

AI & Physiological Psychology Research

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Psychology, Physiological Psychology (PSY 377)

Undergraduate, Junior and Senior Psychology Students

Learning Outcomes

- Develop 3 research questions around a topic related to Physiological Psychology
- Use AI generative software to help sharpen research questions and dig deeper into the issues to answer in a research paper
- Evaluate and discuss responses provided by AI generative software

Context

- Students in the Psychology Department often write research papers as assignment in their major courses. In this course, students will be able to first explore the use of AI generative software in refining their 3 research questions, will then submit a detailed outline of the paper, will submit a full draft of the paper, and then will submit the final version of the research paper at the end of the course.
- The timeframe of this activity will be 2 weeks outside of class
- This assignment will occur at the beginning of the quarter
- This activity is designed for any course format: an in-person, hybrid, or an online synchronous or asynchronous course
- Students will need to think about a topic related to Physiological Psychology that they'd like to learn more about in the course
- Students will need to have an AI Generative account of their choice (e.g., ChatGPT)

Activity

AI- Student Information

- Students will watch a short video introduction about AI and ChatGPT:
<https://www.youtube.com/watch?v=o5MutYFWsM8>
- Students will then sign up for an OpenAI account of their choice (e.g.,
<https://chatgpt.com/>)
- Students will then ask their 3 research questions into the AI generative software of their choice

- It will be important for students to change their prompts several times to see the change in output from the AI generative software
- Students will then copy and paste the responses given from the AI generative software into a document to be submitted for this assignment, along with their evaluation (stated in the bullet points below)
- Students will then evaluate the response given from the AI generative software
 - What specific AI generative software did you use? Why did you choose this software?
 - Please provide your specific prompts and output from this AI generative software.
 - What is accurate? What is inaccurate?
 - What information could be misleading, incomplete, and unethical?
 - How did the AI generative software help you refine your 3 research questions?
 - How did the output change with you altered the specific prompt you entered?
 - What specific details did you provide in your prompts about your research questions? Did this help provide the necessary output?
 - What changes would you make in your prompts next time you use AI generative software in the future?
 - How did the AI generative software give you a new perspective or insight into your 3 research questions?
 - What cautions do you think you (and other students) might need to be aware of after using the AI generative software?
 - How do you think AI generative software can be helpful to you as a student?

AI- Instructor Information

- Instructors will create a detailed instruction sheet that includes all of the step by step process for students listed above
- A checklist will be created to help students ensure they accurately completed all sections of this assignment
- A grading rubric for this assignment will be included in the syllabus

Reflection

- Due to an increase use of AI generative software throughout college campuses, I think it is important for students to take the necessary time to explore how AI generative software accurately and inaccurately can help them in their work as a college student.

- This activity allows students the ability to explore in-depth an AI generative software of their choice. In addition, it enables the student to investigate how AI may be helpful (or not) in exploring Physiological Psychology research (and research in general). In addition, it enables the student to investigate how different user prompts may influence the specific output of AI generative software.
- This assignment has yet to be given in my class, but I look forward to working with my students and learning more about their thoughts on the use of AI generative software in their research papers!