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).

Associations among Experience, Confidence, Transliminality and Ability to Locate and Describe Targets in Experienced Remote Viewers

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

Jennifer Lyke, Ph.D.

Stockton University

Jennifer.lyke@stockton.edu

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

This study proposes a novel protocol to explore associations among remote viewer characteristics and accuracy in identifying target characteristics. Findings will provide a basis for future research into potential mechanisms of successful remote viewing.

Thirty-five volunteer remote viewers will be asked to locate targets on a map that have been randomly placed within a 23-acre area and to describe aspects of the targets themselves. Blind judges will calculate a percentage match for participants' target descriptions of the actual target and three decoy targets. They will also rank order the accuracy of descriptions of the target and three decoys for each participant. Participants will also complete a demographic questionnaire, describe their level of experience with remote viewing, complete a measure of transliminality, and describe their confidence in the target location and target description tasks. This procedure will be used to test the following hypotheses:

1. Participants will identify the location of a target more closely than expected by chance.
2. Participants' descriptions of target characteristics will match the actual target more closely than the decoys.

3. Judges will identify the actual target as the best match for participants' descriptions more often than expected by chance.
4. Participants' location accuracy will correlate with description accuracy.
5. Participant experience will correlate with both location accuracy and description accuracy.
6. Participant location and description confidence will correlate with location accuracy and description accuracy, respectively.
7. Participants' gender and transliminality will interact to predict both location accuracy and description accuracy.

4. A statement or list of the specific hypothesis or hypotheses being tested, and whether each hypothesis is confirmatory or exploratory. ([confirm/explore guidance](#))

1. *Participants' location accuracy will be significantly lower than expected by chance.* **CONFIRMATORY**

2. *Participants' description accuracy will correspond better to the correct target than the decoy targets at a rate greater than chance.* **CONFIRMATORY**

3. *Judges will identify the actual target as the best match for participants' descriptions more often than would be expected by chance.* **CONFIRMATORY**

4. *Participants' description accuracy will be significantly related to location accuracy.* **EXPLORATORY**

5. *Participant experience will correlate with location accuracy.* **EXPLORATORY**

6. *Participant experience will correlate with description accuracy.* **EXPLORATORY**

7. *Participant location confidence will correlate with location accuracy.* **EXPLORATORY**

8. *Participant description confidence will correlate with description accuracy.* **EXPLORATORY**

9. *Participant transliminality and gender will interact to significantly predict target location accuracy.* **EXPLORATORY**

10. *Participant transliminality and gender will interact to significantly predict target description accuracy.* **EXPLORATORY**

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

There will be a minimum of 35 participants with one trial per participant. However, if more than 35 participants are available, data collection will continue until December 15, 2019 in order to include as many eligible participants as possible.

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.

This registration is being submitted prior to testing the first participant.

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.)**

Prior to any analyses, participants who do not have prior remote viewing experience or who failed to complete any of the assessments will be eliminated from the data.

1. *Participants' location accuracy will be significantly lower than expected by chance.*

    A one-sample t test (one-tailed) will be conducted to compare the location accuracy distribution to the average distance between two points within the map area (as calculated with the formula described by Burgstaller and Pillichshammer, 2009). It is expected that the target distances will be significantly less than the distance expected by chance ($p < .05$).

2. *Participants' description accuracy will correspond better to the correct target than the decoy targets at a rate greater than chance.*

    To contrast participants' description accuracy for the actual target versus the decoys, a standardized score will be calculated by subtracting the mean of judges' ratings of both the target and decoys from the rating of the target, and then dividing the difference by the standard deviation of all four ratings. A one-sample t test (one-tailed) will then be conducted to compare this standardized score to zero. It is expected that the standardized score of participants' target description accuracy will be significantly greater than zero ($p < .05$).

3. *Judges will identify the actual target as the best match for participants' descriptions more often than would be expected by chance.*

    A binomial test (one-tailed, $p < .05$) will be used to compare the frequency with which the judges determine the actual target to be the best match for participants' descriptions to that expected by chance ($p = .25$).

4. *Participants' description accuracy will be significantly related to location accuracy.*

   A Pearson Product Moment correlation will be calculated between participants' description accuracy and location accuracy. If necessary, one or both variables may be transformed to improve normality and satisfy the assumption of linearity. A significant negative correlation is expected ($p < .05$).

5. *Participant experience will correlate with location accuracy.*

   A Pearson Product Moment correlation will be calculated between participant experience and location accuracy. If necessary, one or both variables may be transformed to improve normality and satisfy the assumption of linearity. A significant negative correlation is expected ($p < .05$).

6. *Participant experience will correlate with description accuracy.*

   A Pearson Product Moment correlation will be calculated between participant experience and target description accuracy. If necessary, one or both variables may be transformed to improve normality and satisfy the assumption of linearity. A significant positive correlation is expected ($p < .05$).

7. *Participant location confidence will correlate with location accuracy.*

   A Pearson Product Moment correlation will be calculated between participant location confidence and location accuracy. If necessary, one or both variables may be transformed to improve normality and satisfy the assumption of linearity. A significant positive correlation is expected ($p < .05$).

8. *Participant description confidence will correlate with description accuracy.*

   A Pearson Product Moment correlation will be calculated between participant description confidence and target description accuracy. If necessary, one or both variables may be transformed to improve normality and satisfy the assumption of linearity. A significant positive correlation is expected ($p < .05$).

9. *Participant transliminality and gender will interact to significantly predict target location accuracy.*

   A hierarchical linear regression will be conducted using transliminality score and gender to predict location accuracy. It is expected the overall model will be significant ($p < .05$) as well as the change in R^2 when gender is added to model ($p < .05$).

10. *Participant transliminality and gender will interact to significantly predict target description accuracy.*

    A hierarchical linear regression will be conducted using transliminality score and gender to predict description accuracy for the actual target. It is expected the overall model will be significant ($p < .05$) as well as the change in R^2 when gender is added to model ($p < .05$).

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

The minimum number of participants is chosen to produce sufficient power for the statistical analyses given the predicted effect size of 0.385, which is based on meta-analyses of prior research with experienced remote viewers (Baptista, Derakhshani & Tressoldi, 2015). However, if more than 35 participants are available, as many participants as possible will be included up until the cutoff date of December 15, 2019.

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 each participant, a random number generator (Random.org) will be used to select one of the targets to be placed at a location on the map. The random number generator will also be used to select the location on the map by choosing latitude and longitude coordinates from within the coordinates outlining the area.

10. A detailed description of the experimental procedure.

Participants

The participants will be at least 35 experienced remote viewers found through volunteers on the International Remote Viewing Association listserv and snowball sampling. Participants are expected to be approximately 50% female. The minimum number of participants is chosen to produce sufficient power for the statistical analyses given the predicted effect size of 0.385, which is based on meta-analyses of prior research with experienced participants (Baptista, Derakhshani & Tressoldi, 2015).

Materials

Demographic questionnaire. Participants will complete an Informed Consent and demographic questionnaire, which includes information regarding the participant's amount of prior experience with remote viewing.

Revised Transliminality Scale (RTS; Lange et al., 2000). This scale measures transliminality with seventeen statements, such as "At times I perform certain little rituals to ward off negative influences", rated true or false. Scores range from zero to seventeen, depending on how many statements are endorsed, with higher scores indicating higher levels of transliminality. This measure has demonstrated adequate reliability, construct validity, and predictive validity (Lange et al., 2000).

Target set. A set of four possible targets will be created, one of which will be randomly selected to be the placed at the target location. The other targets will be used as decoys during the judging phase of the project. The targets will be selected by Experimenter 2 to be as distinct from each other as possible in four categories (form, texture, color, and intended use). Experimenter 2 will be the only person who

will have any knowledge of the targets until after the blind judging has occurred. Experimenter 2 will have no contact with participants.

Map and instructions. Participants will be given a map of the area where the target is located. The area covers 23 acres in northern Colorado. Participants will be instructed to use whatever remote viewing technique they prefer to identify a point on the map where they believe target is located. They will also be asked to provide verbal descriptions and any drawings of their impressions of the target (potentially including, but not limited to, form, texture, color and intended use).

Procedure

Prior to beginning the study, Experimenter 1 will attain Institutional Review Board approval and register the hypotheses and data analysis plan with the Koestler Parapsychology Unit (KPU).

Experimenter 2 will create four targets as described above. For each participant who enters the study, Experimenter 2 will use a random number generator (Random.org) to select one of the targets to be placed at a location on the map. Experimenter 2 will also use the random number generator to select the location on the map by choosing latitude and longitude coordinates from within the coordinates outlining the area. If a location is selected where the target material cannot be placed (e.g., geographical features make it impossible), the procedure will be repeated until a site is chosen where the target can be located. Experimenter 2 will place the chosen target at the chosen location for a specific duration of 24 hours during which the participant will use remote viewing to identify the target location and characteristics. Following all data collection and prior to unblinding, Experimenter 2 will send a copy of the target data to be held at the KPU.

Experimenter 1, who will be blind to the entire target set as well as the location of the chosen target, will email participants a link to the informed consent, demographic information form and Revised Transliminality Scale. Participants will also receive a blank copy of the map with the instructions to use remote viewing to identify a location on the map where they believe the target to be placed as well as any characteristics of the target they perceive (including form, color, texture, intended use, etc.). They will be given a 24-hour period during which they will need to remote view the target. During that time period, they will respond by making a mark on the map where they believe the target to be located. They will then scan and email the map back to Experimenter 1 along with their written and drawn impressions of the target, level of confidence in their location accuracy, and level of confidence in their description accuracy.

<div align="center">

Judging and Variable Calculation

</div>

Description accuracy. After all data collection, Experimenter 1 and two research assistants, who are all blind to the entire target set, will create lists of characteristics each participant uses to describe their target. They will then be unblinded to the set of targets but not to which specific target was chosen for each participant. For each participant, they will individually review each characteristic used to describe the target and rate each of the four potential targets in terms of whether the characteristic accurately describes that target. After they make individual determinations, the judges will confer with each other

to form a collective opinion regarding whether each characteristic applies to each potential target. If they judge that it does, that will be a hit. If not, it will be a miss. The targets will then be rank ordered according to hit percentage. In the event of a hit percentage tie, the judges will break the tie by collectively agreeing on which of the two potential targets the characteristics describe best. Thus, for each participant, targets will have both a hit percentage and a rank from one to four, with one corresponding to the highest hit percentage.

Location accuracy. Experimenter 1, who is blind to the target location, will import participants' target location maps into ArcGIS software (www.arcgis.com). After the KPU has a copy of the target data from Experimenter 2, Experimenter 1 will send all participant maps to Experimenter 2, who will calculate each participant's distance from the actual target location using ArcGIS.

Experience. Participants' experience will be calculated by creating a standard score (Z score) for each of the three indicators of experience (self-rating on the 1-10 Likert scale, amount of time the participant has practiced remote viewing, and amount of time the participant has spent in formal remote viewing training). Total experience will be the sum of these three scores.

After all judging and variable calculation and before unblinding, Experimenter 1 will send a copy of judging results and location data to be held at the KPU. Experimenter 1 will then be unblinded to the actual target and target location chosen for each participant. Experimenter 1 will then send feedback to the participants regarding their accuracy in locating and describing the target.

References

Baptista, J., Derakhshani, M. & Tressoldi, P.E. (2015). Explicit anomalous cognition: A review of the best evidence in Ganzeld, forced-choice, remote viewing and dream studies. In E. Cardeña, J. Palmer, & D. Marcusson-Clavertz (Eds.), *Parapsychology: A Handbook for the 21st Century* (192-214). Jefferson, NC: McFarland.

Burgstaller, B. & Pillichshammer, F. (2009). The average distance between two points. *Bulletin of the Australian Mathematical Society, 80*(3), 353-359.

Lange, R., Thalbourne, M. A., Houran, J. & Storm, L. (2000). The Revised Transliminality Scale: Reliability and validity data from a Rasch top-down purification procedure. *Consciousness and Cognition, 9,* 591-617.