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TITLE: “Straight from the horse’s mouth?” A literature review and a randomized controlled trial of intuitive animal communication

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ABSTRACT:

Intuitive animal communication (IAC) is defined as a process of transmitting and receiving information between humans and animals, supposedly transcending conventional channels, sometimes invoking mystical roots. The apparent recent increase in practitioners, the “wild” aspects of their practice, the substantial expenses, and the intrusions into veterinary questions point to the need for an evaluation of its scientificity.

Objective

We conducted a systematic literature review and developed a randomized, double-blind protocol testing the ability to distinguish living animals from deceased ones, in conditions close to IAC practice.

Methods

Participants, practitioners and non-practitioners, were shown random photos of dogs, cats, and horses, each animal being currently alive or deceased, and tasked with “feeling” their status.

Results

Practitioners (N = 340) and non-practitioners (N = 1986) perform similarly and not better than chance when predicting living vs. dead status. Statistically, some scores are unusually high or low, indicating unnoticed clues in the images.

Conclusions

Until today, no IAC capability has been demonstrated. Our protocol confirms this absence.

The success of IAC seems based on a combination of guesswork and subjective validations.

We find no scientific reason to recommend this practice.

Clinical relevance

Proving that IAC has no basis should save animals from ineffective treatments and their owners from undue expenses.

Keywords: intuitive animal communication (IAC), randomized controlled trial (RCT), literature review, animal telepathy

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INTRODUCTION

Intuitive Animal Communication (IAC) is self-defined as a process of transmitting and receiving information between humans and other animals, transcending conventional communication channels such as explicit verbal, sound, or body language, and involving an “intuitive”, “extrasensory”, or even “telepathic” transmission. According to the claims of its practitioners, IAC gives access to the well-being of the animal, its affects, and its ailments, well beyond what ethologists and other specialists in “classical” communication realize. It is sometimes implemented without meeting the animal, a photograph, with a few precise criteria (depending on the practitioner, for instance they often want to see the eyes), can suffice.

The first experimental studies on telepathic-type links between humans and non-human animals date back to the 1880s, during the rise of meta- and para-psychology. Some of the most famous studies of the 20th century are due to the American theologian and naturalist William

J. Long¹, who coined the term “animal telepathy”, to Joseph B. Rhine and Louisa E. Rhine² on the mare Lady, to Vladimir Bechtere³ on circus dogs, to Karlis Osis^{4,5} on cats, to Robert Morris⁶ on rats and goldfish, and to Pierre Duval and Evelyn Montredon⁷ (these being the pseudonyms of Rémy Chauvin and Jean Mayer) on mice. At the turn of the 21st century, two series of experiments due to Rupert Sheldrake became famous, despite their flaws: one series with Pamela Smart on her dog Jaytee^{8,9,10,11}, that were subsequently criticized by Richard Wiseman and coauthors^{12,13}, the other series with Aimée Morgana on her parrot N’kisi¹⁴.

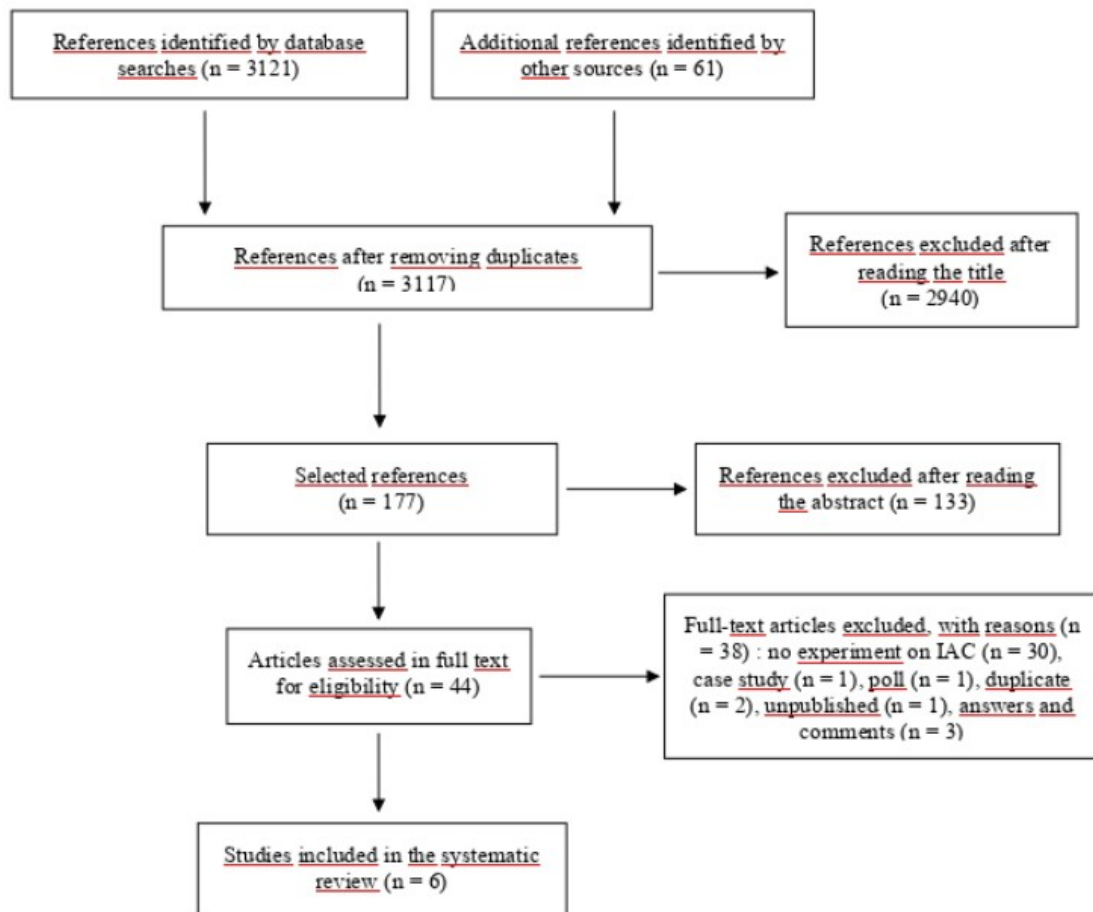
Epistemologically, IAC lies at the confluence of two heavily contested theories. The first one, due to Rupert Sheldrake, is the theory of “morphic fields”. It may be viewed as an heir to the notions of “group mind”¹⁵ and “group soul”¹⁶. Morphic fields, whatever their precise nature, would determine and explain the behavior of living beings, in particular they would inherit habits of species by “morphic resonance”¹⁷. The second theory, due to Rosemary Crossley, is called “facilitated communication” or psychophany. Its aim is to enter into communication with people with disabilities or severe autism: the practitioner is supposed to “mix” their “unconscious” with that of the patient, and doing so, to draw information about them. A systematic review of this method was carried out by Ralf Schlosser and coauthors¹⁸, who concluded that the technique was completely invalid. But most of IAC has developed in a “wild” manner, through the publication of countless non-scientific books^{19,20,21,22,23} and thanks to some significant media coverage (in the French context, on TV channels such as Arte, Animal Planet, TF1, M6, France 5, and others). The potential abuses of this method in terms of consent are flagrant. Rosemary Crossley was called into question several times on this subject, such as in the Stubblefield affair, which concerned a case of forced sexual consent from a person suffering from severe cerebral palsy.

The growing media (and lucrative) success of IAC methods over the past 25 years, carried by a few “flagship” medium persons, has been supported by regular television shows, without any supporting evidence being presented. However, the risks of these methods are real: in addition to significant financial losses (IAC is expensive, with an average cost of around €70 per hour in France for traditional owners (US\$75 per hour), much more for Olympic-level competition horses), relying on them leads to delays in the care of truly sick animals. To sum up, some medical diagnoses by IAC practitioners amount to an illegal practice of veterinary medicine and miss very real, possibly serious, pathologies.

LITERATURE REVIEW

We conducted a systematic literature review, supplemented by individual searches, from December 2023 to October 2024. We relied on 10 search engines (*Google scholar, Science direct, Pubmed, Cochrane, Cairn, PsyArticles, Psychology and Behavioral Sciences Collection, BioArxiv, LISSA, HAL*), using English keywords (“animal psychic”, “pet psychic”, “animal telepathy”, “pet telepathy”, “intuitive animal communication”, “intuitive communication”, “intuitive interspecies communication”, “interspecies telepathic communication”, “animal communicator”, “human-animal communication”) as well as French keywords (“communication intuitive”, “communication animale intuitive”, “interpréteur animalier”, “télépathie animale”). We identified 3,121 references from databases and 61 from other sources. We included experimental protocols using IAC and we set no limits regarding the publication date or the country of publication. In the end, this led us to include 6 studies in our literature review, as summarized in Table A1 in the Annex and Figure 1 below.

Figure 1 - *Selection flowchart PRISMA*



This literature review indicates that the very few experimental protocols developed on IAC are mainly case studies and are tainted by some major methodological biases, as summarized in Table A2 in the Annex. The only protocols of a slightly improved quality point to the absence of validity of the practice.

METHODS

In the absence of rigorous experimental studies on IAC, and given the growth in supply and the risks of delays in the therapeutic care of animals, we have developed a randomized, double-blind experimental protocol on the ability of IAC communicators to discriminate a non-ambiguous information, in conditions as close as possible to their usual practice.

This project received a favourable advice from the ethics committee of CERGA of University Grenoble Alpes (Advice 2024-10, dated 14 February 2024). To ensure quality writing, the authors followed the recommendations of the CONSORT grid²⁶. All the materials used in the study and the data collected are available on OSF²⁷.

Context and participants

Participants were IAC practitioners as well as non-practicing volunteers. Recruitment was carried out online from 9 March to 30 April 2024 by an announcement proposing to any interested adult the opportunity to participate in a study on animal communication. We then disseminated the announcement of the study online on social networks, relying on snowball effects and email. More specifically, the announcement was published on several groups of the IAC Facebook network and we contacted directly and individually 404 identified practitioners. Potentially interested people were able to read a more precise description of the objectives and nature of the study and of its progress on the first LimeSurvey page of the study, after clicking on a link. They then had access to the inclusion criteria (being an adult) and were able to choose whether or not to give their consent to participate in the study. Participation was not mandatory, in fact each participant could decide at any time to leave the questionnaire or cancel their participation, in a completely confidential manner. No reward (e.g., financial, study voucher, etc.) was offered to the participants. No element of this research involved any physical, psychological or professional risk.

Material

After reviewing the literature and consulting with IAC practitioners to get closer to their practice, we developed what appears to be the first randomized, double-blind experimental test on the issue. Considering that IACs would hardly risk producing therapeutic statements during the study, we first considered a test based on an unambiguous criterion, namely, the ability of

an IAC to discriminate, from photos presented online, real living animals from fictitious animals created by AI. However, AIs in 2024 can only offer images whose falsehood is easy to detect. So we modified the protocol and, because we found that every other criterion we could think of remained interpretative and ambiguous, we opted for the mere capacity to discriminate between living and deceased animals.

Knowing that a majority of IAC practitioners are familiar with dogs, cats and horses, although some prefer to operate with certain species of animals, we built three tests:

- 10 photos of horses, mixing in a random proportion living and deceased horses,
- 10 photos of cats, mixing in a random proportion living and deceased cats,
- 10 photos of dogs, mixing in a random proportion living and deceased dogs.

Participants had the possibility to take one, two or three of these tests, depending on their personal preferences.

The pool of photos we assembled comprised 20 images of horses, 32 images of cats and 20 images of dogs. The sets of photos proposed to each participant were drawn uniformly randomly from these pools. The owners of the animals gave their agreement to the use of an image of their animal, and we made sure that the status of every animal (deceased or alive) remained the same during the whole experiment.

Adherence to conventional and alternative therapies

We also wanted to measure the adherence to complementary and alternative therapies of the participants, using the scale of attitudes towards conventional medicine and complementary and alternative therapies²⁸. This scale, the French adaptation of the *Complementary, alternative and conventional medicine attitudes scale (CACMS)*²⁹, is composed of 19 items and allows to specifically study the role of beliefs in the decision to use complementary and alternative therapies. Participants respond using a Likert scale ranging from 1 (“strongly disagree”) to 7 (“strongly agree”). In our study, the scale has good internal consistency ($\alpha = 0.86$).

Data analysis

We assessed the relationships between the participants' profiles (i.e., having practiced IAC or not), their beliefs about IAC and about complementary and alternative therapies, and their scores on the test, by computing Pearson correlation coefficients. We also performed ANOVAs to compare the scores on beliefs about IAC and about alternative and complementary therapies and on the experimental test depending on the practice or not of IAC.

RESULTS

We collected a total of 2,326 complete responses, with 263 participants claiming a personal practice of IAC, 73 a professional practice, and 4 both practices. The sample comprised 83.5 % of women (N = 1942), 14.2 % of men (N = 331) and 2.3 % of persons who indicated no gender (N = 53). The mean age was 35.2 years (median = 33, standard deviation = 11.6).

Table 1 presents Pearson's correlations between the different conditions and variables, showing the following results. First, there is a positive correlation between the degree of belief in the existence of IAC and the degree of beliefs associated with alternative and complementary therapies ($r = 0.77$, $p < 0.001$). Second, there is no significant correlation between the scores (number of images guessed correctly) to the tests about dogs, cats and horses. Thus, participants with a good score on one series do not tend to have particularly good scores on the other series. Finally, there is a *negative* correlation between the degree of belief in the existence of IAC and the scores; however, this effect is weak, and statistically meaningful for the series of dogs only ($r = -0.097$, $p < 0.001$).

Table 1 - Pearson's correlations between the degrees of belief in IAC (b-IAC) and in alternative and complementary therapies (b-ACT), and the scores realized on the dog, cat and horse series

| | 1 | 2 | 3 | 4 | 5 |
|----------------------------|-------------------------|-------------------------|------------------------|--------|---|
| 1. b-IAC | - | | | | |
| 2. b-ACT | 0.77 (¹) | - | | | |
| 3. Scores on <u>dogs</u> | -0.097 (¹) | -0.065 (²) | - | | |
| 4. Scores on <u>cats</u> | -0.017 | -0.045 | 0.055 (³) | - | |
| 5. Scores on <u>horses</u> | -0.024 | -0.035 | 0.049 | -0.053 | - |

Notes : (¹) $p < 0.001$ (²) $p < 0.01$ (³) $p < 0.05$

Practice of IAC, beliefs in IAC and adherence to alternative therapies

Respondents who do not practice IAC have lower degrees of beliefs towards IAC and complementary and alternative therapies ($M = 36.9$ and $M = 38.5$ respectively) than people who developed a personal practice of IAC ($M = 80.2$ and $M = 50.5$) and than people who developed a professional IAC practices ($M = 97.2$ and $M = 55$). The ANOVAs in Table 2 reveal significant differences in beliefs in IAC and alternative and complementary therapies depending on the practice or not of IAC.

Table 2 - Means and ANOVAs based on type of IAC practices, beliefs about IAC (b-IAC), and beliefs in alternative and complementary therapies (b-ACT)

| | IAC PRACTICE | | | | ANOVA |
|-------|--------------|-------------|--------------|---------------------------|---------------------------------------------------------|
| | None | Personal | Professional | Personal and professional | |
| | M (SD) | M (SD) | M (SD) | M (SD) | |
| b-IAC | 36.9 (35.1) | 80.2 (28.1) | 97.2 (13.3) | 75 (50) | $F(3, 2322) = 189$, $p < 0.001$, $\eta^2_p = 0.19$ |
| b-ACT | 38.5 (13.2) | 50.5 (10.4) | 55 (8.24) | 34.8 (21.7) | $F(3, 2322) = 102$, $p < 0.001$, $\eta^2_p = 0.12$ |

Rates of success

The participants answered completely 1163, 859 and 698 series of images of dogs, cats, and horses, respectively. Each series was made of 10 images. The proportions of correct guesses of the animal's status (dead/alive) are 54.8 %, 49.2 % and 48.2 % for dogs, cats and horses respectively. Random answers would have yielded proportions of 50 % for each species, with respective standard deviations 0.46 %, 0.54 % and 0.60 %.

Figures A1, A2 and A3 in the Appendix show histograms of the scores realized by the participants on the sets of 10 images proposed to them, compared to pure chance histograms (binomial distribution).

Table 3 presents ANOVA analyses on the type of IAC practice (i.e., none, personal, professional, or both), which reveal no significant differences in the scores obtained on the three tests.

Table 3 - Means and ANOVA on the scores to the tests depending on the type of practice

| | CAI PRACTICE | | | | ANOVA |
|--------|----------------|--------------------|------------------------|----------------------------------------|-------------------------------------------------------|
| | None M (SD) | Personal M (SD) | Professional M (SD) | Personal and professional M (SD) | |
| Dogs | 1.63 (3.14) | 1.51 (3.03) | 1.17 (3.51) | Na | $F(3, 1955) = 0.593$ $p = 0.619, \eta^2_p = 0.001$ |
| Cats | 0.35 (3.20) | 0.45 (3.19) | -0.2 (3.01) | 1 (4.24) | $F(3, 1690) = 0.672$ $p = 0.57, \eta^2_p = 0.001$ |
| Horses | 0.15 (3.14) | -0.18 (3.14) | 0.27 (2.83) | -2 (Na) | $F(3, 1414) = 0.831$ $p = 0.477, \eta^2_p = 0.002$ |

DISCUSSION

Despite being often claimed, the effectiveness of IAC services is not, according to our literature review, supported by any conclusive study. Instead, the literature presents an assortment

of testimonials seen as evidence, a characteristic feature of pseudo-scientific theories or therapies.

Before starting our experiment, we benefited from some experience sharing with several IAC practitioners. This allowed us to place ourselves as close as possible to their actual conditions of exercise, for example, working on clear images, using full-length photos when possible, of the animals alone, and with their eyes being visible.

The results show that neither practitioners nor non-practitioners achieve scores above chance, despite a possible bias for some photos. If practitioners fail on a parameter as powerful and well-defined as the living/dead status of the animal, their chances of being able, by pure IAC, to detect “classic” elements of IAC sessions, such as a degree of contentment of the animal, the presence or absence of a garden, their appreciation of their food, and various pains, seem dim. In their exchanges with us, some practitioners raised an ad hoc counterargument to this point, which amounts to presuppose that a dead animal is not aware that it is dead, hence our alive-or-deceased criterion would not be relevant since the “soul” of the animal may express itself as well. We find difficult to give credence to this hypothesis, which mobilizes without any supporting element an ex nihilo theorization of the afterlife.

Results of Table 1 show a strong positive correlation between the degree of belief in the existence of IAC and the tendency to adhere to several beliefs about alternative and complementary therapies, which was already noted by other authors^{30,31}. Thus, believing in IAC and believing in those therapies are positively correlated, a fact which may point at some common intellectual roots. On the other hand, correlations between the beliefs in IAC and/or alternative and complementary therapies, and the scores realized on each series, are all small (and are of both signs, positive and negative), indicating no significant effect.

Strengths and limits

Despite some conclusive preliminary tests to remove photos suggesting specific periods (based on, for example, car models, photo granularity, etc.), we suspect that some clues remained in the dog photos, which would explain the better results obtained by some rare photos of this set (and also the worse results on some other rare photos). After the fact, in exchanges with us, some participants mentioned that, to select some of their answers, they had used the presence or absence of flash, the position of the animal in the photo (with fashion effects that have evolved over the years, thus making it possible to estimate the date when the photo was taken and therefore the age of the dog at the time of the test), or some clues in the background (the style of wallpapers for example). Thus, it would be crucial to reproduce the test on dogs with other sets of photos, taking such remarks into account to establish whether these better-than-average scores are indeed due to quality biases.

But, and this was unforeseen, the main remark by practitioners was that bringing large numbers of people into telepathic contact with animals, as our test entailed, would amount to an act of cruelty since this would overload them with telepathic solicitations, without their explicit consent. However, first, such a burden, though hypothesized, was never actually observed and no owner related any change in their animal health. And second, animal consent is an ambiguous hypothesis, rarely used except in the controversial “theory of the domestic contract”³². We also wish to stress that, although IAC practitioners all testify to feeling the emotions of companion animals, no mention is ever made in such a context of the roughly 70 billion land animals that are slaughtered every year, mainly for food consumption by humans. Thus, this (claimed) hypersensitivity towards animals with high social desirability, joined with a total deafness towards other animals, suggests some variable degrees of empathy and compassion, as already studied by other authors³³.

The second main remark by practitioners was that, since dead animals do not know whether they are alive or dead, they would actually be able to communicate with a practitioner. Independently on the validity of this remark, our study shows that, de facto, practitioners are un-

able to discriminate between living and dead animals. Relating this inability to the precision of usual IAC claims (about dental pains, tastes for brands of kibble, etc.), leads to see in this second remark an attempt, possibly unintentional, to make impossible any existence proof or disproof in these matters.

Conclusion

Despite an abundant secondary literature and the seemingly current blossoming of services offered out of any legal framework, our literature review was unable to unearth works proving the effectiveness of IAC practices in providing specific informations about the animal. The studies appearing to do so actually mix subjective validations with high-probability guessings, leading to hypothesis confirmation biases appealing to both animal owners and IAC practitioners (the animals themselves, as far as one can tell, do not seem to care). When, as in our experimental protocol, unambiguous criteria are used, practitioners fare no better than chance. Furthermore, despite the care and the preliminary tests carried out on our photos, clues seems to have corrupted some of these images. This shows the extent to which, even in unconscious ways, IAC practitioners have a strong chance to attribute to their capacities something in fact depending on the environment.

At present, we hesitate between two options : either we refine the experiment presented in this paper, trying to get as close as possible to practice and to take into account the numerous comments received, or, we consider as problematic, being agents of institutions financed by public money, to spend more of our time on a subject for which neither the scientific construction nor the results obtained so far present any avenue whatsoever.

In any case, our study shows that there is currently no scientific reason to recommend IAC practice. Thus, we recommend unambiguously that veterinary services warn the general public about this technique, which is probably often used sincerely but whose beneficial effects are illusory.

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ANNEX

The tables and figures in this Annex present some data mentioned in the body of the article. Table A1 provides numerics summarizing our literature review. Table A2 presents some methodological biases of the few experimental protocols in our literature review. Figures A1, A2 and A3 provide histograms of the scores realized by the participants on the sets of 10 images proposed to them, compared to pure chance (binomial distribution).

Table A1 – *Details of literature review*

| | <u>Total number of hits</u> | <u>Selected titles</u> | <u>Selected abstracts</u> | <u>Studies included</u> |
|---------------------------------------------------|-----------------------------|------------------------|---------------------------|-------------------------|
| <u>Google Scholar</u> | 1674 (*) | 48 | 9 | 3 |
| <u>Science direct</u> | 656 | 24 | 5 | 0 |
| <u>Pubmed</u> | 300 | 11 | 4 | 1 |
| <u>PsyArticles Psycinfo Psycho & Behavior</u> | 158 | 18 | 1 | 0 |
| <u>Cairn</u> | 263 | 15 | 1 | 0 |
| <u>bioRxiv</u> | 0 | 0 | 0 | 0 |
| <u>LISSA</u> | 0 | 0 | 0 | 0 |
| <u>HAL</u> | 7 | 0 | 0 | 0 |
| <u>Other sources</u> | 63 (**) | 61 | 24 | 2 |
| Total | 3121 | 177 | 44 | 6 |

Table A2 – Bias Risks

| Study's Name | Bias Risks | Comments |
|----------------------------------------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Erickson 2014 ²⁴ | HIGH | Low level of <u>methodological rigor</u> No description of <u>qualitative analyses</u> No <u>genuine statistical analysis</u> <u>Descriptive results</u> <u>Weak evaluation criteria</u> <u>Blinding bias</u> in animal-owner-IAC triangulation |
| Erickson <i>et al.</i> 2016 ²⁵ | HIGH | Low level of <u>methodological rigor</u> No <u>research objective</u> <u>Weak evaluation criteria</u> |
| <u>Sheldrake, Smart</u> 1998 ⁹ | HIGH | Case study <u>Experimental bias due to the presence of other persons near the animal</u> <u>Questionable (and discussed) evaluation criteria</u> <u>Lack of inclusion criteria</u> |
| <u>Wiseman, Milton</u> 1998 ¹² | MEDIUM | Case study Precise but ad hoc inclusion criteria Possibly confounded variables |
| <u>Sheldrake, Smart</u> 2000 ¹¹ | MEDIUM | Case study Results over-interpretation |
| <u>Sheldrake, Morgana</u> 2003 ¹⁴ | HIGH | Major biases due to the implication of the experimenters Case study Unjustified data exclusion |

Figure A1 - Histogram of scores for the cats series, compared to pure chance

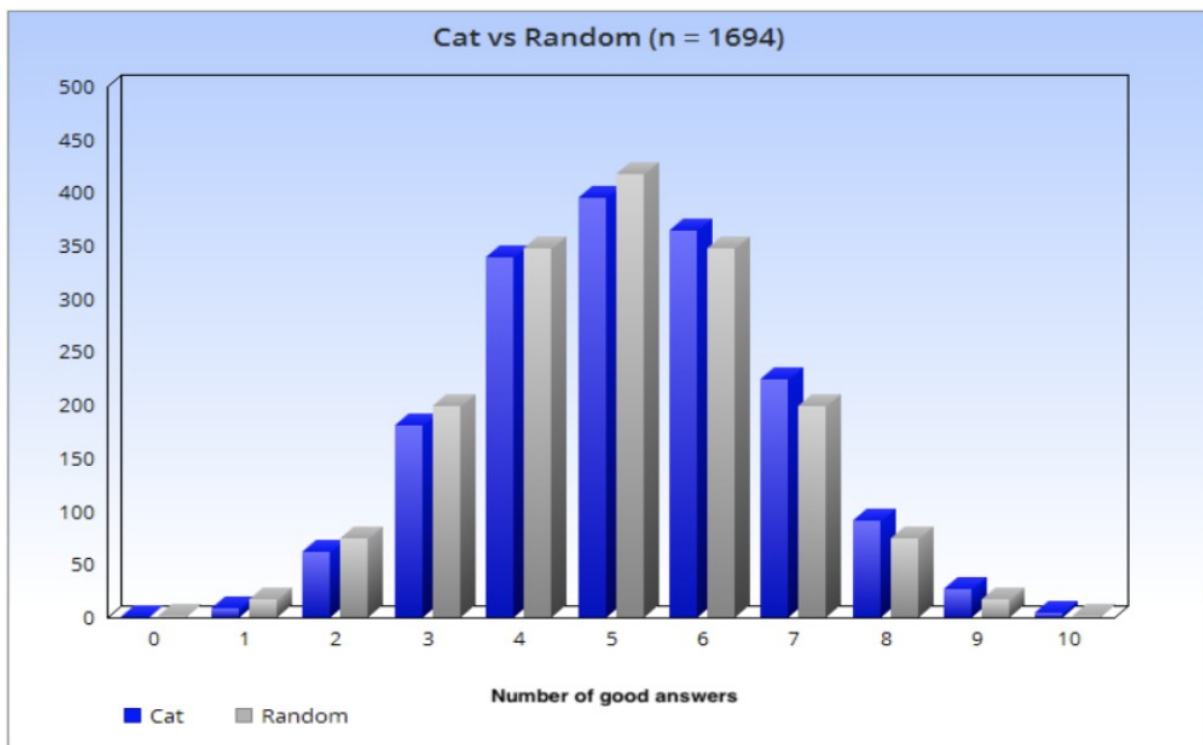


Figure A2 - Histogram of scores for the horses series, compared to pure chance

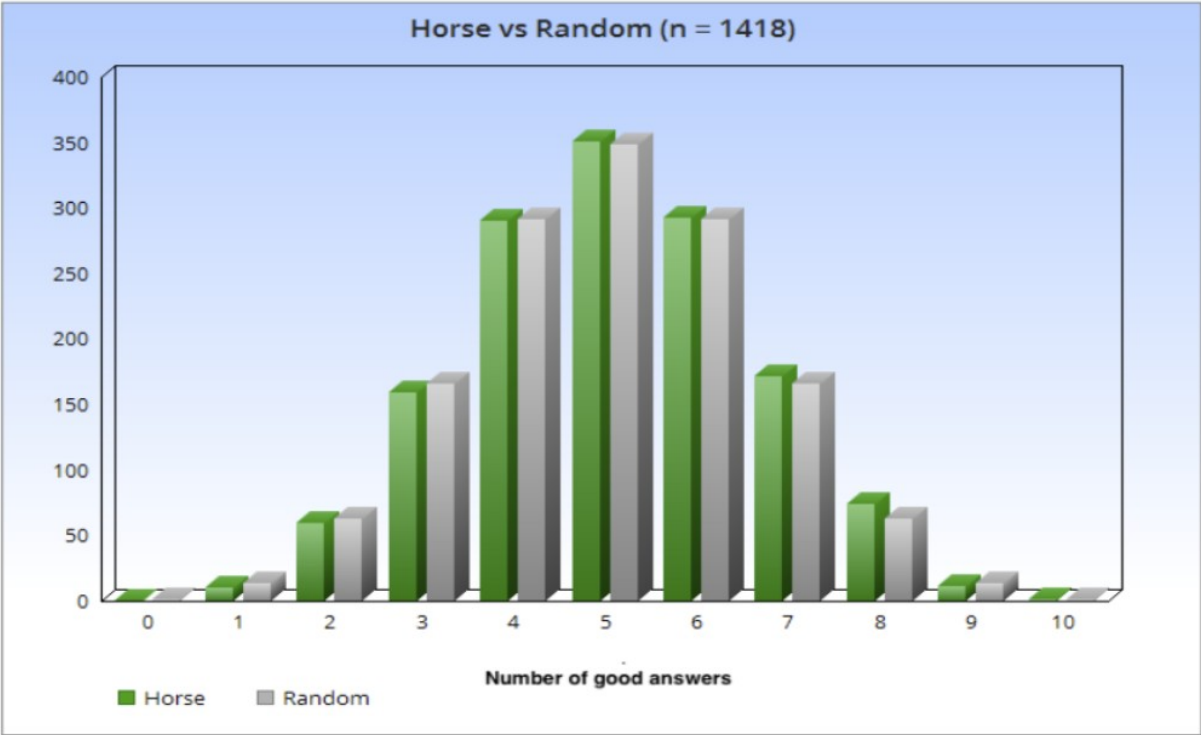


Figure A3 - Histogram of scores for the dogs series, compared to pure chance

