

The Basics:

1. What was the broad question being asked by this research project? What was the specific question being asked by this research project?
 - a. Summarize the background information on the research topic in three sentences.
 - b. What is the gap in the literature identified by the researchers? What question(s) are they trying to answer? What is their hypothesis and what should happen if the author's hypothesis is true?
 - c. What are alternative hypotheses?

The broad question being asked was whether or not people could control their mind wandering, with the presentation of an upcoming, demanding task. They hypothesize that as a demanding task draws nearer, people tend to be more focused and more mindful, and they aimed to discover that with this experiment.

2. What experiments were done to test the hypothesis or investigate the research question?
 - a. Explain the task design – what are participants instructed to do and what is being measured? Think about the independent and dependent variables.

Participants were shown a clock on a computer monitor, and asked to push a button every time the clock was at 12:00. Throughout the trial, they were presented with probes asking them to rate if they were either concentrated, intentionally mind-wandering, or unintentionally mind-wandering.

3. What evidence supports each of the conclusions?
 - a. Before you read the discussion, summarize the main findings and link each one back to the research question(s). How does each result inform the hypothesis?

Mind wandering was decreased among participants in the fourth quadrant, when the task was most closely approaching.

4. What are the major conclusions?

- a. What do the results add to the field? How do the researchers interpret their findings? Summarize any limitations identified by the researchers.

This supports the idea that mind-wandering can be an intentional agent, and limit itself as an attention demanding task approaches. An issue however would be that mind-wandering was self-rated in this experiment, so concerns of the validity of the answers given are called into question.

The Critique:

1. Is the paper well written? How do you know? For week 2 & later, use this space to practice headlines & summaries of the articles via tweets. The paper is well written. Any lingering questions were easily outlined, the sequencing is intuitive, and despite from some statistical nonsense, the paper was quite easy to understand.

2. Do the conclusions seem logical given the data processed? Why or why not? Another way of thinking about this: do the results adequately support the conclusions that are drawn? Are there alternative explanations for the findings? What inferences about the hypotheses and questions can be made based on these results? The conclusions seem logical enough for now. I have issues with the fact that it was self-rated but I'll address that later. As far as demonstrating that self-rated mind-wandering decreases as a task approaches, this task, although very simple, seemed to demonstrate that people can become more focused when they anticipate that their attention is needed.

3. Are the conclusions important? How do you think this relates to everyday behavior? These conclusions are important. They demonstrate an innate mindfulness inside all of us that just sometimes needs an external motivation to unlock it. Further understanding what this motivation (external or internal) may be could lead to great advancements in mindfulness.

4. What were the best aspects of the research presented, and how could the research be improved? Name at least one way to improve the experiment. The best aspect of this research was the question alone, which I believe will inspire many experiments after it to come. There is however an obvious issue about having people self-rate their mindfulness, given that lots of the time, they won't be entirely sure whether or not they were focused.

On top of this, the task at hand seemed a little too simple considering it was only the push of a button, could something slightly more engaging or changing have provided stronger, more realistic evidence?

5. How would you follow-up this experiment or study? I would conduct this study with an EEG (if there is some way to measure mind-wandering with it) or MRI (if there isn't) as participants engage in a similar activity, but one that is slightly more demanding. Like spotting a hidden feature in an image, or rating a comic, something changing that is more reflective of life circumstances, and use the brain scans to identify certain, empirical trends in whether or not peoples' minds are wandering.

Additional Resources: What are the basic concepts that you need to know to understand the science presented in your paper? What other information or resources would help you better understand the paper? This is helpful to consider for your science communication pieces. Principles of attention, and mind wandering.

Further Questions:

Write at least five comments or questions about the article to discuss with the class.

1. How well did they operationalize mindfulness in this experiment?
2. What would be the ideal length to run for a study like this?
3. Were there any implications of using participants from Amazon Turk?
4. What is most shocking about these results?
5. How can we use this information to improve society?