Study Registration for the KPU Study Registry

The registration information for the study is given below. Each section can be expanded as needed.

1. The title or name of the experiment (for listing the experiment in the registry).
   The Psychology and Parapsychology of Spiritual Emergency

2. The name, affiliation, and email address for the lead experimenter(s) for the study.
   Dr. Lance Storm
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3. A short description or abstract of the purpose and design of the experiment.
   A defining aspect of Spiritual Emergency (SE) is ‘psychic opening’ which may predict psi performance. This study will assess psychological and parapsychological aspects of SE to differentiate it from psychosis and its psi-inhibitive symptoms (e.g., alogia, depression, anxiety, and stress). This study uses a revised shamanic-like journeying protocol—audio administered via headphones as a guided imagery plus relaxation (a.k.a. ‘audio’)—which accords with Storm and Rock’s (2009) Imagery Cultivation Model. The study seeks to gain insight into the psi performance differences between two groups: (i) those experiencing spiritual emergency (a.k.a. SE-experients) and (ii) controls comprised mainly of university students.

4. A statement or list of the specific hypothesis or hypotheses being tested, and whether each hypothesis is confirmatory or exploratory. (confirm/explore guidance)
   All hypotheses are effectively exploratory:
   1. There is group difference with SE-Experients scoring higher than non-SE-cohorts (i.e., controls) on psi scoring.
   2. Psi-hitting correlates positively with spirituality (SIS), spiritual emergency (SES), mysticism (MS), and paranormal belief (RASGS)—but is not expected to correlate with alogia (EPSS-AL), depression, anxiety, or stress (DASS-21).

5. The planned number of participants and the number of trials per participant.
   200 (one trial each).
6. A statement that the registration is submitted prior to testing the first participant, or indicating the number of participants tested when the registration (or revision to the registration) was submitted.

Testing is scheduled to start late March 2018. It is planned that testing will not commence until after registration.

The following additional information is needed for studies that include confirmatory analyses:

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 classical analyses, permutation and bootstrap analyses, Bayesian analyses, and classification analyses are provided in the statistics registration document. (This information can be included in section 4 above for simple experiments.)

The study is mainly exploratory given it has mostly new design parameters (i.e., the ‘audio’ treatment is revised), and has not been tested on a clinical sample of individuals experiencing spiritual emergency. However, one study by Storm (submitted) using the revised audio has outcomes indicating the audio may positively influence psi outcomes (in a non-clinical sample). All participants will be administered the audio. A communication anomaly (psi) will be assumed if \( p < .05 \) results from the statistical test. Multiple analysis correction for Hypothesis 2.

There are no clear precedents as to the outcomes, but theoretically certain predictions are made so testing will be one-sided—and, it is expected that there will be (i) group differences in psi performance demarcated by clinical (SE) and non-clinical (control) categorization, with clinical scoring higher than non-clinical (see Hypothesis 1 in section 4 above), and (ii) significant positive psi correlates on specific measures (see Hypothesis 2 in section 4 above).

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

There are two groups; 100 participants in each (total \( N = 200 \)). For the present study, it is expected that the hit rate will be higher in the clinical group compared to the control group, where MCE = 20% since the present study is a ‘5-choice’ experimental design. The 5-choice design is extremely rare (only one in a ganzfeld database of 67 studies—Storm et al., 2010) so I was not able to find suitable studies to guide me in setting an appropriate sample size. This

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2. I am using Ed May’s (May et al., 2012) picture set designed with 12 Groups containing 5 photos in each of five categories, so that each target set has 5 photos per array (i.e., per trail).
design was governed more by time constraints and participant availability, and 200 was the highest number of participants two people (myself and Monika Goretzki) could reasonably expect to test in eight months given a 1/4-time work load and other commitments.

9. The methods for randomization in the experiment. If a pseudorandom generator is used, specify how and when the seed(s) will be obtained.

For the control group (see Participants, section 10), Psychology I students sign up online and choose their own time for testing; other participants volunteer by ballot-box, and are contacted via mobile phone (SMS) by the experimenter—a series of time slots are offered; participant selects most suitable time. Randomization of targets is also conducted using a true-noise RNG (Schmidt, 1970). The SE-Experients are found through various websites and relevant institutes.

10. A detailed description of the experimental procedure.

Participants
A total of 200 will be targeted from the various populations described below:

Group 1: Spiritual Emergency Types (N = 100): IKON (past students - Adelaide campuses), Spiritual Emergency Network Australia, Yoga and mindfulness and professional contacts. Also, online groups (e.g., www.psychforums.com; www.shalomplace.org; www.spiritualforum.org) and Facebook groups (e.g., Osho, Spirituality, Mental Health, Positive Psychology, Spiritual Emergency Network, Psychology).

Group 2: Controls (N = 100): First-Year Psychology students of the School of Psychology, University of Adelaide.

Participants will be tested on computer in the two experimenters’ (L.S. & M.G.) laboratory, or online.

Procedure
SE-Experients Group
SE-Experients are contacted via SMS or email to arrange a time for on-site testing (office of experimenters, L.S. & M.G.), or (in some cases) are given the website address to go online (password controlled, one-time access only) to complete the measures and the psi test once they have been approved as suitable SE-Experients (they will complete the SES in advance of the formal experiment). Inclusion in the SE-Experients group is based on SES scoring and interview performance. If SE-Experients do not qualify due to low SES scoring only (irrespective of other scoring), their data may be considered for the control group.

Control Group
Control participants (First-Year Psychology students) sign up on the School of Psychology website for testing in the experimenters’ laboratory (one session to complete the measures and the psi test).
Questionnaires
Instructions for all 200 participants outlining the experiment are presented on-screen, and if participants choose to participate, they will move to another page which lists a series of consent statements. Participants then provide demographics details, and complete the EPSS, SIS, SES, MS, DASS-21, and RASGS. These tests are presented in random order.

Imagery Cultivation (IC)
Step 1: Via on-screen message, all 200 participants will be (i) informed that they will undergo the IC procedure (duration: 9 1/2 minutes); (ii) asked to relax in their chair, start the pre-recorded instructions, close their eyes, and listen to pre-recorded instructions adapted from Harner (1990): Excerpt: “… Now visualise the future target photograph before you. Study the photograph in all its detail. Remember this information for later.” After the IC procedure, participants are instructed on-screen to make notes (mentation) about their impressions of the future target. At this stage, neither the participant, nor the experimenters (L.S. or M.G.), know what the target is since it has not been generated.

Step 2: Decoys are generated using a randomization method incorporated in the computer application. The selection procedure follows May et al.’s (2012) recommendation. First, the computer randomly selects one Group of twelve, followed by one Category of five, from the fuzzy set encoded target pool totalling 300 photographs. Target selection does not take place until Step 4.

Step 3: Ranking—once the set of five photos appears on-screen, the experimenter instructs the participant to rank the five photographs from 1 to 5 (#1 = ‘most likely’ photo that matches the mentation, to #5 = ‘least likely’ photo that matches the mentation). The participant is permitted to re-read his/her mentation, in order to prompt his/her memory, thereby assisting him/her in the ranking process. The experimenter does not offer personal interpretations of the mentation as this may mislead participants. The experimenter makes sure that the participant types under each photo the respective rank number.

Step 4: The computer generates the target photograph from the five that were previously presented on-screen (MCE = 20%). The computer automatically presents the target as feedback to the participant and gives the rank number for that photo (if the photo is ranked #1, it is a Direct Hit). The participant is debriefed.

Data Analyses
The analytical component of this study involves testing (i) for SE-Experiencers/non-SE-cohorts group differences on paranormal performance (Direct Hitting & Mean Ranks Score); data will be tested for group differences using Independent Samples t test; and (ii) correlates between psi outcomes (Direct Hitting & Mean Rank Score) and the eight variables (EPSS-AL, SIS, SES, MS, DASS-21 subscales [three], and RASGS)—requiring correction for multiple analysis—in accordance with the hypotheses given above.

References


