squares** | **df** | **Mean Square** | **F** | **p** | **η²p**  |
| Time |  | 1377.96 |  | 1 |  | 1377.96 |  | 2.41 |  | 0.12 |  | 1.64e-3 |  |
| Time ✻ WarningCondition |  | 189.30 |  | 3 |  | 63.10 |  | 0.11 |  | 0.95 |  | 2.26e-4 |  |
| Residuals |  | 839191.83 |  | 1468 |  | 571.66 |  |  |  |   |  |  |  |
| Story type |  | 3.09e+6 |  | 1 |  | 3.09e+6 |  | 5859.75 |  | < .001 |  | 0.80 |  |
| Story type ✻ WarningCondition |  | 1259.92 |  | 3 |  | 419.97 |  | 0.80 |  | 0.50 |  | 1.62e-3 |  |
| Residuals |  | 775204.65 |  | 1468 |  | 528.07 |  |  |  |   |  |  |  |
| Time ✻ Story type |  | 53570.15 |  | 1 |  | 53570.15 |  | 124.37 |  | < .001 |  | 0.08 |  |
| Time ✻ Story type ✻ WarningCondition |  | 264.54 |  | 3 |  | 88.18 |  | 0.20 |  | 0.89 |  | 4.18e-4 |  |
| Residuals |  | 632291.09 |  | 1468 |  | 430.72 |  |  |  |   |  |  |  |
|  |
| *Note.*  Type III Sum of Squares |

| **Between Subjects Effects**  |
| --- |
| **Cases** | **Sum of Squares** | **df** | **Mean Square** | **F** | **p** | **η²p**  |
| WarningCondition |  | 3205.27 |  | 3 |  | 1068.42 |  | 1.75 |  | 0.16 |  | 3.55e-3 |  |
| Residuals |  | 898638.02 |  | 1468 |  | 612.15 |  |  |  |  |  |  |  |
|  |
| *Note.*  Type III Sum of Squares |

| **Descriptive statistics** |
| --- |
| **Time** | **Story type** | **WarningCondition** | **Mean** | **SD** | **N** |
| T1 |  | True |  | negative warning |  | 68.18 |  | 18.25 |  | 383 |  |
|   |  |   |  | no misinfo warning |  | 69.40 |  | 18.10 |  | 356 |  |
|   |  |   |  | no posters |  | 67.56 |  | 18.40 |  | 366 |  |
|   |  |   |  | positive warning |  | 69.45 |  | 18.01 |  | 367 |  |
|   |  | Fake |  | negative warning |  | 27.65 |  | 23.22 |  | 383 |  |
|   |  |   |  | no misinfo warning |  | 29.97 |  | 25.47 |  | 356 |  |
|   |  |   |  | no posters |  | 29.21 |  | 23.58 |  | 366 |  |
|   |  |   |  | positive warning |  | 28.44 |  | 24.57 |  | 367 |  |
| T2 |  | True |  | negative warning |  | 72.78 |  | 27.11 |  | 383 |  |
|   |  |   |  | no misinfo warning |  | 73.82 |  | 27.37 |  | 356 |  |
|   |  |   |  | no posters |  | 73.01 |  | 27.13 |  | 366 |  |
|   |  |   |  | positive warning |  | 75.24 |  | 28.14 |  | 367 |  |
|   |  | Fake |  | negative warning |  | 20.63 |  | 20.52 |  | 383 |  |
|   |  |   |  | no misinfo warning |  | 23.36 |  | 21.73 |  | 356 |  |
|   |  |   |  | no posters |  | 21.33 |  | 21.09 |  | 366 |  |
|   |  |   |  | positive warning |  | 21.94 |  | 23.58 |  | 367 |  |
|  |

**Effects of false memory for fake stories at Time1 and warning condition on related behavioural intentions after one week.**

1. Intention to eat more spicy food at Time 2, as a function of original false memory for the chilli peppers story and warning condition:

| **ANOVA** |
| --- |
| **Cases**  | **Sum of Squares**  | **df**  | **Mean Square**  | **F**  | **p**  | **η² p**  |
| Chili\_FalseMem\_T1  |  | 0.88  |  | 1  |  | 0.88  |  | 0.47  |  | 0.49  |  | 6.19e -4  |  |
| WarningCondition  |  | 2.07  |  | 3  |  | 0.69  |  | 0.37  |  | 0.77  |  | 1.46e -3  |  |
| WarningCondition ✻ Chili\_FalseMem\_T1  |  | 3.02  |  | 3  |  | 1.01  |  | 0.54  |  | 0.66  |  | 2.12e -3  |  |
| Residuals  |  | 1418.54  |  | 761  |  | 1.86  |  |  |  |    |  |  |  |
|  |
| *Note.*  Type III Sum of Squares  |

| **Descriptive statistics** |
| --- |
| **Chili\_FalseMemory\_T1**  | **Warning Condition**  | **Mean**  | **SD**  | **N**  |
| memory  |  | negative warning  |  | 2.38  |  | 1.06  |  | 8  |  |
|    |  | no misinformation warning  |  | 3.00  |  | 1.26  |  | 11  |  |
|    |  | no posters  |  | 2.90  |  | 1.62  |  | 20  |  |
|    |  | positive warning  |  | 2.70  |  | 1.64  |  | 10  |  |
| no memory  |  | negative warning  |  | 2.73  |  | 1.40  |  | 206  |  |
|    |  | no misinformation warning  |  | 2.67  |  | 1.37  |  | 173  |  |
|    |  | no posters  |  | 2.55  |  | 1.33  |  | 186  |  |
|    |  | positive warning  |  | 2.44  |  | 1.32  |  | 155  |  |
|  |

1. Intention to drink more coffee at Time 2, as a function of original false memory for the coffee story and warning condition:

| **ANOVA** |
| --- |
| **Cases**  | **Sum of Squares**  | **df**  | **Mean Square**  | **F**  | **p**  | **η² p**  |
| Coffee\_FalseMemory\_T1  |  | 3.44e -4  |  | 1  |  | 3.44e -4  |  | 1.87e -4  |  | 0.99  |  | 2.46e -7  |  |
| WarningCondition  |  | 1.74  |  | 3  |  | 0.58  |  | 0.31  |  | 0.81  |  | 1.24e -3  |  |
| Coffee\_FalseMem\_T1 ✻ WarningCondition  |  | 2.15  |  | 3  |  | 0.72  |  | 0.39  |  | 0.76  |  | 1.53e -3  |  |
| Residuals  |  | 1401.74  |  | 762  |  | 1.84  |  |  |  |    |  |  |  |
|  |
| Note.  Type III Sum of Squares  |

| **Descriptive statistics** |
| --- |
| **Coffee\_FalseMemory\_T1**  | **Warning Condition**  | **Mean**  | **SD**  | **N**  |
| memory  |  | negative warning  |  | 2.59  |  | 1.37  |  | 27  |  |
|    |  | no misinformation warning  |  | 2.21  |  | 1.40  |  | 19  |  |
|    |  | no posters  |  | 2.38  |  | 1.28  |  | 21  |  |
|    |  | positive warning  |  | 2.59  |  | 1.30  |  | 22  |  |
| no memory  |  | negative warning  |  | 2.42  |  | 1.39  |  | 160  |  |
|    |  | no misinformation warning  |  | 2.46  |  | 1.30  |  | 177  |  |
|    |  | no posters  |  | 2.43  |  | 1.42  |  | 175  |  |
|    |  | positive warning  |  | 2.45  |  | 1.33  |  | 169  |  |
|  |

1. Intention to get a COVID-19 vaccine at Time 2, as a function of original false memory for the vaccine story and warning condition:

| **ANOVA**  |
| --- |
| **Cases**  | **Sum of Squares**  | **df**  | **Mean Square**  | **F**  | **p**  | **η² p**  |
| Vaccine\_FalseMem\_T1  |  | 6.18  |  | 1  |  | 6.18  |  | 2.19  |  | 0.14  |  | 2.88e -3  |  |
| WarningCondition  |  | 2.38  |  | 3  |  | 0.79  |  | 0.28  |  | 0.84  |  | 1.11e -3  |  |
| WarningCondition ✻ Vaccine\_FalseMem\_T1  |  | 6.61  |  | 3  |  | 2.20  |  | 0.78  |  | 0.50  |  | 3.08e -3  |  |
| Residuals  |  | 2142.15  |  | 759  |  | 2.82  |  |  |  |    |  |  |  |
|  |
| *Note.*  Type III Sum of Squares  |

| **Descriptive statistics** |
| --- |
| **Vaccine\_FalseMem\_T1**  | **Warning Condition**  | **Mean**  | **SD**  | **N**  |
| memory  |  | negative warning  |  | 5.21  |  | 1.97  |  | 14  |  |
|    |  | no misinformation warning  |  | 4.93  |  | 1.98  |  | 14  |  |
|    |  | no posters  |  | 4.92  |  | 2.02  |  | 13  |  |
|    |  | positive warning  |  | 5.59  |  | 1.66  |  | 17  |  |
| no memory  |  | negative warning  |  | 5.50  |  | 1.57  |  | 191  |  |
|    |  | no misinformation warning  |  | 5.58  |  | 1.66  |  | 166  |  |
|    |  | no posters  |  | 5.54  |  | 1.63  |  | 162  |  |
|    |  | positive warning  |  | 5.39  |  | 1.78  |  | 190  |  |
|  |

1. Intention to download a contact tracing app at Time 2, as a function of original false memory for the contact tracing story and warning condition:

| **ANOVA** |
| --- |
| **Cases**  | **Sum of Squares**  | **df**  | **Mean Square**  | **F**  | **p**  | **η² p**  |
| ContactTracing\_FalseMem\_T1  |  | 1.91  |  | 1  |  | 1.91  |  | 0.49  |  | 0.48  |  | 6.45e -4  |  |
| WarningCondition  |  | 9.82  |  | 3  |  | 3.27  |  | 0.84  |  | 0.47  |  | 3.31e -3  |  |
| ContactTracing\_FalseMem\_T1 ✻ WarningCondition  |  | 5.28  |  | 3  |  | 1.76  |  | 0.45  |  | 0.72  |  | 1.78e -3  |  |
| Residuals  |  | 2955.70  |  | 761  |  | 3.88  |  |  |  |    |  |  |  |
|  |
| *Note.*  Type III Sum of Squares  |

| **Descriptive statistics** |
| --- |
| **ContactTracing\_FalseMem\_T1**  | **Warning Condition**  | **Mean**  | **SD**  | **N**  |
| memory  |  | negative warning  |  | 4.42  |  | 2.07  |  | 50  |  |
|    |  | no misinformation warning  |  | 4.89  |  | 2.28  |  | 37  |  |
|    |  | no posters  |  | 4.96  |  | 1.95  |  | 45  |  |
|    |  | positive warning  |  | 4.89  |  | 2.15  |  | 46  |  |
| no memory  |  | negative warning  |  | 4.84  |  | 1.84  |  | 140  |  |
|    |  | no misinformation warning  |  | 4.91  |  | 1.98  |  | 153  |  |
|    |  | no posters  |  | 4.85  |  | 2.01  |  | 141  |  |
|    |  | positive warning  |  | 5.04  |  | 1.88  |  | 157  |  |
|  |