Supplemental Materials Table 1. Specific search terms for six data bases searched

|  |  |  |
| --- | --- | --- |
| Database | Search string | Fields |
| PubMed | (psilocybin OR lysergic acid diethylamide OR LSD OR ayahuasca OR psychedelic\*) AND (mental disorders/diagnosis OR behavioral symptoms/diagnosis OR mental disorders/therapy OR behavioral symptoms/therapy OR antidepressant\* OR behavioral symptom\* OR bipolar OR depression OR depressive OR emotional OR mental OR mental disorders OR mental health OR mental illness\* OR psychiat\* OR psychosis OR schizophren\* OR suicid\* OR wellbeing OR anx\* OR mood OR PTSD OR posttraumatic stress disorder OR post-traumatic stress disorder OR ADHD OR attention deficit OR substance use OR substance abuse OR alcohol OR SUD OR addiction OR eating disorder OR anorexia OR bulimia OR binge eating disorder OR well-being OR wellbeing OR quality of life OR life satisfaction OR happiness OR healthy) | all fields |
| CINAHL | (psilocybin OR lysergic acid diethylamide OR LSD OR ayahuasca OR psychedelic\*) AND (mental disorders/diagnosis OR behavioral symptoms/diagnosis OR mental disorders/therapy OR behavioral symptoms/therapy OR antidepressant\* OR behavioral symptom\* OR bipolar OR depression OR depressive OR emotional OR mental OR mental disorders OR mental health OR mental illness\* OR psychiat\* OR psychosis OR schizophren\* OR suicid\* OR wellbeing OR anx\* OR mood OR PTSD OR posttraumatic stress disorder OR post-traumatic stress disorder OR ADHD OR attention deficit OR substance use OR substance abuse OR alcohol OR SUD OR addiction OR eating disorder OR anorexia OR bulimia OR binge eating disorder OR well-being OR wellbeing OR quality of life OR life satisfaction OR happiness OR healthy) | all fields |
| PsycINFO | (psilocybin OR lysergic acid diethylamide OR LSD OR ayahuasca OR psychedelic\*) AND (mental disorders/diagnosis OR behavioral symptoms/diagnosis OR mental disorders/therapy OR behavioral symptoms/therapy OR antidepressant\* OR behavioral symptom\* OR bipolar OR depression OR depressive OR emotional OR mental OR mental disorders OR mental health OR mental illness\* OR psychiat\* OR psychosis OR schizophren\* OR suicid\* OR wellbeing OR anx\* OR mood OR PTSD OR posttraumatic stress disorder OR post-traumatic stress disorder OR ADHD OR attention deficit OR substance use OR substance abuse OR alcohol OR SUD OR addiction OR eating disorder OR anorexia OR bulimia OR binge eating disorder OR well-being OR wellbeing OR quality of life OR life satisfaction OR happiness OR healthy) | all fields |
| Scopus | ( psilocybin OR "lysergic acid diethylamide" OR lsd OR ayahuasca OR psychedelic\* ) AND ( "mental disorders/diagnosis" OR "behavioral symptoms/diagnosis" OR "mental disorders/therapy" OR "behavioral symptoms/therapy" OR antidepressant\* OR "behavioral symptom\*" OR bipolar OR depression OR depressive OR emotional OR mental OR "mental disorders" OR "mental health" OR "mental illness\*" OR psychiat\* OR psychosis OR schizophren\* OR suicid\* OR wellbeing OR anx\* OR mood OR ptsd OR "posttraumatic stress disorder" OR "post-traumatic stress disorder" OR adhd OR "attention deficit" OR "substance use" OR "substance abuse" OR alcohol OR sud OR addiction OR "eating disorder" OR anorexia OR bulimia OR "binge eating disorder" OR "well-being" OR wellbeing OR "quality of life" OR "life satisfaction" OR happiness OR healthy ) | title, abstract, keywords |
| Web of Science | (psilocybin OR lysergic acid diethylamide OR LSD OR ayahuasca OR psychedelic\*) AND (mental disorders/diagnosis OR behavioral symptoms/diagnosis OR mental disorders/therapy OR behavioral symptoms/therapy OR antidepressant\* OR behavioral symptom\* OR bipolar OR depression OR depressive OR emotional OR mental OR mental disorders OR mental health OR mental illness\* OR psychiat\* OR psychosis OR schizophren\* OR suicid\* OR wellbeing OR anx\* OR mood OR PTSD OR posttraumatic stress disorder OR post-traumatic stress disorder OR ADHD OR attention deficit OR substance use OR substance abuse OR alcohol OR SUD OR addiction OR eating disorder OR anorexia OR bulimia OR binge eating disorder OR well-being OR wellbeing OR quality of life OR life satisfaction OR happiness OR healthy) | all fields |
| Cochrane | (psilocybin OR lysergic acid diethylamide OR LSD OR ayahuasca OR psychedelic\*) AND (antidepressant\* OR behavioral symptom\* OR bipolar OR depression OR depressive OR emotional OR mental OR mental disorders OR mental health OR mental illness\* OR psychiat\* OR psychosis OR schizophren\* OR suicid\* OR wellbeing OR anx\* OR mood OR PTSD OR posttraumatic stress disorder OR post-traumatic stress disorder OR ADHD OR attention deficit OR substance use OR substance abuse OR alcohol OR SUD OR addiction OR eating disorder OR anorexia OR bulimia OR binge eating disorder OR well-being OR wellbeing OR quality of life OR life satisfaction OR happiness OR healthy) | title, abstract, keywords; restricted to trials |

Supplemental Materials Table 2. Secondary publications

|  |  |
| --- | --- |
| Study | Secondary publications |
| Anderson et al. (2019) | none |
| Barrett et al. (2020) | none |
| Bershad et al. (2019) | none |
| Bogenschutz et al. (2015) | none |
| Carhart-Harris et al. (2012) | none |
| Carhart-Harris et al. (2016b) | none |
| Carhart-Harris et al. (2018a) | Carhart-Harris et al. (2016a); Erritzoe et al. (2018); Lyons & Carhart-Harris (2018a); Lyons & Carhart-Harris (2018b); Stroud et al. (2018) |
| Gasser et al. (2014) | none |
| Griffiths et al. (2006) | Griffiths et al. (2008); MacLean, Johnson, & Griffiths (2011) |
| Griffiths et al. (2011) | MacLean, Johnson, & Griffiths (2011) |
| Griffiths et al. (2016) | none |
| Griffiths et al. (2018) | none |
| Grob et al. (2011) | none |
| Johnson et al. (2014) | Johnson, Garcia-Romeu, Griffiths (2017) |
| Madsen et al. (2020) | none |
| Osório et al. (2015) | none |
| Palhano-Fontes et al. (2019) | none |
| Ross et al. (2016) | Agin-Liebes et al. (2020) |
| Sampedro et al. (2017) | none |
| Sanches et al. (2016) | none |
| Schmid & Liechti (2018) | none |
| Smigielski et al. (2019b) | Smigielski et al. (2019a) |
| Soler et al. (2016) | none |
| Soler et al. (2018) | none |

Note: All studies listed here provided unique data included in the current meta-analysis. Studies published using the same primary sample but not providing eligible data (e.g., neuroimaging studies without psychological measures) are not included here.

Supplemental Materials Table 3. Maximum psychedelic dose, control condition, and adverse effects by study

|  |  |  |  |
| --- | --- | --- | --- |
| Study | Max Dose | Control | Adverse effects |
| Anderson et al. (2019) | .30 mg/kg psilocybin | NA | No serious AE |
| Barrett et al. (2020) | 25 mg/70 kg psilocybin | NA | No serious AE; expected AEs (e.g., headache) |
| Bershad et al. (2019) | 26 ug LSD | 0 ug LSD | No adverse events |
| Bogenschutz et al. (2015) | .40 mg/kg psilocybin | NA | No serious AE; mild headaches, nausea, diarrhea, insomnia |
| Carhart-Harris et al. (2012) | 2 mg IV psilocybin | saline | unclear |
| Carhart-Harris et al. (2016b) | 75 ug LSD in 10 ml saline | saline | unclear |
| Carhart-Harris et al. (2018a) | 25 mg psilocybin | NA | No serious AE; transient anxiety, headaches, nausea, paranoia |
| Gasser et al. (2014) | 200 ug LSD | 20 ug LSD | No serious AE; transient psychological effects (anger, anxiety, distress), feeling cold, gait disturbance, bradyphrenia, hyperhidrosis, mydriasis, tachyphrenia |
| Griffiths et al. (2006) | 30 mg/70 kg psilocybin | 40 mg/70 kg methyphenidate | No serious AE; transient anxiety/dysphoria, transient psychotic symptoms (ideas of reference, paranoia) |
| Griffiths et al. (2011) | 30 mg/70 kg psilocybin | 0 mg psilocybin | No serious AE; transient anxiety/fear, paranoia |
| Griffiths et al. (2016) | 30 mg psilocybin | 1 or 3 mg/70 kg psilocyin | No serious AE; transient anxiety, headaches, nausea, paranoia, elevated blood pressure |
| Griffiths et al. (2018) | 30 mg/70 kg psilocybin | 1 mg/70 kg psilocybin | No serious AE; increased blood pressure |
| Grob et al. (2011) | .20 mg/kg psilocybin | niacin | No serious AE; slight increase in blood pressure and heart rate, no adverse psychological effects reported |
| Johnson et al. (2014) | 30 mg/70 kg psilocybin | NA | No serious AE; transient anxiety/fear |
| Madsen et al. (2020) | .3 mg/kg psilocybin | NA | No adverse events |
| Osório et al. (2015) | 200 mL 0.8 mg/mL DMT, 0.21 mg/mL harmine, no harmaline | NA | No serious AE; transient changes in thought content and sensory perception, increased blood pressure |
| Palhano-Fontes et al. (2019) | 1 mL/kg of 0.36 mg/mL of N, N-DMT, 1.86 mg/ml of harmine, 0.24 mg/ml of harmaline, 1.20 mg/ml of tetrahydroharmine | water, yeast, citric acid, zinc sulfate, and caramel colorant | No serious AE; psychological distress, nausea, vomiting |
| Ross et al. (2016) | .30 mg/kg psilocybin | niacin | No serious AE; transient anxiety, headaches, nausea, paranoia, thought disorder, elevated blood pressure and heart rate |
| Sampedro et al. (2017) | 0.64 mg DMT / kg in 45 mg DMT, 126 mg harmine, 26 mg tetrahydroharmine, 5 mg harmaline | NA | unclear |
| Sanches et al. (2016) | 2.2 mL/kg of 0.8 mg/mL DMT, 0.21 mg/mL harmine, no harmaline | NA | No serious AE; vomiting, increased blood pressure, changes in thought content and sensory perception |
| Schmid & Liechti (2018) | 200 ug LSD | NA | No serious AE; sleep difficulties |
| Smigielski et al. (2019b) | 315 ug/kg psilocybin | lactose placebo | No serious AE |
| Soler et al. (2016) | 43.6 mg DMT | NA | unclear |
| Soler et al. (2018) | not reported | NA | unclear |

Note: AE = adverse event; NA = not applicable; Unclear = not reported.

Supplemental Materials Table 4. Study-level Cochrane risk of bias ratings

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Study | Rand Seq | Alloc Conceal | Blind Person/Part | Blind Out | Attrit Bias | Select Report |
| Anderson et al. (2019) | high | high | high | high | unclear | unclear |
| Barrett et al. (2020) | high | high | high | high | low | low |
| Bershad et al. (2019) | unclear | low | low | high | high | low |
| Bogenschutz et al. (2015) | high | high | high | low | high | low |
| Carhart-Harris et al. (2012) | unclear | unclear | unclear | high | low | unclear |
| Carhart-Harris et al. (2016b) | high | high | high | high | low | low |
| Carhart-Harris et al. (2018a) | high | high | high | high | high | low |
| Gasser et al. (2014) | unclear | low | low | high | high | low |
| Griffiths et al. (2006) | unclear | low | low | low | low | unclear |
| Griffiths et al. (2011) | unclear | low | low | low | low | unclear |
| Griffiths et al. (2016) | unclear | low | high | unclear | high | low |
| Griffiths et al. (2018) | unclear | low | low | low | high | high |
| Grob et al. (2011) | unclear | low | high | high | high | low |
| Johnson et al. (2014) | high | high | high | low | low | unclear |
| Madsen et al. (2020) | high | high | high | high | low | high |
| Osório et al. (2015) | high | high | high | high | low | unclear |
| Palhano-Fontes et al. (2019) | low | low | low | unclear | high | low |
| Ross et al. (2016) | low | low | high | high | high | low |
| Sampedro et al. (2017) | high | high | high | high | high | high |
| Sanches et al. (2016) | high | high | high | high | low | unclear |
| Schmid & Liechti (2018) | high | high | high | high | high | high |
| Smgielski et al. (2019b) | unclear | unclear | high | high | high | unclear |
| Soler et al. (2016) | high | high | high | high | low | unclear |
| Soler et al. (2018) | high | high | high | high | low | unclear |

Note : Rand Seq = random sequence generation; Alloc Conceal = allocation concealment; BlindPerson/Partic = blinding of personnel and participants; Blind Out = blinding of outcome assessment; Attrition bias = incomplete outcome data; Select Report = selective reporting.

Supplemental Materials Table 5. Study-level aggregate effect sizes separated by domain, comparison, and time point.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Study | Domain | Comparison | Timepoint | ES | Variance |
| Bogenschutz et al. (2015) | Targeted sx | within-group | pre-post | 0.55 | 0.06 |
| Grob et al. (2011) | Targeted sx | within-group | pre-post | 0.63 | 0.11 |
| Ross et al. (2016) | Targeted sx | within-group | pre-post | 1.13 | 0.07 |
| Osório et al. (2015) | Targeted sx | within-group | pre-post | 1.25 | 0.16 |
| Gasser et al. (2014) | Targeted sx | within-group | pre-post | 1.77 | 0.21 |
| Griffiths et al. (2016) | Targeted sx | within-group | pre-post | 1.86 | 0.06 |
| Sanches et al. (2016) | Targeted sx | within-group | pre-post | 2.05 | 0.12 |
| Carhart-Harris et al. (2018a) | Targeted sx | within-group | pre-post | 2.08 | 0.11 |
| Palhano-Fontes et al. (2019) | Targeted sx | within-group | pre-post | 3.02 | 0.29 |
| Johnson et al. (2014) | Targeted sx | within-group | pre-post | 3.21 | 0.25 |
| Grob et al. (2011) | Targeted sx | within-group | pre-FU | 0.24 | 0.08 |
| Bogenschutz et al. (2015) | Targeted sx | within-group | pre-FU | 0.92 | 0.07 |
| Ross et al. (2016) | Targeted sx | within-group | pre-FU | 1.11 | 0.06 |
| Carhart-Harris et al. (2018a) | Targeted sx | within-group | pre-FU | 1.20 | 0.06 |
| Gasser et al. (2014) | Targeted sx | within-group | pre-FU | 1.34 | 0.13 |
| Osório et al. (2015) | Targeted sx | within-group | pre-FU | 1.35 | 0.18 |
| Griffiths et al. (2016) | Targeted sx | within-group | pre-FU | 1.99 | 0.04 |
| Sanches et al. (2016) | Targeted sx | within-group | pre-FU | 2.17 | 0.13 |
| Johnson et al. (2014) | Targeted sx | within-group | pre-FU | 2.20 | 0.14 |
| Griffiths et al. (2016) | Targeted sx | between-group | pre-post | 0.86 | 0.10 |
| Grob et al. (2011) | Targeted sx | between-group | pre-post | 0.94 | 0.26 |
| Ross et al. (2016) | Targeted sx | between-group | pre-post | 0.98 | 0.13 |
| Palhano-Fontes et al. (2019) | Targeted sx | between-group | pre-post | 1.20 | 0.12 |
| Gasser et al. (2014) | Targeted sx | between-group | pre-post | 2.22 | 0.45 |
| Osório et al. (2015) | Depression | within-group | pre-post | 1.21 | 0.16 |
| Carhart-Harris et al. (2018a) | Depression | within-group | pre-post | 2.08 | 0.11 |
| Sanches et al. (2016) | Depression | within-group | pre-post | 2.14 | 0.14 |
| Palhano-Fontes et al. (2019) | Depression | within-group | pre-post | 3.02 | 0.29 |
| Carhart-Harris et al. (2018a) | Depression | within-group | pre-FU | 1.20 | 0.06 |
| Osório et al. (2015) | Depression | within-group | pre-FU | 1.34 | 0.20 |
| Sanches et al. (2016) | Depression | within-group | pre-FU | 2.28 | 0.15 |
| Palhano-Fontes et al. (2019) | Depression | between-group | pre-post | 1.20 | 0.12 |
| Bershad et al. (2019) | Neg affect | within-group | pre-post | 0.00 | 0.08 |
| Griffiths et al. (2006) | Neg affect | within-group | pre-post | 0.00 | 0.06 |
| Bogenschutz et al. (2015) | Neg affect | within-group | pre-post | 0.12 | 0.05 |
| Schmid & Liechti (2018) | Neg affect | within-group | pre-post | 0.25 | 0.06 |
| Grob et al. (2011) | Neg affect | within-group | pre-post | 0.63 | 0.09 |
| Barrett et al. (2020) | Neg affect | within-group | pre-post | 0.71 | 0.05 |
| Anderson et al. (2019) | Neg affect | within-group | pre-post | 0.72 | 0.04 |
| Osório et al. (2015) | Neg affect | within-group | pre-post | 1.25 | 0.16 |
| Gasser et al. (2014) | Neg affect | within-group | pre-post | 1.41 | 0.14 |
| Ross et al. (2016) | Neg affect | within-group | pre-post | 1.51 | 0.08 |
| Griffiths et al. (2016) | Neg affect | within-group | pre-post | 1.72 | 0.06 |
| Carhart-Harris et al. (2018a) | Neg affect | within-group | pre-post | 1.92 | 0.09 |
| Sanches et al. (2016) | Neg affect | within-group | pre-post | 2.05 | 0.12 |
| Palhano-Fontes et al. (2019) | Neg affect | within-group | pre-post | 3.02 | 0.29 |
| Schmid & Liechti (2018) | Neg affect | within-group | pre-FU | 0.08 | 0.06 |
| Barrett et al. (2020) | Neg affect | within-group | pre-FU | 0.22 | 0.04 |
| Bogenschutz et al. (2015) | Neg affect | within-group | pre-FU | 0.32 | 0.06 |
| Grob et al. (2011) | Neg affect | within-group | pre-FU | 0.42 | 0.07 |
| Gasser et al. (2014) | Neg affect | within-group | pre-FU | 1.12 | 0.11 |
| Carhart-Harris et al. (2018a) | Neg affect | within-group | pre-FU | 1.24 | 0.06 |
| Ross et al. (2016) | Neg affect | within-group | pre-FU | 1.32 | 0.06 |
| Osório et al. (2015) | Neg affect | within-group | pre-FU | 1.35 | 0.18 |
| Griffiths et al. (2016) | Neg affect | within-group | pre-FU | 1.81 | 0.03 |
| Sanches et al. (2016) | Neg affect | within-group | pre-FU | 2.17 | 0.13 |
| Griffiths et al. (2006) | Neg affect | between-group | pre-post | 0.00 | 0.13 |
| Griffiths et al. (2016) | Neg affect | between-group | pre-post | 0.88 | 0.09 |
| Ross et al. (2016) | Neg affect | between-group | pre-post | 0.92 | 0.13 |
| Grob et al. (2011) | Neg affect | between-group | pre-post | 0.92 | 0.21 |
| Palhano-Fontes et al. (2019) | Neg affect | between-group | pre-post | 1.20 | 0.12 |
| Gasser et al. (2014) | Neg affect | between-group | pre-post | 1.69 | 0.35 |
| Sampedro et al. (2017) | Pos affect | within-group | pre-post | -0.09 | 0.06 |
| Griffiths et al. (2006) | Pos affect | within-group | pre-post | 0.00 | 0.04 |
| Griffiths et al. (2018) | Pos affect | within-group | pre-post | 0.29 | 0.01 |
| Barrett et al. (2020) | Pos affect | within-group | pre-post | 0.56 | 0.05 |
| Ross et al. (2016) | Pos affect | within-group | pre-post | 0.63 | 0.05 |
| Gasser et al. (2014) | Pos affect | within-group | pre-post | 0.88 | 0.15 |
| Griffiths et al. (2016) | Pos affect | within-group | pre-post | 0.95 | 0.04 |
| Griffiths et al. (2006) | Pos affect | within-group | pre-FU | 0.00 | 0.03 |
| Ross et al. (2016) | Pos affect | within-group | pre-FU | 0.29 | 0.04 |
| Barrett et al. (2020) | Pos affect | within-group | pre-FU | 0.42 | 0.05 |
| Griffiths et al. (2016) | Pos affect | within-group | pre-FU | 0.86 | 0.02 |
| Gasser et al. (2014) | Pos affect | within-group | pre-FU | 0.94 | 0.14 |
| Griffiths et al. (2018) | Pos affect | between-group | pre-post | 0.41 | 0.03 |
| Carhart-Harris et al. (2016b) | Pos affect | between-group | pre-post | 0.54 | 0.05 |
| Griffiths et al. (2006) | Pos affect | between-group | pre-post | 0.59 | 0.09 |
| Carhart-Harris et al. (2012) | Pos affect | between-group | pre-post | 0.59 | 0.07 |
| Griffiths et al. (2016) | Pos affect | between-group | pre-post | 0.80 | 0.07 |
| Smgielski et al. (2019b) | Pos affect | between-group | pre-post | 1.39 | 0.09 |
| Gasser et al. (2014) | Pos affect | between-group | pre-post | 1.52 | 0.50 |
| Ross et al. (2016) | Pos affect | between-group | pre-post | 1.86 | 0.10 |
| Osório et al. (2015) | Adverse | within-group | pre-post | 0.18 | 0.08 |
| Sanches et al. (2016) | Adverse | within-group | pre-post | 0.50 | 0.04 |
| Osório et al. (2015) | Adverse | within-group | pre-FU | 0.23 | 0.08 |
| Sanches et al. (2016) | Adverse | within-group | pre-FU | 0.69 | 0.04 |
| Griffiths et al. (2006) | Adverse | between-group | pre-post | -0.10 | 0.10 |
| Griffiths et al. (2018) | Adverse | between-group | pre-post | -0.09 | 0.03 |
| Carhart-Harris et al. (2016b) | Adverse | between-group | pre-post | 0.27 | 0.03 |
| Ross et al. (2016) | Adverse | between-group | pre-post | 1.87 | 0.14 |
| Ross et al. (2016) | Social | within-group | pre-post | 0.43 | 0.07 |
| Carhart-Harris et al. (2018a) | Social | within-group | pre-post | 0.83 | 0.08 |
| Griffiths et al. (2011) | Social | within-group | pre-post | 1.21 | 0.09 |
| Ross et al. (2016) | Social | within-group | pre-FU | 0.23 | 0.06 |
| Griffiths et al. (2011) | Social | within-group | pre-FU | 0.72 | 0.07 |
| Carhart-Harris et al. (2018a) | Social | within-group | pre-FU | 0.77 | 0.15 |
| Smgielski et al. (2019b) | Social | between-group | pre-post | 0.81 | 0.08 |
| Griffiths et al. (2018) | Social | between-group | pre-post | 0.96 | 0.04 |
| Griffiths et al. (2006) | Social | between-group | pre-post | 1.30 | 0.14 |
| Ross et al. (2016) | Social | between-group | pre-post | 1.82 | 0.16 |
| Griffiths et al. (2011) | Behavior | within-group | pre-post | 1.21 | 0.09 |
| Carhart-Harris et al. (2018a) | Behavior | within-group | pre-post | 1.80 | 0.13 |
| Griffiths et al. (2011) | Behavior | within-group | pre-FU | 0.72 | 0.07 |
| Griffiths et al. (2018) | Behavior | between-group | pre-post | 1.13 | 0.05 |
| Griffiths et al. (2006) | Behavior | between-group | pre-post | 1.23 | 0.14 |
| Griffiths et al. (2006) | Exist/spirit | within-group | pre-post | 0.00 | 0.04 |
| Griffiths et al. (2018) | Exist/spirit | within-group | pre-post | 0.42 | 0.01 |
| Carhart-Harris et al. (2018a) | Exist/spirit | within-group | pre-post | 0.46 | 0.12 |
| Griffiths et al. (2011) | Exist/spirit | within-group | pre-post | 0.62 | 0.04 |
| Griffiths et al. (2016) | Exist/spirit | within-group | pre-post | 0.70 | 0.03 |
| Schmid & Liechti (2018) | Exist/spirit | within-group | pre-post | 0.72 | 0.06 |
| Johnson et al. (2014) | Exist/spirit | within-group | pre-post | 0.85 | 0.08 |
| Ross et al. (2016) | Exist/spirit | within-group | pre-post | 0.88 | 0.05 |
| Griffiths et al. (2006) | Exist/spirit | within-group | pre-FU | 0.00 | 0.02 |
| Barrett et al. (2020) | Exist/spirit | within-group | pre-FU | 0.43 | 0.08 |
| Carhart-Harris et al. (2018a) | Exist/spirit | within-group | pre-FU | 0.47 | 0.12 |
| Griffiths et al. (2011) | Exist/spirit | within-group | pre-FU | 0.56 | 0.04 |
| Ross et al. (2016) | Exist/spirit | within-group | pre-FU | 0.60 | 0.04 |
| Griffiths et al. (2016) | Exist/spirit | within-group | pre-FU | 0.77 | 0.02 |
| Schmid & Liechti (2018) | Exist/spirit | within-group | pre-FU | 0.86 | 0.07 |
| Griffiths et al. (2016) | Exist/spirit | between-group | pre-post | 0.47 | 0.05 |
| Griffiths et al. (2018) | Exist/spirit | between-group | pre-post | 0.64 | 0.03 |
| Ross et al. (2016) | Exist/spirit | between-group | pre-post | 0.86 | 0.08 |
| Griffiths et al. (2006) | Exist/spirit | between-group | pre-post | 1.07 | 0.09 |
| Smgielski et al. (2019b) | Exist/spirit | between-group | pre-post | 1.38 | 0.08 |
| Schmid & Liechti (2018) | Openness | within-group | pre-post | 0.03 | 0.06 |
| Griffiths et al. (2018) | Openness | within-group | pre-post | 0.20 | 0.02 |
| Madsen et al. (2020) | Openness | within-group | pre-post | 0.23 | 0.07 |
| Griffiths et al. (2011) | Openness | within-group | pre-post | 0.27 | 0.06 |
| Griffiths et al. (2006) | Openness | within-group | pre-post | 0.27 | 0.03 |
| Schmid & Liechti (2018) | Openness | within-group | pre-FU | -0.04 | 0.06 |
| Barrett et al. (2020) | Openness | within-group | pre-FU | 0.10 | 0.07 |
| Griffiths et al. (2011) | Openness | within-group | pre-FU | 0.22 | 0.06 |
| Griffiths et al. (2006) | Openness | within-group | pre-FU | 0.23 | 0.03 |
| Carhart-Harris et al. (2018a) | Openness | within-group | pre-FU | 0.42 | 0.05 |
| Griffiths et al. (2006) | Openness | between-group | pre-post | 0.00 | 0.13 |
| Griffiths et al. (2018) | Openness | between-group | pre-post | 0.00 | 0.06 |
| Carhart-Harris et al. (2016b) | Openness | between-group | pre-post | 0.15 | 0.05 |
| Schmid & Liechti (2018) | Neuroticism | within-group | pre-post | -0.03 | 0.06 |
| Griffiths et al. (2018) | Neuroticism | within-group | pre-post | 0.00 | 0.02 |
| Griffiths et al. (2011) | Neuroticism | within-group | pre-post | 0.05 | 0.05 |
| Griffiths et al. (2006) | Neuroticism | within-group | pre-post | 0.05 | 0.03 |
| Madsen et al. (2020) | Neuroticism | within-group | pre-post | 0.51 | 0.08 |
| Griffiths et al. (2011) | Neuroticism | within-group | pre-FU | 0.00 | 0.05 |
| Griffiths et al. (2006) | Neuroticism | within-group | pre-FU | 0.00 | 0.03 |
| Schmid & Liechti (2018) | Neuroticism | within-group | pre-FU | 0.15 | 0.06 |
| Barrett et al. (2020) | Neuroticism | within-group | pre-FU | 0.21 | 0.07 |
| Carhart-Harris et al. (2018a) | Neuroticism | within-group | pre-FU | 0.55 | 0.06 |
| Carhart-Harris et al. (2016b) | Neuroticism | between-group | pre-post | 0.00 | 0.05 |
| Griffiths et al. (2006) | Neuroticism | between-group | pre-post | 0.00 | 0.13 |
| Griffiths et al. (2018) | Neuroticism | between-group | pre-post | 0.00 | 0.06 |
| Griffiths et al. (2018) | Extraversion | within-group | pre-post | 0.00 | 0.02 |
| Schmid & Liechti (2018) | Extraversion | within-group | pre-post | 0.04 | 0.06 |
| Madsen et al. (2020) | Extraversion | within-group | pre-post | 0.06 | 0.07 |
| Griffiths et al. (2011) | Extraversion | within-group | pre-post | 0.08 | 0.05 |
| Griffiths et al. (2006) | Extraversion | within-group | pre-post | 0.08 | 0.03 |
| Schmid & Liechti (2018) | Extraversion | within-group | pre-FU | -0.03 | 0.06 |
| Griffiths et al. (2011) | Extraversion | within-group | pre-FU | 0.00 | 0.05 |
| Griffiths et al. (2006) | Extraversion | within-group | pre-FU | 0.00 | 0.03 |
| Barrett et al. (2020) | Extraversion | within-group | pre-FU | 0.33 | 0.08 |
| Carhart-Harris et al. (2018a) | Extraversion | within-group | pre-FU | 0.69 | 0.06 |
| Carhart-Harris et al. (2016b) | Extraversion | between-group | pre-post | 0.00 | 0.05 |
| Griffiths et al. (2006) | Extraversion | between-group | pre-post | 0.00 | 0.13 |
| Griffiths et al. (2018) | Extraversion | between-group | pre-post | 0.00 | 0.06 |
| Schmid & Liechti (2018) | Agreeable | within-group | pre-post | -0.08 | 0.06 |
| Griffiths et al. (2018) | Agreeable | within-group | pre-post | 0.00 | 0.02 |
| Madsen et al. (2020) | Agreeable | within-group | pre-post | 0.02 | 0.07 |
| Griffiths et al. (2011) | Agreeable | within-group | pre-post | 0.16 | 0.05 |
| Griffiths et al. (2006) | Agreeable | within-group | pre-post | 0.17 | 0.03 |
| Barrett et al. (2020) | Agreeable | within-group | pre-FU | -0.25 | 0.07 |
| Carhart-Harris et al. (2018a) | Agreeable | within-group | pre-FU | -0.01 | 0.05 |
| Griffiths et al. (2011) | Agreeable | within-group | pre-FU | 0.00 | 0.05 |
| Griffiths et al. (2006) | Agreeable | within-group | pre-FU | 0.00 | 0.03 |
| Schmid & Liechti (2018) | Agreeable | within-group | pre-FU | 0.11 | 0.06 |
| Griffiths et al. (2006) | Agreeable | between-group | pre-post | 0.00 | 0.13 |
| Griffiths et al. (2018) | Agreeable | between-group | pre-post | 0.00 | 0.06 |
| Carhart-Harris et al. (2016b) | Agreeable | between-group | pre-post | 0.20 | 0.05 |
| Griffiths et al. (2006) | Conscientious | within-group | pre-post | -0.09 | 0.03 |
| Griffiths et al. (2011) | Conscientious | within-group | pre-post | -0.09 | 0.05 |
| Griffiths et al. (2018) | Conscientious | within-group | pre-post | 0.00 | 0.02 |
| Schmid & Liechti (2018) | Conscientious | within-group | pre-post | 0.19 | 0.06 |
| Madsen et al. (2020) | Conscientious | within-group | pre-post | 0.33 | 0.08 |
| Griffiths et al. (2011) | Conscientious | within-group | pre-FU | 0.00 | 0.05 |
| Griffiths et al. (2006) | Conscientious | within-group | pre-FU | 0.00 | 0.03 |
| Barrett et al. (2020) | Conscientious | within-group | pre-FU | 0.26 | 0.07 |
| Carhart-Harris et al. (2018a) | Conscientious | within-group | pre-FU | 0.26 | 0.05 |
| Schmid & Liechti (2018) | Conscientious | within-group | pre-FU | 0.51 | 0.07 |
| Carhart-Harris et al. (2016b) | Conscientious | between-group | pre-post | 0.00 | 0.05 |
| Griffiths et al. (2006) | Conscientious | between-group | pre-post | 0.00 | 0.13 |
| Griffiths et al. (2018) | Conscientious | between-group | pre-post | 0.00 | 0.06 |
| Sampedro et al. (2017) | Mindfulness | within-group | pre-post | 0.04 | 0.04 |
| Soler et al. (2016) | Mindfulness | within-group | pre-post | 0.29 | 0.02 |
| Soler et al. (2018) | Mindfulness | within-group | pre-post | 0.42 | 0.06 |
| Smgielski et al. (2019b) | Mindfulness | within-group | pre-post | 0.86 | 0.06 |
| Madsen et al. (2020) | Mindfulness | within-group | pre-post | 0.93 | 0.11 |
| Sampedro et al. (2017) | Mindfulness | within-group | pre-FU | 0.04 | 0.04 |
| Soler et al. (2016) | Mindfulness | within-group | pre-FU | 0.29 | 0.02 |
| Soler et al. (2018) | Mindfulness | within-group | pre-FU | 0.42 | 0.06 |
| Smgielski et al. (2019b) | Mindfulness | within-group | pre-FU | 0.86 | 0.06 |
| Madsen et al. (2020) | Mindfulness | within-group | pre-FU | 0.93 | 0.11 |
| Smgielski et al. (2019b) | Mindfulness | between-group | pre-post | 0.53 | 0.12 |

Note: Targeted sx = targeted symptoms within psychiatric samples; Depression = depression outcomes restricted to samples with depression; Neg = negative; Pos = positive; Exist/spirit = Existential / spiritual; BAC = blood alcohol content; CO = carbon monoxide; PTSD = posttraumatic stress disorder; WHO = World Health Organization.

Supplemental Materials Table 6. Included measures and their associated outcome domain

|  |  |
| --- | --- |
| Domain | Measure |
| Targeted sx | Quick Inventory of Depressive Symptomatology |
| Targeted sx | Beck Depression Inventory |
| Targeted sx | Hamilton Depression Rating Scale |
| Targeted sx | Snaith-Hamilton Pleasure Scale |
| Targeted sx | Montgomery-Åsberg Depression Rating Scale |
| Targeted sx | State-Trait Anxiety Inventory |
| Targeted sx | Hospital Anxiety and Depression Scale anxiety |
| Targeted sx | GRID Hamilton Depression Rating Scale-17 |
| Targeted sx | Hospital Anxiety and Depression Scale depression |
| Targeted sx | Hamilton Anxiety Rating Scale |
| Targeted sx | Timeline Follow-Back with CO and urine cotinine |
| Targeted sx | Questionnaire of Smoking Urges |
| Targeted sx | Brief Psychiatric Rating Scale anxious-depression |
| Targeted sx | Timeline Follow-Back with BAC drinking days |
| Targeted sx | Timeline Follow-Back with BAC heavy drinking days |
| Targeted sx | Short Inventory of Problems physical problems |
| Targeted sx | Short Inventory of Problems interpersonal problems |
| Targeted sx | Short Inventory of Problems intrapersonal problems |
| Targeted sx | Short Inventory of Problems impulse control problems |
| Targeted sx | Short Inventory of Problems responsibility problems |
| Targeted sx | Penn Alcohol Craving Scale alcohol craving |
| Depression | Quick Inventory of Depressive Symptomatology |
| Depression | Beck Depression Inventory |
| Depression | Hamilton Depression Rating Scale |
| Depression | Snaith-Hamilton Pleasure Scale |
| Depression | Montgomery-Åsberg Depression Rating Scale |
| Neg affect | Demoralization Scale-II |
| Neg affect | Center for Epidemiological Studies Depression Scale |
| Neg affect | Inventory of Complicated Grief |
| Neg affect | PTSD Checklist |
| Neg affect | Depression Anxiety and Stress Scale |
| Neg affect | Positive and Negative Affect Schedule negative affect |
| Neg affect | State-Trait Anxiety Inventory |
| Neg affect | Profile of Mood States tension |
| Neg affect | Profile of Mood States depression |
| Neg affect | Profile of Mood States anger |
| Neg affect | Profile of Mood States vigor |
| Neg affect | Profile of Mood States fatigue |
| Neg affect | Profile of Mood States confusion |
| Neg affect | Quick Inventory of Depressive Symptomatology |
| Neg affect | Beck Depression Inventory |
| Neg affect | Hamilton Depression Rating Scale |
| Neg affect | Snaith-Hamilton Pleasure Scale |
| Neg affect | Montgomery-Åsberg Depression Rating Scale |
| Neg affect | Prediction of Future Life Events pessimism bias |
| Neg affect | Symptom Checklist 90R Global Severity Index |
| Neg affect | Hospital Anxiety and Depression Scale anxiety |
| Neg affect | Hospital Anxiety and Depression Scale depression |
| Neg affect | Positive and Negative Affect Schedule Expanded Form negative affect |
| Neg affect | GRID Hamilton Depression Rating Scale-17 |
| Neg affect | POMS Total Mood Disturbance |
| Neg affect | Brief Symptom Inventory distress |
| Neg affect | Profile of Mood States Brief |
| Neg affect | Brief Psychiatric Rating Scale anxious-depression |
| Neg affect | Demoralization Scale |
| Neg affect | Hopelessness Assessment and Illness |
| Neg affect | Brief Symptom Inventory Global Severity Index |
| Neg affect | Hopelessness Assessment in Illness hopelessness |
| Pos affect | Dispositional Positive Emotions Scale joy |
| Pos affect | Dispositional Positive Emotions Scale content |
| Pos affect | Dispositional Positive Emotions Scale pride |
| Pos affect | Dispositional Positive Emotions Scale love |
| Pos affect | Dispositional Positive Emotions Scale compassion |
| Pos affect | Dispositional Positive Emotions Scale amusement |
| Pos affect | Dispositional Positive Emotions Scale awe |
| Pos affect | Positive and Negative Affect Schedule positive affect |
| Pos affect | Single item scale well-being / life satisfaction |
| Pos affect | Revised Life Orientation Test optimism |
| Pos affect | European Cancer Quality of Life quality of life |
| Pos affect | Persisting Effects Questionnaire positive attitudes |
| Pos affect | Persisting Effects Questionnaire positive mood |
| Pos affect | Persisting Effects Questionnaire well-being / life satisfaction |
| Pos affect | Positive and Negative Affect Schedule Expanded Form positive affect |
| Pos affect | Quality of Life Inventory |
| Pos affect | Functional Assessment of Chronic Illness Therapy - Spiritual Well-Being |
| Pos affect | McGill Quality of Life |
| Pos affect | Life Orientation Test - Revised optimism |
| Pos affect | Persisting Effects Questionnaire positive attitudes about life |
| Pos affect | Persisting Effects Questionnaire positive attitudes about self |
| Pos affect | Gratitude Questionnaire |
| Pos affect | Satisfaction with Life Scale |
| Pos affect | Dispositional Positive Emotions Scale |
| Pos affect | Persisting Effects Questionnaire altrustic social effects |
| Pos affect | WHO BREF physical health |
| Pos affect | WHO BREF psychological health |
| Pos affect | WHO BREF social relationships |
| Pos affect | WHO BREF environmental health |
| Pos affect | Self-Compassion Scale |
| Pos affect | Persisting Effects Questionnaire total of positive items positive change |
| Pos affect | Observer-rated Life Changes Inventory - Revised appreciation for life |
| Pos affect | Observer-rated Life Changes Inventory - Revised self-acceptance |
| Adverse | Peter's Delusions Inventory distress |
| Adverse | Peter's Delusions Inventory preoccupation |
| Adverse | Peter's Delusions Inventory conviction |
| Adverse | Persisting Effects Questionnaire negative attitudes |
| Adverse | Persisting Effects Questionnaire negative mood |
| Adverse | Persisting Effects Questionnaire antisocial effects |
| Adverse | Persisting Effects Questionnaire negative behavior |
| Adverse | Persisting Effects Questionnaire negative attitudes about life |
| Adverse | Persisting Effects Questionnaire negative attitudes about self |
| Adverse | Persisting Effects Questionnaire decreased spirituality |
| Adverse | Young Mania Rating Scale |
| Adverse | Brief Psychiatric Rating Scale withdrawal-retardation |
| Adverse | Brief Psychiatric Rating Scale thinking disorder |
| Adverse | Brief Psychiatric Rating Scale activation |
| Behavior | Global Assessment of Functioning |
| Behavior | Persisting Effects Questionnaire positive behavior |
| Behavior | Observer rating positive change |
| Behavior | Observer rating behavior and attitudes |
| Social | Political Perspective Questionnaire authoritarian political views |
| Social | Dynamic Emotional Expression Recognition Task emotional face recognition reaction time |
| Social | Persisting Effects Questionnaire altrustic social effects |
| Social | Observer rating positive change |
| Social | Observer rating behavior and attitudes |
| Social | Inclusion of Other in Self |
| Social | Observer-rated Life Changes Inventory - Revised concern for others |
| Social | Observer-rated Life Changes Inventory - Revised concern for social values |
| Exist/spirit | Tellegen Absorption Scale |
| Exist/spirit | Nature Relatedness Scale |
| Exist/spirit | Persisting Effects Questionnaire personally meaningful |
| Exist/spirit | Persisting Effects Questionnaire spiritually significant |
| Exist/spirit | Mysticism Scale lifetime mystical experience |
| Exist/spirit | Spiritual Transcendence Scale |
| Exist/spirit | Mystical Experience Questionnaire |
| Exist/spirit | Measure of Actualization Potential |
| Exist/spirit | Faith Maturity Scale |
| Exist/spirit | Death Transcendence Scale religious |
| Exist/spirit | Death Transcendence Scale mysticism |
| Exist/spirit | Death Transcendence Scale nature |
| Exist/spirit | Death Transcendence Scale creative |
| Exist/spirit | Death Transcendence Scale biosocial |
| Exist/spirit | Death Transcendence Scale total |
| Exist/spirit | Purpose in Life Test |
| Exist/spirit | Life Attitudes Profile - Revised coherence / purpose in life |
| Exist/spirit | Life Attitudes Profile - Revised death acceptance |
| Exist/spirit | Death Transcendence Scale death acceptance |
| Exist/spirit | Persisting Effects Questionnaire increased spirituality |
| Exist/spirit | Religious Coping (Brief RCope) positive religious coping |
| Exist/spirit | Daily Spiritual Experience Scale daily spiritual experience |
| Exist/spirit | Life Attitude Profile coherence / life meaning |
| Exist/spirit | Trait Forgiveness Scale |
| Exist/spirit | Forgiveness of Transgression benevolence motivation |
| Exist/spirit | Forgiveness of Transgression avoidance motivation |
| Exist/spirit | Santification of Strivings life striving as sacred |
| Exist/spirit | Schwartz Value Scale tradition values |
| Exist/spirit | Observer-rated spiritual/religious sentiments (ASPIRES) religious sentiments |
| Exist/spirit | Brief Multidimensional Measure of Religiosity/Spirituality forgiveness |
| Exist/spirit | Assessment of Spirituality and Religious Sentiments religious sentiments |
| Exist/spirit | Purpose in Life Test |
| Exist/spirit | Nonattachment Scale |
| Exist/spirit | Persisting Effects Questionnaire spiritually significant |
| Exist/spirit | Death Anxiety Scale |
| Exist/spirit | Functional Assessment of Chronic Illness Therapy - Spiritual Well-Being meaning |
| Exist/spirit | Functional Assessment of Chronic Illness Therapy - Spiritual Well-Being faith |
| Exist/spirit | Functional Assessment of Chronic Illness Therapy - Spiritual Well-Being spiritual well-being |
| Exist/spirit | Functional Assessment of Chronic Illness Therapy - Spiritual Well-Being meaning/peace |
| Exist/spirit | Mysticism Scale mystical experience |
| Exist/spirit | Life Changes Inventory - Revised transformative change |
| Exist/spirit | Observer-rated Life Changes Inventory - Revised concern with worldly achievements |
| Exist/spirit | Observer-rated Life Changes Inventory - Revised quest for meaning |
| Exist/spirit | Observer-rated Life Changes Inventory - Revised spirituality |
| Exist/spirit | Observer-rated Life Changes Inventory - Revised religiousness |
| Exist/spirit | Observer-rated Life Changes Inventory - Revised appreciation of death |
| Mindfulness | Mindful Attention Awareness Scale |
| Mindfulness | Five Facet Mindfulness Questionnaire observing |
| Mindfulness | Five Facet Mindfulness Questionnaire describing |
| Mindfulness | Five Facet Mindfulness Questionnaire acting with awareness |
| Mindfulness | Five Facet Mindfulness Questionnaire non-judging |
| Mindfulness | Five Facet Mindfulness Questionnaire non-reacting |
| Mindfulness | Experiences Questionnaire mindfulness |
| Mindfulness | Freiburg Mindfulness Inventory mindfulness |
| Openness | Big Five Inventory openness |
| Openness | NEO Personality Inventory Revised openness |
| Openness | NEO Five-Factor Inventory openness |
| Neuroticism | Big Five Inventory neuroticism |
| Neuroticism | NEO Personality Inventory Revised neuroticism |
| Neuroticism | NEO Five-Factor Inventory neuroticism |
| Extraversion | Big Five Inventory extraversion |
| Extraversion | NEO Personality Inventory Revised extraversion |
| Extraversion | NEO Five-Factor Inventory extraversion |
| Agreeable | Big Five Inventory agreeableness |
| Agreeable | NEO Personality Inventory Revised agreeableness |
| Agreeable | NEO Five-Factor Inventory agreeableness |
| Conscientious | Big Five Inventory conscientiousness |
| Conscientious | NEO Personality Inventory Revised conscientiousness |
| Conscientious | NEO Five-Factor Inventory conscientiousness |

Note: Targeted sx = targeted symptoms within psychiatric samples; Depression = depression outcomes restricted to samples with depression; Neg = negative; Pos = positive; Exist/spirit = Existential / spiritual; BAC = blood alcohol content; CO = carbon monoxide; PTSD = posttraumatic stress disorder; WHO = World Health Organization.

Supplemental Materials Table 7. Results of moderator tests examining the association between clinical sample, psilocybin psychedelic type, behavioral support, and percentage female with effect size

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Domain | Comparison | Timepoint | *B*clin | *p*clin | *B*psilo | *p*psilo | *B*behav | *p*behav | *B*fem | *p*fem |
| Targeted sx | Within-group | pre-post | NA | NA | -0.47 | 0.414 | -1.45 | 0.12 | -0.01 | 0.459 |
| Targeted sx | Within-group | pre-FU | NA | NA | -0.37 | 0.447 | NA | NA | -0.01 | 0.429 |
| Targeted sx | Between-group | pre-post | NA | NA | -0.49 | 0.188 | -0.16 | 0.688 | -0.01 | 0.624 |
| Depression | Within-group | pre-post | NA | NA | 0.01 | 0.993 | -1.18 | 0.089 | 0.00 | 0.877 |
| Depression | Within-group | pre-FU | NA | NA | -0.64 | 0.389 | NA | NA | 0.02 | 0.105 |
| Depression | Between-group | pre-post | NA | NA | NA | NA | NA | NA | NA | NA |
| Neg affect | Within-group | pre-post | 1.12 | 0.004 | -0.34 | 0.470 | 0.15 | 0.798 | 0.00 | 0.772 |
| Neg affect | Within-group | pre-FU | 1.05 | 0.020 | -0.25 | 0.612 | 1.01 | 0.154 | 0.00 | 0.777 |
| Neg affect | Between-group | pre-post | 1.04 | 0.008 | -0.68 | 0.103 | -0.40 | 0.465 | 0.00 | 0.742 |
| Pos affect | Within-group | pre-post | 0.59 | 0.002 | 0.17 | 0.646 | 0.60 | 0.142 | 0.00 | 0.86 |
| Pos affect | Within-group | pre-FU | 0.47 | 0.128 | -0.54 | 0.316 | NA | NA | -0.04 | 0.002 |
| Pos affect | Between-group | pre-post | 0.65 | 0.073 | 0.10 | 0.835 | 0.45 | 0.288 | 0.01 | 0.56 |
| Adverse | Within-group | pre-post | NA | NA | NA | NA | NA | NA | NA | NA |
| Adverse | Within-group | pre-FU | NA | NA | NA | NA | NA | NA | NA | NA |
| Adverse | Between-group | pre-post | 1.81 | <0.001 | 0.26 | 0.837 | 0.26 | 0.837 | 0.01 | 0.8 |
| Social | Within-group | pre-post | -0.60 | 0.105 | NA | NA | NA | NA | -0.01 | 0.814 |
| Social | Within-group | pre-FU | -0.30 | 0.461 | NA | NA | NA | NA | -0.01 | 0.349 |
| Social | Between-group | pre-post | 0.84 | 0.049 | NA | NA | NA | NA | 0.02 | 0.281 |
| Behavior | Within-group | pre-post | NA | NA | NA | NA | NA | NA | NA | NA |
| Behavior | Within-group | pre-FU | NA | NA | NA | NA | NA | NA | NA | NA |
| Behavior | Between-group | pre-post | NA | NA | NA | NA | NA | NA | NA | NA |
| Exist/spirit | Within-group | pre-post | 0.33 | 0.048 | -0.18 | 0.617 | -0.18 | 0.617 | -0.01 | 0.325 |
| Exist/spirit | Within-group | pre-FU | 0.24 | 0.316 | -0.39 | 0.318 | -0.39 | 0.318 | -0.01 | 0.36 |
| Exist/spirit | Between-group | pre-post | -0.33 | 0.335 | NA | NA | NA | NA | -0.01 | 0.478 |
| Openness | Within-group | pre-post | NA | NA | 0.20 | 0.438 | 0.12 | 0.578 | 0.00 | 0.775 |
| Openness | Within-group | pre-FU | 0.27 | 0.288 | 0.29 | 0.279 | 0.29 | 0.279 | -0.01 | 0.461 |
| Openness | Between-group | pre-post | NA | NA | -0.15 | 0.602 | -0.15 | 0.602 | 0.00 | 0.602 |
| Neuroticism | Within-group | pre-post | NA | NA | 0.10 | 0.695 | -0.17 | 0.413 | -0.02 | 0.208 |
| Neuroticism | Within-group | pre-FU | 0.48 | 0.067 | 0.01 | 0.964 | 0.01 | 0.964 | -0.02 | 0.064 |
| Neuroticism | Between-group | pre-post | NA | NA | 0.00 | 0.999 | 0.00 | 0.999 | 0.00 | 0.999 |
| Extraversion | Within-group | pre-post | NA | NA | 0.00 | 0.996 | -0.01 | 0.948 | 0.00 | 0.919 |
| Extraversion | Within-group | pre-FU | 0.64 | 0.019 | 0.26 | 0.494 | 0.26 | 0.494 | -0.02 | 0.034 |
| Extraversion | Between-group | pre-post | NA | NA | 0.00 | 0.999 | 0.00 | 0.999 | 0.00 | 0.999 |
| Agreeable | Within-group | pre-post | NA | NA | 0.15 | 0.568 | 0.11 | 0.584 | 0.00 | 0.729 |
| Agreeable | Within-group | pre-FU | 0.01 | 0.958 | -0.15 | 0.573 | -0.15 | 0.573 | 0.00 | 0.843 |
| Agreeable | Between-group | pre-post | NA | NA | -0.20 | 0.495 | -0.20 | 0.495 | 0.00 | 0.495 |
| Conscientious | Within-group | pre-post | NA | NA | -0.19 | 0.463 | -0.30 | 0.157 | -0.02 | 0.17 |
| Conscientious | Within-group | pre-FU | 0.12 | 0.645 | -0.40 | 0.153 | -0.40 | 0.153 | -0.01 | 0.372 |
| Conscientious | Between-group | pre-post | NA | NA | 0.00 | 0.999 | 0.00 | 0.999 | 0.00 | 0.999 |
| Mindfulness | Within-group | pre-post | NA | NA | 0.64 | 0.005 | 0.52 | 0.131 | 0.00 | 0.744 |
| Mindfulness | Within-group | pre-FU | NA | NA | 0.64 | 0.005 | 0.52 | 0.131 | 0.00 | 0.744 |
| Mindfulness | Between-group | pre-post | NA | NA | NA | NA | NA | NA | NA | NA |

Note: *B* = coefficient from moderator test; *p* = *p*-value from moderator test; clin = clinical sample; psilo = psilocybin; behav = behavioral support; fem = percentage female; Targeted sx = targeted symptoms within psychiatric samples; Depression = depression outcomes restricted to samples with depression; Neg = negative; Pos = positive; Exist/spirit = Existential / spiritual; NA = estimate not available.

Supplemental Materials Table 8. Results of models re-estimated with outliers removed

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Domain | Comparison | Timepoint | ES | ESadj | ESchange |
| Targeted sx | Within-group | pre-post | 1.70 [1.16, 2.23] | 1.67 [1.21, 2.14] | 0.03 |
| Targeted sx | Within-group | pre-FU | 1.37 [0.95, 1.80] | 1.52 [1.16, 1.87] | -0.15 |
| Targeted sx | Between-group | pre-post | 1.08 [0.74, 1.43] | 1.08 [0.74, 1.43] | 0.00 |
| Depression | Within-group | pre-post | 2.06 [1.41, 2.71] | 2.06 [1.41, 2.71] | 0.00 |
| Depression | Within-group | pre-FU | 1.57 [0.90, 2.24] | 1.57 [0.90, 2.24] | 0.00 |
| Depression | Between-group | pre-post | NA | NA | NA |
| Neg affect | Within-group | pre-post | 1.05 [0.60, 1.49] | 1.19 [0.81, 1.58] | -0.14 |
| Neg affect | Within-group | pre-FU | 0.99 [0.54, 1.43] | 0.73 [0.35, 1.10] | 0.26 |
| Neg affect | Between-group | pre-post | 0.87 [0.46, 1.28] | 0.87 [0.46, 1.28] | 0.00 |
| Pos affect | Within-group | pre-post | 0.44 [0.15, 0.73] | 0.44 [0.15, 0.73] | 0.00 |
| Pos affect | Within-group | pre-FU | 0.47 [0.13, 0.82] | 0.47 [0.13, 0.82] | 0.00 |
| Pos affect | Between-group | pre-post | 0.89 [0.52, 1.25] | 0.89 [0.52, 1.25] | 0.00 |
| Adverse | Within-group | pre-post | 0.40 [0.08, 0.71] | 0.40 [0.08, 0.71] | 0.00 |
| Adverse | Within-group | pre-FU | 0.50 [0.05, 0.95] | 0.50 [0.05, 0.95] | 0.00 |
| Adverse | Between-group | pre-post | 0.46 [-0.42, 1.33] | 0.46 [-0.42, 1.33] | 0.00 |
| Social | Within-group | pre-post | 0.81 [0.36, 1.25] | 0.81 [0.36, 1.25] | 0.00 |
| Social | Within-group | pre-FU | 0.53 [0.16, 0.90] | 0.53 [0.16, 0.90] | 0.00 |
| Social | Between-group | pre-post | 1.13 [0.76, 1.51] | 1.13 [0.76, 1.51] | 0.00 |
| Behavior | Within-group | pre-post | 1.47 [0.90, 2.04] | 1.47 [0.90, 2.04] | 0.00 |
| Behavior | Within-group | pre-FU | NA | NA | NA |
| Behavior | Between-group | pre-post | 1.16 [0.78, 1.53] | NA | NA |
| Exist/spirit | Within-group | pre-post | 0.56 [0.35, 0.76] | 0.56 [0.35, 0.76] | 0.00 |
| Exist/spirit | Within-group | pre-FU | 0.52 [0.27, 0.76] | 0.52 [0.27, 0.76] | 0.00 |
| Exist/spirit | Between-group | pre-post | 0.84 [0.53, 1.16] | 0.84 [0.53, 1.16] | 0.00 |
| Openness | Within-group | pre-post | 0.21 [0.04, 0.38] | 0.21 [0.04, 0.38] | 0.00 |
| Openness | Within-group | pre-FU | 0.20 [0.00, 0.40] | 0.20 [0.00, 0.40] | 0.00 |
| Openness | Between-group | pre-post | 0.07 [-0.22, 0.36] | 0.07 [-0.22, 0.36] | 0.00 |
| Neuroticism | Within-group | pre-post | 0.06 [-0.11, 0.23] | 0.06 [-0.11, 0.23] | 0.00 |
| Neuroticism | Within-group | pre-FU | 0.16 [-0.05, 0.36] | 0.16 [-0.05, 0.36] | 0.00 |
| Neuroticism | Between-group | pre-post | 0.00 [-0.29, 0.29] | 0.00 [-0.29, 0.29] | 0.00 |
| Extraversion | Within-group | pre-post | 0.04 [-0.13, 0.21] | 0.04 [-0.13, 0.21] | 0.00 |
| Extraversion | Within-group | pre-FU | 0.18 [-0.09, 0.44] | 0.18 [-0.09, 0.44] | 0.00 |
| Extraversion | Between-group | pre-post | 0.00 [-0.29, 0.29] | 0.00 [-0.29, 0.29] | 0.00 |
| Agreeable | Within-group | pre-post | 0.05 [-0.12, 0.23] | 0.05 [-0.12, 0.23] | 0.00 |
| Agreeable | Within-group | pre-FU | -0.02 [-0.21, 0.18] | -0.02 [-0.21, 0.18] | 0.00 |
| Agreeable | Between-group | pre-post | 0.09 [-0.20, 0.38] | 0.09 [-0.20, 0.38] | 0.00 |
| Conscientious | Within-group | pre-post | 0.02 [-0.15, 0.19] | 0.02 [-0.15, 0.19] | 0.00 |
| Conscientious | Within-group | pre-FU | 0.17 [-0.03, 0.36] | 0.17 [-0.03, 0.36] | 0.00 |
| Conscientious | Between-group | pre-post | 0.00 [-0.29, 0.29] | 0.00 [-0.29, 0.29] | 0.00 |
| Mindfulness | Within-group | pre-post | 0.45 [0.14, 0.77] | 0.45 [0.14, 0.77] | 0.00 |
| Mindfulness | Within-group | pre-FU | NA | NA | NA |
| Mindfulness | Between-group | pre-post | NA | NA | NA |

Note: ESadj = adjusted effect size based on models with outliers removed; ESchange = change in effect size following re-estimation with outliers removed (computed as ES – ESadj); Targeted sx = targeted symptoms within psychiatric samples; Depression = depression outcomes restricted to samples with depression; Neg = negative; Pos = positive; Exist/spirit = Existential / spiritual; ES = effect size in Hedges’ g units; FU = follow-up; NA = not available.

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