

Supplementary Table S3. Selection frequencies of variables at Step 1 and models at Step 2 as a result of the bootstrap model selection process (top) and pooled parameter estimates of the most frequently selected models (bottom).

Model selection for the dependent variable $\sqrt{G-ASC}$

| Predictors | Step 1 (%) | Models selected in step 2 (the first 10 models are shown)* | | | | | | | | | |
|--|------------|--|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| | | 1 (6) | 2 (5) | 3 (5) | 4 (4) | 5 (5) | 6 (5) | 7 (4) | 8 (4) | 9 (4) | 10 (5) |
| 1. Drug dose | 100.0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2. Absorption (TAS) | 84.8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | – |
| 3. Performance-Related Activity (EWL) | 78.4 | ✓ | ✓ | ✓ | ✓ | ✓ | – | ✓ | – | – | ✓ |
| 4. General Inactivation (EWL) | 66.8 | ✓ | ✓ | ✓ | ✓ | – | ✓ | – | – | ✓ | ✓ |
| 5. Hallucinogen-naïve | 66.3 | ✓ | – | ✓ | – | ✓ | ✓ | – | ✓ | ✓ | ✓ |
| 6. Emotional Excitability (EWL) | 64.0 | ✓ | ✓ | – | – | ✓ | ✓ | ✓ | ✓ | – | ✓ |
| 7. General Well-Being (EWL) | 46.0 | | | | | | | | | | |
| 8. Anxiety-Depressiveness (EWL) | 45.6 | | | | | | | | | | |
| 9. Global Severity Index (SCL-90-R) | 44.2 | | | | | | | | | | |
| 10. Activity (ZKPQ) | 41.4 | | | | | | | | | | |
| 11. Extroversion-Introversion (EWL) | 40.6 | | | | | | | | | | |
| 12. Positron emission tomography | 37.8 | | | | | | | | | | |
| 13. Alcohol frequency | 36.4 | | | | | | | | | | |
| 14. Sociability (ZKPQ) | 34.8 | | | | | | | | | | |
| 15. Impulsive Sensation Seeking (ZKPQ) | 33.5 | | | | | | | | | | |
| 16. Aggression-Hostility (ZKPQ) | 32.9 | | | | | | | | | | |
| 17. Neuroticism-Anxiety (ZKPQ) | 26.5 | | | | | | | | | | |
| 18. Daily smoker | 18.8 | | | | | | | | | | |
| 19. Years of education | 16.4 | | | | | | | | | | |
| 20. Age | 13.0 | | | | | | | | | | |
| 21. Body mass index | 11.7 | | | | | | | | | | |
| 22. Time of measuring | 11.2 | | | | | | | | | | |
| 23. THC frequency | 9.3 | | | | | | | | | | |
| 24. Female | 7.5 | | | | | | | | | | |
| Model selection frequency (%) | | 24.2 | 14.4 | 11.3 | 7.6 | 7.4 | 5.2 | 5.0 | 4.1 | 3.0 | 2.5 |

✓, variables included in the model; –, variables not selected.

* The number of variables in the model is given within parentheses.

Pooled parameter estimates of the best model for the dependent variable $\sqrt{G-ASC}$

| Predictors | Coefficient | Standard error | P-value | | HPD CI low | HPD CI high | n missings | FMI | RIV |
|------------------------------------|-------------|----------------|---------|-----|------------|-------------|------------|------|------|
| Drug dose | 0.78 | 0.09 | 0.00 | *** | 0.60 | 0.96 | 0 | 0.07 | 0.08 |
| Absorption (TAS) | 0.35 | 0.12 | 0.00 | ** | 0.11 | 0.58 | 312 | 0.44 | 0.76 |
| Performance-Related Activity (EWL) | 0.33 | 0.12 | 0.01 | ** | 0.10 | 0.56 | 224 | 0.41 | 0.67 |
| General Inactivation (EWL) | 0.18 | 0.11 | 0.11 | | -0.04 | 0.40 | 224 | 0.33 | 0.47 |
| Hallucinogen-naïve | 0.16 | 0.10 | 0.11 | | -0.04 | 0.36 | 40 | 0.18 | 0.21 |
| Emotional Excitability (EWL) | 0.26 | 0.12 | 0.03 | * | 0.03 | 0.48 | 224 | 0.46 | 0.82 |

Note. HPD = Highest Posterior Density. CI = Confidence Interval. FMI = Fraction of missing information. RIV = Relative increase in variance due to missingness.

Model selection for the dependent variable $\sqrt{\text{Oceanic Boundlessness}}$

| Predictors | Step 1 (%) | Models selected in step 2 (the first 10 models are shown)* | | | | | | | | | |
|--|------------|--|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| | | 1 (6) | 2 (5) | 3 (5) | 4 (4) | 5 (5) | 6 (5) | 7 (4) | 8 (4) | 9 (3) | 10 (4) |
| 1. Drug dose | 100.0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2. Absorption (TAS) | 88.7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3. General Inactivation (EWL) | 77.4 | ✓ | ✓ | ✓ | ✓ | - | ✓ | - | ✓ | ✓ | - |
| 4. Performance-Related Activity (EWL) | 76.0 | ✓ | ✓ | ✓ | ✓ | ✓ | - | ✓ | - | - | - |
| 5. Global Severity Index (SCL-90-R) | 62.4 | ✓ | ✓ | - | - | ✓ | ✓ | - | - | - | ✓ |
| 6. Emotional Excitability (EWL) | 62.3 | ✓ | - | ✓ | - | ✓ | ✓ | ✓ | ✓ | - | ✓ |
| 7. Extroversion-Introversion (EWL) | 46.5 | | | | | | | | | | |
| 8. General Well-Being (EWL) | 45.4 | | | | | | | | | | |
| 9. Activity (ZKPQ) | 44.9 | | | | | | | | | | |
| 10. Anxiety-Depressiveness (EWL) | 42.2 | | | | | | | | | | |
| 11. Hallucinogen-naïve | 42.2 | | | | | | | | | | |
| 12. Alcohol frequency | 35.2 | | | | | | | | | | |
| 13. Positron emission tomography | 34.9 | | | | | | | | | | |
| 14. Aggression-Hostility (ZKPQ) | 34.2 | | | | | | | | | | |
| 15. Impulsive Sensation Seeking (ZKPQ) | 32.8 | | | | | | | | | | |
| 16. Sociability (ZKPQ) | 32.6 | | | | | | | | | | |
| 17. Neuroticism-Anxiety (ZKPQ) | 27.8 | | | | | | | | | | |
| 18. Daily smoker | 26.1 | | | | | | | | | | |
| 19. Age | 21.1 | | | | | | | | | | |
| 20. Years of education | 16.3 | | | | | | | | | | |
| 21. Body mass index | 14.6 | | | | | | | | | | |
| 22. Time of measuring | 12.7 | | | | | | | | | | |
| 23. THC frequency | 10.4 | | | | | | | | | | |
| 24. Female | 6.4 | | | | | | | | | | |
| Model selection frequency (%) | | 32.1 | 16.6 | 11.8 | 8.8 | 7.0 | 3.3 | 3.2 | 3.0 | 2.4 | 2.0 |

✓, variables included in the model; -, variables not selected.

* The number of variables in the model is given within parentheses.

Pooled parameter estimates of the best model for the dependent variable $\sqrt{\text{Oceanic Boundlessness}}$

| Predictors | Coefficient | Standard error | P-value | HPD CI low | HPD CI high | n missings | FMI | RIV |
|------------------------------------|-------------|----------------|----------|------------|-------------|------------|------|------|
| Drug dose | 0.70 | 0.09 | 0.00 *** | 0.51 | 0.88 | 0 | 0.11 | 0.13 |
| Absorption (TAS) | 0.41 | 0.12 | 0.00 *** | 0.18 | 0.64 | 312 | 0.39 | 0.61 |
| General Inactivation (EWL) | 0.22 | 0.12 | 0.06 | -0.01 | 0.46 | 224 | 0.39 | 0.61 |
| Performance-Related Activity (EWL) | 0.31 | 0.12 | 0.01 ** | 0.07 | 0.57 | 224 | 0.42 | 0.68 |
| Global Severity Index (SCL-90-R) | -0.22 | 0.11 | 0.04 * | -0.42 | -0.01 | 111 | 0.26 | 0.35 |
| Emotional Excitability (EWL) | 0.24 | 0.12 | 0.05 * | 0.01 | 0.46 | 224 | 0.45 | 0.78 |

Note. HPD = Highest Posterior Density. CI = Confidence Interval. FMI = Fraction of missing information. RIV = Relative increase in variance due to missingness.

Model selection for the dependent variable log(Dread of Ego Dissolution)

| Predictors | Step 1 (%) | Models selected in step 2 (the first 10 models are shown)* | | | | | | | | | |
|--|------------|--|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| | | 1 (5) | 2 (6) | 3 (4) | 4 (5) | 5 (5) | 6 (4) | 7 (4) | 8 (3) | 9 (5) | 10 (3) |
| 1. Drug dose | 100.0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2. Positron emission tomography | 87.0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3. Time of measuring | 72.4 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - |
| 4. Emotional Excitability (EWL) | 64.2 | ✓ | ✓ | ✓ | ✓ | - | - | - | - | ✓ | ✓ |
| 5. Hallucinogen-naïve | 60.0 | ✓ | ✓ | - | - | ✓ | ✓ | - | - | ✓ | - |
| 6. General Well-Being (EWL) | 50.3 | - | ✓ | - | ✓ | ✓ | - | ✓ | - | ✓ | - |
| 7. Sociability (ZKPQ) | 48.8 | | | | | | | | | | |
| 8. Absorption (TAS) | 48.0 | | | | | | | | | | |
| 9. General Inactivation (EWL) | 47.9 | | | | | | | | | | |
| 10. Performance-Related Activity (EWL) | 47.1 | | | | | | | | | | |
| 11. Age | 46.6 | | | | | | | | | | |
| 12. Extroversion-Introversion (EWL) | 44.3 | | | | | | | | | | |
| 13. Global Severity Index (SCL-90-R) | 41.9 | | | | | | | | | | |
| 14. Anxiety-Depressiveness (EWL) | 39.0 | | | | | | | | | | |
| 15. Impulsive Sensation Seeking (ZKPQ) | 35.2 | | | | | | | | | | |
| 16. Activity (ZKPQ) | 31.8 | | | | | | | | | | |
| 17. Neuroticism-Anxiety (ZKPQ) | 29.5 | | | | | | | | | | |
| 18. Aggression-Hostility (ZKPQ) | 28.0 | | | | | | | | | | |
| 19. Alcohol frequency | 23.8 | | | | | | | | | | |
| 20. Daily smoker | 20.9 | | | | | | | | | | |
| 21. Female | 19.9 | | | | | | | | | | |
| 22. Body mass index | 18.8 | | | | | | | | | | |
| 23. Years of education | 15.9 | | | | | | | | | | |
| 24. THC frequency | 12.8 | | | | | | | | | | |
| Model selection frequency (%) | | 18.1 | 15.8 | 12.3 | 9.0 | 8.2 | 5.0 | 4.4 | 3.8 | 2.8 | 2.7 |

✓, variables included in the model; -, variables not selected.

* The number of variables in the model is given within parentheses.

Pooled parameter estimates of the best model for the dependent variable log(Dread of Ego Dissolution)

| Predictors | Coefficient | Standard error | P-value | | HPD CI low | HPD CI high | n missings | FMI | RIV |
|------------------------------|-------------|----------------|---------|-----|------------|-------------|------------|------|------|
| Drug dose | 0.53 | 0.10 | 0.00 | *** | 0.34 | 0.72 | 0 | 0.01 | 0.01 |
| Positron emission tomography | 0.31 | 0.15 | 0.04 | * | 0.02 | 0.59 | 0 | 0.01 | 0.01 |
| Time of measuring | -0.23 | 0.10 | 0.02 | * | -0.42 | -0.04 | 0 | 0.01 | 0.01 |
| Emotional Excitability (EWL) | 0.30 | 0.11 | 0.01 | ** | 0.08 | 0.51 | 224 | 0.32 | 0.46 |
| Hallucinogen-naïve | 0.18 | 0.10 | 0.09 | | -0.03 | 0.38 | 40 | 0.12 | 0.14 |

Note. HPD = Highest Posterior Density. CI = Confidence Interval. FMI = Fraction of missing information. RIV = Relative increase in variance due to missingness.

Model selection for the dependent variable $\sqrt{\text{Visionary Restructuralization}}$

| Predictors | Step 1 (%) | Models selected in step 2 (the first 10 models are shown)* | | | | | | | | | |
|--|------------|--|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| | | 1 (6) | 2 (7) | 3 (5) | 4 (5) | 5 (6) | 6 (6) | 7 (5) | 8 (4) | 9 (6) | 10 (4) |
| 1. Drug dose | 100.0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2. Hallucinogen-naïve | 92.8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | – | ✓ | ✓ | ✓ |
| 3. Absorption (TAS) | 92.3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 4. Performance-Related Activity (EWL) | 92.0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | – | – | – |
| 5. General Inactivation (EWL) | 67.3 | ✓ | ✓ | ✓ | – | ✓ | – | ✓ | – | ✓ | – |
| 6. Emotional Excitability (EWL) | 56.8 | ✓ | ✓ | – | ✓ | – | ✓ | ✓ | – | ✓ | ✓ |
| 7. Alcohol frequency | 54.2 | – | ✓ | – | – | ✓ | ✓ | – | – | ✓ | – |
| 8. Extroversion-Introversion (EWL) | 48.9 | | | | | | | | | | |
| 9. Sociability (ZKPQ) | 47.9 | | | | | | | | | | |
| 10. Activity (ZKPQ) | 46.9 | | | | | | | | | | |
| 11. Global Severity Index (SCL-90-R) | 46.8 | | | | | | | | | | |
| 12. General Well-Being (EWL) | 46.4 | | | | | | | | | | |
| 13. Anxiety-Depressiveness (EWL) | 40.1 | | | | | | | | | | |
| 14. Positron emission tomography | 38.6 | | | | | | | | | | |
| 15. Impulsive Sensation Seeking (ZKPQ) | 34.8 | | | | | | | | | | |
| 16. Aggression-Hostility (ZKPQ) | 30.2 | | | | | | | | | | |
| 17. Neuroticism-Anxiety (ZKPQ) | 26.2 | | | | | | | | | | |
| 18. THC frequency | 21.1 | | | | | | | | | | |
| 19. Years of education | 16.0 | | | | | | | | | | |
| 20. Time of measuring | 15.5 | | | | | | | | | | |
| 21. Age | 14.0 | | | | | | | | | | |
| 22. Daily smoker | 13.4 | | | | | | | | | | |
| 23. Body mass index | 10.3 | | | | | | | | | | |
| 24. Female | 5.4 | | | | | | | | | | |
| Model selection frequency (%) | | 21.7 | 17.9 | 10.1 | 9.2 | 8.6 | 3.1 | 2.8 | 2.4 | 2.1 | 1.8 |

✓, variables included in the model; –, variables not selected.

* The number of variables in the model is given within parentheses.

Pooled parameter estimates of the best model for the dependent variable $\sqrt{\text{Visionary Restructuralization}}$

| Predictors | Coefficient | Standard error | P-value | | HPD CI low | HPD CI high | n missings | FMI | RIV |
|------------------------------------|-------------|----------------|---------|-----|------------|-------------|------------|------|------|
| Drug dose | 0.71 | 0.09 | 0.00 | *** | 0.52 | 0.88 | 0 | 0.08 | 0.09 |
| Hallucinogen-naïve | 0.22 | 0.11 | 0.04 | * | 0.01 | 0.43 | 40 | 0.25 | 0.32 |
| Absorption (TAS) | 0.38 | 0.13 | 0.00 | ** | 0.12 | 0.63 | 312 | 0.53 | 1.08 |
| Performance-Related Activity (EWL) | 0.38 | 0.12 | 0.00 | *** | 0.15 | 0.61 | 224 | 0.40 | 0.63 |
| General Inactivation (EWL) | 0.14 | 0.11 | 0.19 | | -0.07 | 0.36 | 224 | 0.31 | 0.44 |
| Emotional Excitability (EWL) | 0.23 | 0.12 | 0.05 | * | 0.00 | 0.46 | 224 | 0.45 | 0.78 |

Note. HPD = Highest Posterior Density. CI = Confidence Interval. FMI = Fraction of missing information. RIV = Relative increase in variance due to missingness.

Model selection for the dependent variable $\sqrt{\text{Experience of Unity}}$

| Predictors | Step 1 (%) | Models selected in step 2 (the first 10 models are shown)* | | | | | | | | | |
|--|------------|--|-------|--------|--------|-------|--------|--------|--------|--------|---------|
| | | 1 (11) | 2 (8) | 3 (11) | 4 (11) | 5 (9) | 6 (10) | 7 (10) | 8 (12) | 9 (10) | 10 (11) |
| 1. Drug dose | 100.0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2. Positron emission tomography | 92.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3. Absorption (TAS) | 90.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 4. Performance-Related Activity (EWL) | 87.2 | ✓ | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5. Emotional Excitability (EWL) | 81.5 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 6. Time of measuring | 80.8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 7. General Inactivation (EWL) | 79.2 | ✓ | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | - | ✓ |
| 8. Global Severity Index (SCL-90-R) | 76.1 | ✓ | - | ✓ | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ |
| 9. General Well-Being (EWL) | 75.8 | ✓ | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | ✓ | ✓ |
| 10. Hallucinogen-naïve | 72.0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 11. Extroversion-Introversion (EWL) | 68.7 | - | - | - | ✓ | - | - | - | - | ✓ | - |
| 12. Anxiety-Depressiveness (EWL) | 66.8 | - | - | ✓ | - | ✓ | - | - | - | - | - |
| 13. Sociability (ZKPQ) | 64.9 | - | - | - | - | - | - | - | - | - | - |
| 14. Age | 64.5 | - | - | - | - | - | - | - | - | - | - |
| 15. Activity (ZKPQ) | 59.6 | ✓ | - | - | - | - | - | - | ✓ | - | - |
| 16. Aggression-Hostility (ZKPQ) | 58.9 | - | - | - | - | - | - | - | - | - | ✓ |
| 17. Impulsive Sensation Seeking (ZKPQ) | 57.9 | - | - | - | - | - | - | - | ✓ | - | - |
| 18. Neuroticism-Anxiety (ZKPQ) | 55.1 | - | - | - | - | - | - | ✓ | - | - | - |
| 19. Female | 49.3 | | | | | | | | | | |
| 20. Alcohol frequency | 41.7 | | | | | | | | | | |
| 21. Daily smoker | 37.8 | | | | | | | | | | |
| 22. Years of education | 31.6 | | | | | | | | | | |
| 23. Body mass index | 29.9 | | | | | | | | | | |
| 24. THC frequency | 23.7 | | | | | | | | | | |
| Model selection frequency (%) | | 0.5 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |

✓, variables included in the model; -, variables not selected.

* The number of variables in the model is given within parentheses.

Pooled parameter estimates of the best model for the dependent variable $\sqrt{\text{Experience of Unity}}$

| Predictors | Coefficient | Standard error | P-value | HPD CI low | HPD CI high | n missings | FMI | RIV |
|------------------------------------|-------------|----------------|----------|------------|-------------|------------|------|------|
| Drug dose | 0.53 | 0.10 | 0.00 *** | 0.33 | 0.73 | 0 | 0.09 | 0.09 |
| Positron emission tomography | -0.12 | 0.21 | 0.58 | -0.54 | 0.28 | 0 | 0.47 | 0.83 |
| Absorption (TAS) | 0.46 | 0.14 | 0.00 *** | 0.18 | 0.73 | 312 | 0.48 | 0.89 |
| Performance-Related Activity (EWL) | 0.27 | 0.14 | 0.04 * | 0.00 | 0.54 | 224 | 0.34 | 0.50 |
| Emotional Excitability (EWL) | 0.21 | 0.13 | 0.11 | -0.05 | 0.45 | 224 | 0.44 | 0.74 |
| Time of measuring | 0.07 | 0.10 | 0.51 | -0.13 | 0.27 | 0 | 0.11 | 0.12 |
| General Inactivation (EWL) | 0.16 | 0.12 | 0.19 | -0.08 | 0.39 | 224 | 0.31 | 0.44 |
| Global Severity Index (SCL-90-R) | -0.22 | 0.12 | 0.06 | -0.45 | 0.01 | 111 | 0.31 | 0.44 |
| General Well-Being (EWL) | 0.06 | 0.14 | 0.64 | -0.20 | 0.34 | 224 | 0.37 | 0.57 |
| Hallucinogen-naïve | 0.02 | 0.11 | 0.84 | -0.19 | 0.23 | 40 | 0.12 | 0.13 |
| Activity (ZKPQ) | -0.10 | 0.11 | 0.39 | -0.32 | 0.12 | 182 | 0.26 | 0.34 |

Note. HPD = Highest Posterior Density. CI = Confidence Interval. FMI = Fraction of missing information. RIV = Relative increase in variance due to missingness.

Model selection for the dependent variable log(Spiritual Experience)

| Predictors | Step 1 (%) | Models selected in step 2 (the first 10 models are shown)* | | | | | | | | | |
|--|------------|--|--------|--------|--------|--------|--------|--------|--------|-------|---------|
| | | 1 (11) | 2 (12) | 3 (10) | 4 (12) | 5 (13) | 6 (10) | 7 (12) | 8 (12) | 9 (9) | 10 (13) |
| 1. Drug dose | 100.0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2. Absorption (TAS) | 98.4 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3. General Inactivation (EWL) | 90.7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 4. Emotional Excitability (EWL) | 90.6 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5. Performance-Related Activity (EWL) | 90.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 6. Hallucinogen-naïve | 86.6 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 7. Time of measuring | 76.9 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 8. Activity (ZKPQ) | 75.0 | ✓ | ✓ | ✓ | ✓ | ✓ | - | ✓ | - | ✓ | ✓ |
| 9. Extroversion-Introversion (EWL) | 74.4 | ✓ | ✓ | - | ✓ | ✓ | - | ✓ | - | - | ✓ |
| 10. Global Severity Index (SCL-90-R) | 73.5 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 11. General Well-Being (EWL) | 68.9 | - | - | - | ✓ | ✓ | - | - | ✓ | - | ✓ |
| 12. Sociability (ZKPQ) | 68.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | ✓ |
| 13. Anxiety-Depressiveness (EWL) | 66.4 | - | - | - | - | - | - | ✓ | ✓ | - | ✓ |
| 14. Positron emission tomography | 63.6 | - | - | - | - | - | ✓ | - | ✓ | - | - |
| 15. Aggression-Hostility (ZKPQ) | 56.4 | - | ✓ | - | - | ✓ | - | - | - | - | - |
| 16. Impulsive Sensation Seeking (ZKPQ) | 53.8 | - | - | - | - | - | - | - | - | - | - |
| 17. THC frequency | 48.5 | | | | | | | | | | |
| 18. Alcohol frequency | 47.4 | | | | | | | | | | |
| 19. Neuroticism-Anxiety (ZKPQ) | 44.5 | | | | | | | | | | |
| 20. Female | 44.2 | | | | | | | | | | |
| 21. Daily smoker | 42.3 | | | | | | | | | | |
| 22. Years of education | 37.9 | | | | | | | | | | |
| 23. Age | 37.5 | | | | | | | | | | |
| 24. Body mass index | 33.8 | | | | | | | | | | |
| Model selection frequency (%) | | 0.9 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 |

✓, variables included in the model; -, variables not selected.

* The number of variables in the model is given within parentheses.

Pooled parameter estimates of the best model for the dependent variable log(Spiritual Experience)

| Predictors | Coefficient | Standard error | P-value | | HPD CI low | HPD CI high | n missings | FMI | RIV |
|------------------------------------|-------------|----------------|---------|-----|------------|-------------|------------|------|------|
| Drug dose | 0.41 | 0.10 | 0.00 | *** | 0.21 | 0.60 | 0 | 0.16 | 0.19 |
| Absorption (TAS) | 0.48 | 0.16 | 0.00 | ** | 0.17 | 0.78 | 312 | 0.66 | 1.83 |
| General Inactivation (EWL) | 0.20 | 0.12 | 0.12 | | -0.05 | 0.44 | 224 | 0.37 | 0.56 |
| Emotional Excitability (EWL) | 0.46 | 0.12 | 0.00 | *** | 0.23 | 0.69 | 224 | 0.39 | 0.61 |
| Performance-Related Activity (EWL) | 0.20 | 0.15 | 0.19 | | -0.10 | 0.49 | 224 | 0.49 | 0.92 |
| Hallucinogen-naïve | -0.08 | 0.11 | 0.43 | | -0.30 | 0.12 | 40 | 0.18 | 0.22 |
| Time of measuring | 0.27 | 0.10 | 0.01 | ** | 0.08 | 0.47 | 0 | 0.18 | 0.21 |
| Activity (ZKPQ) | -0.12 | 0.11 | 0.28 | | -0.34 | 0.10 | 182 | 0.30 | 0.42 |
| Extroversion-Introversion (EWL) | 0.02 | 0.14 | 0.88 | | -0.25 | 0.30 | 224 | 0.35 | 0.51 |
| Global Severity Index (SCL-90-R) | -0.17 | 0.11 | 0.14 | | -0.39 | 0.06 | 111 | 0.34 | 0.50 |
| Sociability (ZKPQ) | -0.25 | 0.10 | 0.02 | * | -0.45 | -0.04 | 182 | 0.24 | 0.31 |

Note. HPD = Highest Posterior Density. CI = Confidence Interval. FMI = Fraction of missing information. RIV = Relative increase in variance due to missingness.

Model selection for the dependent variable $\sqrt{\text{Blissful State}}$

| Predictors | Step 1 (%) | Models selected in step 2 (the first 10 models are shown)* | | | | | | | | | |
|--|------------|--|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| | | 1 (13) | 2 (10) | 3 (12) | 4 (13) | 5 (11) | 6 (10) | 7 (13) | 8 (14) | 9 (14) | 10 (15) |
| 1. Drug dose | 100.0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2. Performance-Related Activity (EWL) | 98.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3. Hallucinogen-naïve | 97.8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 4. Absorption (TAS) | 95.8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5. General Inactivation (EWL) | 95.7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 6. Global Severity Index (SCL-90-R) | 79.5 | ✓ | ✓ | ✓ | ✓ | - | - | ✓ | ✓ | ✓ | ✓ |
| 7. Alcohol frequency | 77.6 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 8. THC frequency | 76.5 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 9. Emotional Excitability (EWL) | 75.5 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 10. General Well-Being (EWL) | 72.9 | ✓ | - | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | ✓ |
| 11. Extroversion-Introversion (EWL) | 71.5 | ✓ | - | - | ✓ | - | - | - | ✓ | ✓ | - |
| 12. Sociability (ZKPQ) | 67.7 | - | - | - | - | - | - | - | - | - | ✓ |
| 13. Positron emission tomography | 64.9 | - | ✓ | - | ✓ | - | - | - | - | ✓ | ✓ |
| 14. Anxiety-Depressiveness (EWL) | 64.5 | - | - | - | - | - | - | ✓ | ✓ | - | ✓ |
| 15. Activity (ZKPQ) | 62.3 | - | - | - | - | - | - | - | - | - | - |
| 16. Impulsive Sensation Seeking (ZKPQ) | 57.9 | - | - | - | ✓ | - | - | - | - | - | - |
| 17. Years of education | 57.8 | ✓ | - | ✓ | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 18. Age | 56.9 | ✓ | - | ✓ | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 19. Aggression-Hostility (ZKPQ) | 48.9 | | | | | | | | | | |
| 20. Daily smoker | 48.7 | | | | | | | | | | |
| 21. Neuroticism-Anxiety (ZKPQ) | 48.5 | | | | | | | | | | |
| 22. Time of measuring | 27.1 | | | | | | | | | | |
| 23. Body mass index | 22.1 | | | | | | | | | | |
| 24. Female | 20.9 | | | | | | | | | | |
| Model selection frequency (%) | | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |

✓, variables included in the model; -, variables not selected.

* The number of variables in the model is given within parentheses.

Pooled parameter estimates of the best model for the dependent variable $\sqrt{\text{Blissful State}}$

| Predictors | Coefficient | Standard error | P-value | HPD CI low | HPD CI high | n missings | FMI | RIV |
|------------------------------------|-------------|----------------|----------|------------|-------------|------------|------|------|
| Drug dose | 0.54 | 0.10 | 0.00 *** | 0.34 | 0.74 | 0 | 0.10 | 0.10 |
| Performance-Related Activity (EWL) | 0.30 | 0.14 | 0.03 * | 0.02 | 0.58 | 224 | 0.34 | 0.50 |
| Hallucinogen-naïve | 0.17 | 0.11 | 0.11 | -0.04 | 0.39 | 40 | 0.11 | 0.12 |
| Absorption (TAS) | 0.02 | 0.16 | 0.89 | -0.30 | 0.33 | 312 | 0.46 | 0.82 |
| General Inactivation (EWL) | 0.24 | 0.13 | 0.08 | -0.03 | 0.49 | 224 | 0.38 | 0.59 |
| Global Severity Index (SCL-90-R) | -0.26 | 0.11 | 0.02 * | -0.48 | -0.04 | 111 | 0.22 | 0.27 |
| Alcohol frequency | 0.16 | 0.11 | 0.14 | -0.06 | 0.38 | 83 | 0.24 | 0.31 |
| THC sometimes vs rarely | 0.33 | 0.11 | 0.00 ** | 0.11 | 0.55 | 47 | 0.09 | 0.10 |
| THC rarely vs never | 0.02 | 0.15 | 0.89 | -0.28 | 0.32 | 47 | 0.23 | 0.28 |
| Emotional Excitability (EWL) | 0.19 | 0.12 | 0.11 | -0.04 | 0.42 | 224 | 0.32 | 0.46 |
| General Well-Being (EWL) | 0.22 | 0.16 | 0.15 | -0.09 | 0.53 | 224 | 0.44 | 0.74 |
| Extroversion-Introversion (EWL) | -0.14 | 0.19 | 0.45 | -0.51 | 0.22 | 224 | 0.53 | 1.07 |
| Years of education | -0.19 | 0.13 | 0.13 | -0.45 | 0.06 | 0 | 0.24 | 0.30 |
| Age | 0.22 | 0.11 | 0.06 | -0.01 | 0.44 | 0 | 0.15 | 0.17 |

Note. HPD = Highest Posterior Density. CI = Confidence Interval. FMI = Fraction of missing information. RIV = Relative increase in variance due to missingness.

Model selection for the dependent variable log(Insightfulness)

| Predictors | Step 1 (%) | Models selected in step 2 (the first 10 models are shown)* | | | | | | | | | |
|--|------------|--|-------|-------|-------|-------|-------|-------|--------|-------|--------|
| | | 1 (8) | 2 (8) | 3 (9) | 4 (9) | 5 (9) | 6 (8) | 7 (8) | 8 (10) | 9 (8) | 10 (7) |
| 1. Drug dose | 100.0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2. Absorption (TAS) | 94.9 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3. Performance-Related Activity (EWL) | 91.3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 4. General Inactivation (EWL) | 89.7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5. Hallucinogen-naïve | 87.8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 6. Emotional Excitability (EWL) | 84.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 7. Activity (ZKPQ) | 72.1 | ✓ | ✓ | ✓ | - | ✓ | - | - | ✓ | - | - |
| 8. Positron emission tomography | 71.8 | ✓ | - | ✓ | ✓ | ✓ | - | - | - | ✓ | - |
| 9. Neuroticism-Anxiety (ZKPQ) | 66.9 | - | ✓ | - | ✓ | ✓ | ✓ | ✓ | ✓ | - | ✓ |
| 10. General Well-Being (EWL) | 65.9 | - | - | - | - | - | - | - | - | - | - |
| 11. Anxiety-Depressiveness (EWL) | 64.6 | - | - | - | - | - | - | ✓ | - | - | - |
| 12. Extroversion-Introversion (EWL) | 62.2 | - | - | - | - | - | - | - | - | - | - |
| 13. Impulsive Sensation Seeking (ZKPQ) | 61.4 | - | - | - | - | - | - | - | ✓ | - | - |
| 14. Aggression-Hostility (ZKPQ) | 56.1 | - | - | - | ✓ | - | - | - | - | - | - |
| 15. Female | 55.7 | - | - | ✓ | - | - | ✓ | - | ✓ | ✓ | - |
| 16. Global Severity Index (SCL-90-R) | 55.2 | - | - | - | - | - | - | - | - | - | - |
| 17. Sociability (ZKPQ) | 47.7 | | | | | | | | | | |
| 18. Alcohol frequency | 45.2 | | | | | | | | | | |
| 19. THC frequency | 34.2 | | | | | | | | | | |
| 20. Daily smoker | 30.6 | | | | | | | | | | |
| 21. Age | 30.1 | | | | | | | | | | |
| 22. Years of education | 29.7 | | | | | | | | | | |
| 23. Time of measuring | 28.8 | | | | | | | | | | |
| 24. Body mass index | 24.3 | | | | | | | | | | |
| Model selection frequency (%) | | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |

✓, variables included in the model; -, variables not selected.

* The number of variables in the model is given within parentheses.

Pooled parameter estimates of the best model for the dependent variable log(Insightfulness)

| Predictors | Coefficient | Standard error | P-value | HPD CI low | HPD CI high | n missings | FMI | RIV |
|------------------------------------|-------------|----------------|----------|------------|-------------|------------|------|------|
| Drug dose | 0.48 | 0.10 | 0.00 *** | 0.29 | 0.67 | 0 | 0.07 | 0.08 |
| Absorption (TAS) | 0.36 | 0.13 | 0.00 ** | 0.11 | 0.60 | 312 | 0.37 | 0.58 |
| Performance-Related Activity (EWL) | 0.25 | 0.13 | 0.06 | -0.01 | 0.51 | 224 | 0.43 | 0.72 |
| General Inactivation (EWL) | 0.21 | 0.12 | 0.09 | -0.03 | 0.44 | 224 | 0.34 | 0.50 |
| Hallucinogen-naïve | 0.20 | 0.11 | 0.06 | -0.01 | 0.42 | 40 | 0.16 | 0.19 |
| Emotional Excitability (EWL) | 0.26 | 0.11 | 0.02 * | 0.04 | 0.48 | 224 | 0.32 | 0.46 |
| Activity (ZKPQ) | -0.20 | 0.12 | 0.10 | -0.42 | 0.04 | 182 | 0.36 | 0.53 |
| Positron emission tomography | 0.19 | 0.18 | 0.27 | -0.16 | 0.53 | 0 | 0.31 | 0.43 |

Note. HPD = Highest Posterior Density. CI = Confidence Interval. FMI = Fraction of missing information. RIV = Relative increase in variance due to missingness.

Model selection for the dependent variable log(Disembodiment)

| Predictors | Step 1 (%) | Models selected in step 2 (the first 10 models are shown)* | | | | | | | | | |
|--|------------|--|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| | | 1 (16) | 2 (15) | 3 (15) | 4 (14) | 5 (13) | 6 (14) | 7 (15) | 8 (15) | 9 (17) | 10 (14) |
| 1. Drug dose | 100.0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2. Absorption (TAS) | 99.5 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3. General Inactivation (EWL) | 95.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 4. Emotional Excitability (EWL) | 94.8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5. Performance-Related Activity (EWL) | 94.3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 6. Hallucinogen-naïve | 94.3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 7. Extroversion-Introversion (EWL) | 86.1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 8. Positron emission tomography | 84.1 | ✓ | ✓ | ✓ | – | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 9. General Well-Being (EWL) | 82.0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 10. Time of measuring | 81.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 11. Global Severity Index (SCL-90-R) | 81.0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 12. Anxiety-Depressiveness (EWL) | 81.0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | – | ✓ | ✓ | ✓ |
| 13. Activity (ZKPQ) | 80.5 | ✓ | – | ✓ | ✓ | – | ✓ | ✓ | ✓ | ✓ | – |
| 14. Sociability (ZKPQ) | 80.5 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 15. Aggression-Hostility (ZKPQ) | 70.5 | ✓ | ✓ | – | – | – | – | ✓ | ✓ | ✓ | – |
| 16. Impulsive Sensation Seeking (ZKPQ) | 67.1 | ✓ | ✓ | ✓ | ✓ | – | – | ✓ | – | ✓ | ✓ |
| 17. THC frequency | 63.2 | – | – | – | – | – | – | – | – | ✓ | – |
| 18. Alcohol frequency | 60.3 | – | – | – | – | – | – | – | – | – | – |
| 19. Neuroticism-Anxiety (ZKPQ) | 58.0 | – | – | – | – | – | – | – | – | – | – |
| 20. Female | 54.5 | – | – | – | – | – | – | – | – | – | – |
| 21. Daily smoker | 52.9 | – | – | – | – | – | – | – | – | – | – |
| 22. Years of education | 47.7 | | | | | | | | | | |
| 23. Age | 45.4 | | | | | | | | | | |
| 24. Body mass index | 40.9 | | | | | | | | | | |
| Model selection frequency (%) | | 0.9 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 |

✓, variables included in the model; –, variables not selected.

* The number of variables in the model is given within parentheses.

Pooled parameter estimates of the best model for the dependent variable log(Disembodiment)

| Predictors | Coefficient | Standard error | P-value | | HPD CI low | HPD CI high | n missings | FMI | RIV |
|------------------------------------|-------------|----------------|---------|-----|------------|-------------|------------|------|------|
| Drug dose | 0.41 | 0.10 | 0.00 | *** | 0.21 | 0.61 | 0 | 0.05 | 0.05 |
| Absorption (TAS) | 0.27 | 0.13 | 0.04 | * | 0.01 | 0.53 | 312 | 0.29 | 0.39 |
| General Inactivation (EWL) | 0.10 | 0.14 | 0.48 | | -0.19 | 0.38 | 224 | 0.42 | 0.69 |
| Emotional Excitability (EWL) | 0.12 | 0.14 | 0.38 | | -0.14 | 0.40 | 224 | 0.39 | 0.61 |
| Performance-Related Activity (EWL) | 0.24 | 0.15 | 0.10 | | -0.05 | 0.54 | 224 | 0.36 | 0.55 |
| Hallucinogen-naïve | 0.25 | 0.11 | 0.03 | * | 0.03 | 0.46 | 40 | 0.12 | 0.14 |
| Extroversion-Introversion (EWL) | -0.11 | 0.20 | 0.58 | | -0.50 | 0.27 | 224 | 0.47 | 0.85 |
| Positron emission tomography | 0.24 | 0.19 | 0.21 | | -0.15 | 0.61 | 0 | 0.29 | 0.39 |
| General Well-Being (EWL) | 0.14 | 0.20 | 0.46 | | -0.26 | 0.52 | 224 | 0.39 | 0.62 |
| Time of measuring | -0.07 | 0.10 | 0.50 | | -0.27 | 0.13 | 0 | 0.04 | 0.05 |
| Global Severity Index (SCL-90-R) | -0.16 | 0.13 | 0.21 | | -0.40 | 0.09 | 111 | 0.33 | 0.48 |
| Anxiety-Depressiveness (EWL) | 0.08 | 0.14 | 0.58 | | -0.20 | 0.36 | 224 | 0.31 | 0.43 |
| Activity (ZKPQ) | 0.06 | 0.12 | 0.59 | | -0.17 | 0.29 | 182 | 0.22 | 0.27 |
| Sociability (ZKPQ) | 0.04 | 0.13 | 0.74 | | -0.22 | 0.30 | 182 | 0.34 | 0.50 |
| Aggression-Hostility (ZKPQ) | 0.16 | 0.13 | 0.21 | | -0.09 | 0.41 | 182 | 0.36 | 0.55 |
| Impulsive Sensation Seeking (ZKPQ) | 0.00 | 0.16 | 1.00 | | -0.30 | 0.31 | 182 | 0.32 | 0.45 |

Note. HPD = Highest Posterior Density. CI = Confidence Interval. FMI = Fraction of missing information. RIV = Relative increase in variance due to missingness.

Model selection for the dependent variable $\sqrt{\text{Impaired Control and Cognition}}$

| Predictors | Step 1 (%) | Models selected in step 2 (the first 10 models are shown)* | | | | | | | | | |
|--|------------|--|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| | | 1 (19) | 2 (18) | 3 (20) | 4 (17) | 5 (18) | 6 (19) | 7 (20) | 8 (18) | 9 (18) | 10 (17) |
| 1. Drug dose | 100.0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2. Hallucinogen-naïve | 99.4 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3. Performance-Related Activity (EWL) | 99.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 4. Absorption (TAS) | 98.3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5. General Inactivation (EWL) | 97.3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 6. Global Severity Index (SCL-90-R) | 90.5 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 7. Time of measuring | 87.5 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | – | ✓ | ✓ |
| 8. Extroversion-Introversion (EWL) | 84.7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 9. General Well-Being (EWL) | 84.7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 10. Emotional Excitability (EWL) | 84.5 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 11. Anxiety-Depressiveness (EWL) | 82.6 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 12. Alcohol frequency | 82.3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 13. Positron emission tomography | 80.8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | – |
| 14. Sociability (ZKPQ) | 80.3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 15. THC frequency | 80.1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 16. Age | 79.8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | – | – | ✓ |
| 17. Activity (ZKPQ) | 73.5 | ✓ | ✓ | ✓ | – | – | – | ✓ | ✓ | ✓ | – |
| 18. Impulsive Sensation Seeking (ZKPQ) | 72.7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 19. Aggression-Hostility (ZKPQ) | 66.1 | – | – | – | – | – | ✓ | ✓ | – | ✓ | – |
| 20. Neuroticism-Anxiety (ZKPQ) | 64.5 | – | – | ✓ | – | – | – | – | – | – | – |
| 21. Years of education | 63.2 | ✓ | – | ✓ | – | ✓ | ✓ | ✓ | ✓ | – | ✓ |
| 22. Daily smoker | 61.9 | – | – | – | – | – | – | – | – | – | – |
| 23. Body mass index | 42.2 | | | | | | | | | | |
| 24. Female | 42.1 | | | | | | | | | | |
| Model selection frequency (%) | | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |

✓, variables included in the model; –, variables not selected.

* The number of variables in the model is given within parentheses.

Pooled parameter estimates of the best model for the dependent variable $\sqrt{\text{Impaired Control and Cognition}}$

| Predictors | Coefficient | Standard error | P-value | HPD CI low | HPD CI high | n missings | FMI | RIV | |
|------------------------------------|-------------|----------------|---------|------------|-------------|------------|-----|------|------|
| Drug dose | 0.49 | 0.10 | 0.00 | *** | 0.28 | 0.69 | 0 | 0.05 | 0.06 |
| Hallucinogen-naïve | 0.17 | 0.11 | 0.14 | | -0.05 | 0.38 | 40 | 0.08 | 0.09 |
| Performance-Related Activity (EWL) | 0.15 | 0.16 | 0.36 | | -0.18 | 0.46 | 224 | 0.48 | 0.89 |
| Absorption (TAS) | 0.06 | 0.22 | 0.73 | | -0.39 | 0.47 | 312 | 0.65 | 1.74 |
| General Inactivation (EWL) | -0.01 | 0.15 | 0.94 | | -0.29 | 0.29 | 224 | 0.45 | 0.78 |
| Global Severity Index (SCL-90-R) | 0.13 | 0.13 | 0.31 | | -0.12 | 0.38 | 111 | 0.33 | 0.47 |
| Time of measuring | -0.22 | 0.10 | 0.03 | * | -0.43 | -0.03 | 0 | 0.04 | 0.04 |
| Extroversion-Introversion (EWL) | -0.10 | 0.21 | 0.64 | | -0.50 | 0.30 | 224 | 0.50 | 0.95 |
| General Well-Being (EWL) | 0.00 | 0.23 | 0.97 | | -0.45 | 0.44 | 224 | 0.55 | 1.18 |
| Emotional Excitability (EWL) | 0.06 | 0.14 | 0.67 | | -0.22 | 0.34 | 224 | 0.40 | 0.63 |
| Anxiety-Depressiveness (EWL) | 0.22 | 0.16 | 0.15 | | -0.08 | 0.53 | 224 | 0.41 | 0.66 |
| Alcohol frequency | 0.13 | 0.12 | 0.26 | | -0.10 | 0.36 | 83 | 0.25 | 0.33 |
| Positron emission tomography | 0.09 | 0.18 | 0.62 | | -0.27 | 0.46 | 0 | 0.20 | 0.25 |
| Sociability (ZKPQ) | 0.10 | 0.14 | 0.45 | | -0.16 | 0.37 | 182 | 0.29 | 0.40 |
| THC sometimes vs rarely | 0.05 | 0.12 | 0.67 | | -0.18 | 0.28 | 47 | 0.07 | 0.08 |
| THC rarely vs never | -0.17 | 0.15 | 0.26 | | -0.48 | 0.13 | 47 | 0.21 | 0.26 |
| Age | -0.27 | 0.13 | 0.04 | * | -0.52 | -0.02 | 0 | 0.20 | 0.24 |
| Activity (ZKPQ) | 0.06 | 0.13 | 0.66 | | -0.21 | 0.32 | 182 | 0.38 | 0.58 |
| Impulsive Sensation Seeking (ZKPQ) | -0.09 | 0.18 | 0.60 | | -0.43 | 0.26 | 182 | 0.45 | 0.77 |
| Years of education | -0.04 | 0.15 | 0.81 | | -0.34 | 0.26 | 0 | 0.37 | 0.56 |

Note. HPD = Highest Posterior Density. CI = Confidence Interval. FMI = Fraction of missing information. RIV = Relative increase in variance due to missingness.

Model selection for the dependent variable $\frac{-1}{\sqrt{Anxiety}}$

| Predictors | Step 1 (%) | Models selected in step 2 (the first 10 models are shown)* | | | | | | | | | |
|--|------------|--|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| | | 1 (17) | 2 (15) | 3 (18) | 4 (15) | 5 (16) | 6 (16) | 7 (15) | 8 (16) | 9 (15) | 10 (14) |
| 1. Drug dose | 100.0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2. Positron emission tomography | 99.7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3. Emotional Excitability (EWL) | 98.8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 4. Absorption (TAS) | 97.9 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5. Performance-Related Activity (EWL) | 96.1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 6. General Inactivation (EWL) | 93.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 7. Hallucinogen-naïve | 91.5 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 8. Neuroticism-Anxiety (ZKPQ) | 81.4 | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 9. THC frequency | 81.3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 10. General Well-Being (EWL) | 80.7 | ✓ | - | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | ✓ |
| 11. Activity (ZKPQ) | 80.1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 12. Anxiety-Depressiveness (EWL) | 77.6 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - |
| 13. Impulsive Sensation Seeking (ZKPQ) | 76.1 | ✓ | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 14. Extroversion-Introversion (EWL) | 75.0 | ✓ | ✓ | ✓ | ✓ | - | - | - | ✓ | ✓ | - |
| 15. Aggression-Hostility (ZKPQ) | 73.1 | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | - | - | ✓ |
| 16. Global Severity Index (SCL-90-R) | 69.4 | - | - | ✓ | - | ✓ | - | - | - | ✓ | - |
| 17. Sociability (ZKPQ) | 69.0 | ✓ | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | - | - |
| 18. Female | 58.9 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | ✓ | ✓ |
| 19. Time of measuring | 56.8 | - | - | - | - | - | ✓ | - | - | - | - |
| 20. Alcohol frequency | 56.3 | - | - | - | - | - | - | - | - | - | - |
| 21. Daily smoker | 48.9 | | | | | | | | | | |
| 22. Age | 48.3 | | | | | | | | | | |
| 23. Years of education | 46.8 | | | | | | | | | | |
| 24. Body mass index | 41.1 | | | | | | | | | | |
| Model selection frequency (%) | | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |

✓, variables included in the model; -, variables not selected.

* The number of variables in the model is given within parentheses.

Pooled parameter estimates of the best model for the dependent variable $\frac{-1}{\sqrt{Anxiety}}$

| Predictors | Coefficient | Standard error | P-value | HPD CI low | HPD CI high | n missings | FMI | RIV |
|------------------------------------|-------------|----------------|----------|------------|-------------|------------|------|------|
| Drug dose | 0.30 | 0.10 | 0.00 ** | 0.10 | 0.49 | 0 | 0.05 | 0.05 |
| Positron emission tomography | 0.65 | 0.18 | 0.00 *** | 0.30 | 1.00 | 0 | 0.17 | 0.20 |
| Emotional Excitability (EWL) | 0.52 | 0.15 | 0.00 *** | 0.23 | 0.83 | 224 | 0.50 | 0.94 |
| Absorption (TAS) | 0.07 | 0.14 | 0.63 | -0.21 | 0.35 | 312 | 0.44 | 0.75 |
| Performance-Related Activity (EWL) | 0.11 | 0.15 | 0.44 | -0.18 | 0.39 | 224 | 0.39 | 0.63 |
| General Inactivation (EWL) | 0.06 | 0.14 | 0.67 | -0.20 | 0.33 | 224 | 0.37 | 0.55 |
| Hallucinogen-naïve | 0.12 | 0.11 | 0.27 | -0.09 | 0.34 | 40 | 0.14 | 0.17 |
| Neuroticism-Anxiety (ZKPQ) | -0.13 | 0.15 | 0.40 | -0.43 | 0.15 | 182 | 0.50 | 0.95 |
| THC sometimes vs rarely | -0.23 | 0.12 | 0.07 | -0.46 | 0.02 | 47 | 0.23 | 0.28 |
| THC rarely vs never | 0.21 | 0.15 | 0.16 | -0.08 | 0.49 | 47 | 0.14 | 0.15 |
| General Well-Being (EWL) | -0.14 | 0.20 | 0.48 | -0.53 | 0.25 | 224 | 0.41 | 0.67 |
| Activity (ZKPQ) | -0.06 | 0.14 | 0.68 | -0.33 | 0.21 | 182 | 0.43 | 0.72 |
| Anxiety-Depressiveness (EWL) | -0.02 | 0.14 | 0.88 | -0.28 | 0.25 | 224 | 0.20 | 0.24 |
| Impulsive Sensation Seeking (ZKPQ) | -0.06 | 0.16 | 0.71 | -0.38 | 0.26 | 182 | 0.40 | 0.65 |
| Extroversion-Introversion (EWL) | -0.03 | 0.18 | 0.84 | -0.40 | 0.32 | 224 | 0.40 | 0.63 |
| Aggression-Hostility (ZKPQ) | -0.10 | 0.13 | 0.44 | -0.35 | 0.15 | 182 | 0.32 | 0.45 |
| Sociability (ZKPQ) | 0.17 | 0.12 | 0.17 | -0.07 | 0.41 | 182 | 0.23 | 0.29 |
| Female | 0.04 | 0.11 | 0.74 | -0.19 | 0.25 | 0 | 0.23 | 0.29 |

Note. HPD = Highest Posterior Density. CI = Confidence Interval. FMI = Fraction of missing information. RIV = Relative increase in variance due to missingness.

Model selection for the dependent variable $\sqrt{\text{Complex Imagery}}$

| Predictors | Step 1 (%) | Models selected in step 2 (the first 10 models are shown)* | | | | | | | | | |
|--|------------|--|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| | | 1 (18) | 2 (17) | 3 (16) | 4 (17) | 5 (16) | 6 (17) | 7 (16) | 8 (16) | 9 (17) | 10 (15) |
| 1. Drug dose | 100.0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2. Absorption (TAS) | 98.6 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3. Performance-Related Activity (EWL) | 97.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 4. Positron emission tomography | 96.4 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5. Hallucinogen-naïve | 95.3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 6. General Inactivation (EWL) | 91.3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 7. Emotional Excitability (EWL) | 91.3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 8. Global Severity Index (SCL-90-R) | 90.0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 9. Extroversion-Introversion (EWL) | 87.5 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 10. General Well-Being (EWL) | 85.9 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 11. Time of measuring | 84.7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 12. Sociability (ZKPQ) | 79.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 13. Anxiety-Depressiveness (EWL) | 78.1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 14. Alcohol frequency | 77.1 | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | - | ✓ | ✓ |
| 15. Impulsive Sensation Seeking (ZKPQ) | 75.1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | ✓ | ✓ | - |
| 16. Activity (ZKPQ) | 73.2 | ✓ | - | ✓ | ✓ | - | ✓ | ✓ | ✓ | ✓ | ✓ |
| 17. Aggression-Hostility (ZKPQ) | 70.0 | ✓ | ✓ | - | ✓ | ✓ | ✓ | - | ✓ | - | - |
| 18. Age | 69.2 | - | - | - | - | - | - | - | - | - | - |
| 19. Neuroticism-Anxiety (ZKPQ) | 64.6 | ✓ | ✓ | - | ✓ | - | - | ✓ | - | ✓ | - |
| 20. Female | 52.0 | - | - | - | - | - | - | - | - | - | - |
| 21. Daily smoker | 48.7 | | | | | | | | | | |
| 22. THC frequency | 45.0 | | | | | | | | | | |
| 23. Years of education | 41.3 | | | | | | | | | | |
| 24. Body mass index | 39.8 | | | | | | | | | | |
| Model selection frequency (%) | | 0.6 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |

✓, variables included in the model; -, variables not selected.

* The number of variables in the model is given within parentheses.

Pooled parameter estimates of the best model for the dependent variable $\sqrt{\text{Complex Imagery}}$

| Predictors | Coefficient | Standard error | P-value | | HPD CI low | HPD CI high | n missings | FMI | RIV |
|------------------------------------|-------------|----------------|---------|-----|------------|-------------|------------|------|------|
| Drug dose | 0.47 | 0.10 | 0.00 | *** | 0.26 | 0.67 | 0 | 0.12 | 0.14 |
| Absorption (TAS) | 0.45 | 0.15 | 0.00 | ** | 0.15 | 0.73 | 312 | 0.49 | 0.91 |
| Performance-Related Activity (EWL) | 0.40 | 0.15 | 0.00 | ** | 0.12 | 0.69 | 224 | 0.38 | 0.58 |
| Positron emission tomography | 0.03 | 0.22 | 0.85 | | -0.43 | 0.45 | 0 | 0.51 | 0.99 |
| Hallucinogen-naïve | 0.20 | 0.12 | 0.08 | | -0.02 | 0.43 | 40 | 0.24 | 0.31 |
| General Inactivation (EWL) | 0.08 | 0.14 | 0.56 | | -0.18 | 0.34 | 224 | 0.37 | 0.57 |
| Emotional Excitability (EWL) | 0.22 | 0.14 | 0.12 | | -0.06 | 0.47 | 224 | 0.39 | 0.62 |
| Global Severity Index (SCL-90-R) | -0.25 | 0.12 | 0.04 | * | -0.49 | -0.01 | 111 | 0.22 | 0.27 |
| Extroversion-Introversion (EWL) | -0.26 | 0.18 | 0.12 | | -0.62 | 0.07 | 224 | 0.35 | 0.51 |
| General Well-Being (EWL) | 0.01 | 0.22 | 0.94 | | -0.41 | 0.43 | 224 | 0.52 | 1.04 |
| Time of measuring | 0.14 | 0.10 | 0.16 | | -0.06 | 0.34 | 0 | 0.08 | 0.09 |
| Sociability (ZKPQ) | 0.13 | 0.13 | 0.31 | | -0.12 | 0.39 | 182 | 0.38 | 0.58 |
| Anxiety-Depressiveness (EWL) | 0.07 | 0.15 | 0.65 | | -0.22 | 0.35 | 224 | 0.36 | 0.55 |
| Alcohol frequency | 0.28 | 0.11 | 0.01 | * | 0.06 | 0.50 | 83 | 0.23 | 0.29 |
| Impulsive Sensation Seeking (ZKPQ) | -0.05 | 0.17 | 0.75 | | -0.38 | 0.28 | 182 | 0.47 | 0.85 |
| Activity (ZKPQ) | -0.03 | 0.12 | 0.79 | | -0.27 | 0.21 | 182 | 0.34 | 0.49 |
| Aggression-Hostility (ZKPQ) | 0.06 | 0.12 | 0.62 | | -0.18 | 0.29 | 182 | 0.24 | 0.31 |
| Neuroticism-Anxiety (ZKPQ) | -0.03 | 0.13 | 0.81 | | -0.29 | 0.22 | 182 | 0.22 | 0.28 |

Note. HPD = Highest Posterior Density. CI = Confidence Interval. FMI = Fraction of missing information. RIV = Relative increase in variance due to missingness.

Model selection for the dependent variable $\sqrt{\text{Elementary Imagery}}$

| Predictors | Step 1 (%) | Models selected in step 2 (the first 10 models are shown)* | | | | | | | | | |
|--|------------|--|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| | | 1 (17) | 2 (17) | 3 (16) | 4 (18) | 5 (18) | 6 (18) | 7 (19) | 8 (18) | 9 (16) | 10 (17) |
| 1. Drug dose | 100.0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2. Absorption (TAS) | 99.9 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3. Performance-Related Activity (EWL) | 98.4 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 4. Hallucinogen-naïve | 97.9 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5. General Inactivation (EWL) | 97.6 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 6. Emotional Excitability (EWL) | 96.6 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 7. Extroversion-Introversion (EWL) | 93.6 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 8. Sociability (ZKPQ) | 91.7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 9. Positron emission tomography | 90.5 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 10. General Well-Being (EWL) | 90.5 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 11. Activity (ZKPQ) | 89.8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 12. Time of measuring | 89.6 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 13. Anxiety-Depressiveness (EWL) | 89.3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 14. Global Severity Index (SCL-90-R) | 85.1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 15. Aggression-Hostility (ZKPQ) | 78.8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 16. Impulsive Sensation Seeking (ZKPQ) | 77.5 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | ✓ |
| 17. Alcohol frequency | 71.0 | - | ✓ | - | ✓ | ✓ | - | ✓ | - | - | - |
| 18. Neuroticism-Anxiety (ZKPQ) | 70.6 | ✓ | - | - | - | ✓ | - | - | ✓ | ✓ | - |
| 19. THC frequency | 69.1 | - | - | - | - | - | ✓ | ✓ | ✓ | - | - |
| 20. Daily smoker | 65.5 | - | - | - | ✓ | - | ✓ | ✓ | - | - | ✓ |
| 21. Female | 58.4 | - | - | - | - | - | - | - | - | - | - |
| 22. Years of education | 54.0 | - | - | - | - | - | - | - | - | - | - |
| 23. Age | 53.3 | - | - | - | - | - | - | - | - | - | - |
| 24. Body mass index | 48.6 | - | - | - | - | - | - | - | - | - | - |
| Model selection frequency (%) | | 1.1 | 0.8 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 |

✓, variables included in the model; -, variables not selected.

* The number of variables in the model is given within parentheses.

Pooled parameter estimates of the best model for the dependent variable $\sqrt{\text{Elementary Imagery}}$

| Predictors | Coefficient | Standard error | P-value | HPD CI low | HPD CI high | n missings | FMI | RIV |
|------------------------------------|-------------|----------------|----------|------------|-------------|------------|------|------|
| Drug dose | 0.56 | 0.11 | 0.00 *** | 0.34 | 0.77 | 0 | 0.15 | 0.17 |
| Absorption (TAS) | 0.36 | 0.14 | 0.01 ** | 0.09 | 0.64 | 312 | 0.40 | 0.63 |
| Performance-Related Activity (EWL) | 0.45 | 0.14 | 0.00 *** | 0.18 | 0.73 | 224 | 0.29 | 0.39 |
| Hallucinogen-naïve | 0.13 | 0.12 | 0.24 | -0.09 | 0.36 | 40 | 0.23 | 0.29 |
| General Inactivation (EWL) | 0.05 | 0.13 | 0.74 | -0.20 | 0.31 | 224 | 0.30 | 0.42 |
| Emotional Excitability (EWL) | 0.18 | 0.14 | 0.23 | -0.12 | 0.45 | 224 | 0.45 | 0.78 |
| Extroversion-Introversion (EWL) | -0.15 | 0.19 | 0.44 | -0.54 | 0.21 | 224 | 0.46 | 0.81 |
| Sociability (ZKPQ) | 0.21 | 0.13 | 0.11 | -0.05 | 0.46 | 182 | 0.36 | 0.54 |
| Positron emission tomography | -0.15 | 0.21 | 0.50 | -0.58 | 0.26 | 0 | 0.46 | 0.81 |
| General Well-Being (EWL) | -0.04 | 0.21 | 0.84 | -0.44 | 0.35 | 224 | 0.46 | 0.81 |
| Activity (ZKPQ) | -0.14 | 0.12 | 0.26 | -0.38 | 0.10 | 182 | 0.29 | 0.39 |
| Time of measuring | 0.22 | 0.10 | 0.03 * | 0.02 | 0.42 | 0 | 0.06 | 0.07 |
| Anxiety-Depressiveness (EWL) | 0.02 | 0.14 | 0.89 | -0.27 | 0.29 | 224 | 0.28 | 0.38 |
| Global Severity Index (SCL-90-R) | -0.09 | 0.13 | 0.49 | -0.35 | 0.17 | 111 | 0.28 | 0.37 |
| Aggression-Hostility (ZKPQ) | -0.10 | 0.12 | 0.42 | -0.33 | 0.14 | 182 | 0.21 | 0.26 |
| Impulsive Sensation Seeking (ZKPQ) | -0.09 | 0.17 | 0.62 | -0.42 | 0.24 | 182 | 0.44 | 0.74 |
| Neuroticism-Anxiety (ZKPQ) | -0.15 | 0.14 | 0.30 | -0.43 | 0.13 | 182 | 0.32 | 0.45 |

Note. HPD = Highest Posterior Density. CI = Confidence Interval. FMI = Fraction of missing information. RIV = Relative increase in variance due to missingness.

Model selection for the dependent variable $\log(\text{Audio-Visual Synesthesiae})$

| Predictors | Step 1 (%) | Models selected in step 2 (the first 10 models are shown)* | | | | | | | | | |
|--|------------|--|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| | | 1 (20) | 2 (19) | 3 (21) | 4 (19) | 5 (19) | 6 (19) | 7 (18) | 8 (19) | 9 (23) | 10 (18) |
| 1. Drug dose | 100.0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2. Positron emission tomography | 99.9 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3. Emotional Excitability (EWL) | 99.6 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 4. Absorption (TAS) | 99.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5. Performance-Related Activity (EWL) | 97.7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 6. Hallucinogen-naïve | 96.6 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 7. General Inactivation (EWL) | 96.0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 8. Alcohol frequency | 91.4 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 9. General Well-Being (EWL) | 91.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 10. Extroversion-Introversion (EWL) | 88.8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 11. Activity (ZKPQ) | 88.0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 12. Neuroticism-Anxiety (ZKPQ) | 87.1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 13. Anxiety-Depressiveness (EWL) | 87.1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | – | ✓ | ✓ |
| 14. Impulsive Sensation Seeking (ZKPQ) | 84.8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 15. THC frequency | 84.5 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | – | ✓ | ✓ | ✓ |
| 16. Sociability (ZKPQ) | 83.4 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 17. Aggression-Hostility (ZKPQ) | 81.3 | ✓ | ✓ | ✓ | ✓ | ✓ | – | ✓ | ✓ | ✓ | ✓ |
| 18. Time of measuring | 79.3 | ✓ | ✓ | ✓ | – | ✓ | ✓ | ✓ | ✓ | ✓ | – |
| 19. Global Severity Index (SCL-90-R) | 77.8 | ✓ | – | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | – |
| 20. Years of education | 68.8 | – | – | ✓ | – | – | – | – | – | ✓ | – |
| 21. Age | 65.0 | – | – | – | – | – | – | – | – | ✓ | – |
| 22. Daily smoker | 62.6 | – | – | – | – | – | – | – | – | ✓ | – |
| 23. Female | 61.2 | ✓ | ✓ | ✓ | ✓ | – | ✓ | – | ✓ | ✓ | ✓ |
| 24. Body mass index | 51.6 | – | – | – | – | – | – | – | – | – | – |
| Model selection frequency (%) | | 0.7 | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 |

✓, variables included in the model; –, variables not selected.

* The number of variables in the model is given within parentheses.

Pooled parameter estimates of the best model for the dependent variable $\log(\text{Audio-Visual Synesthesiae})$

| Predictors | Coefficient | Standard error | P-value | | HPD CI low | HPD CI high | n missings | FMI | RIV |
|------------------------------------|-------------|----------------|---------|-----|------------|-------------|------------|------|------|
| Drug dose | 0.43 | 0.11 | 0.00 | *** | 0.22 | 0.65 | 0 | 0.19 | 0.23 |
| Positron emission tomography | -0.42 | 0.23 | 0.05 | | -0.88 | 0.01 | 0 | 0.53 | 1.07 |
| Emotional Excitability (EWL) | 0.27 | 0.14 | 0.04 | * | 0.01 | 0.54 | 224 | 0.39 | 0.62 |
| Absorption (TAS) | 0.51 | 0.15 | 0.00 | *** | 0.22 | 0.81 | 312 | 0.52 | 1.02 |
| Performance-Related Activity (EWL) | 0.31 | 0.15 | 0.04 | * | 0.02 | 0.59 | 224 | 0.36 | 0.55 |
| Hallucinogen-naïve | 0.06 | 0.11 | 0.56 | | -0.15 | 0.28 | 40 | 0.15 | 0.18 |
| General Inactivation (EWL) | -0.05 | 0.14 | 0.70 | | -0.32 | 0.21 | 224 | 0.39 | 0.61 |
| Alcohol frequency | 0.30 | 0.11 | 0.01 | ** | 0.08 | 0.52 | 83 | 0.26 | 0.33 |
| General Well-Being (EWL) | 0.11 | 0.21 | 0.61 | | -0.30 | 0.52 | 224 | 0.49 | 0.90 |
| Extroversion-Introversion (EWL) | -0.23 | 0.19 | 0.22 | | -0.62 | 0.14 | 224 | 0.45 | 0.78 |
| Activity (ZKPQ) | 0.05 | 0.12 | 0.66 | | -0.19 | 0.29 | 182 | 0.30 | 0.42 |
| Neuroticism-Anxiety (ZKPQ) | -0.09 | 0.15 | 0.56 | | -0.38 | 0.20 | 182 | 0.41 | 0.66 |
| Anxiety-Depressiveness (EWL) | 0.10 | 0.14 | 0.50 | | -0.19 | 0.38 | 224 | 0.33 | 0.48 |
| Impulsive Sensation Seeking (ZKPQ) | -0.12 | 0.16 | 0.49 | | -0.43 | 0.20 | 182 | 0.40 | 0.63 |
| THC sometimes vs rarely | -0.13 | 0.12 | 0.25 | | -0.36 | 0.10 | 47 | 0.20 | 0.25 |
| THC rarely vs never | -0.03 | 0.15 | 0.85 | | -0.31 | 0.26 | 47 | 0.14 | 0.17 |
| Sociability (ZKPQ) | 0.28 | 0.12 | 0.03 | * | 0.03 | 0.52 | 182 | 0.29 | 0.39 |
| Aggression-Hostility (ZKPQ) | 0.03 | 0.13 | 0.81 | | -0.23 | 0.28 | 182 | 0.35 | 0.51 |
| Time of measuring | 0.18 | 0.10 | 0.08 | | -0.02 | 0.38 | 0 | 0.08 | 0.09 |
| Global Severity Index (SCL-90-R) | -0.16 | 0.13 | 0.25 | | -0.42 | 0.11 | 111 | 0.35 | 0.52 |
| Female | -0.07 | 0.11 | 0.53 | | -0.28 | 0.15 | 0 | 0.20 | 0.24 |

Note. HPD = Highest Posterior Density. CI = Confidence Interval. FMI = Fraction of missing information. RIV = Relative increase in variance due to missingness.

Model selection for the dependent variable $\sqrt{\text{Changed Meaning of Percepts}}$

| Predictors | Step 1 (%) | Models selected in step 2 (the first 10 models are shown)* | | | | | | | | | |
|--|------------|--|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| | | 1 (18) | 2 (20) | 3 (19) | 4 (17) | 5 (18) | 6 (17) | 7 (18) | 8 (18) | 9 (17) | 10 (19) |
| 1. Drug dose | 100.0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2. Absorption (TAS) | 99.8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3. Performance-Related Activity (EWL) | 99.8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 4. Hallucinogen-naïve | 99.3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5. Positron emission tomography | 97.8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 6. General Inactivation (EWL) | 94.5 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 7. Emotional Excitability (EWL) | 94.3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 8. Global Severity Index (SCL-90-R) | 93.4 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 9. General Well-Being (EWL) | 92.7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 10. Extroversion-Introversion (EWL) | 92.2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 11. Time of measuring | 87.4 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 12. Activity (ZKPQ) | 85.8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | ✓ | ✓ |
| 13. Anxiety-Depressiveness (EWL) | 85.8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 14. Sociability (ZKPQ) | 84.3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | ✓ |
| 15. Impulsive Sensation Seeking (ZKPQ) | 83.8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 16. Alcohol frequency | 82.0 | ✓ | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | ✓ | ✓ |
| 17. Age | 77.9 | - | ✓ | ✓ | - | ✓ | - | ✓ | ✓ | - | - |
| 18. Aggression-Hostility (ZKPQ) | 77.9 | ✓ | ✓ | ✓ | ✓ | ✓ | - | ✓ | ✓ | ✓ | ✓ |
| 19. Neuroticism-Anxiety (ZKPQ) | 74.5 | ✓ | ✓ | ✓ | - | ✓ | ✓ | - | ✓ | ✓ | ✓ |
| 20. Years of education | 64.5 | - | ✓ | - | - | - | - | - | - | - | ✓ |
| 21. Female | 63.2 | - | - | - | - | - | - | - | - | - | - |
| 22. Daily smoker | 59.2 | - | - | - | - | - | - | - | - | - | - |
| 23. THC frequency | 50.9 | - | - | - | - | - | - | - | - | - | - |
| 24. Body mass index | 49.5 | - | - | - | - | - | - | - | - | - | - |
| Model selection frequency (%) | | 1.3 | 1.0 | 1.0 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 |

✓, variables included in the model; -, variables not selected.

* The number of variables in the model is given within parentheses.

Pooled parameter estimates of the best model for the dependent variable $\sqrt{\text{Changed Meaning of Percepts}}$

| Predictors | Coefficient | Standard error | P-value | | HPD CI low | HPD CI high | n missings | FMI | RIV |
|------------------------------------|-------------|----------------|---------|-----|------------|-------------|------------|------|------|
| Drug dose | 0.47 | 0.10 | 0.00 | *** | 0.27 | 0.68 | 0 | 0.13 | 0.15 |
| Absorption (TAS) | 0.33 | 0.16 | 0.05 | * | 0.02 | 0.63 | 312 | 0.55 | 1.14 |
| Performance-Related Activity (EWL) | 0.56 | 0.16 | 0.00 | *** | 0.26 | 0.87 | 224 | 0.47 | 0.85 |
| Hallucinogen-naïve | 0.24 | 0.11 | 0.02 | * | 0.03 | 0.46 | 40 | 0.15 | 0.18 |
| Positron emission tomography | 0.05 | 0.19 | 0.77 | | -0.32 | 0.42 | 0 | 0.32 | 0.45 |
| General Inactivation (EWL) | 0.19 | 0.14 | 0.17 | | -0.07 | 0.47 | 224 | 0.43 | 0.71 |
| Emotional Excitability (EWL) | 0.11 | 0.14 | 0.45 | | -0.16 | 0.38 | 224 | 0.45 | 0.80 |
| Global Severity Index (SCL-90-R) | -0.03 | 0.13 | 0.81 | | -0.28 | 0.22 | 111 | 0.31 | 0.44 |
| General Well-Being (EWL) | -0.13 | 0.22 | 0.58 | | -0.55 | 0.31 | 224 | 0.57 | 1.24 |
| Extroversion-Introversion (EWL) | -0.09 | 0.17 | 0.63 | | -0.44 | 0.25 | 224 | 0.33 | 0.48 |
| Time of measuring | -0.12 | 0.10 | 0.24 | | -0.31 | 0.08 | 0 | 0.10 | 0.11 |
| Activity (ZKPQ) | -0.18 | 0.12 | 0.14 | | -0.42 | 0.06 | 182 | 0.35 | 0.52 |
| Anxiety-Depressiveness (EWL) | 0.07 | 0.14 | 0.63 | | -0.21 | 0.34 | 224 | 0.32 | 0.47 |
| Sociability (ZKPQ) | 0.03 | 0.13 | 0.81 | | -0.24 | 0.29 | 182 | 0.43 | 0.74 |
| Impulsive Sensation Seeking (ZKPQ) | 0.09 | 0.18 | 0.62 | | -0.27 | 0.42 | 182 | 0.52 | 1.03 |
| Alcohol frequency | 0.05 | 0.11 | 0.68 | | -0.16 | 0.26 | 83 | 0.22 | 0.28 |
| Aggression-Hostility (ZKPQ) | 0.09 | 0.12 | 0.50 | | -0.15 | 0.33 | 182 | 0.32 | 0.45 |
| Neuroticism-Anxiety (ZKPQ) | -0.10 | 0.14 | 0.47 | | -0.38 | 0.17 | 182 | 0.35 | 0.52 |

Note. HPD = Highest Posterior Density. CI = Confidence Interval. FMI = Fraction of missing information. RIV = Relative increase in variance due to missingness.