The below R script describes the preregistered models (using unimputed data). For information on how the data was imputed for the preregistered models, see the main text.

dat$Age\_Four\_Baseline <- as.factor(dat$Age\_Four\_Baseline)

dat$Religion\_Baseline <- as.factor(dat$Religion\_Baseline)

dat$Gender\_Baseline <- as.factor(dat$Gender\_Baseline)

dat$Mindfulness\_Lifetime\_Baseline <- as.factor(dat$Mindfulness\_Lifetime\_Baseline)

dat$Metta\_Lifetime\_Baseline <- as.factor(dat$Metta\_Lifetime\_Baseline)

dat$Dose\_Follow <- as.factor(dat$Dose\_Follow)

model <- lm(scale(Mindfulness\_Week\_Follow - Mindfulness\_Week\_Baseline) ~ Psychedelics\_Month\_Follow +

Alcohol\_Month\_Follow + Nicotine\_Month\_Follow + Cannabis\_Month\_Follow +

MDMA\_Month\_Follow + Stimulants\_Month\_Follow + Narcotic\_Month\_Follow +

Benzodiazepines\_Month\_Follow + Inhalants\_Month\_Follow + Other\_Month\_Follow +

as.factor(Age\_Four\_Baseline) + as.factor(Gender\_Baseline) +

Education\_Baseline + as.factor(Religion\_Baseline) +

as.factor(Political\_Baseline) + Psychedelics\_Month\_Baseline,

data = dat)

summary(model)

model <- lm(scale(Metta\_Week\_Follow - Metta\_Week\_Baseline) ~ Psychedelics\_Month\_Follow +

Alcohol\_Month\_Follow + Nicotine\_Month\_Follow + Cannabis\_Month\_Follow +

MDMA\_Month\_Follow + Stimulants\_Month\_Follow + Narcotic\_Month\_Follow +

Benzodiazepines\_Month\_Follow + Inhalants\_Month\_Follow + Other\_Month\_Follow +

as.factor(Age\_Four\_Baseline) + as.factor(Gender\_Baseline) +

Education\_Baseline + as.factor(Religion\_Baseline) +

as.factor(Political\_Baseline) + Psychedelics\_Month\_Baseline,

data = dat)

summary(model)

model <- lm(scale(DMPI\_Follow\_Total - DMPI\_Baseline\_Total) ~ Psychedelics\_Month\_Follow +

Alcohol\_Month\_Follow + Nicotine\_Month\_Follow + Cannabis\_Month\_Follow +

MDMA\_Month\_Follow + Stimulants\_Month\_Follow + Narcotic\_Month\_Follow +

Benzodiazepines\_Month\_Follow + Inhalants\_Month\_Follow + Other\_Month\_Follow +

as.factor(Age\_Four\_Baseline) + as.factor(Gender\_Baseline) +

Education\_Baseline + as.factor(Religion\_Baseline) +

as.factor(Political\_Baseline) + Psychedelics\_Month\_Baseline,

data = dat)

summary(model)

model <- lm(scale(FFMQ\_Follow\_Total - FFMQ\_Baseline\_Total) ~ Psychedelics\_Month\_Follow +

Alcohol\_Month\_Follow + Nicotine\_Month\_Follow + Cannabis\_Month\_Follow +

MDMA\_Month\_Follow + Stimulants\_Month\_Follow + Narcotic\_Month\_Follow +

Benzodiazepines\_Month\_Follow + Inhalants\_Month\_Follow + Other\_Month\_Follow +

as.factor(Age\_Four\_Baseline) + as.factor(Gender\_Baseline) +

Education\_Baseline + as.factor(Religion\_Baseline) +

as.factor(Political\_Baseline) + Psychedelics\_Month\_Baseline,

data = dat)

summary(model)

model <- lm(scale(Self\_Compassion\_Follow\_Total - Self\_Compassion\_Baseline\_Total) ~ Psychedelics\_Month\_Follow +

Alcohol\_Month\_Follow + Nicotine\_Month\_Follow + Cannabis\_Month\_Follow +

MDMA\_Month\_Follow + Stimulants\_Month\_Follow + Narcotic\_Month\_Follow +

Benzodiazepines\_Month\_Follow + Inhalants\_Month\_Follow + Other\_Month\_Follow +

as.factor(Age\_Four\_Baseline) + as.factor(Gender\_Baseline) +

Education\_Baseline + as.factor(Religion\_Baseline) +

as.factor(Political\_Baseline) + Psychedelics\_Month\_Baseline,

data = dat)

summary(model)

model <- lm(scale(CEQ\_Follow\_Total) ~ scale(Mindfulness\_Week\_Baseline) + as.factor(Mindfulness\_Lifetime\_Baseline) +

as.factor(Dose\_Follow) + Psychedelics\_Ever\_Baseline + Alcohol\_Ever\_Baseline + Nicotine\_Ever\_Baseline + Cannabis\_Ever\_Baseline +

MDMA\_Ever\_Baseline + Stimulants\_Ever\_Baseline + Narcotic\_Ever\_Baseline +

Benzodiazepines\_Ever\_Baseline + Inhalants\_Ever\_Baseline + Other\_Ever\_Baseline +

as.factor(Age\_Four\_Baseline) + as.factor(Gender\_Baseline) +

Education\_Baseline + as.factor(Religion\_Baseline) +

as.factor(Political\_Baseline),

data = dat)

summary(model)

model <- lm(scale(CEQ\_Follow\_Total) ~ scale(Metta\_Week\_Baseline) + as.factor(Metta\_Lifetime\_Baseline) +

as.factor(Dose\_Follow) + Psychedelics\_Ever\_Baseline + Alcohol\_Ever\_Baseline + Nicotine\_Ever\_Baseline + Cannabis\_Ever\_Baseline +

MDMA\_Ever\_Baseline + Stimulants\_Ever\_Baseline + Narcotic\_Ever\_Baseline +

Benzodiazepines\_Ever\_Baseline + Inhalants\_Ever\_Baseline + Other\_Ever\_Baseline +

as.factor(Age\_Four\_Baseline) + as.factor(Gender\_Baseline) +

Education\_Baseline + as.factor(Religion\_Baseline) +

as.factor(Political\_Baseline),

data = dat)

summary(model)

model <- lm(scale(CEQ\_Follow\_Total) ~ scale(FFMQ\_Baseline\_Total) +

as.factor(Dose\_Follow) + Psychedelics\_Ever\_Baseline + Alcohol\_Ever\_Baseline + Nicotine\_Ever\_Baseline + Cannabis\_Ever\_Baseline +

MDMA\_Ever\_Baseline + Stimulants\_Ever\_Baseline + Narcotic\_Ever\_Baseline +

Benzodiazepines\_Ever\_Baseline + Inhalants\_Ever\_Baseline + Other\_Ever\_Baseline +

as.factor(Age\_Four\_Baseline) + as.factor(Gender\_Baseline) +

Education\_Baseline + as.factor(Religion\_Baseline) +

as.factor(Political\_Baseline),

data = dat)

summary(model)

model <- lm(scale(CEQ\_Follow\_Total) ~ scale(Self\_Compassion\_Baseline\_Total) +

as.factor(Dose\_Follow) + Psychedelics\_Ever\_Baseline + Alcohol\_Ever\_Baseline + Nicotine\_Ever\_Baseline + Cannabis\_Ever\_Baseline +

MDMA\_Ever\_Baseline + Stimulants\_Ever\_Baseline + Narcotic\_Ever\_Baseline +

Benzodiazepines\_Ever\_Baseline + Inhalants\_Ever\_Baseline + Other\_Ever\_Baseline +

as.factor(Age\_Four\_Baseline) + as.factor(Gender\_Baseline) +

Education\_Baseline + as.factor(Religion\_Baseline) +

as.factor(Political\_Baseline),

data = dat)

summary(model)