

Guidelines for the Critical Analysis Papers

This critical analysis paper can be on a topic of your own choosing, but it must be specifically related to course content (i.e., mind and brain development). A draft must be submitted before the final paper for professor-recommended revisions. This paper is 30% of your final grade in this course. A grading rubric and an example of the kind of paper that is expected are available for you on Blackboard.

Paper Requirements:

- Each Critical Analysis paper must be 6-7 typed pages, double-spaced with 12 pt font.
- You will need to use at least THREE research studies to write this paper, including the textbook and/or other sources you find using the library. Resources MUST BE from professional peer-reviewed resources. Do NOT use Wikipedia, web sites, or other sources of popular research or information. You may refer to research that is discussed in-depth in the textbook as ONE of the resources/research studies.
- Adopt a *scientific voice*. This means that you use direct, objective, and rather impersonal language. Instead of writing “*As I was reading the article...*” use language such as “*The author suggested that...*” Instead of writing, “*I was thinking about the way the brain...*,” use language such as “*One may consider the way the brain...*” Do not use first person.
- All sources must be cited, even if not quoted directly, but only referred to. Remember though, *quotes* should *only be used* when what the author said was so profound, so beautifully and perfectly written that it simply cannot be said any other way!
- Because this is a writing intensive class, spelling, grammar and writing clarity (appropriate paragraph length/topic, transitions, introductions, conclusions, etc.) will count for a significant part of the grade on this paper. If you need help, ask someone to proofread your paper for you. Look for paragraph breaks and make sure that your sentences are neither too short nor are run-on. You might also try reading it aloud. Another tip is saving the document in a different font (such as Comic Sans) and re-reading it. Doing this, you often see errors you didn’t catch the first time.
- You will need an APA-style cover page and reference section. Cover page needs to include an appropriate title for your paper, your name, course number, section, and title, instructor name, semester/year. Resources are available for you on Canvas.

Writing the Paper:

1. **Define and describe a behavioral or psychological topic or concept.** Begin with a general statement about the topic. Then define a specific behavioral concept that is examined in research using psychobiological methods. As an example, you might provide a general overview of and introduction to the topic of autism. Then, provide narrower definitions related to descriptions of autism, including operational definitions as appropriate, specific to brain development (e.g., cognitive function, maladaptive behavior, language, etc.)
2. **Describe and explain how researchers use neuroscientific or other methods to measure or study that concept.** For example, if they use fMRI to examine semantic vs. grammatical processing in language, be sure you explain how this method works, what the participants of the studies were generally doing while the measure was being performed, and how the researchers generally connected the concept to the results. Some studies will use behavioral assessments or other research instruments, rather than neurological equipment – if so, explain how they are used and why. Briefly discuss the kinds of results obtained and what this tells us.
3. Clearly explain the **implications** of the studies being conducted on this topic. What does it mean for society or more specifically for individuals who are directly affected? Are there recommended treatments, interventions? Are they effective/not effective? What is left to think about or discuss? As you write about this, think ahead into the next section about what might be missing from the research which you reviewed on this topic. Are there specific gaps?
4. Clearly explain the methodological or theoretical **limitations** or problems associated with the way scientists study the topic. Think about what constitutes good research, and what the known limitations of different psychobiological methods are. What makes you wonder, “*Why didn’t they do the research in this way? What if they examined different subjects, different ages, different cultures, etc?*” “*What was especially challenging about doing these kinds of research studies?*” Or you can focus on the limitations and suggestions for future research that they bring up in their discussion. (Please avoid the most basic of “small sample size,” and really show that you thought about the overall methodologies).
5. **Avoid summarizing and critiquing each individual study.** Instead, ***synthesize*** what you have learned on this topic and how researchers study it to learn more. Give a critical analysis of the *overall* kinds of hypotheses posed or research questions asked, the methods used in trying to understand the behavioral/developmental/psychological concept, and the discussions these research studies bring to light. See sample provided.

One more thing:

I would encourage you to narrow things down a bit wherever possible. For example, rather than just addressing language and literacy, you might choose to critically analyze the research available on second language acquisition (maybe specific to early childhood) or reading disabilities. As another example, if addressing the neonatal period, you might choose to critically analyze the literature available on

attachment (maybe specific to a population or culture). If looking at trauma on the brain, you might examine trauma at birth *or* the effects of TBI later in life. If exploring the arts and brain development, you might decide to focus your analysis on the literature relevant to music and the brain. If you're looking at memory, you might consider simply exploring the literature on dementia or Alzheimer's. You might also consider different topics altogether – such as mental health illnesses, including depression, anxiety, and schizophrenia. I hope this helps clarify things a bit. Please let me know if you have any questions or concerns.