

## Aims and Hypothesis Writing: Some Guidance

So, you have to come up with a study Aim and a Hypothesis, but are unsure of what these are. Let us help.

A study **AIM** describes a broad idea for a study. It is the reason the study is done. It is also called the rationale for the study.

A **HYPOTHESIS** is a highly specific prediction of what you expect to find in a study. The HYPOTHESIS is the test of your idea about how something works or the relation between variables.

For the purposes of your PSY1022 research proposal assignment, **KEEP IT SIMPLE**. Use one independent and one dependent variable. You will not be getting extra marks for a complex idea. In fact, the more complex your question, the more likely you will be to make mistakes and lose marks. Also, **STICK TO THE TOPICS PROVIDED**. You've been given three topics to choose from and you should stick very closely to what we have suggested. If you think you've gone off-topic, you probably have. If you are in doubt, please contact your facilitator for guidance.

Here are some examples of good and bad AIMS:

1. The following study aimed to examine motor control in Asperger's syndrome
2. Given the lack of consensus in the existing literature, the following study aimed to examine motor control in Asperger's syndrome
3. Research has consistently demonstrated gross motor deficits, but not fine motor deficits, in Asperger's syndrome. Therefore the following study aimed to more accurately characterise fine motor control in Asperger's using new, more sensitive, motor assessments.

Here are examples of good and bad HYPOTHESES:

1. It is predicted that there will be a difference in spatial ability between men and women
2. It is hypothesised that women will possess better spatial ability than men
3. It is hypothesised that men will perform the Spatial Ability Test faster and more accurately than women

4. It is predicted that men will perform the Spatial Ability Test slower than women and that they will make more errors than females

Which do you like and why?

Good and bad AIMS:

1. The following study aimed to examine motor control in Asperger's syndrome

*This aim is too broad. It gives very little specific information on what aspects of motor control are of interest.*

2. Given the lack of consensus in the existing literature, the following study aimed to examine motor control in Asperger's syndrome

*Again, this aim is far too broad. A study on this issue will be more specific than motor control in general, so the AIM should reflect the specific ideas you are investigating.*

3. Research has consistently demonstrated gross motor deficits, but not fine motor deficits, in Asperger's syndrome. Therefore the following study aimed to more accurately characterise fine motor control in Asperger's using new, more sensitive, motor assessments.

*Longer is not always better, but this AIM has the level of detail that reflects what you are actually interested in investigating. This aim does not give a broad and sweeping statement about "motor control," but details the aspects of motor control that are being investigated.*

Good and bad HYPOTHESES:

A good hypothesis adequately predicts the results in the context of the independent variable(s) and dependent variable(s), AND is succinct.

1. It is predicted that there will be a difference in spatial ability between men and women

*A difference? In which direction? This hypothesis fails to make a specific prediction about the direction of an effect. Your background literature will rarely lead to such vague hypothesis. This is the worst of the bunch.*

2. It is hypothesised that women will possess better spatial ability than men

*This hypothesis isn't too bad and you are likely to see such a hypothesis published. We have a direction (women being better than men), but the way in which they are better is not specified. What is "better"? Also, the way in which "spatial ability" is measured is not specified.*

3. It is hypothesised that men will perform the Spatial Ability Test faster and more accurately than females

*This is a good hypothesis. There is a specificity about the direction of the effect, what the test is and what the measure of superior performance is (speed and accuracy). This hypothesis also mentions the specific test of spatial ability used. It is not always necessary to detail the specific task used, but it doesn't hurt to be specific.*

4. It is predicted that men will perform the Spatial Ability Test slower than women and that they will make more errors than females

*This is the best of the bunch. It is similar to hypothesis 3, but adds what is meant by accuracy (error rate). In this way, it is more specific than number 3, but either 3 or 4 would be acceptable*