

Notes on Reading

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1 Some resources that I think you will find useful

1. [Keshav, S. How to read a paper.](#)
2. [Subramanyam, R. V. Art of reading a journal article: Methodically and effectively.](#)

2 My own notes on how to read a paper

In what follows, I briefly discuss the strategy I use to read papers. I have found it very useful and time-saving. Try it and see if it works for you.

1. Read the *Abstract* and think for a minute about what the article will try and show.
 - (a) This is perhaps the thing students don't do often. Many read "passively", instead of "actively".
 - (b) What kind of data do you think the author will present to make their argument?
 - (c) What do you think of the claim? Why would you disagree/agree? How does it fit into your view of the topic?
2. Read the *Introduction* to get familiar with the background facts and viewpoint of the authors.
3. Read the *Conclusions* to see what they claim to have shown.
4. Now that you have a clear idea of what to expect, look at the actual experiment/argument and constantly think about confounds (meaningful confounds that could affect the interpretation, not silly side-details).
5. Then see if the conclusions/interpretation are merited. Is there another possible explanation?
6. Ask yourself how what you have learned from the paper modifies your view of the general topic. Connect it to other papers you have read, and see if there is a tension or agreement.

NOTE: Steps 1, 5 & 6 are the MOST important steps – synthesis of the knowledge. This is what allows you to actually be a good scientist in the long run. This is what generates new ideas and experiments. Every other step could be done by a decent high-school student.

Another couple of things:

- You need to read constantly and well beyond what is assigned in class. There is no way you can become a good researcher and have good ideas, if you don't read widely outside class.
- Simply put, you are not in high-school anymore. You are here to do research, so you need to be self-driven.