

Supplemental Materials

Note: Models including dummy codes for race or ethnicity were not specified, as the frequencies of each non-white identity were so low – out of a total of 103 volunteers for the 23-27 mg analysis, Asian $n = 2$, unknown = 9, and Hispanic = 2.

Table SA. Multivariate regression analysis results for participants who received 23 to 27 mg (inclusive) psilocybin ($n = 103$) including BMI instead of weight, demonstrating no statistically significant relationships between psilocybin subjective effects and demographic variables.

| | Estimate | Std.Err | z-value | p-value |
|-------------|----------|---------|---------|---------|
| MEQ30 total | | | | |
| age | -0.002 | 0.002 | -0.898 | 0.369 |
| race | -0.062 | 0.067 | -0.916 | 0.360 |
| sex | -0.029 | 0.046 | -0.638 | 0.523 |
| BMI | 0.005 | 0.007 | 0.705 | 0.481 |
| CEQ total | | | | |
| age | -0.001 | 0.001 | -0.915 | 0.360 |
| race | 0.039 | 0.052 | 0.751 | 0.452 |
| sex | -0.077 | 0.036 | -2.172 | 0.030 |
| BMI | 0.006 | 0.005 | 1.130 | 0.258 |
| Intensity | | | | |
| age | -0.007 | 0.008 | -0.944 | 0.345 |
| race | 0.075 | 0.293 | 0.257 | 0.797 |
| sex | -0.221 | 0.200 | -1.108 | 0.268 |
| BMI | 0.024 | 0.030 | 0.817 | 0.414 |

Note: MEQ30 = Mystical Experience Questionnaire; CEQ = Challenging Experience Questionnaire.

Table SB. Multivariate regression analysis results for participants who received 23 to 27 mg (inclusive) psilocybin ($n = 103$) including dummy codes for study. No studies showed statistically significant relationships between psilocybin subjective effects and demographic variables.

| | Estimate | Std.Err | z-value | p-value |
|------------------------|----------|---------|---------|---------|
| MEQ30 total | | | | |
| age | 0.000 | 0.002 | 0.207 | 0.836 |
| race | 0.011 | 0.079 | 0.140 | 0.888 |
| sex | -0.022 | 0.045 | -0.482 | 0.630 |
| weight (kg) | 0.010 | 0.017 | 0.572 | 0.567 |
| Griffiths et al., 2011 | -0.058 | 0.134 | -0.436 | 0.663 |
| Griffiths et al., 2016 | -0.248 | 0.132 | -1.881 | 0.060 |
| Johnson et al., 2014 | -0.315 | 0.122 | -2.588 | 0.010 |
| Griffiths et al., 2018 | -0.107 | 0.114 | -0.939 | 0.348 |
| NCT02145091 | -0.161 | 0.120 | -1.342 | 0.180 |
| Carbonaro et al., 2018 | -0.150 | 0.137 | -1.094 | 0.274 |
| NCT02243813 | -0.087 | 0.150 | -0.583 | 0.560 |
| Davis et al., 2020 | -0.347 | 0.165 | -2.102 | 0.036 |
| Barrett et al., 2020 | -0.098 | 0.150 | -0.652 | 0.514 |
| CEQ total | | | | |
| age | -0.002 | 0.002 | -1.620 | 0.105 |
| race | 0.002 | 0.064 | 0.024 | 0.981 |
| sex | -0.079 | 0.036 | -2.179 | 0.029 |
| weight (kg) | 0.002 | 0.014 | 0.138 | 0.890 |
| Griffiths et al., 2011 | 0.165 | 0.108 | 1.529 | 0.126 |
| Griffiths et al., 2016 | 0.077 | 0.106 | 0.727 | 0.467 |
| Johnson et al., 2014 | 0.102 | 0.098 | 1.039 | 0.299 |
| Griffiths et al., 2018 | 0.054 | 0.092 | 0.592 | 0.554 |
| NCT02145091 | 0.044 | 0.096 | 0.459 | 0.646 |
| Carbonaro et al., 2018 | -0.079 | 0.110 | -0.714 | 0.475 |
| NCT02243813 | 0.233 | 0.121 | 1.936 | 0.053 |
| Davis et al., 2020 | 0.162 | 0.133 | 1.221 | 0.222 |
| Barrett et al., 2020 | 0.029 | 0.121 | 0.236 | 0.813 |
| Intensity | | | | |
| age | -0.001 | 0.008 | -0.172 | 0.864 |
| race | 0.244 | 0.337 | 0.682 | 0.495 |
| sex | -0.148 | 0.203 | -0.728 | 0.466 |
| weight (kg) | 0.009 | 0.078 | 0.112 | 0.911 |
| Griffiths et al., 2011 | 0.173 | 0.604 | 0.287 | 0.774 |
| Griffiths et al., 2016 | -0.703 | 0.595 | -1.182 | 0.237 |
| Johnson et al., 2014 | -0.845 | 0.547 | -1.544 | 0.123 |
| Griffiths et al., 2018 | -0.397 | 0.515 | -0.771 | 0.440 |
| NCT02145091 | -0.030 | 0.540 | -0.056 | 0.955 |
| Carbonaro et al., 2018 | -0.122 | 0.616 | -0.197 | 0.844 |
| NCT02243813 | -0.380 | 0.675 | -0.563 | 0.573 |
| Davis et al., 2020 | -1.044 | 0.744 | -1.403 | 0.161 |
| Barrett et al., 2020 | -0.472 | 0.676 | -0.698 | 0.485 |

Note: MEQ30 = Mystical Experience Questionnaire; CEQ = Challenging Experience Questionnaire. The Griffiths et al., 2006 study is the reference category. NCT02145091 is a study in meditation practitioners with a long-term daily practice. NCT02243813 is a study in religious professionals.

Table SC. Multivariate regression analysis results for participants who received 20 mg/70 kg psilocybin ($n = 123$) including dummy codes for study. One study showed a statistically significant relationship between psilocybin subjective effects and demographic variables.

| | Estimate | Std.Err | z-value | p-value |
|------------------------|---------------|--------------|---------------|--------------|
| MEQ30 total | | | | |
| age | -0.002 | 0.002 | -0.947 | 0.344 |
| race | 0.036 | 0.069 | 0.518 | 0.604 |
| sex | -0.030 | 0.052 | -0.583 | 0.560 |
| adjusted dose (mg) | 0.007 | 0.007 | 1.065 | 0.287 |
| Johnson et al., 2014 | -0.128 | 0.080 | -1.601 | 0.109 |
| Griffiths et al., 2018 | 0.002 | 0.064 | 0.025 | 0.980 |
| Carbonaro et al., 2018 | -0.189 | 0.082 | -2.294 | 0.022 |
| NCT02243813 | 0.057 | 0.085 | 0.671 | 0.503 |
| Davis et al., 2020 | -0.106 | 0.099 | -1.076 | 0.282 |
| CEQ total | | | | |
| age | -0.003 | 0.001 | -1.817 | 0.069 |
| race | 0.039 | 0.049 | 0.787 | 0.431 |
| sex | -0.068 | 0.037 | -1.846 | 0.065 |
| adjusted dose (mg) | 0.005 | 0.005 | 1.044 | 0.296 |
| Johnson et al., 2014 | 0.011 | 0.057 | 0.199 | 0.843 |
| Griffiths et al., 2018 | -0.038 | 0.045 | -0.831 | 0.406 |
| Carbonaro et al., 2018 | -0.188 | 0.058 | -3.227 | 0.001 |
| NCT02243813 | -0.066 | 0.060 | -1.095 | 0.274 |
| Davis et al., 2020 | 0.024 | 0.070 | 0.339 | 0.735 |
| Intensity | | | | |
| age | -0.009 | 0.008 | -1.188 | 0.235 |
| race | 0.434 | 0.263 | 1.650 | 0.099 |
| sex | -0.162 | 0.198 | -0.817 | 0.414 |
| adjusted dose (mg) | 0.021 | 0.026 | 0.808 | 0.419 |
| Johnson et al., 2014 | -0.303 | 0.305 | -0.993 | 0.321 |
| Griffiths et al., 2018 | -0.126 | 0.244 | -0.518 | 0.605 |
| Carbonaro et al., 2018 | 0.541 | 0.314 | -1.722 | 0.085 |
| NCT02243813 | -0.255 | 0.322 | -0.792 | 0.428 |
| Davis et al., 2020 | -0.320 | 0.376 | -0.850 | 0.395 |

Note: MEQ30 = Mystical Experience Questionnaire; CEQ = Challenging Experience Questionnaire. The Griffiths et al., 2011 study is the reference category. NCT02243813 is a study of psilocybin in religious professionals. Statistically significant effects after Bonferroni correction are indicated in bold.

Table SD. Multivariate regression analysis results for participants who received 30 mg/70 kg psilocybin ($n = 193$) including dummy codes for study. One study showed a statistically significant relationship between psilocybin subjective effects and demographic variables.

| | Estimate | Std.Err | z-value | p-value |
|------------------------|--------------|--------------|---------------|--------------|
| MEQ30 total | | | | |
| age | -0.003 | 0.002 | -0.947 | 0.344 |
| race | 0.001 | 0.069 | 0.518 | 0.604 |
| sex | 0.011 | 0.052 | -0.583 | 0.560 |
| adjusted dose (mg) | 0.001 | 0.007 | 1.065 | 0.287 |
| Griffiths et al., 2011 | -0.012 | 0.080 | -1.601 | 0.109 |
| Johnson et al., 2014 | -0.118 | 0.080 | -1.601 | 0.109 |
| Griffiths et al., 2018 | -0.092 | 0.064 | 0.025 | 0.980 |
| Carbonaro et al., 2018 | -0.196 | 0.082 | -2.294 | 0.022 |
| NCT02243813 | -0.114 | 0.085 | 0.671 | 0.503 |
| Davis et al., 2020 | -0.003 | 0.099 | -1.076 | 0.282 |
| CEQ total | | | | |
| age | -0.003 | 0.002 | -1.893 | 0.058 |
| race | 0.002 | 0.052 | 0.025 | 0.980 |
| sex | 0.000 | 0.039 | 0.276 | 0.783 |
| adjusted dose (mg) | 0.001 | 0.003 | 0.263 | 0.792 |
| Griffiths et al., 2011 | 0.019 | 0.072 | -0.162 | 0.871 |
| Johnson et al., 2014 | -0.028 | 0.062 | -1.904 | 0.057 |
| Griffiths et al., 2018 | -0.064 | 0.053 | -1.728 | 0.084 |
| Carbonaro et al., 2018 | -0.212 | 0.079 | -2.487 | 0.013 |
| NCT02243813 | -0.164 | 0.094 | -1.222 | 0.222 |
| Davis et al., 2020 | 0.063 | 0.107 | -0.027 | 0.979 |
| Intensity | | | | |
| age | -0.009 | 0.001 | -2.519 | 0.012 |
| race | 0.434 | 0.036 | 0.042 | 0.967 |
| sex | -0.162 | 0.027 | -0.016 | 0.987 |
| adjusted dose (mg) | 0.021 | 0.002 | 0.400 | 0.689 |
| Griffiths et al., 2011 | -0.128 | 0.050 | 0.379 | 0.705 |
| Johnson et al., 2014 | -0.303 | 0.043 | -0.660 | 0.509 |
| Griffiths et al., 2018 | -0.126 | 0.037 | -1.755 | 0.079 |
| Carbonaro et al., 2018 | 0.541 | 0.055 | -3.886 | 0.000 |
| NCT02243813 | -0.255 | 0.065 | -2.536 | 0.011 |
| Davis et al., 2020 | -0.320 | 0.074 | 0.848 | 0.396 |

Note: MEQ30 = Mystical Experience Questionnaire; CEQ = Challenging Experience Questionnaire. The Griffiths et al., 2006 study is the reference category. NCT02243813 is a study of psilocybin in religious professionals. Statistically significant effects after Bonferroni correction are indicated in bold.