Assignment 3. Face processing literature review
The goal of this assignment is for you to learn about what is involved in writing a literature review. And also to find out a little about face processing.

You will write a literature-review type of essay of about 2000 words concerning some aspect of face processing.

What is a literature review?
A literature review assesses published work pertaining to a particular topic. It does not contain new research, but may synthesize existing research in a new and useful way, bring out questions regarding that research, and make suggestions for further work. The topic may be very specialized or be quite general. A more specialized review, with fewer papers dealing with it, is easier to write. It may be published as an introduction to an experimental paper, to explain why the experiment was conducted, or it may be published as a stand-alone paper which summarizes the current state of research on some topic.

What you are required to do

(a) Find (on Google Scholar) and read this “seed paper”:

It contains 19 numbered facts about face perception. Choose one of the 19 that particularly interests you. (We will also consider some aspects of face-processing in the last part of the course.) The aspect of face processing you choose can be concerned with the computational, psychological, neurological or social aspects of face processing.

(b) Learn to search Google Scholar. If you type “Google Scholar” into Google, then you will find searching advice in places like:
https://scholar.google.co.uk/intl/en/scholar/help.html
and

Learning to search Google Scholar effectively is vital to your academic work.

(c) Find four published but electronically available original research papers that are concerned with your topic. “Original research paper” means that the paper must report new research, rather than itself being a review paper. Conference proceedings are also permissible. You can find the four papers in the bibliography of the Sinha et al. paper and/or from Google Scholar. Using an effective search term will find you the most appropriate four papers. You can inspect the abstracts of the papers on your screen so as to decide which ones will be relevant to review. The papers you choose should all be closely concerned with your particular topic. You may find them by finding a recent paper on your topic and looking at the papers it cites. The “sort by relevance” and “sort by date” commands in Google Scholar will be helpful to you. Recent papers will show you state of the art research. The original paper on the topic can also be important.

(d) Download an electronic version of each of your four papers. Read them.

(e) Write your review.

Writing a literature review is not simply a matter of summarizing other papers one after another. The reviewer’s job is to pick out what is important, to evaluate the evidence and to support particular conclusions.
Making sense of one paper can seem difficult enough, and to make sense of four papers requires some planning. Think of writing a literature review as creating a coherent narrative out of a group of papers. What story does a body of research tell? Examples of a research narrative include:

* Comparing and contrasting how two or more theories relate to your topic.
* Looking at the evolution of a field or an idea over time (a chronological narrative).
* Marshalling research findings for and against a particular viewpoint or conclusion.
* Justification for a programme of work.

Read the papers you have identified and gather your evidence. It is likely that you will find some parts of the papers very difficult to understand! You are not expected to understand every line, and are NOT expected to understand or write about any complex maths. That said, if the only part of the paper you do understand is the abstract, it might be wise to see if there is another paper you can use instead, or to ask your classmates or your tutor for help.

Start with the parts most likely to be in plain English and try to understand those before proceeding to the more technical sections. This may mean not reading the paper from beginning to end. The Abstract, Introduction, and Conclusion are the best places to start, followed by the Discussion, Method, and Results. For this assignment, you will probably not need to read the Results in detail; that is where statistics are reported, and this assignment is more concerned with the more general information in the paper, or the outcome of the experiment.

Look for the following types of information in each paper, and take notes about each paper:

* What is the point of this paper?
* What research question does this paper try to answer? What do the authors hope to find out?
* What were the hypotheses (testable predictions) investigated in the experiment?
* How does this paper relate to previous research? (Look in the Introduction for that information)
* How did the authors test their hypothesis or their other claims?
* If there were human participants, who were they? Why this group? This is especially important if you choose a theme to do with neurological conditions or "expert" participants
* What was the experiment? What stimuli did they use?
* What were the results of the experiment and what do they mean?
* Focus on the plain-English description of the results and what they mean. It can be helpful to report key numbers such as "participants were 75% accurate discriminating between x and y" but you do NOT need to report endless numerical results or the real details of the experiments carried out. You’re writing a review, a summary.
* Do the results support the hypotheses? Have any research questions been answered?

Organize your information. Plan the narrative for your literature review. If you are having a great deal of difficulty deciding how to organise your papers, make sure to ask yourself whether they are related enough. Is your topic too broad? If you have, for example, three papers that go well together and an odd one out, you may wish to cut the paper that doesn’t fit or replace it with a more appropriate one.

Writing it. The good news: there is no one way to write a literature review. The bad news: there is no one way to write a literature review!

In general, it will have an introduction, a body, and a conclusion. You need not use a section heading for the introduction. Put the title at the top of the page, then begin the introduction after that. Leave a line space between the end of the introduction and the beginning of the body of the review. You may not need section headings within the body of the review, unless you find it useful. Do use a section heading for the Conclusion. Start the references on a separate page with References at the top.

Some useful hints for writing your review:
 Make sure that your review has an introduction where you make the reader aware of your topic and your chosen theme. Assume that your reader has general knowledge of face processing and of the general discipline in which you are writing (e.g. Psychology, AI, …)

* Analyze and synthesize what you have read. What do you want the reader to get out of the four papers? What points do you want to make?
* Discuss the original papers, according to your idea of what type of review you are writing. In most cases, it will make sense to spend a roughly equal amount of space overall discussing each of your four chosen papers.
* Be clear! Back up your claims with evidence from the papers, cited appropriately.
* Define technical terms if appropriate.
* Start a new paragraph for each new point you make.
* What were the "findings" of your review?
* If you are comparing two viewpoints, which one seems like the most comprehensive (or convincing) explanation?
* Perhaps you have a suggestion for future work?
* Conclude your review:
  * Re-state your review’s theme and any general, key points, briefly.
  * Re-state your review’s “findings”, briefly.
  * Do not introduce any NEW information in your conclusion!

Citations and references:
At the end, list the papers you have cited, in alphabetical order of the first author.
You are free to use any academic citation style that you like, but APA is a good standard one. Be consistent! See:
http://owl.english.purdue.edu

Beware of plagiarism! Keep track of your sources when taking notes and when writing. Put inverted commas (") around all direct quotations and cite page numbers and the reference.

Images, graphs, and tables are not required. If you feel that any of these would be particularly useful to your reader in understanding the papers (for example, a sample of stimuli on which experimental participants were tested), feel free to include a small number of them. Make sure to use appropriate, consistent citations to refer to these items in the text, and to attribute them to the original authors.

Try and keep to the approximately 2000 words target length. But don’t get too obsessive about it. Don’t count the References at the end. List the number of words at the end of your literature review.