

APA citation of journal article:

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. Pupillary dilations reflect conscious attention between a speaker and listener. Peoples pupils dilate the most at a time of emotional peak or high emotion.
 - 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? The gap is in how people share attention, and is attributable to it being difficult for researchers to test it in real time. They are trying to answer the question of how do pupil dilations show how people share attention?
 - c. What are alternative hypotheses? Other hypothesis include humans mirroring other individuals, we connect with others who posture, facial expressions and eyeblinks match our own.

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.

There are a group of speakers and a group of listeners. The speakers were recorded giving either high expressive or low expressive stories. The group of listeners simply listened to the video. Raters would rate how emotionally expressive they thought the speaker was. Eye tracking was used to measure pupil dilations during the listening period.

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?

There was an effect on speaker expressivity and listener empathy on pupil synchrony. This supports the hypothesis that pupils synchronize between those who share a connection. The more listeners adopted the speaker's perspective, the greater the synchrony. This didn't happen for low expressive speakers. This also refutes any counter claims that show that these synchronizations

don't happen for this reason. This helps the hypothesis because it shows clear findings that can support the claims researchers make.

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.

The results give a good start to the study of connections and mental coupling. Researchers find that their data indicate positive results, but also help open the door to more research questions about mental coupling. The limitations on the research were possibly the design, and that a simpler, if coarser way to test if factors influence synchrony would be to take away stimuli and see if it still occurs.

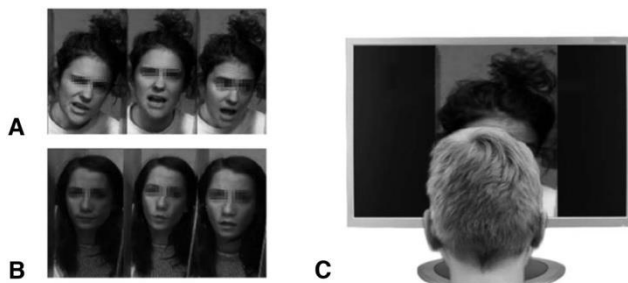
The Critique:

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.

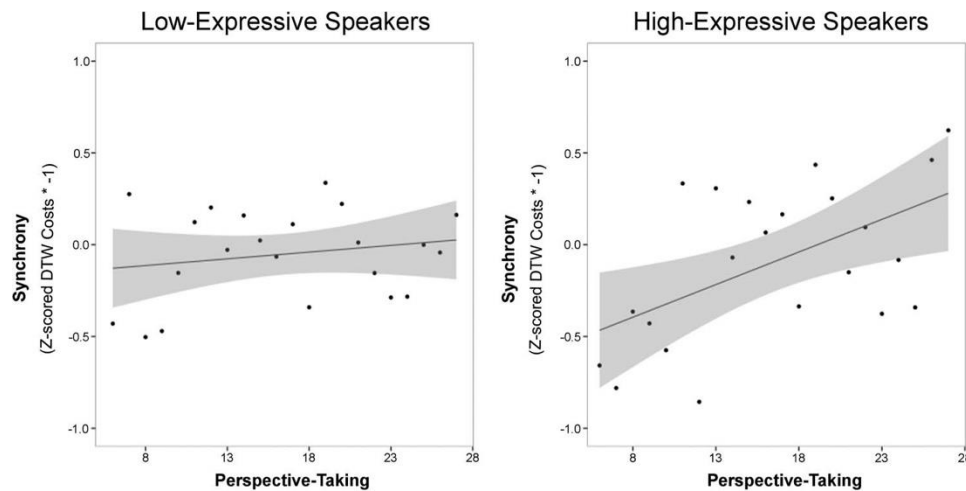
This paper is written well for its audience.

Tweets:

In this study, researchers found that people's pupils dilate in sync when sharing attention. The more expression a speaker uses, the more in sync pupils become.



Researchers found that pupil synchronization happens within people tested through pupillometry, a method of eye tracking. Higher empathy and expression from the speaker showed greater dilation synchrony.



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?

They do seem logical. The hypothesis was supported through data, graphs, and other claims that were supported. The data does support the claims researchers made. Inferences from the hypothesis that can be made are, higher emotional appeal between people shows they are more connected, supported through their pupil synchrony.

3. Are the conclusions important? How do you think this relates to everyday behavior?

I think the conclusions are important as the researchers did state there is a gap in literature of mental coupling and human's attention sharing. This relates to everyday behavior because we interact with people every day, and knowing this can help increase our connections

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.

I think the study design was great. they had clear methodology that could be replicated. One way to improve the research would be to increase the number of participants. Although it is more expensive to do so, this would allow for conclusions and results to be better generalized to a larger population.

5. How would you follow-up this experiment or study?

I would discuss the need for more information and studies on human connection and mental coupling. Although the results were positive, it just opens the door to more research questions.

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.

Study design, methods were big. Knowing about eye tracking allowed me to understand how they measured pupil synchronization without someone just looking at a person's pupils in front of them. A resource that would help is to have a press release or science article written from this research.

Further Questions:

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

1. Why state that there could be a simpler way to conduct the experiment in the discussion? If there was a better way, why not do it?
2. Why was the intro so long, but the discussion was very short? I know the audience needs background information, but I feel that discussing implications and results is more important
3. Should the videos be included for replicability of the experiment?
4. Can this experiment be replicated solely from this? Or would someone wanting to replicate it need more information?
5. How would so much information translate into a 140 character tweet?