

Critical thinking: Ethics



Teacher notes

This is a four-staged exercise, which may take up to two lessons to complete.

- 1** Give out Proposal 1 to students (either individually or in small groups). Explain that this is an example of a proposal that went to an ethics committee and give students a few minutes to read it.
- 2** Give out the ethics committee's response handout. It will take longer to read and you might need to go over it with students as a whole group before moving on to the third part of the task.
- 3** Give students one of Proposals 2 to 5 and ask them to work through it, applying the ethical guidelines. They have to decide if what is being proposed is within ethical guidelines and make suggestions to improve on the research in ethical terms. It is a challenge to remain focused on ethics and not become sidetracked into making other methodological improvements. Warn students about this.
- 4** Give out the student worksheet. Ask each student or small group to give written or oral feedback. Students could present their conclusions verbally and take questions from the rest of the class.

Proposal 1

A group of PhD students, as part of their final thesis, want to conduct a study in which an opportunity sample of their undergraduate colleagues is recruited onto a research project, the aim of which is to establish the effect of mentoring on the quality of essays. They have discussed this with some students already, who have agreed to take part. Other students will be recruited by word of mouth. Those who agree to participate will be divided into an experimental group, members of which will each receive individual mentoring for 30 minutes every week from one of the research team, and a control group, members of which will not. The mentoring will consist of the PhD students highlighting grammatical errors in essays as well as pointing out any omissions in detail they feel a student made.

Ethics committee’s response

Guideline	Met or not?	Suggestions
<p>Consent Fully informed consent should be aimed for, unless there is good justification for partially informed consent. The only forms of research permitted without any consent are some forms of observation (see observational research guideline).</p>	<p>It would appear that this guideline has been met. Researchers have already discussed mentoring with fellow students and it seems that volunteers are being recruited via ‘word of mouth’, apparently aware of what their participation will involve.</p>	<p>It needs to be clarified to participants that they could be allocated to either experimental or control conditions and that by agreeing, those in the control group are effectively agreeing to have no mentoring. This may disadvantage their marks (or not), as the research aims to discover. Therefore, this should also be a consideration under the psychological distress guideline. It would be advisable to formalise the consent as part of procedure and for it to be scripted in a standardised way.</p>
<p>Observational research Guidelines concerning consent to observation are the same as consenting to any form of research, except when the observation is in a public place where participants could expect to be observed by strangers. In such cases, special consideration should be given to local, religious and cultural norms. If there is any risk that observations could cause offence, they should not be undertaken.</p>	<p>The research does not appear to be observational in nature, although the researcher’s observations of students’ work and their responses to the mentoring process will inevitably be observed.</p>	<p>None advised.</p>
<p>Psychological distress Researchers should ensure that their research, at no point either during or after the study, gives rise to distressing or embarrassing feelings for participants.</p>	<p>The research proposes to highlight grammatical errors and omissions in detail. Although these are common flaws in essays, to have them pointed out by a fellow ‘student’ might be embarrassing and undermine confidence. Distress may ensue. As the students conducting the research appear to already know some of their participants, existing friendships may be damaged.</p>	<p>Alternative methods could be to provide optional one-to-one tuition on such areas as grammar and ‘common errors’, and for this to be provided by a person unknown to the participant.</p>
<p>Physical harm Researchers should ensure that their research, at no point either during or after the study, gives rise to physical pain or distress.</p>	<p>None foreseen.</p>	<p>None advised.</p>

Guideline	Met or not?	Suggestions
<p>Confidentiality Participants should be assured of anonymity throughout the research process. The use of actual names should be avoided, as should any information that could lead readers of published data to identify a participant.</p>	<p>No mention has been made of a standard script that instructs participants of the research or the use of their data within it. It seems likely that individuals would know the researchers working with them, which would challenge the confidentiality guideline.</p>	<p>A standard script could be issued at the outset, assuring participants of anonymity. Participants should be allocated numbers and be asked to use these when submitting essays. The markers should be unaware of which student has received mentoring and which has not. Another possibility would be to 'mentor' via the internet, with both participant and mentor remaining anonymous to each other.</p>
<p>Withdrawal Participants should be made aware at the outset of their right to withdraw from the research at any time or have their data withdrawn at any point in the research process.</p>	<p>This appears problematic as it seems that the researchers are already gathering a sample from a known student body. Those who have been recruited by friends or existing academic staff may feel that they must participate and that they cannot withdraw without it negatively affecting others' opinion of them.</p>	<p>Standard scripted recruitment processes should be used, highlighting the optional nature of participation and making clear the right to withdraw self or data at any point. (If participants are anonymous as suggested, this may make them more likely to take the withdrawal option rather than continuing while feeling coerced.)</p>
<p>Debrief On completion, participants should be given the opportunity to comment on their participation in the research. Their results in the context of the research should be fully explained.</p>	<p>No mention is made of what happens at the end of the research, but this is important, especially if differences are found between conditions such that the mentored group fares better than the control group (as predicted).</p>	<p>A debrief should be given, re-stating the aim of the research clearly. Participants should be told of any improvement made in their essays. Those in the control group should be given the opportunity to take advantage of a similar mentoring process if this has proven to be helpful. They should be thanked for their participation. If it has been found that mentoring has put those mentored in a position of advantage over those who have not, some redress should be made. Though unlikely, mentoring may have a detrimental effect, for which a contingency should be made, e.g. submitting an unmentored essay.</p>
<p>Consultation This must take place prior to research. Colleagues in similar fields are appropriate persons to consult. Members of the public could also be asked for their opinions on any aspect of the research, because this could feed into improved research.</p>	<p>It would appear that the PhD students have consulted with likely participants (seemingly their friends or existing tutees). However, no mention has been made of consultation with superior colleagues or references to previous studies in related fields — this is problematic.</p>	<p>When gathering a sample, it would be advisable to make the process less personal, as participants may be at an advantage by being known to the researchers. They may feel coerced for the same reason. Senior academic staff should be consulted — they may have existing mentoring programmes in place that could be utilised in the research. The wider student body could be approached via student counsel so that consultations are not limited to only those known to the researchers.</p>

Student worksheet

Your turn! Proposal

Suggestions	
Met or not?	
Guideline	

Proposal 2

An undergraduate student proposes to use colleagues from a support group that she attends as an opportunity sample. This group is made up of respondents to an advertisement posted by the student union and was formed to support students struggling with life away from home. It aims to help them form friendships and develop independence. The student intends to survey the group on 'the university experience', specifically on issues around loneliness and depression. She is hoping to use the findings to help future students settle in more easily than she did. The group has previously fed back on their experience of the group to the student union.

Proposal 3

A recruit to the psychology department proposes a research project on dyspraxia. He intends to do a case study on three of his tutees, who have all been diagnosed previously as dyspraxic. They all have similar profiles of exam results and are now taking a module in disorders of learning. The researcher was tested for dyspraxia some years ago but a diagnosis was not confirmed. He proposes to conduct interviews with participants and their close families and friends, and with former teachers. Some observational data will be gathered over the course of the academic year.

Proposal 4

There is a long history of the medical use of parasitic worms. They can be effective in cleaning wounds, and recent research suggests they may also have a use in treating asthma. A researcher proposes that hookworms be administered to an experimental group of asthmatics, compared with a control group of asthmatics who will continue with their existing inhaler treatment. The sample will consist of volunteers from several asthma clinics who will be made aware of the type of treatment proposed but not its duration. After a period of 6 months, the experimental group will receive a drug, which they will be told will kill off the worms in their gut. They will actually receive a placebo. The progress of their condition will be monitored through routine asthma clinic attendance data, and after 2 years the research team will draw its conclusions.

Proposal 5

A research psychologist has been asked by the Ministry of Defence to conduct research on the experience of new recruits. Life in the forces is a challenging experience and it is often reported that many new recruits feel overwhelmed and bullied. The research is to explore recruits' expectations and experiences in the first 6 months of army life. On entering the armed forces, recruits are told that it may be a requirement of their service to take part in psychological research. Those participating will be a randomly drawn sample of new recruits. It is proposed that a detailed medical and personal history will be taken at the outset. Also, every fortnight, all participants in the study will have a 45-minute interview with a psychologist.

Prompting: Usefulness

Research is useful if it can **predict** the way someone might behave or react. (However, remember that such labelling can also be damaging for an individual and can be used by unscrupulous people to control others.)

**Does the research enable predictions to be made?
If so, what are they?**

Research is useful if it serves a purpose and tells us something that we can use in **everyday life**.

**Does the research tell us something that we can use in
everyday life? If so, what?**

Psychology is useful if it helps explain facts and therefore can help us **understand** some human behaviour.

**What do we understand more about thanks to this research?
What has this research explained?**



A piece of research is useful if its findings remain **relevant**. Some research findings (for example, on the way language develops) are as relevant today as when they were published. The ways people conform or fail to do so can still be understood using the explanations given by Milgram or Zimbardo.

Is the research under discussion still relevant? If so, how?



Psychology is useful if it **improves people's potential**, i.e. if it helps people to make progress intellectually or personally.

Has the research helped improve what people might achieve? Can you give some relevant examples?



Psychology is useful if it **alleviates suffering**.

Has the research helped reduce anyone's suffering? If so, how?

Teacher notes

This activity is a starting point for teaching the concepts of reliability and validity. Introduce the concepts of reliability as consistency and validity as truth.

Reliability

Students should place the following items in order from 'likely to be most reliable' to 'likely to be least reliable'. There are no right or wrong answers to this activity, but students must be prepared to justify their place order.

✂

An IQ test score from a standardised test compared with a score from a similar (but not standardised) test

✂

An individual's score of extraversion from a standardised test compared with the viewpoint of a friend

✂

An eyewitness account taken immediately after the event compared with one taken 3 weeks later

✂

A score of introversion from a test in a women's magazine compared with the view of a friend

✂

An eyewitness account taken 3 weeks after the event compared with an account given 1 year later in court

✂

Temperature taken using an electronic gauge compared with temperature taken using a hand held to the forehead

✂

A diary entry of a dream compared with a verbal account given to a friend

✂

Temperature taken using a hand held to the forehead compared with a 'guesstimate'

✂

A personal account of why homework has not been returned compared with a parent's account

✂

A participant's attractiveness rating of a partner before and after being 'asked out' by him/her

✂

Validity

Students should place the following items in order from 'likely to be most valid' to 'likely to be least valid'. There are no right or wrong answers to this activity, but students must be prepared to justify their place order.

✂

A blood-pressure measurement taken using the latest technology

✂

The results of a Breathalyser test

✂

A score on a standardised IQ test

✂

A score on a personality test that has been conducted anonymously over the internet

✂

A score on the Beck Depression Inventory (a standardised depression questionnaire)

✂

A personal account given by a guest on the *Jeremy Kyle Show*

✂

A confession given under no pressure

✂

A 'kiss and tell' account in a Sunday newspaper

✂

A confession given under pressure

✂

A personal account of how much someone drank at a party

✂

Ranking: The nature/nurture debate

Students should place the following terms in order from 'most influenced by nature' (i.e. innate, inborn or genetic factors) to 'least influenced by nature' (i.e. more influenced by experience, environment etc. — that is, nurture). Students must be prepared to justify their place order.

✂

Drawing skills

✂

Autism

✂

Down's syndrome

✂

Schizophrenia

✂

Multiple personality disorder

✂

Athleticism

✂

Introversion

✂

Happiness

✂

Depression

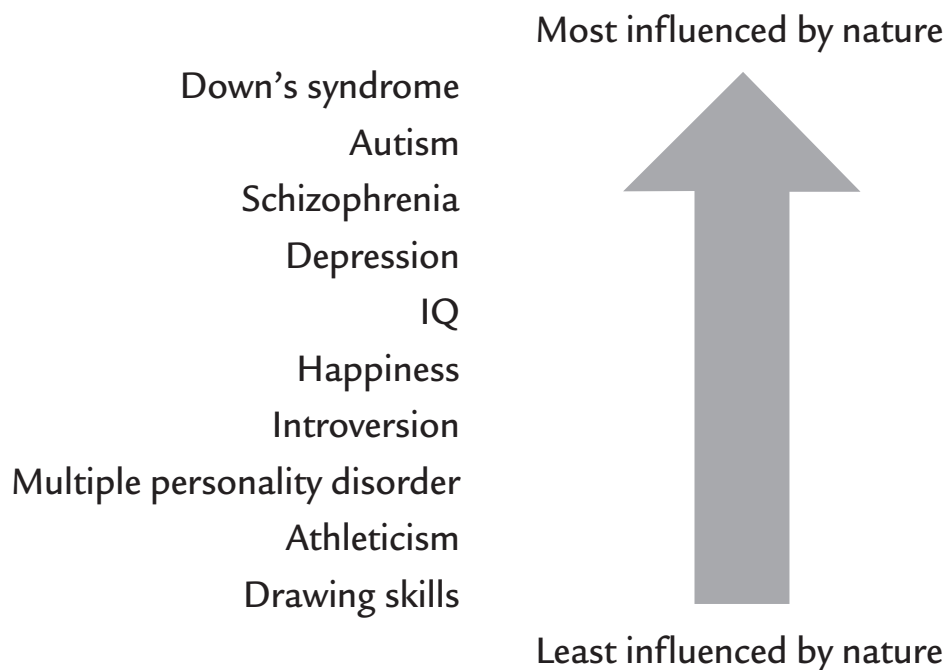
✂

IQ



Teacher answers

There is room for debate here, and that is the point of the exercise. The following is a guide only. Students may have read research or news articles that have highlighted findings in one or other direction about any of these terms. If so, encourage them to explain that point of view and whether it adds to our knowledge or simply makes assumptions. The likelihood is that the discussion will lead to re-stating the idea that nature and nurture are inevitably intertwined, though there may be different 'loadings'.



Sorting: Qualitative and quantitative data



Item	Qualitative	Quantitative
Diary entry of dream content		
Score on an IQ test		
Results of a personality test		
Analysis of a Rorschach ink blot test		
Results of a projective test		



Item	Qualitative	Quantitative
Transcripts of an interview		
Observations of pro-social behaviours in the playground		
Perception of attractiveness		
Happiness ratings		
EEG results		



Item	Qualitative	Quantitative
PET scan data		
Adaptation to daily living after an operation		
Aggression towards others		
Feelings of guilt		
Depersonalisation		



Item	Qualitative	Quantitative
Responses to art		
Eyewitness testimonies		
Empathy with others		
Changes in cultural values over time		



Teacher answers

Your students may come up with ingenious alternative responses, but here are some suggested answers for you to give as practical examples.

Item	Qualitative	Quantitative
Diary entry of dream content	A diary entry is a personal account revealing an individual's subjective experience	
Score on an IQ test		IQ tests are generally standardised and yield numerical values, which are quantitative data
Results of a personality test	Some personality tests are projective and rely on a therapist's interpretations of a person's response to stimuli, so in this case such a measure would be qualitative	Many, if not most, personality tests are standardised questionnaire tests and yield numerical scores, so this is a quantitative measure
Analysis of a Rorschach ink blot test	The Rorschach ink blot test is an example of a projective test. It relies on a therapist's interpretation of a person's response to stimuli, so such a measure is qualitative	
Results of a projective test		
Transcripts of an interview	A written record of what has been said in an interview is a qualitative measure	
Observations of pro-social behaviours in the playground		
Perception of attractiveness		To rate someone on attractiveness would be likely to involve the use of scales that would allow at least ordinal ratings, so therefore this is a quantitative measure



Item	Qualitative	Quantitative
Happiness ratings		The term 'ratings' here suggests the use of a scaling system, so therefore this is a quantitative measure
EEG results		EEGs measure brain waves or electrical activity in the brain, so therefore EEG results are a quantitative measure
PET scan data		
Adaptation to daily living after an operation	This might involve observing and describing how well someone performs daily-living tasks in the home, so would be a qualitative measure	
Aggression towards others	Observations could be made noting what triggers aggressive acts or how aggression is displayed. Both these ways would be qualitative	This could be measured on a rating scale, or the number of aggressive acts could be recorded. Both these ways would be quantitative
Feelings of guilt	If information was gathered by interviewing people or keeping a diary of emotions, this would be qualitative	
Depersonalisation		
Responses to art	Asking participants to describe or verbalise their responses (verbal protocols) would be qualitative	
Eyewitness testimonies	Accounts given in response to a cognitive interview are qualitative	If measured experimentally using comparisons of, for example, speed estimates (Loftus and Palmer), this would be quantitative



Item	Qualitative	Quantitative
Empathy with others		
Changes in cultural values over time	Interviews with people who have lived through a particular time period would give qualitative data	