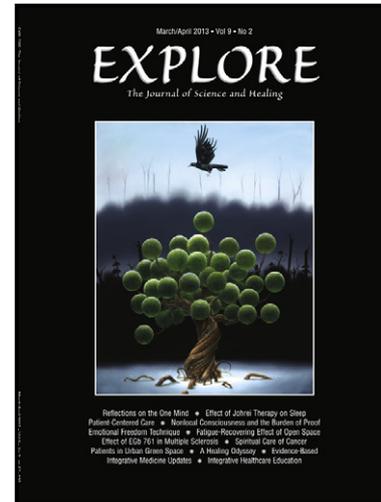# Author's Accepted Manuscript

Anomalous information reception by research Mediums under blinded Conditions II: Replication and extension

Julie Beischel, Mark Boccuzzi, Michael Biuso, Adam J. Rock

Anomalous Information Reception by Research Mediums under Blinded Conditions II: Replication and Extension

Julie Beischel[a,1], Mark Boccuzzi[a], Michael Biuso[a], Adam J. Rock[b]

[a]Windbridge Institute, 1517 N Wilmot Rd #254, Tucson, Arizona, USA, info@windbridge.org

[b]School of Behavioural, Cognitive, and Social Sciences, University of New England, Armidale, NSW, Australia

[1]Corresponding author

1517 N Wilmot Rd #254, Tucson, Arizona, USA, beischel@windbridge.org

Abstract

Context: The examination of the accuracy and specificity of information reported by mediums addresses the existence of non-local information transfer.

Objective: This study was designed to replicate and extend a previous methodology achieving positive findings regarding the anomalous reception of information about deceased individuals by research mediums under experimental conditions that eliminate conventional explanations including cold reading, rater bias, experimenter cueing, and fraud.

Design: Mediumship readings were performed over the phone under blinded conditions in which mediums, raters, and experimenters were all blinded.

Participants: Twenty Windbridge Certified Research Mediums participated in 86 readings.

Main Outcome Measures: Accuracy and specificity were assessed through item scores, global reading scores, and forced-choice selections provided by blinded sitters.

Results: (1) Comparisons between blinded target and decoy readings regarding the estimated percent accuracy of reading items ($n=27$, $p=0.05$, $d=0.49$), (2) comparisons regarding the calculated percent accuracy of reading items ($n=31$, $p=0.002$, $d=0.75$), (3) comparisons regarding hits-vs.-misses ($n=31$, $p<0.0001$ and $p=0.002$ for different reading sections), (4) comparisons regarding global scores ($n=58$, $p=0.001$, $d=0.57$), and (5) forced-choice reading selections between blinded target and decoy readings ($n=58$, $p=0.01$) successfully replicate and extend previous findings demonstrating the phenomenon of anomalous information reception, the reporting of accurate and specific information without prior knowledge, in the absence of sensory feedback, and without using deceptive means. Because the experimental conditions of this study eliminated normal, sensory sources for the information mediums report, a non-local source (however controversial) remains the most likely explanation for the accuracy and specificity of their statements.

Keywords: medium, mediumship, anomalous information reception, blinding, non-local, replication

Introduction

Mediums report information about deceased individuals (called *discarnates* here for ease of exposition but not implying independent volition or survival of consciousness) to the living friends or relatives of the discarnates (called *sitters*) during specific episodes (called *readings*). Although mediumship has recently received increased media attention, it is "ancient and ubiquitous across cultures"[1] (p. 9) and has been scientifically investigated since the late 19th century.[2, 3] Modern research with mediums has examined their psychology,[4] phenomenology,[5, 6] neurobiology,[7, 8] and electrophysiology.[9] Contemporary mediumship research also includes the therapeutic potential of mediumship readings for the bereaved[10] and proof-focused studies of the accuracy of the readings mediums provide.[11, 12] A collection of proof-focused experimental

methods exists[13] which allows researchers to optimize the research environment by replicating in the laboratory the natural setting in which mediumship exists while also maximizing experimental blinding and controlling for local, sensory explanations for positive results.

In a study of the information reported by eight claimant mediums under conditions controlling for sensory explanations,[14] each sitter gave a global score to a target reading and a decoy reading and chose which of the two was more applicable to him/her (n=16). The findings included significantly higher scores for target readings (p=.007) and significant reading-choice results (p=.01) and supported the conclusion that certain mediums are capable of anomalous information reception (AIR), the reporting of accurate and specific information about discarnates without prior knowledge about the discarnates or sitters, in the absence of any sensory feedback, and without using deceptive means.

Since the publication of the AIR study, two quantitative studies of mediums' accuracy have been published in which a total of 28 readings were performed.[15, 16] The first[15] (n=7) obtained negative results; the second[16] collected data during two experiments, one (n=12) that was not significant and one (n=9) that was highly significant (p<.0001; although methodological issues[17] were present). Neither group used the previously described methodology[13] although Jensen and Cardeña[15] suggested future improvements in their protocol based on those methods.

The mediumship phenomenon provides an ideal mechanism for examining the acquisition or reception of non-local, non-sensory information in several ways. A specialized participant population is available for repeated investigations. The study of the mediumship phenomenon provides "an opportunity for researchers to confront their own implicit biases regarding the investigation of controversial topics not explainable by current scientific paradigms"[18] as well as mental experiences that are not yet well-understood. In addition, when

experimental conditions eliminate the normal, sensory sources for the information mediums report, a non-local source remains the most likely explanation for the accuracy and specificity of their statements. In turn, this provides a mechanism for the careful study of the limits of consciousness and the anomalous transfer of information.

The current study (AIRII) is a replication and extension of the original AIR study. The aim was to examine mediums' abilities to report accurate and specific information about discarnates through both atomistic (e.g., item-by-item scores) and holistic (e.g., global reading scores and forced binary reading choices) rating methods and under conditions that optimize the research environment and maximize experimental blinding. Twenty credentialed mediums participated in 96 readings.

Methods

Participants

Mediums. The 20 medium participants in this study were Windbridge Certified Research Mediums (WCRMs) who have been screened, tested, and trained using a peer-reviewed eight-step certification procedure.[13] WCRMs live across the US, volunteer to regularly participate in various aspects of research, have demonstrated the ability to report accurate and specific information about individual discarnates under several different controlled laboratory conditions, and agree to abide by specific standards of conduct including only providing readings when specifically requested to do so. Two male and 18 female WCRMs participated in the current study. Upon completion of all of data collection their mean age was 50.81 ± 1.76 years. Three of the 20 WCRMs who participated in the current AIRII study had also participated in the 2007 AIR study; the remaining 17 WCRMs had not.

Sitters. Nearly 1,000 potential research sitters had volunteered to participate in mediumship research by completing an online form through the Windbridge Institute website (www.windbridge.org/sitters.html). Each sitter had reported wanting to hear from one specific discarnate during their reading. The sitters (88% female, 12% male) who scored the discarnate readings (36% female, 64% male) in this study were randomly selected from the general sitter pool using www.random.org to select participant ID numbers. All sitters were 18 years of age or older, resided in the US, and speak and write English as their primary language.

Procedure

Data were collected during 96 mediumship readings that took place between 2009 and 2013. All research readings performed by WCRMs during this time using the methods described are included in the current report (i.e., findings cannot be attributed to 'the file drawer effect.').

The course of the study involved three experiments employing increasing levels of rigor and participant burden: an exploratory study, Experiment 1, and Experiment 2. Each of the 20 WCRMs participated in at least one of the three methods. All readings took place during audio-recorded phone calls with the mediums and experimenter with whom they interacted in different cities if not states. Table 1 summarizes the readings performed, blinding parameters, and data collected in each of the three experiments.

At the start of each reading, the first name of a discarnate was given to the medium. This step is required in order to effectively blind and pair (see Experiment 1, below) readings prior to rater scoring; each reading must focus on an individual discarnate. In addition, the discarnate's first name serves as a target for the medium's mental focus and allows her to complete the cognitive tasks required to perform the reading.

The obvious criticism of this method is that the names themselves provide information to

the medium that can be used for a type of cold reading... Because the mediums are asked

to provide specific information about the physical lives of each discarnate... it seems

unlikely that they could obtain the necessary information solely from these names... In

cases in which the names provide overt evidence about the discarnates' ethnicities and in

turn their probable physical descriptions... or provide other identifying information (e.g.,

religion)... a pair is chosen to include two discarnates of the same ethnicity, religion, etc.

(p. 41-42)[13]

Thus, the names do not provide enough information to influence the blinding required to

examine the phenomenon of AIR.

For each mediumship reading performed, accuracy was rated by the sitters for whom the

readings were intended. These are the only people with the intrinsic knowledge base required to

appropriately score items about the discarnates and, thus, the only raters qualified to assess a

readings' accuracy. Specificity is assessed by comparing the scores from the blinded sitter for

whom a reading was intended (for which the reading would be a 'target') to those given to the

reading by a different blinded sitter (for which that reading would be a 'decoy'). In addition,

requiring mediums to answer specific questions about the discarnates during the readings further

addresses the issue of specificity. Accuracy and specificity are addressed in three ways:

calculated or estimated percentages of accurate statements in transcribed and itemized lists;

individual global scores given to whole readings; and forced-choice selections between blinded

target and decoy readings.

Exploratory Study. In the exploratory study, 28 readings by 14 mediums were performed under circumstances that closely mimic the phone readings which WCRMs regularly provide to clients while also including additional controls.

During this exploratory study, a blinded experimenter performed a three-way phone call with a sitter and a WCRM blinded to information about the sitter and the discarnate beyond the discarnate's first name which she was given at the start of the reading. In Phase 1 (single-blinded), the sitter could hear the medium but was silent and responded to experimenter questions (e.g., 'are you ready to begin?') by pressing keys on the phone so the medium could not hear him/her and remained blinded to the sitter's age, gender, etc. The medium reported free-form information about the named discarnate for roughly 20 minutes. During Phase 2 (unblinded but regulated), the medium was introduced to the sitter by first name. In this 20-minute phase, the medium was permitted, if she chose, to ask the sitter yes-or-no questions to which the sitter could respond "yes," "no," "maybe," "sort of," or "I don't know." During the call, the sitter documented a score[13] at the end of each of the two Phases:

6: Excellent reading, including strong aspects of communication, and with essentially no incorrect information.

5: Good reading with relatively little incorrect information.

4: Good reading with some incorrect information.

3: Mixture of correct and incorrect information, but enough correct information to indicate that communication with the discarnate occurred.

2: Some correct information, but not enough to suggest beyond chance that communication with the discarnate occurred.

1: Little correct information or communication.

0: No correct information or communication.

Additional blinding to control for rater bias was added for Experiments 1 and 2.

Experiment 1. In Experiment 1, 14 WCRMs performed 28 phone readings.

Pairing. Each participating WCRM performed two phone readings, one for each of two discarnates who had been paired using custom software run by an experimenter who did not interact with the mediums. Pairing optimizes the discarnates' differences in five categories (i.e., age at passing, physical description, personality, hobbies, and cause of death) but matches their genders.[13] This maximizes each rater's ability to discriminate between target and decoy readings during scoring (rather than having sitters rate two randomly selected readings that may describe similar discarnates). Pairing also limits sitter participant burden to two readings during scoring and standardizes the language, etc., used in both readings since the same medium provided both.

Blinding. The readings took place under conditions that were more than double-blind (>double-blind; previously called 'fully blind' or 'quintuple blind'). Only the medium and a blinded experimenter participated in each phone reading during which the medium responded to specific questions about a named discarnate, each sitter scored both a target and a decoy reading, and each of three experimenters interacting with the participants were blinded to different information that prevented sensory leakage.[13] Specifically, the blinding used in this protocol includes five levels: (i) the medium is blinded to information about the sitter and the discarnate before and during the reading; (ii) the sitter-raters are blinded to the origin of the readings during scoring; (iii) the experimenter who consents and trains the sitter-raters (Experimenter 1) is blinded to which mediums read which sitters and which blinded readings were intended for which discarnates; (iv) the experimenter who interacts with the mediums during the phone

readings and formats the readings into item lists (Experimenter 2) is blinded to any information about the sitters and the discarnates beyond the discarnates' first names; and (v) the experimenter who interacts with the sitters during scoring (i.e., e-mails and receives by e-mail the blinded readings) (Experimenter 3) is blinded to all information about the discarnates, to which medium performed which readings, and to which readings were intended for which discarnates/sitters.

This >double-blind protocol eliminates as explanations: cueing by the experimenter, fraud, rater bias, and cold reading (a set of techniques in which visual and auditory cues from the sitter or very general statements are used to fabricate accurate readings).[17]

Reading Format. At the start of each Experiment 1 reading, the WCRM was given the first name of a discarnate. She was then asked to respond to the following five items:

1. What did the discarnate look like in his/her physical life? Provide a physical description of the discarnate.

2. Describe the discarnate's personality.

3. What were the discarnate's hobbies or interests? How did s/he spend his/her time?

4. What was the discarnate's cause of death?

5. Does the discarnate have any specific messages for the sitter?

Finally, the medium was given the opportunity to provide additional free-form information by being asked: Is there anything else you can tell me about the discarnate? The audio-recordings of the readings were then transcribed, formatted into lists of definitive statements, and blinded to remove any references to the discarnates' names. They were then emailed to a blinded experimenter who emailed them to the blinded sitters for scoring. Each sitter received two

blinded readings: a target reading intended for the named discarnate they chose and a decoy

reading for another sitter's discarnate.

Scoring. In Experiment 1, each sitter provided an estimated percent accuracy for the two

sections (Five Questions and Free-Form) of each of the two readings. Of the 28 readings

performed, 27 scores were returned and contained usable data.

Experiment 2. Experiment 2 was identical to Experiment 1 in terms of pairing, blinding

(i.e., >double-blind), and reading format. Twenty WCRMs participated in 40 readings. Twelve

of those readings took place during a study examining the electrocortical activity of six

WCRMs.[9] During those 12 readings, the Five Questions were randomized, subquestions (e.g.,

descriptions of the discarnate's hair, eyes, build, height, etc.) as well as additional questions (e.g.,

about the discarnate's job, favorite foods, etc.) were included, the blinded experimenter

performing the readings was physically present with the WCRM, and, in order to collect

electroencephalographic (EEG) data, the WCRMs were required to pause for 20 seconds after

each question was read aloud before reporting their responses (the limitations of this reading set-

up are discussed elsewhere[9]). Only scores of the WCRMs' responses to the Five Questions and

the Free-Form topics from that study were included in the present AIRII analysis.

Scoring. For the Experiment 2 readings, sitters provided individual scores[13] for each

item in each of two readings: a target and a decoy. Each item received one of the following

scores:

5: Obvious fit (used if the item is a direct or concrete hit that does not require

interpretation to fit)

4: Fit requiring minimal interpretation (used if the item indirectly applies and needs

minimal interpretation or symbolism to fit)

3: Fit requiring more than minimal interpretation (used if the item indirectly applies and

needs a greater degree of interpretation or symbolism to fit)

2: Other fit (used if the item does not fit the named discarnate or the rater, but does fit

someone else that the rater is/was close to and that is likely to be the subject of the

statement)

1: No fit (used if the information is a concrete miss—is clearly wrong—or if it is

information for which there is no reasonable interpretation)

0: Don't know (used if the rater does not understand the item or does not have enough

information to judge its accuracy)

Percent accuracy was calculated in Experiment 2 by tallying the number of items that received

scores of 4 or 5 and dividing that total by the total number of items minus the items scored as 0's

[(4's+5's/(total-0's)] and calculated separately for the Five Questions and the Free-Form

sections. A more conservative tally was also examined in which only the items scored as 5's

(hits) or 1's (misses) were totaled. Of the 40 Experiment 2 readings performed, 31 were returned

and contained usable data.

Experiments 1 and 2. In addition to the estimated and calculated item percent

accuracies collected in Experiments 1 and 2, respectively, each of the sitters also provided a

global score for each reading (using the same 0-6 scoring system used for Phase scoring in the

Exploratory study above) and engaged in a forced-choice selection in which they chose which of

two blinded readings (target or decoy) was more applicable to them. Of the combined 68

readings (28 from Experiment 1 and 40 from Experiment 2), 58 (27 from Experiment 1 and 31

from Experiment 2) usable scores were collected.

Table 1. Summary information regarding the readings, blinding, and data collected.

	n		Blinding	Phase Score	Item % Accuracy		Hits vs. Misses	Global Score	Choice
	readings performed	usable data			Estimated	Calculated			
Exploratory	28	28							
Phase 1			single	X					
Phase 2			controlled	X					
Experiment 1	28	27						X	X
5 Questions			>double		X				
Free-Form			>double		X				
Experiment 2	40	31						X	X
5 Questions			>double			X	X		
Free-Form			>double			X	X		
Totals	**96**	**86**		**28**	**27**	**31**	**31**	**58**	**58**

Results and Discussion

All data are reported as means ± standard error of the mean. Because it was hypothesized during the design of these studies that accuracy data would be higher for target readings and that sitters would choose target readings more often than decoy readings, one-tailed tests were used.

Exploratory Phase Scores (*n*=28)

The Phase 1 sections of the Exploratory readings received a mean score of 3.94 ± 0.26 and ranged from 2 ('Some correct information, but not enough to suggest beyond chance that communication with the discarnate occurred') to 6 ('Excellent reading, including strong aspects of communication, and with essentially no incorrect information'). That is, mediums reported information deemed accurate by sitters (roughly 4: 'Good reading with some incorrect information') under conditions in which the mediums received no feedback and had no prior knowledge about the sitters or the discarnates beyond the discarnates' first names.

The Phase 2 sections in which the mediums were permitted to request limited feedback to yes-or-no questions if they chose received a mean score of 4.20 ± 0.25 and also ranged from 2 to 6. The scores from the two phases are not significantly different (p=.08); that is, a significant scoring increase did not occur once the WCRMs were able to request feedback during the reading. This suggests that the accurate information reported during Phase 1 may have been acquired from a non-local source.

In order to address fraud, rater bias, experimenter cueing, and cold reading as explanations for the accuracy of mediums' statements, Experiments 1 and 2 employed a >double-blind protocol in which they were asked specific questions about the discarnates.

Experiment 1: Estimated Item Scores (n=27)

When sitters estimated the accuracy percentages of sections of blinded target and decoy readings in Experiment 1, the Free-Form sections of target readings (those intended for the sitter providing the scores) received significantly higher ratings than did those sections of decoy readings (those not intended for the sitter providing the scores): estimates of the accuracy were $37.0\% \pm 4.8\%$ compared to $24.5\% \pm 4.9\%$ (p<.05, one-tailed, Cohen's d=.49). These data demonstrate the reporting of accurate and specific non-local information under conditions that exclude ordinary explanations for the source of the information; that is, they were successful in replicating data that support the existence of anomalous information reception (AIR).

The Five Questions sections of the target readings were estimated to be $47.4\% \pm 5.2\%$ accurate versus those sections of the decoy readings which were estimated to be $35.6\% \pm 5.7\%$ accurate. This difference is in the expected direction but is not significant (p=.09).

Experiment 1: Global Scores (*n*=27)

The Global (0-6) Scores of the 27 readings in Experiment 1 were significantly higher for the target readings than the decoy readings (2.78 ± 0.26 vs. 2.04 ± 0.26, *p*=.04, one-tailed).

Experiment 1: Reading Choice (*n*=27)

When each of 27 Experiment 1 sitters was asked to choose which of two blinded readings (a target and a decoy) was more applicable to his/her discarnate, they chose the target readings 17 times (63.0%). This is a not a significant proportion (*p*=.12, one-tailed).

Experiment 2: Calculated Item Scores (*n*=31)

In Experiment 2 in which the percent accuracy was calculated from individual item scores, the Five Questions sections of target readings received ratings significantly larger than those sections of decoy readings ($52.8\% \pm 3.9\%$ vs. $36.6\% \pm 3.8\%$, *p*=.002, one-tailed, Cohen's *d*=.75). These data continue to demonstrate AIR under conditions that exclude ordinary explanations.

Differences in the Free-Form sections were in the expected direction but not significant ($43.0\% \pm 4.8\%$ vs. $35.6\% \pm 5.5\%$, *p*=.10).

Experiment 2: Hits vs. Misses (*n*=31)

Because the scores given to the individual items in Experiment 2 are ordinal (where the numerical quantity of a each score simply establishes an order to the scale), just the items categorized as *hits* [those scored as 5's: Obvious fit (used if the item is a direct or concrete hit that does not require interpretation to fit)] and *misses* [those scored as 1's: No fit (used if the

information is a concrete miss—is clearly wrong—or if it is information for which there is no reasonable interpretation)] in the target and decoy readings could be compared. A 2x2 chi-squared analysis demonstrated significant differences between the ratios of hits-to-misses in the target and decoy readings for both the Five Questions (2,474 items, Yates chi square=66.69, $p<.0001$, Cramer's V=.165) and the Free-Form (726 items, Yates chi square=9.53, p=.002, Cramer's V=.118) sections; that is, the target readings received significantly more hits and less misses than the decoy readings for both sections. These data, collected under >double-blind conditions and evaluated using a very conservative analysis method, continue to demonstrate AIR under conditions that exclude ordinary, sensory explanations.

Experiment 2: Global Scores (*n*=31)

The Global (0-6) Scores of the 31 readings in Experiment 2 were significantly higher for the target readings than the decoy readings (2.97 ± 0.26 vs. 2.13 ± 0.26, p=.007, one-tailed).

Experiment 2: Reading Choice (*n*=31)

When each of the 31 Experiment 2 sitters was asked to choose which of two blinded readings (a target and a decoy) was more applicable to his/her discarnate, the target readings were chosen 21 times (67.7%). This is a significant portion (p=.04, binomial probability, one-tail).

Combined Experiments 1 and 2: Global Scores (*n*=58)

The Global (0-6) Scores of the 58 total readings in Experiments 1 and 2 were significantly higher for the target readings than the decoy readings (2.88 ± 0.18 vs. 2.09 ± 0.18,

p=.001, one-tailed, Cohen's *d*=.57). These significant data continue to demonstrate AIR under

conditions that exclude ordinary explanations.

Combined Experiments 1 and 2: Reading Choice (*n*=58)

The reading choices between two blinded readings (a target and a decoy) for the 58

combined sitters from Experiments 1 and 2 were correct 38 times (65.5%). This is a significant

portion (*p*=.01, binomial probability, one-tail). These data also continue to demonstrate AIR

under conditions that exclude local, sensory explanations for the source of the information.

Conclusions

The statistical significance and effect sizes of (1) comparisons between blinded target and

decoy readings regarding the estimated percent accuracy of reading items (*n*=27, 37.0% vs.

24.5% for Free-Form sections, *p* = 0.05, *d*=0.49), (2) comparisons between blinded target and

decoy readings regarding the calculated percent accuracy of reading items (*n*=31, 52.8% vs.

36.6% for Five Questions sections, *p*=0.002, *d*=0.75), (3) comparisons between blinded target

and decoy readings regarding hits-vs.-misses ratios (*n*=31, *p*<0.0001, *V*=0.165 for Five

Questions sections and *p*=0.002, *V*=0.118 for Free-Form sections), (4) comparisons between

blinded target and decoy readings regarding global reading scores (*n*=58, 2.88 vs. 2.09, *p*=0.001,

d=0.57), and (5) forced-choice reading selections between blinded target and decoy readings

(*n*=58, 38/58, *p*=0.01) successfully replicate and extend previous findings[14] demonstrating the

phenomenon of anomalous information reception (AIR), the reporting of accurate and specific

information about discarnates without prior knowledge about the discarnates or sitters, in the

absence of any sensory feedback, and without using deceptive means. The findings from this

AIRII study were of a similar direction and significance to those reported in the original AIR

study regarding the global score (AIRII: p=0.001, d=0.5; AIR: p=0.007, d=0.57) and forced-

choice findings (AIRII: p=0.01; AIR: p=0.01).[14]

The conditions under which these AIRII data were collected optimized the research

environment by replicating in the laboratory the natural setting in which mediumship exists

while also maximizing experimental blinding and controlling for local, sensory explanations

such as cold reading (including information so general it could apply to many people), rater bias,

experimenter cueing, and fraud. Future studies will need to ensure that these conditions as well

as including rational, open-minded investigators; pre-screened medium participants who trust the

investigators and their unbiased motivations; respect for the participants and their processes; and

a research environment conducive to the phenomenon are all met in order for an effective

replication to occur. Studies not adhering to these requirements cannot be considered

replications. In addition, future studies may wish to examine alternatives to using discarnate first

names for the mediums' mental focus that still allow them to complete the cognitive tasks

required to perform readings as well as to include further statistical analyses such as Wilcoxon

signed rank tests for reading choice data.

Because the experimental conditions of this study eliminated the normal, sensory sources

for the information mediums report, a non-local source (however controversial) remains the most

likely explanation for the accuracy and specificity of their statements. Although a causal

mechanism for the phenomenon of AIR is not proposed at this time, the authors note that the

etiology is currently unknown or not fully understood for numerous (1) ubiquitous human

experiences (e.g., yawning, dreaming, and blushing), (2) diseases and conditions (e.g., multiple

sclerosis, lupus, rheumatoid arthritis, Parkinson's disease, eczema, psoriasis, glaucoma, and

fibromyalgia), and (3) medications [e.g., certain drugs that treat Parkinson's (pramipexole),

cancer (procarbazine), malaria (halofantrine); and epilepsy (levetiracetam); the antibiotics

clofazimine and pentamidine; and many psychotropic drugs (e.g., lithium)] which continue to

exist, be experienced, be widely prescribed, and be worthy of scientific study even in the absence

of a known mechanism.

References

1. Hunter J, Luke D. (eds.). Talking with the Spirits: Ethnographies From Between the Worlds. Brisbane, Australia: Daily Grail Publishing; 2014.

2. Blum D. Ghost hunters: William James and the Search for Scientific Proof of Life After Death. New York: Penguin Press; 2006.

3. Carter C. Science and the Afterlife Experience: Evidence for the Immortality of Consciousness. Rochester, VT: Inner Traditions; 2012.

4. Roxburgh EC, Roe CA. A survey of dissociation, boundary-thinness, and psychological well-being in Spiritualist mental mediumship. J Parapsychol. 2011;75:279–99.

5. Rock AJ, Beischel J. Quantitative analysis of mediums' conscious experiences during a discarnate reading versus a control task: A pilot study. Aust J Parapsychol. 2008;8:157–179.

6. Roxburgh EC, Roe CA. Reframing voices and visions using a spiritual model: An interpretative phenomenological analysis of anomalous experiences in mediumship. Ment Health Relig Culture. 2014;17:641–653. DOI: 10.1080/13674676.2014.894007

7. Hageman JH, Peres JFP, Moreira-Almeida A, Caixeta L, Wickramasekera I II, Krippner S. The neurobiology of trance and mediumship in Brazil. In: Krippner S, Friedman HL, eds. Mysterious Minds: The Neurobiology of Psychics, Mediums, and other Extraordinary People. Santa Barbara, CA: ABC-CLIO; 2010:85–111.

8. Moreira-Almeida A. Research on mediumship and the mind-brain relationship. In: Moreina-Almeida A, Santos FS, eds. Exploring the Frontiers of the Mind-Brain Relationship. New York: Springer; 2012:191–213.

9. Delorme A, Beischel J, Michel L, Boccuzzi M, Radin D, Mills PJ. Electrocortical activity associated with subjective communication with the deceased. Front Psychol. 2013;4:834. doi: 10.3389/fpsyg.2013.00834

10. Beischel J, Mosher C, Boccuzzi M. The possible effects on bereavement of assisted after-death communication during readings with psychic mediums: A continuing bonds perspective. Omega: J Death Dying. in press.

11. Roy AE, Robertson TJ. Results of the application of the Robertson-Roy protocol to a series of experiments with mediums and participants. J Soc Psychical Res. 2004;68:161–174.

12. O'Keefe C, Wiseman R. Testing alleged mediumship: Methods and results. Br J Psychol. 2005;96:165–179.

13. Beischel J. Contemporary methods used in laboratory-based mediumship research. J Parapsychol. 2007;71:37–68.

14. Beischel J, Schwartz GE. Anomalous information reception by research mediums demonstrated using a novel triple-blind protocol. EXPLORE: J Sci Healing. 2007;3:23–27.

15. Jensen CG, Cardeña E. (2009). A controlled long-distance test of a professional medium. Eur J Parapsychol. 2009;24:53–67.

16. Kelly EW, Arcangel D. An investigation of mediums who claim to give information about deceased persons. J Nerv Ment Dis. 2011;199:11–17.

17. Beischel J. Advances in quantitative mediumship research. In: Rock, AJ, ed. The Survival Hypothesis: Essays on Mediumship. Jefferson, NC: McFarland; 2014:177–195.

18. Beischel J, Boccuzzi M, May EC. Mediumship and its place within parapsychology. In: Rock, AJ, ed. The Survival Hypothesis: Essays on Mediumship. Jefferson, NC: McFarland; 2014:275–284.