

Tables

Table 1. Summary statistics of demographic and psychometric information. Student's two-sample *t*-tests were used for group comparisons.

| Demographic information | | Consistent | Inconsistent | Two-sample <i>t</i> -test | |
|-------------------------|------------------------|---------------|---------------|---------------------------|-----------------|
| | | Mean (STD) | Mean (STD) | <i>t</i> -score | <i>p</i> -value |
| Age | | 23.58 (2.47) | 23.09 (3.13) | 0.60 | 0.55 |
| Education (years) | | 14.69 (1.61) | 14.96 (1.85) | -0.52 | 0.60 |
| BFI-10 | Extraversion | 3.48 (0.86) | 3.09 (0.97) | 1.46 | 0.15 |
| | Agreeableness | 3.48 (0.58) | 3.2 (0.84) | 1.33 | 0.19 |
| | Conscientiousness | 3.19 (0.76) | 3.0 (0.82) | 0.83 | 0.41 |
| | Neuroticism | 3.21 (0.79) | 3.11 (0.9) | 0.42 | 0.68 |
| | Openness to experience | 3.69 (0.83) | 3.48 (0.89) | 0.85 | 0.40 |
| MDMQ | Good-Bad | 18.31 (2.41) | 16.78 (2.84) | 1.97 | 0.06 |
| | Awake-Tired | 17.54 (2.68) | 17.39 (2.53) | 0.19 | 0.85 |
| | Calm-Nervous | 21.69 (3.1) | 20.22 (2.78) | 1.72 | 0.09 |
| VAS | | 3.62 (1.92) | 4.25 (1.85) | -1.15 | 0.26 |
| SMS | | 61.31 (12.33) | 59.35 (14.74) | 0.49 | 0.63 |
| PHQ-9 | | 2.11 (1.75) | 1.96 (1.33) | 0.44 | 0.66 |
| PSS | | 12.85 (3.63) | 14.61 (4.44) | -1.48 | 0.15 |
| EHI (%) | | 95.59 (5.85) | 93.90 (6.85) | 0.91 | 0.37 |

STD, standard deviation; BFI-10, Big Five Inventory10; MDMQ, Multidimensional Mood State Questionnaire (Multidimensionaler Befindlichkeitsfragebogen, MDBF, in German); VAS, Visual Analog scale; SMS, State Mindfulness Scale; PHQ, Patient Health Questionnaire; PSS, Perceived Stress Scale; EHI, Edinburgh Handedness Inventory.

Table 2. Summary statistics of MAAS scores on the interview day and the MRI session day along with the average for each group. Student's two-sample *t*-tests were used for group comparisons.

| | Interview day | | MRI session day | | Average | |
|--------------------|---------------|--------------|-----------------|--------------|------------|--------------|
| | Consistent | Inconsistent | Consistent | Inconsistent | Consistent | Inconsistent |
| Mean | 69.9 | 67.3 | 66.3 | 61.0 | 68.1 | 64.2 |
| STD | 8.1 | 9.7 | 8.2 | 8.6 | 7.8 | 8.7 |
| <i>t</i> -score | 0.991 | | 2.164 | | 1.636 | |
| (<i>p</i> -value) | (0.327) | | (0.036)* | | (0.108) | |

STD, standard deviation; *, $p < 0.05$

Table 3. Number of correct trials in each run (mean \pm STD). The total number of trials was 85 in each of the MF and MW runs. A potential group difference in the number of correct trials was evaluated using a two-sample *t*-test.

| | Consistent group | Inconsistent group | <i>t</i> -score (<i>p</i> -value) |
|--------|------------------|--------------------|------------------------------------|
| MF run | 67.2 \pm 8.7 | 67.0 \pm 11.53 | 0.04 (0.97) |
| MW run | 66.9 \pm 10.2 | 67.3 \pm 10.6 | -0.14 (0.89) |

STD, standard deviation; MF, mindfulness; MW, mind-wandering

Table 4. Linear regression on the behavior data from the NBT performance and MAAS scores. Slopes and p -values (in parentheses) are denoted. The linear regression was performed using two different threshold values (the 60th and the 70th percentile) to define the consistent and inconsistent groups by comparing two sets of the 15-item MAAS data.

| 60 th percentile | Interview day | | MRI session day | | Average | |
|-----------------------------|------------------------|---------------|----------------------|---------------|-----------------------|---------------|
| | Consistent | Inconsistent | Consistent | Inconsistent | Consistent | Inconsistent |
| ACC_MF | 0.361 (0.32) | 0.240 (0.33) | 0.723 (0.03)* | 0.298 (0.26) | 0.591 (0.11) | 0.298 (0.27) |
| ACC_MW | -0.293 (0.52) | 0.245 (0.27) | 0.319 (0.49) | 0.306 (0.21) | 0.013 (0.98) | 0.305 (0.22) |
| Δ Accuracy | 0.655 (0.005)** | -0.005 (0.96) | 0.404 (0.11) | -0.007 (0.95) | 0.578 (0.024)* | -0.007 (0.96) |
| RT_MF | -0.006 (0.17) | -0.003 (0.45) | -0.003 (0.51) | 0.000 (0.82) | -0.005 (0.30) | -0.001 (0.77) |
| RT_MW | -0.003 (0.50) | -0.001 (0.57) | -0.001 (0.77) | -0.000 (0.99) | -0.003 (0.61) | -0.001 (0.75) |
| Δ RT | -0.003 (0.22) | -0.001 (0.71) | -0.002 (0.53) | 0.000 (0.78) | -0.003 (0.34) | -0.000 (0.95) |
| 70 th percentile | Interview day | | MRI session day | | Average | |
| | Consistent | Inconsistent | Consistent | Inconsistent | Consistent | Inconsistent |
| ACC_MF | 0.177 (0.49) | 0.294 (0.33) | 0.353 (0.16) | 0.389 (0.26) | 0.290 (0.28) | 0.373 (0.27) |
| ACC_MW | -0.242 (0.43) | 0.343 (0.22) | 0.165 (0.58) | 0.362 (0.25) | -0.039 (0.90) | 0.390 (0.21) |
| Δ Accuracy | 0.419 (0.011)* | -0.048 (0.72) | 0.188 (0.28) | 0.026 (0.86) | 0.329 (0.06) | -0.017 (0.91) |
| RT_MF | -0.008 (0.05) | -0.000 (0.83) | -0.002 (0.65) | 0.000 (0.98) | -0.005 (0.22) | -0.001 (0.92) |
| RT_MW | -0.004 (0.20) | -0.000 (0.79) | -0.003 (0.45) | 0.000 (0.99) | -0.004 (0.29) | -0.001 (0.89) |
| Δ RT | -0.004 (0.18) | -0.000 (0.99) | 0.000 (0.80) | 0.000 (0.99) | -0.002 (0.58) | 0.000 (0.99) |

* $p < 0.05$, ** $p < 0.01$, corrected using 10,000 random permutations.

Consistent group (N = 18), Inconsistent group (N = 31) using the 60th percentile threshold; Consistent group (N = 26), Inconsistent group (N = 23) using the 70th percentile; ACC, accuracy; MF, mindfulness; MW, mind-wandering; RT, response time