**KPU Registry ID Number 1057** **Date Submitted: 31st August 2020**

**Study Registration for the KPU Study Registry**

**1. The title or name of the study (for listing the study in the registry).**

The Institute of Noetic Science Discovery Lab: A Systematic Investigation of the relationship between Interconnectedness, Extended Human Capacities, and Well-being.

**2. The name, affiliation, and email address for the lead researcher(s) for the study.**

Dr. Helané Wahbeh, ND, MCR
Director of Research, The Institute of Noetic Sciences
hwahbeh@noetic.org

**3. A short description or abstract of the purpose and design of the study.**

The Institute of Noetic Sciences (IONS) Discovery Laboratory or IDL is a long-term research program. The primary goal of this phase of the study is to investigate the relationship between Interconnectedness, Extended Human Capacities, and Well-being and the influence of transformational practices and individual characteristics on those relationships. The study is a prospective uncontrolled, within-participant design study. Participants are invited to complete questionnaires and tasks before and after their non-invasive, low-risk transformational practice (e.g. workshop, retreat, course) either in-person at the IONS EarthRise Learning Center or online. The objectives of the study are to 1) evaluate the relationships between the three factors, interconnectedness, extended human capacities, and well-being; 2) evaluate which experiences or practices, if any, create the greatest pre-post change in these factors; and 3) examine which, if any, individual characteristics are predictors for the change in the factors.

**4. A statement or list of the specific hypothesis or hypotheses being tested, and whether each hypothesis is confirmatory or exploratory. A discussion of confirmatory and exploratory analyses is provided here.**

Below are the three objectives and hypotheses. The hypotheses are based on the results of our preliminary analyses. Objective #1 hypothesis is confirmatory. Objective #2 and #3 hypotheses are exploratory.

**Objective #1** To evaluate the relationships between the three composite measures (interconnectedness, extended human capacities, and well-being) for all unique individuals for measures taken before a workshop.

*We hypothesize that the composite measures of interconnectedness and well-being will have a significant positive correlation and that the composite measure of extended human capacities*

*will have a significant negative correlation with the composite measures interconnectedness and well-being.*

**Objective #2** To evaluate which experiences or practices, if any, create the greatest pre-post change in these factors.

*We hypothesize that...*
*- the workshop leader's desired outcome of interconnectedness will predict an increase in the well-being composite measure and workshop leader's desired outcome of extended human capacities will predict a decrease in the well-being composite measure;*
*- the workshop format of 'outside/in nature' will predict an increase in the interconnectedness and well-being composite measures and the workshop format of 'small groups' and 'pairs' will predict a decrease in the well-being composite measure.*
*-the workshop content of 'meditation' will predict an increase in the interconnectedness and well-being factors, and the workshop content of 'nature' will predict an increase in the well-being factor.*

**Objective #3** To examine which, if any, individual characteristics are predictors for the change in the factors.

*We hypothesize that increased age will predict a decreased change in the interconnectedness and wellbeing composite measures.*

**5. The planned number of participants and the number of trials per participant.**

Please see question #8 for details on the power calculations for each objective

Objective #1 - 1834

Objective #2 - 2900

Objective #3 - 670

**6. A statement that the registration is submitted prior to collecting data for the first participant, or indicating the number of participants that have provided data when the registration (or revision to the registration) was submitted.**

This registration is being submitted prior to collecting data for the first participant for this formal study.

**7. Specification of all analysis decisions that could affect the confirmatory results, including the specific statistical test for each confirmatory hypothesis, whether the test is one-sided or two-sided, the criterion for acceptable evidence, any transformations or adjustments to the data, any criteria for excluding or deleting data, and any corrections for multiple analyses. Checklists and examples for registering different types of analyses are provided in the statistics registration document.**

Composite Measure Generation: First, a standard confirmatory factor analysis (CFA) model will be fit on the pre-workshop data using the R package *lavaan* (Rosseel, 2012) with the latent variable variance constrained to 1. The CFA will be fitted using the ML estimator that allows for missing data and the NLMINB optimization method. The model will be fit using 3 composite measures (latent variables), interconnectedness, extended human capabilities, and well-being. The composite measures and their indicator variables are summarized in Table 1.

**Table 1**: Latent variables and the measured/indicator/manifest variables used to define each latent variable. Please see Measures section under Question 10 for a description of these questionnaires and tasks.

| **Composite Measures (Latent Variable)** | **Manifest Variables** |
|---|---|
| Interconnectedness | Cloninger Self-Transcendence Scale (INT)<br>Inclusion of Nature in Self (Int_SN)<br>Inclusion of the Other in Self (Int_SO) |
| Extended Human Capacities | Jar Task (Jar)<br>Quick Remote Viewing Task (RV)<br>Bubble Task (Bubble) |
| Well-being | Arizona Integrative Outcomes Scale (AIOS)<br>Positive and Negative Affect Scale (PANAS_P, PANAS_N)<br>Sleep Quality last 24 hours (Slp_24)<br>Pain last 24 hours (Pn_24) |

The following procedures will be conducted on the manifest variables before combining to generate the composite measures. The Jar Task and Bubble Task scores are the person's guess minus the true value. These are transformed to absolute values. A variable jar_ratio will be defined by taking the absolute value of count divided by true number and subtracting 1. Variables measuring negative attributes will be recoded such that higher values reflect improvement. Specifically, the Jar Task, PANAS_N, Pn_24, and Slp_24 were recoded by subtracting the value from the maximum or scale maximum value. Other variables are transformed so that they are on similar scales. Int_SN, Int_SO, and AIOS will be divided by 100. Int will be divided by 15 and Slp_24 and Pn_24 will be divided by 10. PANAS_N_recoded and PANAS_P will be divided by 25.

The data will be assessed for multivariate normality using Mardia's test in the R package MVN (Korkmaz et al. 2014). Appropriate power transformations using the Box-Cox family that allows for negative responses will be systematically identified using the R package car (Fox and Weisberg, 2019). Mardia's coefficient of multivariate kurtosis ($p > 0.05$) (Everitt & Hothorn, 2011) in addition to univariate QQ-plots showing approximate adherence to normality will be used as criteria for multivariate normality. If the multivariate data utilizing the variable jar_diff achieve a p-value > 0.05 for Mardia's kurtosis, this variable will be used in CFA fitting. If the multivariate data utilizing the variable jar_ratio achieve a p-value > 0.05 for Mardia's kurtosis and/or if the univariate QQ-plot of this variable shows improved adherence to normality (compared to jar_diff), this variable instead will be used in CFA fitting.

Once the CFA is fitted, composite measures will be generated by computing estimated values for the latent variables using the R package *lavaan*, which uses the regression method for continuous indicators. For each observation, this results in 3 scores (representing the 3 composite measures), which are a linear combination of the component indicators. These factor scores will then be used for all subsequent analyses in all three objectives.

**Objective #1** To evaluate the relationships between the three composite measures (interconnectedness, extended human capacities, and well-being) for all unique individuals for measures taken before a workshop.

If the assumptions of normality (Shapiro-Wilk $p > 0.05$) and linearity are satisfied, a Pearson's correlation test will be used to evaluate the relationship between the three composite measures. Otherwise, a Spearman's rank correlation test will be used to evaluate the relationship between the three composite measures. Two-sided tests will be conducted. Only values from unique individuals from pre-workshop data will be used for this analysis. If a participant has completed more than one workshop, the values from their first completion of the survey will be used for the analysis. Correlations with *p*-values less than 0.05 will be considered significant.

**Objective #2** To evaluate which experiences or practices, if any, create the greatest pre-post change in these factors.

First, changes in the three factors will be evaluated for all transformational practices. Summary statistics by composite measure will be generated and post-workshop and pre-workshop distributions visualized using boxplots. Differences will be defined as post-workshop composite measure minus pre-workshop composite measure (for all three composite measures). Composite measure difference distributions will be visually examined using histograms and QQ-plots and tested for normality using the Shapiro-Wilk and Kolmogorov-Smirnov tests. Differences not conforming to normality will be assessed for symmetry. For symmetric distributions, the Wilcoxon Signed-Rank test will be performed and for non-symmetric distributions, the Sign test will be performed using the R package *BSDA* (Arnholt and Evans, 2017). Cohen's *d* will be calculated for paired *t*-tests using the data and the R package *effectsize* (Ben-Shachar et al. 2020).

**Objectives #2 and #3** Linear regression models will be fit using differences in factor (post-pre workshop factor) for each of the three factors using explanatory variables to evaluate the relationship between pre-post changes of the three factors and transformational practice parameters (desired outcome, format, and content), and potential predictors. Regressions will use only one observation per individual. Model diagnostics will be evaluated using diagnostic plots, QQ-plots of studentized residuals, the Kolmogorov-Smirnov test of normality, the Non-constant Variance test, and the Durbin-Watson test. Transformations will be applied to assist residuals in complying with normality. Outliers will be removed only when needed.

**8. The power analysis or other justification for the number of participants and trials.**

The details on the power calculations for each objective are listed below.

**For Objective #1,** power calculations were based on preliminary data collected and a confirmatory factor analysis model using the three composite measures. The number of samples required to achieve a given effect was explored using the R package *semPower*.[19] Various root mean square error of approximation (RMSEA) levels were used to assess

estimated effect and power. RMSEA = 0.03 was used as estimated effect and *a priori* power analysis using $\alpha = 0.05$, $\beta = 0.10$, $df = 51$, and the number of variables = 12 showed that 816observations are required. The same calculation with RMSEA = 0.02 and 0.01 showed that 1834 and 7325 observations are required, respectively. We have opted for RMSEA = 0.02 with 1834 observations.

Power calculations for correlation tests were based on preliminary data collected and correlation tests evaluating the desired outcome. For sample size calculation, the correlation coefficients were calculated and the required sample size was determined using the R package *pwr* using power = 0.90 and significance level 0.05. The lowest magnitude correlation coefficient was -0.43, requiring a sample size of 53.

**For Objective #2,** power calculations were based on preliminary data collected and linear models evaluating desired outcome, format, and content aspects of the transformational practices. For sample size estimation, $f^2$ was calculated using the multiple $R^2$ in the R package *pwr*[1] using power = 0.90, significance level = 0.05. Since the differences were not normally distributed, the explanatory measure of effect size from the Yuen's test on trimmed means for dependent samples was also calculated using the R package *WRS2*.[2]

*Desired outcome* - To detect effects at a 0.05 significance level and 0.90 power, 1553 samples are needed for the interconnectedness model (Cohen's $f^2 = 0.00996$), 2826 for the extended human capacities model (Cohen's $f^2 = 0.0055$), and 361 for the well-being model (Cohen's $f^2 = 0.043$). We retained 2900 as the sample size for this objective.

*Format* - To detect effects at a 0.05 significance level and 0.90 power, 661 samples are needed for the interconnectedness model (Cohen's $f^2 = 0.027$), 1391 for the extended human capacities model (Cohen's $f^2 = 0.013$), and 325 for the well-being model (Cohen's $f^2 = 0.05$).

*Content* - To detect effects at a 0.05 significance level and 0.90 power, 441 samples are needed for the interconnectedness model (Cohen's $f^2 = 0.05$), 862 for the extended human capacities model (Cohen's $f^2 = 0.026$), and 332 for the well-being model (Cohen's $f^2 = 0.068$).

**For Objective #3,** power calculations were based on preliminary data collected and linear models evaluating individual characteristics as potential predictors.

*Demographics* - To detect effects at a 0.05 significance level and 0.90 power, 436samples are needed for the interconnectedness model (Cohen's $f^2 = 0.06$), 667 for the extended human capacities model (Cohen's $f^2 = 0.04$), and 402for the well-being model (Cohen's $f^2 = 0.07$). We retained 667 as the sample size for this objective.

*Other Predictors* - To detect effects at a 0.05 significance level and 0.90 power, 181 samples are needed for the interconnectedness model (Cohen's $f^2 = 0.21$), 263 for the extended human capacities model (Cohen's $f^2 = 0.14$), and 180 for the well-being model (Cohen's $f^2 = 0.21$).

**9. The methods for randomization in the study.**

Randomization was used in three of the tasks (see section 10 for more details).

Bubble Task: The movement of the bubbles to form a circle is linked to a random number generator (pseudo-random generator KISS07 0.9 implemented in Javascript).

Quick Remote Viewing Task: The "Math.random()" function of Javascript is used to randomly choose images.

Jar Task:The "Math.random()" function of Javascript is used to randomly choose images.

**10. A detailed description of the study procedure.**

### Participants

*Inclusion criteria*: Participants aged 18 years or older who are able to read and understand the consent form and complete the survey and tasks, and who have access to the survey online or at the IONS EarthRise Learning Center will be eligible to participate. *Exclusion criteria:* Children will not be included in this study.

### Recruitment

Participants will happen through various methods. IONS has a website page dedicated to the IDL research program. Potential workshop leaders will be provided this link to explore the opportunity. The EarthRise reservations department will also discuss this opportunity with potential workshop leaders and individuals visiting EarthRise. Postcards, flyers, IONS blog news and newsletters will be distributed to community networks, previous workshop leaders and various conferences and meetings to promote the research program. All study activities are approved by the IONS Institutional Review Board.

### Study Procedures

Volunteers will receive a link to the IDL survey that they will complete prior to their transformational practice. The survey can be completed on any device that has access to the internet. They will enter their first name and date of birth. This will allow the program to generate an anonymized ID. They will then review the informed consent form. Only volunteers who agree to the consent may proceed. Participants will then complete a series of online tasks and self-report questionnaires measuring interconnectedness, extended human capacities, and well-being (see measures below). Participants will complete the same survey after their transformational practice. Participants will be advised to complete the survey as close as possible to the beginning and ending of the workshop. Because of travel to and from the workshop site and other uncontrollable variables, we anticipate that there will be some variability in when participants complete their survey. The most controlled situation will be when administered at the physical IONS Discovery Lab on our campus before and after a workshop being held there.

## Measures: Questionnaires and Tasks in Survey

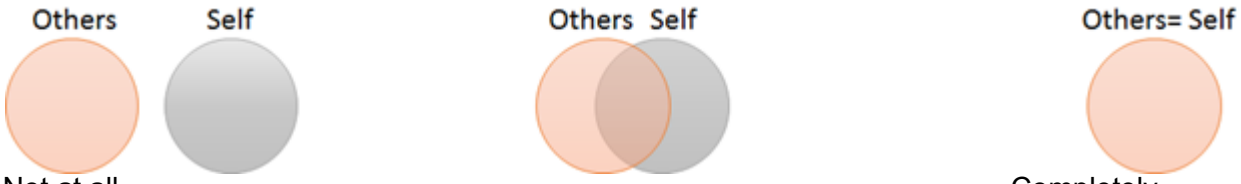
**Factor #1 Interconnectedness**: The interconnectedness factor includes three measures.

-*The Cloninger Self-Transcendence Scale*[3] - This measures uses the 15-item self-transcendence subscale of the Cloninger 125-item Temperament and Character Inventory.

Cloninger et al. (1993) defined self-transcendence as “the extent to which a person identifies the self as…an integral part of the universe as a whole” (p. 975). Thus, a person high on self-transcendence is keenly aware of being part of a larger whole—of being in a spiritual union with God or nature. Participants answer each item with a slider anchored with “Definitely False”(0) and “Definitely True” (10). The scale is scored by summing all 15 items and then dividing by 10. Total scores range from 0-15.

-*Inclusion of Nature in Self (INS)*[4,5] - Interconnectedness with Nature is evaluated with the INS graphical single-item scale containing seven circle pairs with differing overlap of the two circles labeled ‘nature’ and ‘self’. We used an adapted form with three graphical representations representing the Self and Nature completely separated, partially and completely overlapped. The scale asks the participant to “Please move the slider below to the picture that best describes your relationship with the natural environment. How interconnected are you with nature? ("Self" = you; "Nature" = the environment)?” Slider with a range of 0-100; with 0 being anchored by Not at All and 100 being anchored by Completely. The item results with one score between 0 and 100 with 100 representing the greatest interconnection with nature. The INS test-retest correlations are very high after four weeks.[5] Additionally, compared to other multiple-item scales, the INS scale has been found to be very accurate for measuring individual differences in connectedness with nature.


-*Inclusion of the Other in Self (IOS)*[6,7] - Interconnectedness with ‘other’ is measured using the IOS. Social psychologist Arthur Aron and colleagues developed the single-item Inclusion of Other in the Self (IOS) scale to measure how close the respondent feels with another person or group.[7] Feeling connected with other people drives outcomes that relate to social mobility. For instance, in studies where the “other” on the IOS scale is a romantic partner, high scores are associated with marriage quality and can even predict whether a dating couple will still be together in three months.[6] We used an adapted form with three graphical representations representing the Self and Other completely separated, partially and completely overlapped. Participants move a slider to represent their answer on a sliding bar anchored by Not at all and Completely. The scale asks the participant to “Please move the slider below to the picture that best describes your relationship with other people. How interconnected are you with others? ("Self" = you; "Others" = other people)?” The slider is anchored by 0 representing Not at All and 100 representing completely. Higher scores represent greater subjective interconnection with ‘other’.



**Factor #2 Extended Human Capacities:** Three online tasks will evaluate the participants before and after the workshop.

-*Jar Task* - The jar task is designed to evaluate a person's ability to generate accurate information without using logical or rational means. The participant is presented with a picture of a jar containing items. The image is displayed for only 2 seconds such that they are not able to consciously count the number of items. The participant 'guesses' how many items they believe are in the jar. The participants are shown different images at their pre- and post-assessments. The score for this task is the absolute value of the participant's response minus the actual number. The smaller the difference the more accurate the participant was able to 'know' the number of items in the jar.

-*Quick Remote Viewing Task* - For this task, a blank frame is displayed in the center of the screen, and 5 photos are displayed below it. The participant chooses which of the 5 images they think will appear in the blank space. After they select the picture, the target picture is shown in the blank frame and the participant may press a button to move to the next trial. The participant completes 20 trials. The percentage of "hits" is recorded over their 20 trials.

-*Bubble Task* - The bubble task is a psychokinetic task. The participant is first asked to relax for 7 seconds. Small bubbles then start moving on the screen and the participant is asked to concentrate to make the bubbles form a circle for 15 seconds. Then, the participant asked to relax for 7 seconds. The movement of the bubbles to form a circle is linked to a random number generator (pseudo-random generator KISS07 0.9 implemented in Javascript). The normal function of the random number generator results in a value of zero for this task. If the participant is able to affect the random number generator, then their values would deviate away from zero. The score is the absolute value of the difference between the mean random number during the focus period compared to the rest period. Greater numbers represent a greater psychokinetic effect.

**Factor #3 Well-Being:** The well-being factor includes overall well-being, positive and negative mood, and quality of sleep and pain over the last 24 hours.

-*Arizona Integrative Outcomes Scale (AIOS)*[8] - This is a single item, visual-analogue self-rating scale that evaluates overall subjective sense of well-being. Participants are asked, "Please reflect on your sense of well-being, taking into account your physical, mental, emotional, social, and spiritual condition over the past 24 hours. Please move the slider below to a point that summarizes your overall sense of well-being for the past 24 hours." The slider goes from 0-100 with 0 being anchored by "Worst you have ever been" and 100 anchored by "Best you've ever been." The scale results in one value with larger values indicating greater well-being. The scale was valid in discriminating between patients and caregivers. Convergent and divergent validity was significant compared to Global Health Index (0.38) and Global Severity Index (-0.41), negative affect (-0.41), and positive affect (0.56) of the Positive and Negative Affect Scale.

-*Positive and Negative Affect Scale (PANAS)*[9,10] - Mood is measured with this 10 item scale that is rated using a 5-point Likert scale (1 - Very slightly or not at all, 2 - A little, 3 - Moderately, 4 - Quite a bit, 5 - Extremely). Participants are asked, "Thinking about yourself and how you normally feel, to what extent do you generally feel:...(Upset, Hostile, Alert,

Ashamed, Inspired, Nervous, Determined, Attentive, Afraid, Active)." There are five items each for positive and negative affect. The scale is scored by summing positive and negative items. The scale score ranges from 5-25 for each subscale, with higher scores representing higher levels of positive or negative affect.

**-***Sleep Quality Scale (SQS)*[11] - Acute Sleep is a single-item 11-point numeric scale measuring acute sleep, or sleep quality. Participants are asked, "How would you rate the quality of your sleep LAST NIGHT?" moving the slider for their response. The slide is anchored by "Best possible sleep" (0) and "Worst possible sleep" (10).

-*The Numeric Pain Rating Scale (NPRS)*[12] - The NPRS is a visual analog scale in which a respondent selects a whole number (0–10 integers) that best reflects the intensity of his/her pain. The common format is a horizontal bar or line. Similar to the VAS, the NPRS is anchored by terms describing pain severity extremes. Participants are asked to report pain intensity "in the past 24 hours" on a slider from position 0 being "No pain" to position 10 being "Worst possible pain". The pain NRS has been found to be a reliable scale in terms of inter- or intra-rater repeatability and its ability to detect change.[13–15]

**Transformation Practices Categories** All workshop leaders are asked to rate their workshops desired outcome, format, and content and format. These categories will be used for the analysis of research question #2 regarding transformation practices and their effects on the three factors.

*Desired Outcomes* - "Select the outcome(s) that you hope will be achieved or enhanced by attendees of your workshop. Check all that apply" Answer choices: Interconnectedness, Accessing information and/or energy from beyond space and time, and/or Well-being.

*Format* - "What is the general activity format of your workshop? Check all that apply" Answer choices: Lecture (didactic), small groups, paired, discussion, movement, outside/in nature.

*Content* - "The following is a list of categories of noetic practices, including examples of individual practices that may be classified within that category. The examples are not extensive -- there may be additional examples of practices that could be included within each category. The categories are not exclusive -- individual practices may fall into multiple categories. Select ALL the categories of practice that are explored in your workshop." Answer choices:

- Altered States of Consciousness (Invoking theta/delta, hypnosis, psychedelics)
- Arts & Creativity (Expressive and materials arts, writing, music)
- Death, Dying & Beyond (Channeling, mediumship with the deceased, grief work)
- Dreamwork (Lucid dreaming, dream interpretation, intentional dreaming, Tibetan Dream Yoga)
- Embodied practices (Yoga, Tai Chi, 5-senses, 5-rhythms, authentic movement, somatic modalities)
- Health & Healing (Subtle energy healing, biofield, diagnostic practices, mindful/intuitive eating, chakra work, mind-body medicine practices)
- Intention (Vision boards, manifesting processes, positive affirmations, intention-setting)
- Intuition (Inner knowing, divination, sixth sense)
- Meditation/Contemplation (Mindfulness, guided meditation, visualization, mantras, expressive meditation, walking meditation)

- Nature practices (Working with elements, nature baths, vision quests, animal communication)
- PSI/Parapsychology (Clairvoyance-sentence, audience etc, remote viewing, psychokinesis, precognition, channeling/mediumship, quantum phenomena)
- Positive Psychology Practices (Gratitude, altruism, awe, affirmations, compassion)
- Sound/Aural Practices (Sound baths, singing bowls, kirtan, raga, sound as creator, music)
- Spirituality (Prayer, ritual, invocation, chanting, religious practices)
- Technology Tools (Brain entrainment, AI (e.g. loving AI robot), light/sound machines, biofeedback tools, HeartMath)

**Potential Predictors:** The following potential predictors that are measured before the workshop will be used in research question #3 about individual characteristics.

-*Demographic variables* - age, gender, education, relationship status, race, income, childhood and current religious/spiritual affiliation and importance.

-*Psychiatric treatment* - Participants are asked, "Are you currently being treated for a psychiatric condition?"

**-***Single General Self-Rated Health Question (sGSRH)*[16] - This is a single item subjective rating of a person's overall health. Participants are asked, "In general, how would you rate your overall health?" which they rate as Poor, Fair, Good, Very good or Excellent. Persons with ''poor'' self-rated health had a 2-fold higher mortality risk compared with persons with ''excellent'' self-rated health. Participants' responses to a simple, single-item GSRH question maintained a strong association with mortality even after adjustment for key covariates such as functional status, depression, and comorbidity.

-*Brief Five Inventory - 10 (BFI-10)*[17]- The BFI-10 is a ten-item scale asking the participant to describe their personality on a rating scale of disagree strongly to agree strongly based on ten statements. These correspond to the big five personality characteristics of extraversion, agreeableness, conscientiousness, neuroticism, and openness with two items per subscale After reverse scoring one item per subscale, item scores are averaged for subscale values. Overall, results indicate that the BFI-10 scales retain significant levels of reliability and validity compared to the longer scales.

-*Noetic Experience and Belief Scale (NEBS)*[18] - The scale contains ten statements about the belief in intuition, non-local consciousness, extraterrestrials, precognition, life after death, contact with the dead, clairvoyance, psychokinesis, telepathy, and automatism, which the participant rates on a slider from Disagree Strongly (0) to Agree Strongly (100). For each of the ten items, participants also answered whether they had ever personally experienced the phenomenon on a slider scale from Never (0) to Always (100). The sliders allow for gradation of belief and experience rather than binary or Likert responses as are often included in these types of questionnaires. The scale results in global scores for paranormal belief and paranormal experience by averaging the ten-items for each subscale (0-100). Item scores can also be used individually for scores on each specific category (0-100). The belief subscale Cronbach's alpha = 0.90; Experience subscale Cronbach's alpha of 0.93. The NEBS had high test-retest reliability for both the belief ($r$ = 0.83, $p$ <0.00005) and experience values ($r$ = 0.77, $p$ <0.00005).

-*Meditation practice* - Participants are also asked, “Do you meditate?” Answer choices are Yes or No. Participants are also asked how many minutes per day and for how long they have been meditating but these will not be included in these analyses.

-*Adverse life and traumatic events* - Participants are asked “Have you experienced an intense adverse life event(s) or traumatic event(s)?” Answer choices are Yes or No. Participants are also asked “From your perspective today, what type of influence did the adverse life or traumatic event(s) have on your life?” which the participant rates on a slider from Very Negative (0) to Very Positive (100).

-*Moments of clarity or profound insight* - Participants are asked “Have you experienced a moment of clarity or profound insight?” Answer choices are Yes or No. Participants are also asked “From your perspective today, what type of influence did the moment of clarity or profound insight have on your life?” which the participant rates on a slider from Very Negative (0) to Very Positive (100).