Describe a “slice” of your mental “action”

Role:
This description is another section of your lit review. It gives your readers more general background information to help them understand your research problem better. It also helps you focus on a more precise problem.

This assignment:
The description of your mental “action” broke it down into different steps or parts that we’re calling “slices”.
Pick one “slice” to focus on.
Describe in more detail what researchers know about how this one “slice” of your mental “action” or cognitive process works. Be sure to describe the factors that affect your “slice” and the specific effects that these factors have.

Parts of this section:
- factors that affect how your specific “slice” works
- a list of your references, in APA format
- Separate outline indicating each paragraph

Characteristics of this section:
- Length: ≈ 2 pages, double spaced for the draft version (=500 words)
- Section heading: <your “slice”>

Tips for this section:
- Don’t talk about other slices. Just focus on one.
- Keep careful track of the sources for each fact that you mention.

Next steps:
After this assignment, you’ll choose two of the factors that affect your “slice” and describe their effects in more detail. This will help you make your research problem even more precise.
Here are some short **examples** of what this section should include.

*Divergent Thinking* [a “slice” of problem solving]

The problem solver can begin to generate alternate solutions for a problem once the problem and the goal are identified (Bransford & Stein, 1984). This phase includes the development, evaluation, and selection of alternative solutions that will solve a problem. It is important to note that although many problems only require one solution, others may utilize two or more of the alternate solutions to reach the desired outcome. The ability to utilize information given in a problem and generate alternate solutions is conducive to efficient problem solving (Bourne & Dominowski, 1972).

Generating a higher quantity of solutions is the main objective to maximize the chances that the best solution is among those generated (Speedie, Treffinger & Houtz, 1976). This quantity principle provides an understanding that the more solutions generated increases the more quality solutions available (D'Zurilla & Nezu, 1980). The quantity of solutions has also been shown to predict adaptive behavioral and emotional responses for the problem solver (Nezu, Nezu, & Perri, 1989). In childrearing problems, the ability to generate multiple solutions is associated with a parenting style that is supportive of the child’s development (Pridham, Denney, Pasco, Chiu, Creasey, 1995). Additional factors such as psychological disorders, (Pishkin & Wolfgang, 1965), age (Blanchard-Fields, Jahnke, & Camp, 1995) and gender, (Kuhn & Holling, 2009) influence the quantity of alternatives generated by the problem solver.

*[Lorincz & Mencimer, 2010]*

*Social Perception of Emotion* [a “slice” of social cognition]

A vital part of social cognition is the concept of social perception. Social perception is necessary for making sense of people and is commonly used to deal with everyday situations (McGannan & De Jaegher, 2009). Important visual stimuli for humans are faces which become more apparent in social settings. People are constantly monitoring each other’s faces, attentively looking at details that can provide some insight into the emotions individuals are displaying. Acquiring face-reading skills brings great social advantages, allowing the individual to have a better understanding of the others’ internalized processes and possibly predict people’s behavior (Leopold & Rhodes, 2010).

Face-reading skills are complex (Leopold & Rhodes, 2010), involving an integration of age, gender, emotion category, and social experience. The ability to distinguish a certain emotion depends on the type of emotion that is being displayed. Standard emotions (happiness, sadness, anger, and fear) and positive emotions have been found to be easier to recognize (de Sonneville et al., 2002). In addition, socialization through areas of human interaction such as work experience contributes to the ability to correctly perceive people’s emotions. For example, teachers working and interacting with children are able to gain insight into their students’ emotions by simply referring to their facial expressions (Bellas, 2010).

*[Hernandez & Lucas, 2010]*
**Notice** that all these examples get right to the point. They don’t include information that’s not about the specific “slice”. They include many correct APA citations to document their sources. They’re clearly written and don’t have major issues with spelling or grammar. They don’t talk about the researchers or the experiments -- they talk about the facts, by using the “author-inside” citation style.

Of course, there are always ways to improve them: these samples could include more information about the factors that affect this “slice”, for example.

And your drafts should be about two pages long.

More papers from Psyc 120, Research Methods are [here](#).

### Example “slices” for some mental “actions”

Here are some important mental actions (or “cognitive processes”) and one way of “slicing” each one into steps or parts. You can choose a mental action or a single “slice”. You can also choose other mental actions that are not on this list. These are just a sample.

<table>
<thead>
<tr>
<th>Mental “actions”</th>
<th>Different “slices” of the mental action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceiving</td>
<td>Sensation, classification, visual parsing, using prior knowledge</td>
</tr>
<tr>
<td>Remembering and forgetting</td>
<td>Phonological loop, visuo-spatial sketchpad, central executive, episodic buffer</td>
</tr>
<tr>
<td>(Working Memory, aka Short-term memory)</td>
<td></td>
</tr>
<tr>
<td>Remembering and forgetting</td>
<td>Remembering words, numbers, sentences, restaurant orders, music, images, etc</td>
</tr>
<tr>
<td>(Long-term Memory)</td>
<td>Remembering events, facts, skills</td>
</tr>
<tr>
<td></td>
<td>Encoding, storage, search</td>
</tr>
<tr>
<td>Reading</td>
<td>Word recognition, grammatical analysis, sentence interpretation, inferring information, schema building, using prior knowledge</td>
</tr>
<tr>
<td>Writing</td>
<td>Planning, word choice, structuring sentences, revising</td>
</tr>
<tr>
<td>Problem solving</td>
<td>Understanding problems and building problem spaces, divergent thinking, trying solutions, identifying the best solution</td>
</tr>
<tr>
<td>Decision making</td>
<td>Identifying alternatives, risk assessment, choosing</td>
</tr>
<tr>
<td>Thinking about people (aka social cognition)</td>
<td>Perceiving, classifying, inferring information, stereotype formation, stereotype activation</td>
</tr>
</tbody>
</table>

You can also choose other mental actions that aren’t on this list.
Here’s how to do this assignment:

**Work in groups.** Find all the people who are interested in the same “slice”. **Choose someone who’s interested in the same “slice” to partner with for the rest of the semester.** Divide the library work and share the references for this section. Discuss your readings with each other to understand them better. Exchange drafts for feedback.

This time, submit one draft per two-person team.

**Plan first**
- Start with a general outline.
- Make a Search Plan (Database Assignment #2).

**Find the information that you need**
- Go back to the *Annual Review of Psychology* articles you found.
- Go back to the theses and dissertations you found.
- Go back to the book chapters you found.

**Read only what you need to**
- Skim! Don’t read everything.
- Add detail to your outline as you go.
- Take notes right in your outline.

**Write this section**
- Keep your writing focused.
- Use APA style.
- Write like a scientist.

**Review and revise carefully**
- Check the parts and characteristics of this section.
- Get feedback about your writing.
Step by Step

Plan first

Start with a general outline.

Always make a detailed outline before you write. Start with a general outline that includes the parts of this section as described above. Then, as you find them, add details and facts that you want to mention. Don’t forget to include your sources – so you don’t have to try to find them later.

Many factors will affect how your “slice” works. Make a separate item in your outline for each factor that you find. You can decide how to group them later.

The more detailed your outline is now, the easier it is to actually write later on.

Make a Search Plan. This is Database Assignment #2.

Do NOT run off and start your literature search with Google or PsycINFO!

Plan your search first. Think though what you need to find and where you can look for it. What information do you need to write this section?

You need specific, technical information about your “slice” and about which factors affect how it works.

- Go back to the review article in the Annual Review of Psychology that is most relevant to your research problem. Search for the name of your “slice” and any synonyms. See Access the Annual Review here. Find the references that talk about your “slice”. Write the best references here:

- Go back to the two PhD dissertations that are most relevant to your research problem. Search inside them for the name of your “slice” and any synonyms. Find the references that talk about your “slice”. Write the best references here:

Kinds of factors that might affect your “slice”

- Participants (gender, age, etc.)
- Materials (length, topic, complexity, etc.)
- Task (difficulty, time, etc.)
- Setting (distractors, noise, etc.)
Find the information that you need

Start with the *Annual Review of Psychology*. Then check theses and dissertations. Try to find book chapters.

Now look in the reference lists from the review articles and dissertations that you found when you made your Search Plan for Database Assignment #2. Find related articles.

- Look for authors who appear frequently. Look for books and book chapters by these authors.
- Look for journals that appear frequently. Browse through these journals.
- Look for other theses and dissertations.

See more about *Finding related articles* here.

For each interesting item you find, look in its reference list for more relevant sources. **Forget keyword search, for now.**

Make a list of all the relevant articles from *Annual Review*, theses, dissertations, books, and book chapters. They will contain the general information that you need to write this section.

If you get desperate, use the name of your “slice” as a search term in *PsycINFO*.

Read only what you need to

Skim! Don’t read everything.

**Do NOT try to read everything from end to end!** Your job is to SKIM the articles for relevant information. You just need to find information about the steps or parts of your mental “action”. SKIP everything else.

Technical and scientific writing are different from fiction. Research articles have a very predictable structure so that you can quickly skim to find the part of the article that you want and get only the information that you need.

With this skimming strategy, you can review 40 or 50 articles without spending very much time. This is a good way to show the reader that you are thorough and knowledgeable!

If you find experimental articles, only read the introduction (i.e., the lit review) for now. Skip the rest.

Add detail to your outline as you go. Take notes right in your outline.

As you understand more about your “slice”, add information to the correct part of your outline. As you read, you will find information to make your outline more detailed with new subsections for new factors. Are the effects of each factor significant? How big are they? What exactly is affected?

Double check that the researchers aren’t using different terms to talk about the same things. That happens all the time!

Don’t forget to write down the sources for each new factor.
Write **this section**

**Keep your writing focused.**

Identify your “slice” and **focus on only one way of looking at it.** Talk about the factors that affect how your slice happens. Don’t talk about any other related information.

**Use APA style.**

APA style includes rules for which sections include which information, for page layout, for citing other researchers’ work, for helping your readers find your sources with complete references, etc. If you don’t follow these rules, readers will conclude that you aren’t intelligent enough to follow them – so they won’t believe your results. Learn the important parts of the *APA Manual* by heart.

**Write like a scientist.**

Researchers write differently from the way you learned to write in other classes. They focus on the ideas and facts rather than on the people.

- They don’t address the reader directly (with *you* or *your*).
- They don’t talk about themselves (with *I* or *we*).
- They don’t use first names or direct quotes.
- They don’t use fancy, literary English, just technical terms.

Review the information about scientific writing [here](#) -- before, during, and after you write. Do your best to sound as professional as possible.

---

**Deeper Qs**

- Your mental “action” has parts or steps that we call “slices”. Do the “slices” have parts, too?
Review and revise carefully
Check the parts and characteristics of this section.

At the beginning of this assignment, there is a description of the parts and characteristics of this section.

Review what you wrote to make sure that it includes all the necessary parts and characteristics, so you know when you’ve finished.

Checklist:

Does your draft include these parts and characteristics?

| __ factors that affect how your specific “slice” works |
| __ separate outline indicating each paragraph |
| __ a list of your references, in APA format |
| __ ≈ 2 pages, double spaced (=500 words) |
| __ Section heading: <your “slice”> |
| __ APA style writing, layout, and citations |

Exchange drafts with someone else to check the parts and characteristics of their writing and get feedback about yours.

Submit one draft per person.

Get feedback about your writing.

The biggest difference between professional writers and inexperienced writers is feedback. Professionals get lots of feedback about their writing, from many different people. Then they revise and rework everything they write SEVERAL TIMES. That’s why it looks professional.

I have a friend who’s written DOZENS of books and he still gets everything reviewed and revised.

Build a support group of people who can give you good feedback about your writing. You’ll need this support for the rest of your career. Some people will give good feedback about spelling, others about grammar or style. Other people will be good at telling you what makes sense and what does not. That’s why you need feedback from lots of people.

Remember to finish writing EARLY enough so that you have time to get feedback and improve your writing based on it. Plan for three or more drafts if you want to look your best!

You can also get help with your writing on campus at:

- the Writing Center [http://www.sjsu.edu/writingcenter/] or
- the Learning Assistance Resource Center [http://www.sjsu.edu/larc/].