Review of: "Exploring the Boundaries of Behavioral Robotics: Understanding the Limitations of Psychokinesis"

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I found this article to be an intriguing synthesis of ideas that I have not often read in conjunction with one another. As a result, I found this to be an interesting read on an underexamined topic. With that said, I feel that the article could be improved as the article adopts a rather informal style at certain points, with some repetitive portions and phrasing. Additionally, the presence of a couple of grammatical issues leads to a lack of clarity in portions of the manuscript.

Most crucially, providing additional references would greatly benefit the strength of the article, particularly when it comes to psi. As it stands, there is a significant dearth of sufficient background on psychical phenomena and supporting evidence for some of the rather strongly worded statements that the paper posits.

I outline a few other points below:

1. I did not find that the abstract satisfactorily summarized the contents of the article itself and read more as an introduction to the overall topic.

2. "In practice one might arrange 10 test runs, typically one week apart, each with 200 tosses or more. One might then find that the psychokinetic ability of the subject varies from test run to test run, but if the overall result is highly significant, the psychokinetic ability should be considered as verified, doing otherwise would be inconsistent, and even dishonest."

There are potentially other reasons for such a result that ought to be considered and this paragraph consequently comes across as inappropriate in tonality.

3. Unnecessarily verbose descriptions of the rather simple math, e.g., for 30 throws being 180*(1/6) and "the throwing of dice is a specific example within the category of such cases, where a single throw of a die may result in 1 of 6 equally probable outcomes, namely any one of the six possible numbers of spots coming uppermost, the probabilities of these 6 outcomes in this case being equal to 1/6 each." This could be explained in a far more straightforward manner.

4. I also believe that the rather lengthy explanation of chi-square probability could be significantly shortened.

5. The reiteration of the two methods of probability calculations is likely excessive and I would suggest removing this repetition.

6. While Rhine's research is indeed relevant to the topic, it would be helpful to the reader to be informed of the results that were obtained, as well as the results of the follow-up research. Gardner's criticism of Rhine's research ought to also be

noted - specifically, the alleged presence of experimenter's bias affecting the results of such experiments.

7. Similarly, the following paragraph describing the various ways in which results were obtained ought to be properly referenced and explained further, including briefly stating the results of each.

8. With respect to the wheel experiment, how many total participants took part? With respect to AD and DM, how were they selected? Crucially, how many total trials were completed by each participant and of those, how many were significant? One would presume that each participant would have needed to complete a great many trials, a large number of which were significant, for the results to be able to serve as conclusively demonstrating psychical phenomena.

9. Generally speaking, the results section is in severe need of summarization as it is rather exhausting to review at present. Moreover, it is unclear what the overall obtained effect, or lack thereof, actually was for each experiment.

10. The transition between the two types of experiment (viz., the wheel and the crystal) is rather jarring. Incorporation of a subheading would significantly improve readability.

11. Following completion of the paper, I remain confused about the exact connection between psychokinesis and AI that is to be proven or disproven. If the argument is that psychokinesis is an ability that is strictly found in humans, this needs to be outlined in a clearer way and the justification for the utilization of this fact as the point of delineation between humans and AI would likewise need to be highlighted. Moreover, if psychokinesis is indeed utilized for delineation, what is the justification for not using other psychical abilities (for instance) in its stead?

12. The final three or four paragraphs of the paper strike me as rather repetitive and while I admire and appreciate the spirit, I would suggest condensing them into perhaps just one or two.

Thank you for the opportunity to review this article. It is my true hope that the feedback that I have provided will be helpful and constructive. I wish the authors my very best with their revision and future research leadership in this very important and underexamined domain.