

## Chapter 1: An overview of how to do research.

### Full answers to study questions

1. The exact wording of the hypotheses could be quite variable, so the suggestions below are indicative of the kind of thing you could have written. The most important thing is whether the hypothesis clearly maps onto the type specified.
  - 1.1. A two-tailed hypothesis should specify that a difference will be found, but with no direction given:  
People with and without pets will differ in their levels of satisfaction with life.
  - 1.2. A null hypothesis should specify no difference: There will be no difference in levels of general anxiety between participants with and without spider phobia.
  - 1.3. A one-tailed hypothesis should specify both that there will be a difference, and the predicted direction of that difference: Psychology students will have a significantly higher IQ than students studying for a different degree subject. You could also have suggested a one-tailed hypothesis in the opposite direction: Psychology students will have a significantly lower IQ than students studying for a different degree subject.
2. When considering ethics application, different people may identify different concerns. Below are some of my thoughts on the ethics of the design, but you might have picked up on some additional issues. That is totally fine!
  - 2.1. Informed consent: It is good that the participants were asked to give informed consent, but as they are children the researcher should also ask for informed consent from an appropriate adult, such as a parent or the school's head teacher.
  - 2.2. Deception: There is no obvious deception, either implicit or explicit.
  - 2.3. Protecting participants from harm: There is the potential for harm in this design, in many ways (e.g., psychological harm due to a bullied child worrying about naming their bully, potentially exacerbating bullying occurring). If this study occurs, there needs to be some careful safeguards in place, such as a detailed anti-bullying component added to classes during and after the study has occurred.
  - 2.4. Right to withdraw: Children should not be compelled to answer questions that make them feel uncomfortable, especially when talking about bullying. This is also a potential source of harm to the children. This part of the research protocol would need to be changed before ethical approval could be granted.

- 2.5. Anonymity and confidentiality: Asking children to name their bully raises some potential issues. If names are to be stored then the researchers would need to include information about how the data will be stored securely (e.g., password protected) to maintain confidentiality. The researchers could alternatively be asked to redesign their study to avoid asking children to name their bully as this aspect of the design raises multiple ethical issues!
- 2.6. Debriefing: Given the sensitive nature of the research topic, I'd ask for a more detailed debriefing protocol. It would be better to debrief children individually, as the information given may need to be adapted depending on whether the child has been bullied or whether they have been identified as a bully. Class level debriefing is also necessary, particularly around anti-bullying content. I would also suggest that debriefing information is sent to parents, giving them advice in case their child discloses to them that they have either been bullied, or that that have bullied other children.
3. Within each of these ethics documents, you need to include every single piece of information specified in Figure 1.6. You can see a fully written example of an ethics application, based on this study design, in the Online Resources. It is fully annotated, pointing out where and how to include all of the necessary information. As well as the information, consent and debriefing sheets, there is additional information that may be relevant when applying for ethical approval.