



VANCOUVER ISLAND
UNIVERSITY

Research papers

John Hill

The Writing Centre

What are we writing *for*?

- A research paper is aimed at solving a problem
- So you need to know what problem you are solving.
- To rephrase: What is your **research question**?
- EG: Should students take a year out of education between high school and college?
- OR: How do college students spend their time
- OR: How do admissions tutors choose students?
- OR: **What is the most effective way to treat high blood pressure?**

How do we answer that question?

- We can't answer a question like that off the top of our heads. "I think... maybe, like, antibiotics..?"
- We can't just offer an opinion: "Oh, if I were you I'd eat a lot of eggs. Or you could buy my *Doctor Carruther's Solve-all Snake Oil*."
- We have to find out the best information available.
- That is, we have to do **RESEARCH**

Research

- Universities are places where information is generated and disseminated. Research is done, articles are written (and read) presenting the findings from that research, students are taught.
- That information, produced by researchers around the world, is made available to scholars at the university (and this means you) through your main research partner, **THE LIBRARY**. Learn to use it.

Presenting your research

- As you read, your topic will begin to acquire shape – you will see different aspects of the issue: behavioral matters like diet and exercise; medical treatments like different classes of drugs; mechanical approaches like surgery.
- You can now focus your research on these issues
- Having gathered your EVIDENCE – that is the material you have collected during your research, you, have to do some thinking. What *is the best way of treating this illness?*

The Thesis Statement

- It will become obvious to you that there is some sort of weighting to the options available. It will rarely be completely one-sided however.
- Nevertheless, even complex issues can be boiled down to a relatively simple fundamental overall position, even if *nuanced*, with respect to the problem you have investigated.
- This position is your **THESIS**.

The Thesis Statement

- You need to formulate your thesis as a clear take or position on your subject, and write it in your essay, typically at the end of your introduction. This is your **thesis statement**. *(Sometimes in APA research papers this key finding appears in the abstract and conclusion, but not in the introduction).*
- EG1 “High blood pressure is a big problem for the health-care system.” **Not good** – blandly descriptive. – why do the research and write an essay simply to demonstrate an obvious fact?
- EG2 “What is the best way to treat high blood pressure?” **Not good**: this is a **question**. Your thesis should be the **answer** to this question.

The Effective Thesis Statement

- “It is clear that treatment of high blood pressure requires a holistic approach to the patient: it is not simply a matter for medication, though a range of drugs have a role to play, rather the health-care team also has to address questions of lifestyle, especially diet and exercise.”
- You have thereby taken a **clear** position with regard to a **significant** problem.

More on Thesis Statements

- Determine what kind of paper you are writing:
- An **analytical** paper breaks down an issue or an idea into its component parts, evaluates the issue or idea, and presents this breakdown and evaluation to the audience.
- An **expository** (explanatory) paper explains something to the audience.
- An **argumentative** paper makes a claim about a topic and justifies this claim with specific evidence. The claim could be an opinion, a policy proposal, an evaluation, a cause-and-effect statement, or an interpretation. The goal of the argumentative paper is to convince the audience that the claim is true based on the evidence provided. (Tardiff & Brizee 2011)

Different Types of Thesis Statement

Example of an analytical thesis statement:

An analysis of the college admission process reveals one challenge facing counselors: accepting students with high test scores or students with strong extracurricular backgrounds.

The paper that follows should:

- explain the analysis of the college admission process
- explain the challenge facing admissions counselors

(Tardiff & Brizee, 2011)

Example of an expository (explanatory) thesis statement:

The life of the typical college student is characterized by time spent studying, attending class, and socializing with peers.

- The paper that follows should:
- explain how students spend their time studying, attending class, and socializing with peers
- (Tardiff & Brizee 2011)

Example of an argumentative thesis statement:

High school graduates should be required to take a year off to pursue community service projects before entering college in order to increase their maturity and global awareness.

The paper that follows should:

- present an argument and give evidence to support the claim that students should pursue community projects before entering college

(Tardiff & Brizee 2011)

The Introduction (1)

- We now know the **final** element of the introduction (the thesis statement), but how do we get there?
- One approach is to open your essay with a **generality** about your topic. EG: *High blood pressure is a syndrome that contributes to a significant amount of ill-health in Canada.*
- A good essay might then **secure that generality in scholarship**, adding something like: *Smith and Jones (2009) report that B.C. alone spends \$2bn annually on treating patients exhibiting this symptom.*

Introduction (2)

- You would then go on to introduce the **specific aspect** of the issue that you are dealing with: ***“However, the most effective way to treat such patients is uncertain. Various studies (Hope 2010, Wish 2009) have indicated that conventional approaches have disappointing long-term outcomes. Recent work in this area (Wang 2011, Schmidt 2012) has suggested that lifestyle changes are key to improved health.”***
- Now you have prepared the ground for the **position** you have taken following your research, and you can deliver your thesis statement: ***“It is clear that treatment of high blood pressure requires a holistic approach to the patient: it is not simply a matter for medication, though a range of drugs have a role to play; rather, the health-care team also has to address questions of lifestyle, especially diet and exercise.***

Introduction (3)

High blood pressure is a syndrome that contributes to a significant amount of ill-health in Canada. Smith and Jones (2009) report that B.C. alone spends \$2bn annually on treating patients exhibiting this symptom. However, the most effective way to treat such patients is uncertain. Various studies (Hope 2010, Wish 2009) have indicated that conventional approaches have disappointing long-term outcomes. Recent work in this area (Wang 2011, Schmidt 2012) has suggested that lifestyle changes are key to improved health. It is clear that treatment of high blood pressure requires a holistic approach to the patient: it is not simply a matter for medication, though a range of drugs have a role to play; rather, the health-care team also has to address questions of lifestyle, especially diet and exercise.

Body of the essay

- You will then demonstrate how you reached this conclusion in a **DISCUSSION of your findings** through a series of related, relevant paragraphs, each covering an aspect of the study, *such as* (1) The nature of the problem of high blood pressure (2) Problems with conventional treatment (3) Advantages of lifestyle changes (4) best practices re diet, exercise (5) Need for combination with appropriate medication.
- If there are multiple paragraphs on related sub-topics use subheadings for each sub(topic) (first level bold and centred; second level bold and flush left)
- You will **provide EVIDENCE from your RESEARCH** to support your assertions.
- And you will **CITE that evidence** in conventional APA style.

Body paragraphs 1

- A paragraph should form a **unity** – that is, it should all relate to a single main idea.
- That idea should be expressed at (or near) the beginning of the paragraph – **the topic sentence.**
- This idea should be clearly **related to the overall thesis** of the paper.
- It should be well-developed, with sub-points supported by evidence adequate to make the paragraph's main idea clear and PERSUASIVE.

Body paragraphs 2 – Four steps

- **Establish the main idea in a topic sentence**

The serious side effects of drugs used to treat high blood pressure on some patients form one reason to keep their use to the minimum.

- **Explain that idea**

This means that it may be important to find non-drug treatments that allow the care team to reduce the dosage and/or duration of the medication

- **Give an example (support with evidence from your research)**

For example Drug XXXX has been shown to produce depression in between 10% and 12% of patients (Harper 2009, Cameron 2009).

- **Explain the significance of that example**

Drug XXXX is the most common treatment for high blood pressure, administered in around 50% of cases of very high blood pressure (above a value of YYY). Since around X hundred thousand Canadians are treated for this disease each year (Health Canada, 2011) this medication is annually inducing up to X0,000 unnecessary cases of depression nation-wide, and according to Smith (2008), “Many of these cases are severe” (p.213).

Body Paragraphs (cont)

- **[You might start another paragraph here, or add another example to this paragraph]**

Another such example is drug ZZZZ.... Etc.

- **Finally, it may be appropriate to draw it all together, following the “they say”, “I say” pattern.**
- EG: As a result of the severity and relatively high incidence of side-effects from the most effective drugs used, there is a need for alternative or additional treatments.
- **Then open your next paragraph with a suitable transition that “signposts” your direction to the reader:**
- EG: Therefore, However, Nevertheless, Additionally, Consequently, As a result, An example of this is...

What is a Conclusion?

- It's your last opportunity to make sure that the reader is able to see how the different parts of your essay join up and demonstrate the strength of your argument by **validating the thesis statement** you gave them back in the introduction.
- However, it is not enough to simply restate the thesis. Your reader is now **a different reader** – they know more of what you know and therefore can deal with a more complex and nuanced discussion of your findings.

Conclusions (cont.)

- Thus the conclusion rehearses the **KEY STEPS** of the argument you have given, explaining how they lead to your thesis.
- Additionally it **CAN** be a place where you acknowledge the **LIMITATIONS** of your study: what you didn't do given the time, space, other constraints, that would have been interesting.
- This **MAY** lead naturally towards a pointer to **FUTURE RESEARCH** – part of the great academic conversation: “I didn't do this, but you might like to – it does need doing.”

Example conclusion

- There are a range of effective drug therapies available to treat high blood pressure. However, as demonstrated, many of these drugs have serious side-effects, and, moreover, they do not address the underlying cause of the illness. The most recent scholarship indicates that without changes to lifestyle, in the form of an improved diet and exercise regimen, drug-treatment alone is of limited efficacy. However, more research is required to determine precisely what levels of exercise, and precisely what elements of the patients' diet have the best effect.