

Chapter 1B

Issues in Research

Chapter contents

- 42 Introduction to issues in research
- 44 The use of the scientific method in psychology
- 46 Ethical issues and human participants
- 48 Ethical issues and non-human animals
- 50 Ethical issues in applications of psychology

End-of-chapter review

- 52 Chapter summary
- 54 Exam question with student answer



Specification breakdown

The advantages of the use of the scientific method in psychology

The scientific method is a successful way of acquiring knowledge in the physical world and is the main method employed in modern psychology. The scientific method has many advantages, which can be illustrated with examples from psychology.

The disadvantages of the use of the scientific method in psychology

Not all is sweetness and light, alas! There are also disadvantages with the use of the scientific method. Psychology provides many examples of artificiality in studies and there are also limitations of humans investigating their own brains.

Ethical issues in the use of human participants in research in psychology

Ethical standards and basic human rights can be easily compromised in the process of investigating human behaviour. Apart from the necessary deception so often needed in research, there are many examples where ethical standards may appear less than ideal.

Ways of dealing with ethical issues when using human participants in research in psychology

Both historically and in modern research, ethical issues have arisen and been dealt with, well or badly. There are many examples in psychology that illustrate the ways used.

Ethical issues in the use of non-human animals in research in psychology

For the British in particular, non-human animals seem to raise the emotional temperature more than humans. The way non-human animals have been used in research raises issues of scientific benefit versus moral considerations – can, and should, we justify animal research when psychology increasingly finds evidence of thought and emotion in non-human animals? This area focuses strictly on psychological research alone.

Ethical issues arising from two applications of psychology in the real world (e.g. advertising, military)

Psychological findings can be used outside the research domain, especially when funded by organisations like retail businesses or governments. The ethical issues arise when ideas are used for financial gain, to oppress people, to deny rights or even to damage them, physically or mentally.

Examples can be drawn from any two applications of psychology, not just advertising or military uses. We have covered the media and the military but you could use any of the topics.

INTRODUCTION TO ISSUES IN RESEARCH

What is an issue?

The decision to preface the word 'Issue' with the modifier 'Big' for the magazine sold by and for homeless people, was made because it suggested to us that homelessness was important, vital, not to be ignored. The same is true in psychology – there are some 'issues' that are so important that we really can't ignore them. These may potentially undermine the value of psychological theories and research (e.g. if we can demonstrate that the scientific method is flawed) or they may focus us on important aspects of the subject's integrity (e.g. the use of non-human animals in research). All of these issues are 'big' because we ignore them at our peril.



Link to chapter 1A

Many of the topics in this chapter are linked to chapter 1A. For example ethical issues in relation to research with human participants were considered on pages 18–19. In this chapter the focus has changed from answering short questions on potential ethical issues in research to answering longer essay questions where you discuss these issues. The material in this chapter builds on the knowledge you gained in your AS studies and also in Chapter 1A. There are also links to the controversies in Chapter 2 where you will again consider science and ethics.

The exam

Possible questions

The PY3 exam is divided into three sections. Sections A and B each contain a parted question on research methods (covered in Chapter 1A). Section C contains **three** essay questions from which you must select **two**.

Altogether you have 1½ hours to answer this paper – about a minute per mark which leaves about 15 minutes for each Section C question.

The three questions will be drawn from the following list:

- Discuss the advantages of the use of the scientific method in psychology. [15]
- Discuss the disadvantages of the use of the scientific method in psychology. [15]
- Discuss ethical issues in the use of human participants in research in psychology. [15]
- Discuss ways of dealing with ethical issues when using human participants in research in psychology. [15]
- Discuss ethical issues in the use of non-human animals in research in psychology. [15]
- Discuss ethical issues arising from **two** applications of psychology in the real world. [15]

Note the command word in the above questions is 'discuss'. Other command words may be used.

In this chapter we have covered all six essay possibilities, although some of them have been combined on one spread (thus there are only four spreads in this chapter).

Writing Grade A answers

On pages 000–000 we have discussed how to write Grade A answers for essay questions. The advice offered there is appropriate for essays on PY4, however PY3 essays are different. The essay questions on this paper (Section C) are marked out of 15 marks and there are no separate description and evaluation marks. The assessment objective in this essay is just **A03** – analysing how science works. Your answers are purely assessed on the extent to which you discuss the issues research covered in this chapter.

Such theoretical discussions are difficult and therefore the exam board recommends that you use examples and psychological evidence to develop and support your theoretical discussion. Such examples will help make your essay effective – an important criteria as shown in the mark scheme below. This mark scheme further identifies the key elements required for a Grade A essay.

A summary of the mark scheme for PY3 Section C*

Marks	Appropriateness	Detail	Effectiveness and elaboration	Depth or range of material	Specialist terms
12–15	Appropriate	Well detailed	Effective, and coherent elaboration	Both depth <i>and</i> range covered, though not equal	Used throughout
8–11	Reasonable	Less detailed	Effective	Depth <i>or</i> range covered	Some evident
4–7	Basic	Relevant			Few evident
1–3	Superficial	Muddled and/or incorrect			Absent or incorrectly used
0	No relevant material presented				

* A full version of this mark scheme is available to all teachers from the exam board, and it's always wise to check if any changes have been made.

STARTER ACTIVITIES

GET TO GRIPS WITH SCIENCE

In this chapter and in Chapters 1A and 2 one of the key issues is looking at psychology as a science. So it's a good idea to get your head round the concept of science. One of the great ways to do this is to look at 'pseudoscience'. A pseudoscience is a field of study that masquerades as a science but lacks certain important characteristics. A prime example of a pseudoscience is the study of paranormal activity — such as extra sensory perception (ESP), ghosts, aliens, psychic mediums and so on. Of course, some of you may believe in such phenomena and that's fine, but what we scientists want is evidence.

Your task is to put on your sceptical 'hat' (good scientists are sceptics) and select one or more studies of paranormal phenomena (search on the internet) and subject it to the scrutiny of *science*.

- **Can you find a replication?** One of the key features of the scientific approach is that scientists record their procedures exactly so that others can try to reproduce the same study and check that they do produce the same results. Pseudoscientific researchers tend to be secretive and this means we cannot verify their findings.
- **Is the hypothesis irrefutable?** The aim of the scientific process is to test **hypotheses**. It is not possible to prove a hypothesis correct but you can prove it is wrong (i.e. falsify it). Pseudoscientists frequently investigate phenomena that cannot be proven wrong. For example, a study may find no evidence of ESP. This would appear to suggest that ESP doesn't exist. However, some paranormal psychologists then claim the lack of supporting evidence occurs because sceptics are present and the phenomena disappear under such conditions. The end result is a non-falsifiable hypothesis. Many of the hypotheses related to paranormal experience are of this nature.
- **Is there a theory to explain the effects?** The aim of scientific research is to construct explanations for observations made about the world. Many paranormal phenomena have not, as yet, been given explanations that are likely. Without a theory, evidence is meaningless.



▲ *The Cottingley fairies*

The photograph above was regarded as definite proof of the existence of fairies. One of its notable believers was Sir Arthur Conan Doyle who wrote the Sherlock Holmes stories. There were five photographs taken between 1916 and 1920 by cousins Elsie Wright and Francis Griffiths who lived in Cottingley near Bradford, England. The girls claimed to play with fairies but no one believed them so they produced photographic evidence. Various attempts to prove that the photos were fake failed and it was not until 1983 that the women finally admitted the hoax (www.cottingleyconnect.org.uk).

People continue to accept photographic evidence as proof for anomalous phenomena (such as photos of unidentified flying objects and ghosts), despite the fact that photographs are easily faked. The burden of proof is on the sceptic who is asked 'Explain this photograph' in contrast to scientific research where the burden of proof is on the believer.

> WWW

There is a lot of information about 'bad science' on Ben Goldacre's blog (www.badsience.net), or read his book also called *Bad Science* — it'll change your life (and help you understand science a lot better)!



ETHICAL ISSUES

The other key issue in Chapters 1A, 1B and 2 is ethical issues — those concerning both human and non-human participants and in real-world situations such as advertising.

A bit of debating might be a good idea. Select a meaty ethical issue, and then consider the following:

- Is it unethical? Look at the top ten unethical psychology experiments (see <http://listverse.com/2008/09/07/top-10-unethical-psychological-experiments>). One team has to defend these studies while the other team argues for their ethical unacceptability.
- Use of non-human animals in research, see www.bbc.co.uk/ethics/animals
- Ethics in advertising or the media or any application, search online.

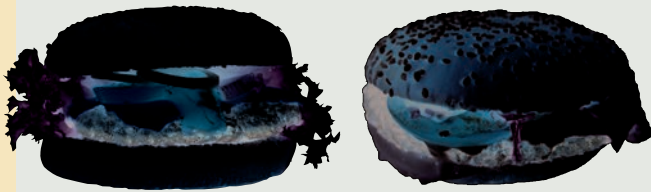
THE USE OF THE SCIENTIFIC METHOD IN PSYCHOLOGY

The core of your study of psychology is an understanding of 'how science works'. This has been inherent in all of the psychology you have studied. Psychologists, like all scientists, use the **scientific method** to produce valid explanations about the world around them. This method has both advantages and disadvantages.

EXAM TIP

On the previous spread we discussed the importance of using examples and psychological evidence in your essay answers for PY3 Section C – these will help you to develop and support your theoretical arguments (and gain higher marks). The examples and evidence provided on this spread are by no means the only ones – feel free to use your own!

An empirical test



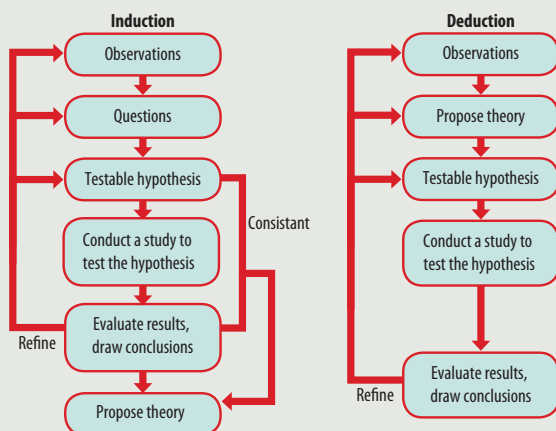
▲ The picture above left is of a burger from a well-known fast food outlet. Or at least this is what you are led to expect you will get, but what about reality? You may think you know something but unless you test this empirically you cannot know if it is true. Above right is the empirical evidence of what the burgers are really like. 'Empirical' refers to information gained through direct experience. Science uses empirical methods to separate unfounded beliefs from real truths.

(Thanks to Professor Sergio della Sala for this tasty and memorable example of empiricism.)

The scientific method

The scientific process starts with observations of phenomena in the world. In the **inductive model** this then leads to the development of hypotheses. Hypotheses are tested which may lead to new questions and new hypotheses. Eventually such data may be used to construct a theory.

The **deductive model** places theory construction at the beginning of the process, after making observations.



A 'good' theory is one that can be empirically tested. Unless you can test a theory there is no means of knowing if it is right or wrong. So a good theory should produce a variety of testable hypotheses, thus allowing falsification.

ADVANTAGES OF THE USE OF THE SCIENTIFIC METHOD IN PSYCHOLOGY

1. The scientific method is empirical

Empirical data is information gained through direct observation or experiment rather than by reasoned argument or unfounded beliefs. The scientific method aims to collect facts.

Why is this an advantage? People can make claims about the truth of a theory or the benefits of a treatment but the only way we know such things to be true is through empirical evidence.

For example... Testing a drug to see if it reduces anxiety.

2. The scientific method is objective

An important aspect of empirical data is that it is objective, i.e. not affected by the expectations of the researcher. Systematic collection of measurable data is at the heart of the method.

Why is this an advantage? Without objectivity we have no way of being certain that data collected is valid.

For example... In the AS core study by Gardner and Gardner (1969) the observers might have judged that Washoe was using real words because they wanted her to succeed. For that reason the Gardners developed a strict set of criteria to make judgements.

3. The scientific method is falsifiable

The aim of the scientific method is to test hypotheses by falsifying them, i.e. rejecting a **null hypothesis**.

Why is this an advantage? It is not possible to prove a hypothesis correct but you can prove it is wrong, i.e. falsify it.

For example... One of the issues with Freud's (1917) theory of **psychoanalysis** is the lack of proof. His theory produces claims that are untestable because they are unfalsifiable. For instance, his view that all men have repressed homosexual tendencies cannot be disproved. If you do find men who have no repressed homosexual tendencies then it could be argued that the men do have the feelings but these are not apparent as they are repressed.

The **validity** of the theory is important if we want to use it to generate methods of treating people who are mentally ill. If the theory is unfounded then the therapy should not be used. The same arguments could be applied to the use of drugs or ECT in treating the mentally ill.

4. The scientific method is controlled

The ideal form of the scientific method is a **lab experiment** because it enables researchers to demonstrate causal relationships. The **experimental** method is the only way to do this – where we vary one factor (the **independent variable**) and observe its effect on a **dependent variable**. In order for this to be a 'fair test' all other conditions (**extraneous variables**) must be controlled, and the best place for this is the lab.

Why is this an advantage? If we can't demonstrate causal relationships then we can't be sure that, for example, a person's anxiety was reduced by the drug used.

5. The scientific method permits replication

Scientists record their methods and standardise them carefully so the same procedures can be followed in the future i.e. replicated.

Why is this an advantage? Repeating a study is the most important way to demonstrate the validity of any observation or experiment. If the outcome is the same this affirms the truth of the original results.

For example... One of the issues with Milgram's (1963) study was its **ecological validity**. But the fact that it has been replicated suggests that the study does have ecological validity.

Be careful

It is easy to fall into the trap of believing that the scientific method means lab experiments and you end up criticising lab experiments when you are meant to be considering disadvantages of the scientific method. This is a limited view of the scientific method which in reality embraces all the different research methods.

There is a discussion in Chapter 2 about psychology as a science (see page 84). The interest there is on the wider issue of whether or not psychology can be considered to be a science. On this spread our focus is on the scientific method as a research method.



DISADVANTAGES OF THE USE OF THE SCIENTIFIC METHOD IN PSYCHOLOGY

1. The scientific method may lack internal validity

Psychological research is fraught with problems such as investigator effects and **demand characteristics**, which compromise the **internal validity** of the research.

Why is this a disadvantage? The observed effects may be due to variables other than the research manipulation.

For example... A **questionnaire** may have a number of **leading questions**, which means that the findings are not valid.

2. The scientific method may lack external validity

Findings from psychology experiments are not always supported by real-life, everyday observations.

Why is this a disadvantage? This suggests that the findings of psychological research cannot be generalised beyond the particular settings in which they were conducted.

For example... Mandel's (1998) analysis of obedience research showed that Milgram's (1974) findings bore very little relationship to behaviour in the real world. For instance, Milgram found that being in close proximity to the 'victim' produced lower levels of obedience, yet this constraining factor did not explain obedience in the Nazi death camps.

3. The scientific method can be reductionist

In order to conduct psychological research, behaviour must be *reduced* to a set of individual **operationalised** variables. This is true in experiments and also in observational studies where **behavioural categories** are operationalised.

Why is this a disadvantage? The result of this reductionism is that we may oversimplify something that cannot be simplified and, in doing so, are no longer studying what we meant to study.

For example... The psychiatrist R.D. Laing (1965), in discussing the causes of **schizophrenia**, suggested that it is inappropriate to view a person experiencing distress as a complex physical-chemical system that has gone wrong. Laing claims that treatment can only succeed if each patient is treated as an individual case (the **idiographic approach**).

4. The scientific method tends to ignore individual differences

Science takes the **nomothetic** approach, looking to make generalisations about people and find similarities.

Why is this a disadvantage? The result is that gender, culture, age and other individual differences are overlooked.

For example... Most research in psychology has involved American participants who are men and college students. The underlying assumption is that the behaviour of this group of people can be generalised to the whole population, ignoring the possibility that this group of people have unique characteristics, such as higher intelligence than average, interests that are typical of young male adults and so on.

5. The scientific method raises ethical issues

In psychological research there are often **ethical** costs.

Why is this a disadvantage? The issue to consider is whether the benefits of the research outweigh the ethical costs (a topic discussed in Chapter 2, see page 86). Even if the ethical costs are 'excusable' the end result is that the participants may have been harmed in some way.

For example... Many people feel that the knowledge gained in Milgram's study excuses the **psychological harm** experienced by participants. Nevertheless, individual participants may feel that their rights have been infringed.

Investigator effects

One criticism of the use of the scientific method in psychology is that the findings of a research study may be negatively affected by the way the investigator's behaviour affects participants. This is also a problem in the 'hard' sciences. Heisenberg (1927) argued that it is not even possible to measure a subatomic particle without altering its 'behaviour' in doing the measurement. This so-called **uncertainty principle** is a kind of investigator effect: the presence of an experimenter changes the behaviour of what is observed, even in physics.

EXAM TIP

You could be set one of the following essays related to the content on this spread:

Consider the advantages of the use of the scientific method in psychology. [15]

Consider the disadvantages of the use of the scientific method in psychology. [15]

Note The **command term** may vary – it could be analyse, assess, consider, discuss, evaluate, examine, explain or identify and explain – whatever it says, you are still required to do the same thing, i.e. present either advantages *only* or disadvantages *only*.

CAN YOU...?

No. 1B.1

- 1... For each of the **five** advantages and **five** disadvantages select **two** key phrases or concepts (i.e. ten key phrases).
- 2... For each key phrase/concept write **four** or **five** sentences explaining the phrase.
- 3... For each of the **five** advantages and **five** disadvantages try to think of your own examples.
- 4... Use all of this material to write an answer to the following exam questions: (a) *Discuss the advantages of the use of the scientific method in psychology*, and (b) *Discuss the disadvantages of the use of the scientific method in psychology*. Your answers should be about 500 words.

Don't forget to read the essay-writing guidance on pages 000 and 000, as well as the notes for Section C of PY3 on page 42.

ETHICAL ISSUES AND HUMAN PARTICIPANTS

In this chapter there are three spreads on **ethical issues** – this spread and the next two spreads. On this spread we look at *human* participants and on both the ethical issues *and* ways of dealing with them. Both of these topics are familiar to you as they were part of your AS studies and have been revisited in Chapter 1A of this book. The aim of this spread is to expand your knowledge and organise new knowledge in a way that will fit the demands of the exam.



▲ *Concern for the protection of human participants in research has its roots in the Nuremberg Code (1947), a document designed to protect against atrocities such as those uncovered by the Nuremberg Trials following World War II. The Nuremberg Code was the first ethical code of practice. The American Psychological Association (APA) produced the first code for psychologists in 1953, a document of 170 pages.*

Socially sensitive research

Ethical guidelines do not cover broader ethical issues that arise in 'socially sensitive' areas. Sieber and Stanley (1988) defined **socially sensitive research** as 'studies in which there are potential social consequences or implications, either directly for the participants in research or the class of individuals represented by the research' (Sieber and Stanley, 1988).

One of the most controversial avenues of research has been consideration of inter-racial differences in IQ (see page 136). Some evidence suggests that, in terms of IQ, black children may be innately inferior. Even though this research may be flawed (e.g. it ignores social conditions) such 'scientific' evidence can be used to support divisive and discriminatory social policies. Other areas of social sensitivity include research on drug abuse or sexual orientation.

The ethical question concerns whether or not such research should be conducted. If research is conducted the findings may be abused. If research is not conducted such groups may miss out on the potential benefits from the research (e.g. increased funding or wider public understanding). However, ignoring these important areas of research is an abdication of the 'social responsibilities' of the psychological researcher (i.e. their duty to society to study important areas of human behaviour).

The ethical issues described below have also been described on pages 18 and 19, so an explanation is not always provided.

ETHICAL ISSUES WITH HUMAN PARTICIPANTS

1. Informed consent

Ideally, participants should be given the opportunity to know about all aspects of any research before agreeing to take part, i.e. give their **informed consent**. This is a basic right stemming from the inhumane experiments conducted in concentration camps such as Auschwitz-Birkenau in World War II.

Why is it an issue? Such an issue arises because full information may compromise the integrity of a study (e.g. knowing the full aims may alter a participants' behaviour, rendering the results meaningless). However, informed consent is especially important in cases where there may be issues of harm because participants would not have had the opportunity to decline to participate.

For example... in Milgram's (1963) study participants experienced extreme distress but arguably did not have the opportunity to decline to take part. In studies where harm is not an issue (such as memory studies) then informed consent is less of an issue.

2. Deception

Why is it an issue? Honesty is an important ethical principle and therefore needs to concern researchers as a study should only be conducted when circumstances excuse it (see 'BPS Code of Conduct' on the facing page). It is especially an issue because lack of honesty prevents participants from being able to give informed consent.

For example... In Rosenhan's (1973) study the hospital staff were deceived about the nature of the pseudopatients. This may have led them in future to be mistrustful of patients and therefore not offer the best treatment.

3. Right to withdraw

If participants do not have the **right to withdraw** they may remain in a study and continue to be harmed. This is especially problematic if they didn't provide informed consent in the first place.

Why is it an issue? It is an issue because there are various circumstances where participants do not feel they can withdraw.

For example... A number of American studies use college students as participants and the students receive course credits for their participation. This may make them feel they can't withdraw. Participants in other studies may feel they can't withdraw because it would spoil the study.

4. Protection from harm

Participants should not experience physical or **psychological harm**.

Why is it an issue? It isn't always possible to anticipate when participants will experience harm.

For example... In Milgram's study the extent of distress wasn't expected as the preliminary survey of opinion suggested that most people would stop before reaching the maximum level of shock.

5. Confidentiality and privacy

Confidentiality concerns the trust that personal information is protected. **Privacy** concerns a person's right to control the flow of information about themselves. Privacy and confidentiality are linked. If privacy is invaded, confidentiality should be protected.

Why is it an issue? It is difficult to establish what exactly counts as 'private'.

For example... In an observational study, some people might regard it as an invasion of their privacy to be watched in a supermarket, which is a public place.

EXAM TIP

You could be set either of the following essays related to the content on this spread:

- *Assess ethical issues in the use of human participants in research in psychology.* [15]
- *Assess ways of dealing with ethical issues when using human participants in research in psychology.* [15]

The key point is that students often answer the first question when they are set the second one, i.e. they describe issues when they should be explaining how they would deal with them.

WAYS OF DEALING WITH ETHICAL ISSUES WITH HUMAN PARTICIPANTS

In many cases the way of dealing with an ethical issue is the same as the issue itself. For example, psychologists deal with the issue of informed consent by offering participants the opportunity to provide informed consent. Psychologists deal with confidentiality by ensuring, as far as possible, that the identity of all participants is not available. In addition there are some special methods, discussed below.

1. Debriefing

Once a study is completed, participants should be informed of the true aims of the study, offered the opportunity to discuss any concerns they may have and be given the opportunity to withdraw their data from the study – to compensate for the lack of opportunity for informed consent.

Problems... Debriefing can't turn back the clock – a participant may still feel embarrassed or have lowered **self-esteem**.

2. Presumptive consent

Presumptive consent is a method of dealing with lack of informed consent or deception, by asking a group of people who are similar to the prospective participants in a study whether they would agree to take part in the study. If this group of people consent to the procedures in the proposed study, it is presumed that the real participants would agree as well.

Problems... In a sense Milgram (1963) sought presumptive consent when he surveyed 14 Yale Psychology students before his study took place. The fact they estimated that almost no one would go beyond 450 volts suggested that there was no potential for psychological harm and therefore participants would be 'happy' to take part.

3. Ethical committee

All institutions where research takes place have an ethical committee and the committee must approve any study before it begins. They look at all possible ethical issues raised in any research proposal and at how the researcher suggests that the issues will be dealt with, weighing up the *benefits* of the research against the possible *costs* to the participants.

Problems... Cost-benefit decisions are flawed because they involve subjective judgements, and the costs are not always apparent until after the study. The cost-benefit approach may actually raise more problems than it solves.

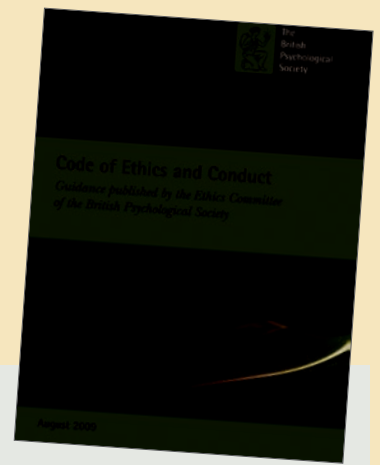
4. Ethical guidelines

Professional bodies, such as the BPS (*British Psychological Society*) and APA (*American Psychological Association*), produce **ethical guidelines** and codes of conduct (see right). The intention of such guidelines is to tell psychologists what behaviours are not acceptable and tell them how to deal with ethical dilemmas.

Problems... This 'rules and sanctions' approach is inevitably rather general because of the virtual impossibility of covering every conceivable situation that a researcher may encounter. The CPA (*Canadian Psychological Association*) takes a slightly different approach – they present a series of hypothetical dilemmas and invite psychologists to discuss these. The strength of this approach is that it encourages discussion whereas the BPS and APA approach tends to close off discussions about what is right and wrong because the answers are provided. Guidelines also absolve the individual researcher of any responsibility because the researcher can simply say 'I followed the guidelines so my research is acceptable'.

5. Punishment

If a psychologist does behave in an unethical manner, such as conducting unacceptable research, then the BPS reviews the research and may decide to bar the person from practising as a psychologist. It is not a legal matter (the researcher won't be sent to prison) but it could affect the researcher's livelihood.



BPS Code of ethics and conduct

The *British Psychological Society* (BPS) produces ethical guidance for research psychologists as well as practicing psychologists (for example those who treat mental patients). There are a variety of documents that deal with specific issues faced, for example, when treating mental patients or conducting research with animals. However, one document applies to all psychologists – the *Code of Ethics and Conduct*. The code is based on four ethical principles:

1. Respect Psychologists must value the dignity and worth of all persons, with sensitivity to the dynamics of perceived authority or influence over clients, and with particular regard to people's rights including those of privacy and self-determination.

2. Competence Psychologists must value continuing development and maintenance of high standards of competence in their professional work. They should also recognise the limits of their knowledge, skill, training, education and experience.

3. Responsibility Psychologists must value their responsibilities to clients, to the general public, and to the profession and science of Psychology, including the avoidance of harm and the prevention of misuse or abuse of their contributions to society.

4. Integrity Psychologists must value honesty, accuracy, clarity and fairness in their interactions with all people, and seek to promote integrity in all facets of their scientific and professional endeavours. (BPS, 2009, page 21)

CAN YOU...?

No. 1B.2

- 1... For each of the **five** ethical issues and **five** ways of dealing with ethical issues select **two** key phrases or concepts.
- 2... For each key phrase/concept write **four or five** sentences explaining the phrase.
- 3... For each of the **five** issues and **five** ways of dealing with issues try to think of your own examples.
- 4... Use all of this material to write an answer to the following exam questions: (a) *Assess ethical issues in the use of human participants in research in psychology*, and (b) *Assess ways of dealing with ethical issues when using human participants in research in psychology*. Your answers should be about 500 words.

Don't forget to read the essay-writing guidance on pages 000 and 000, as well as the notes for Section C of PY3 on page 42.

ETHICAL ISSUES AND NON-HUMAN ANIMALS

It is important to remember that an **ethical issue** is a *conflict*. When considering psychological research with non-human animals we are weighing up the conflict between the wider benefits for society and the potential harm to animals that are used.

There are two important points to bear in mind: (1) your focus must be on psychological research, rather than, for example, the use of animals for cosmetic testing, and (2) your focus must be on objective, evidence-based arguments rather than emotionally-fuelled diatribes.

Examples of research with non-human animals

This is a short introduction to some examples of non-human animal research. You might investigate these examples in greater depth in order to be able to use them in your essays, and also find some others of your own.



The origins of love Harry Harlow (1959) placed infant rhesus monkeys in a cage with two wire mothers (see left) — one with a feeding bottle and one wrapped in soft cloth. The monkeys spent most time with the cloth-covered mother demonstrating the importance of contact comfort.

So where's the harm? The monkeys developed into emotionally maladjusted adults despite their contact comfort — they couldn't socialise with other monkeys and rejected their own infants. However, the research had an important influence on understanding of infant emotional development.

Sensory deprivation Our understanding of perceptual development has relied on studies where young animals were deprived of their sight. This research is described on page 86.

Naturalistic observations Ethologists seek to study animals in a way that does not affect their behaviour. For example, Dian Fossey's (1983) work observing gorillas in the natural habitat to reach a greater understanding of their social relationships, made famous through the film *Gorillas in the Mist*.

Drug and addiction research Psychologists and psychiatrists have a great interest in the safety of medication for mental disorders and, as such, the research testing of these drugs constitutes psychological research. Animals are also used in research on addiction. Both kinds of research inevitably result in some degree of pain and suffering for the animals involved. However, psychoactive drugs allow people with mental illnesses to lead relatively 'normal' lives (protecting them and protecting society), and **addiction** research offers important insights into the damaging process of addiction.

► Photographs like the one on the right are frequently used to support arguments against the use of non-human animals in research. Not all psychological research with animals involves such physical interventions — although psychological treatments may be as damaging as physical ones. And, in fact, research rarely involves higher mammals.



ETHICAL ISSUES WITH NON-HUMAN ANIMALS

Value of non-human animals

Although the vast majority of investigations in psychology involve the study of *humans*, there are several reasons why psychologists may choose to carry out research using non-human animals.

- Non-human animals may be studied simply because they are fascinating to study in their own right and such research may ultimately benefit non-human animals.
- Animals offer the opportunity for greater control and objectivity in research procedures.
- Human beings and non-human animals have sufficient of their physiology and evolutionary past in common to justify conclusions drawn from the one being applied to the other. Although it can be argued that animals tested under stressful conditions may provide very little useful information.

Wider benefits to society The bottom line is that we use animals when research procedures would not be possible with human beings, see for example the research described on the left. Animals are used because they 'cost' less and the benefits of such research outweigh the costs to the animals.

Moral justification

The question remains as to whether 'science at any cost' is justifiable.

Sentient beings Do animals experience pain and emotions, i.e. are they sentient? There is evidence that they respond to pain but this may not be the same as conscious awareness. There is evidence that animals other than primates have **self-awareness** (see page 163) and are therefore **sentient**. In fact, in December 2009 the Treaty of Lisbon, which governs the European Union, declared that 'all animals are sentient' so it appears that the argument is resolved.

A different line of argument, in relation to sentience, is that some humans lack sentience, such as brain-damaged individuals or infants, but we wouldn't use them in research without consent. The conclusion must be that lack of sentience does not provide moral justification for the use of animals.

Speciesism Peter Singer (1975) argued that discrimination on the basis of membership of a species is no different from racial or gender discrimination and thus suggested that the use of animals is an example of '**speciesism**', similar to racism or sexism. However, Jeffrey Gray (1991) argues that we have a special duty of care to humans, and therefore speciesism is not equivalent to, for example, racism.

Animal rights Singer's view is a **utilitarian** one, i.e. whatever produces the greater good for the greater number of individuals is ethically acceptable. This means that, if animal research can alleviate pain and suffering for a large number of people, it is justifiable. Tom Regan (1984), however, argued that there are no circumstances under which animal research is acceptable (an **absolutist** position). Regan claimed that animals have a right to be treated with respect and should never be used in research.

The 'animal rights' argument can be challenged by examining the concept of rights — having rights is dependent on having responsibilities in society, i.e. as citizens. It can therefore be said that as animals do not have any responsibilities, they do not have any rights.

Empty cages

Empty Cages is the title of Tom Regan's book, arguing his absolutist position – in contrast with Peter Singer's relativist utilitarian view. However, even Regan agrees that *some* animals could be used. Central to Regan's philosophy is the concept 'subject of a life'. He claims that any individual who is the 'subject of a life' has inherent value to that individual which is independent of any usefulness to others. Any individual (human or animal) who has inherent value has a right to be treated with respect and a right not to be used. It should be noted that Regan believes that all mature mammals are 'subject of a life' but it is not clear to what extent this applies to other animals. This means that all mature mammals should be treated the same as humans. In a sense, Regan's approach has been supported by legislation which bans the use of primates (chimpanzees, gorilla and orang-utans) in research.

Existing constraints

Legislation The UK *Animals (Scientific Procedures) Act* (1986) requires that animal research only takes place at licensed laboratories with licensed researchers on licensed projects. Thus, there are three 'levels' of regulation, all of which require a separate licence, which are only granted if:

- Potential results are important enough to justify the use of animals. When considering costs versus benefits, investigators must consider whether the knowledge to be gained from any investigation justifies harm or distress to animal participants.
- The research cannot be done using non-animal methods.
- The minimum number of animals will be used.
- Any discomfort or suffering is kept to a minimum by appropriate use of anaesthetics or painkillers.

The act relates only to vertebrate animals and to those more than halfway through their gestation period. One invertebrate species (the octopus) was added in 1993. Primates, cats, dogs and horses have additional protection.

The principle of the 3Rs – Replace, Reduce, Refine In 2000, the Home Office issued further guidance on the operation of the 1986 Act. This introduced the guiding principle of the **3Rs**, first proposed by Russell and Birch in 1959. Researchers should seek, wherever possible, to *replace* animals with suitable alternatives (e.g. brain scanning), to *reduce* the number of animals used, and *refine* procedures so that they cause less suffering. A national group, *The National Centre for the Replacement, Refinement and Reduction Animals* (NC3Rs), has been set up to encourage, research and support the use of the 3Rs.

BPS guidelines are published for research with animals. Psychologists are advised, for example, to conform to current legislation, heed the 3Rs, choose species that are suited to research purpose, be aware of an animal's previous experience and remember that their responsibilities extend to the care of animals when not being studied, including the provision of companions (for social animals). In particular, any procedure that may cause pain should be carefully evaluated and alternatives considered. Regulation of food intake (e.g. for conditioning experiments) may be considered harmful and researchers should consider an animal's normal food intake and metabolic requirements.

Do these constraints work? Dunayer (2002) argues that animal legislation simply sets standards for the imprisonment, enslavement, hurting and killing of animals. Such laws are similar to the laws that codified norms of black enslavement in America. Dunayer argues that making it legal doesn't make it right.

The NC3Rs recently sponsored an analysis of 271 studies in the US and the UK that had used non-human animals (note that these are not all psychological studies). Only 59% of these studies mentioned the number of animals that were used, many of them reported different numbers of animals in the methods section and results sections of the report, and many studies were poorly designed. The NC3Rs analysis concluded that there are a number of issues that need to be addressed in non-human animal research, including using more careful design as required by the 3Rs and providing more accurate scientific reporting (Kilkenny *et al.*, 2009).

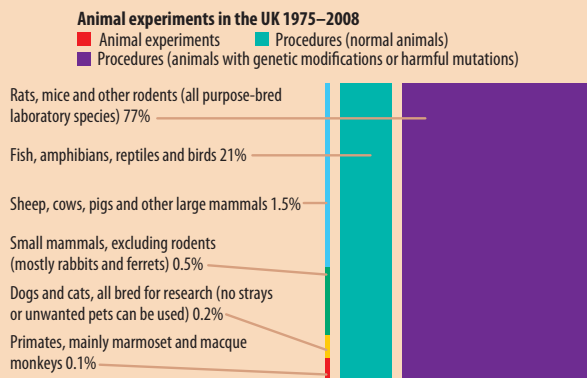
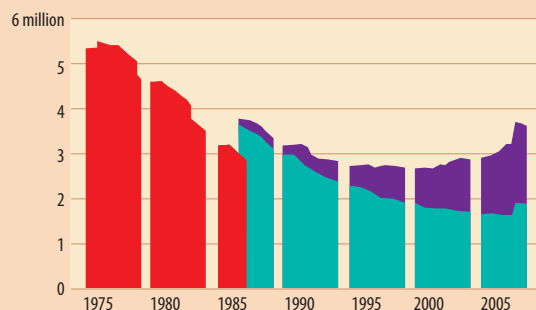
The facts

The data below are taken from the 'Understanding Animal Research' website, sponsored by a group who support the importance of animal research for scientific understanding and medical progress. It isn't as simple as saying that all research should be stopped, for example British law requires that any new drug (such as antidepressants, for example) must be tested on at least two different species of live mammal.

The graph below shows a general reduction in animal experiments since 1975. Recent rises are due to the use of genetically altered animals (mostly mice and fish), now half of all animals used.

It is noteworthy that UK bioscience and medical research funding more than doubled in real terms between 1998 and 2008, but animal procedures rose by just one-third, which suggests that the principle of the 3Rs are having an effect.

But remember – most of this research is not psychological. Data about psychological research is not kept separately.



CAN YOU...?

No. 1B.3

- 1... Identify at least **five** key arguments either for or against the use of non-human animals in psychological research.
- 2... For each argument write **four or five** sentences explaining the argument,
- 3... For each argument describe at least **one** example from psychological research.
- 4... Use all of this material to write an answer to the following exam question: *Discuss ethical issues in the use of non-human animals in research in psychology.* You might also compose some 'building block' essays: (a) *Discuss arguments for the use of non-human animals in research in psychology,* and (b) *Discuss arguments against the use of non-human animals in research in psychology.* Your answers should be about 500 words.

Don't forget to read the essay-writing guidance on pages 000 and 000, as well as the notes for Section C of PY3 on page 42.

ETHICAL ISSUES IN APPLICATIONS OF PSYCHOLOGY

The *Code of Conduct* published by the *British Psychological Society* (BPS, 2009) is not just relevant to research psychology but also to practicing psychologists. Many psychologists work in mental hospitals, education systems, the military and other organisations. On this spread we consider some of the **ethical issues** that should concern psychologists in practice.

EXAM TIP

On this spread we have considered ethical issues related to the media and the military but the specification says 'Ethical issues arising from two applications of psychology in the real world (e.g. advertising, military)'. Advertising and the military are given as examples which means it is not compulsory to use these; any two examples would be acceptable in an exam answer. There are many other topics that could be considered – such as the application of psychology to education, mental illness and forensic psychology.

There is no value in studying more than two because exam questions will always ask for just two.



◀ In 2003 Channel 4 broadcast a programme called *Inside the Mind of Paul Gascoigne*. Professor Kevin Gournay, a psychiatric nurse, offered a diagnosis of his mental condition without actually having met Gascoigne, concluding that he was suffering from attention deficit disorder, obsessive-compulsive disorder and Tourette's syndrome. Such labels are damaging because they alter the public perception of the person and are hard to shake off. If the diagnosis was based on real fact we still might object, but it is even worse that it was based on hearsay.

▼ The BBC series *A Child of our Time* is a 20-year project following the lives of 25 babies born in 2000. The aim of the series is to systematically investigate the effects of genes and environment on the development of these individuals. This includes conducting regular experiments to test their behaviour and abilities. Clearly, these children did not have the opportunity to provide their informed consent at the beginning, or even during, the study.



PSYCHOLOGISTS AND THE MEDIA

There are many media examples where psychologists are in demand: newspaper advice columns, magazine self-improvement articles, psychology books, radio phone-in shows, talk-show appearances, experts on the TV news and consultants for films and television shows (Bouhoutsos *et al.*, 1986). People are interested in understanding the behaviour of other people and psychologists are the 'experts'.

The role of the BPS

The BPS recognises this demand for psychologists by the media and provides a free contact service, putting journalists in touch with over 1000 media-friendly psychologists. The BPS also recognises that talking to the media raises a number of ethical considerations, especially the increasing use of psychologists on TV (e.g. being a 'talking head' in a documentary or selecting participants for a reality TV programme). For that reason the BPS has produced a document *Ethical Implications for Psychologists Working on TV: A Guide for Production Companies* (BPS, 2010). The points below are drawn from this guide.

Informed consent

Psychologists should ensure that any TV programme participants are fully aware that they are losing the right to **privacy** and control over what may be used, especially as the behaviour they produce may later lead to embarrassment. This is particularly important when children are involved because they may be too young or not fully understand the situation they are being placed in.

For example... Participants of the BBC programme *Castaway 2000* were fully informed of the implications of taking part by the show's psychologist Dr Cynthia McVey. It subsequently became apparent that despite this, the participants didn't really understand the later repercussions, such as newspaper articles criticising their personal characters (BPS, 2010).

Manipulation

One of the major issues, especially for reality TV, is the extent to which participants' behaviour is manipulated. The BPS guide reminds psychologists that it is their duty to protect participants from any physical or mental harm that might be greater than that experienced in their normal lives. Psychologists also should not lie to participants or withhold information if the psychologist believes that participants are typically likely to object or show unease once debriefed.

For example... Professor David Wilson was employed by the reality TV programme *Big Brother* as the resident psychologist. He resigned when he realised that the programme makers wanted him to create psychological situations that would increase tension in the house and cause distress (Wilson, 2005).

Other issues

Duty of care The BPS guide reminds psychologists that their role, as professionals, is to ensure that all TV participants are treated with 'the highest standards of consideration and respect'.

Confidentiality Psychologists should ensure that confidential discussions can take place between psychologists and TV show participants, which will not be filmed.

Follow-up involvement It is not appropriate for psychologists to become intimately involved with TV participants and then withdraw as soon as the show ends. TV companies should therefore ensure continued involvement, even if this only involves reassurance.

Professional boundaries Psychologists should not offer advice on matters that are outside their area of expertise.

The reputation of psychology The general code of conduct published by the BPS states that 'In all their work psychologists shall conduct themselves in a manner that does not bring into disrepute the discipline and the profession of psychology'.

PSYCHOLOGISTS AND THE MILITARY

If you accept the need for an army then it makes sense to use all the resources at your disposal, including psychologists. The involvement of psychology with the military (sometimes referred to as 'PsyOps', which stands for psychological operations) raises a number of ethical issues.

Improving interrogation techniques

A key task for the military is eliciting information from the enemy. The development of effective interview techniques has drawn on various areas of psychological research.

For example... Hebb *et al.* (1952) conducted a series of mind control experiments, sponsored by the American Central Intelligence Agency (CIA) (McCoy, 2007). In one study on **sensory deprivation** (SD) volunteer students were kept in physical and social isolation, wearing translucent goggles and long cuffs to restrict sensory experience. Within days many started to experience extreme visual and auditory hallucinations and after a while were unable to distinguish waking from sleeping. More important, from the sponsor's point of view, the volunteers were found to be much more susceptible to any type of propaganda while in SD.

Training animals for warfare

Animals have been trained (using **conditioning** techniques) to become agents of human warfare. Most recently sea lions have been trained to attach something like a handcuff to enemy divers (Daily Mail, 2009).

For example... During World War II The **behaviourist** B.F. Skinner masterminded 'Project Pigeon' where pigeons were trained to accurately pilot a missile to seek out ships. They were able to distinguish different types of ships so that they would avoid allied ships and dive onto enemy ones. In the end, the American military decided against using the pigeons.



Real world application

The APA have a military division, and the BPS are currently considering a proposal for one in the UK. The *APA Society for Military Psychology* encourages research and the application of psychological research to military problems. During World War II, half the pages of the *Psychological Bulletin* were devoted to topics of military psychology, and from 1943 to 1945 one in every four psychologists in the country was engaged in military psychology (Driskell and Olmstead, 1989).

The APA military division website (www.apadivision19.org) provides a small sample of the types of contributions that can be made by military psychologists: (a) working in mental health or family counselling clinics to improve the lives of service personnel and their families, (b) performing research to select recruits into the service and assign them to one of many possible jobs, and (c) analyses of humanitarian and peacekeeping missions to determine procedures that could save military and civilian lives.

Psychologists' stance on torture

The growing use of psychological techniques to enhance distress in places such as Guantánamo Bay, Abu Ghraib and Afghanistan has led to pressure on organisations such as the APA and BPS to make their position on torture clear (Patel, 2007). At the time of writing the BPS has not issued any explicit statements. Patel suggests that such a statement might include reference to obligations under international law, the health impact and ineffectiveness of torture as a method of interrogation, and clear mechanisms to support those who may face problems as a result of ethical compliance or wishing to report breaches by others.

Propaganda

Psychologists are employed to develop propaganda campaigns, i.e. media presentations of information that are designed to influence the attitude of a community toward some cause or position. Propaganda often presents facts selectively and is a form of political warfare.

For example... During the Vietnam War in the 1960s American psychologists collected social information about the Vietnamese so they could work out how to most effectively influence them. One instance was related to the grieving practices of the Vietnamese, where people remember their dead relatives on anniversaries of their death, as well as 49 and 100 days after their relatives died. The Americans dropped propaganda leaflets on these dates after big battles in areas where people would have been likely to have lost relatives. The aim was to increase the misery of those days and further undermine the morale of the Vietnamese.

Positive influences

Psychologists can also have a positive influence, such as helping members of the military to cope with traumatic stress and injury. The concept of **post-traumatic stress disorder** has its origins in World War I 'battle fatigue'. Another positive approach is to prepare personnel for possible capture.

Peace and conflict studies draw on psychological theory and research, as well as other disciplines such as sociology and politics. Magazines such as *The Journal of Peace Research*, and organisations such as the *Peace Research Foundation* seek to encourage and disseminate research on promoting peace.

For example... a classic study by Sherif *et al.* (1961) demonstrated how conflict resolution can be resolved by getting opposing sides to work together on a task involving superordinate goals, such as repairing a failed water supply that was used by both groups.

CAN YOU...?

No. 1B.4

- 1... **Two** applications of research are covered on this spread. For each application, identify at least **five** key topics.
- 2... For each topic write **four or five** sentences explaining the topic.
- 3... For each topic describe at least **one** example from psychological research. (In some cases you will need to develop your own examples.)
- 4... Use all of this material to write an answer to the following exam question: *Discuss ethical issues arising from two applications of psychology in the real world. You might also compose some 'building block' essays: (a) Discuss ethical issues arising from the application of psychology to the media, and (b) Discuss ethical issues arising from the application of psychology to the military. Your answers should be about 500 words.*

Don't forget to read the essay-writing guidance on pages 000 and 000, as well as the notes for Section C of PY3 on page 42.

END-OF-CHAPTER REVIEW: CHAPTER SUMMARY

ADVANTAGES OF THE USE OF THE SCIENTIFIC METHOD IN PSYCHOLOGY

1. The scientific method is empirical

- Empirical data comes from direct observation or experiment (rather than reasoned argument or beliefs).
- This provides evidence for the truth of a theory or the benefits of a treatment (e.g. whether a drug reduces anxiety).

2. The scientific method is objective

- Empirical data is objective (is not affected by the expectations of the researcher). For example, the strict criteria used by Gardner and Gardner to judge whether Washoe had learned new words.

3. The scientific method is falsifiable

- We cannot prove a hypothesis correct but the scientific method allows a hypothesis to be tested by falsification, i.e. by rejecting a null hypothesis.
- For example, Freud's theory of psychoanalysis is untestable because it is unfalsifiable, e.g. the idea 'all men have repressed homosexual tendencies' cannot be disproved – a man who seemed to contradict the view might just have very deeply repressed homosexual tendencies.

4. The scientific method is controlled

- In a lab experiment an independent variable is manipulated and the effect on a dependent variable observed. Possible extraneous variables are controlled (easiest in a lab) so causal relationships can be found.
- For example, in an experiment we can be sure that the drug, rather than any other variable, reduced anxiety.
- Lab experiments are not the only research method used in the scientific method.

5. The scientific method permits replication

- Standardised procedures allow for replication and repeating a study helps to demonstrate validity.
- For example, Milgram's study has been replicated.

DISADVANTAGES OF THE USE OF THE SCIENTIFIC METHOD IN PSYCHOLOGY

1. The scientific method may lack internal validity

- Investigator effects and demand characteristics threaten internal validity.
- For example, a questionnaire with leading questions would lack validity.
- Investigator effects also occur in the 'hard' sciences, e.g. the uncertainty principle.

2. The scientific method may lack external validity

- If experimental findings don't match real-life observations they do not generalise beyond the setting in which they were conducted.
- For example, Milgram's findings about proximity did not explain obedience in the Nazi death camps.

3. The scientific method can be reductionist

- Operationalising variables is reductionist as we oversimplify behaviours.
- For example, Laing suggested we should consider each case of schizophrenia individually (idiographic approach) rather than describing them as in purely physical-chemical terms.

4. The scientific method tends to ignore individual differences

- Science is nomothetic, looking for similarities and making generalisations.

5. The scientific method raises ethical issues

- Good scientific research has ethical costs, e.g. psychological harm. A balance between scientific benefits and ethical costs is desirable but may ignore individual rights.

ETHICAL ISSUES AND HUMAN PARTICIPANTS

1. Informed consent

- Participants should be told about all aspects of the research before agreeing to take part (informed consent). This is an issue because the information may compromise the study but if there is a potential for harm participants should have the opportunity to decline to participate.
- For example, in Milgram's study.

2. Deception

- Honesty is important especially as without it participants cannot give informed consent.
- For example, Rosenhan deceived hospital staff so they may not trust patients afterwards.

3. Right to withdraw

- Without a right to withdraw participants may be exposed to unnecessary harm, especially if they didn't give informed consent. Right to withdraw may be difficult if participants offered incentives, e.g. course credits.

4. Confidentiality

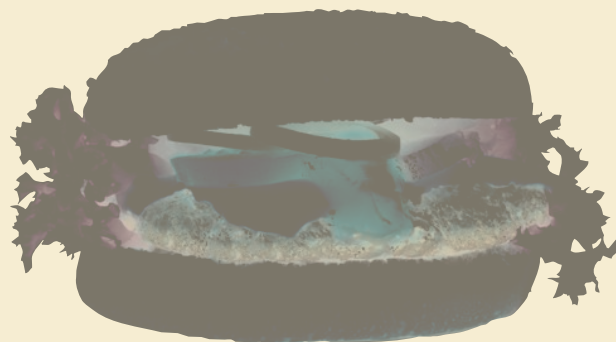
- Confidentiality depends on the protection of personal information, although this may be an unobtainable ideal.
- For example, if the participant in a case study is so unusual they can be recognised from the data.

5. Privacy

- If privacy is invaded (e.g. we are watched when we wouldn't expect to be), confidentiality should be protected but what counts as 'private' may be hard to establish.
- For example, observing a shoplifter in a public place would be an invasion of privacy.

Socially sensitive research

- Socially sensitive research has potential negative implications for the participants or the people it applies to, e.g. drug addicts or homosexuals.
- Evidence on inter-racial differences in IQ may be flawed but is used to support discriminatory social policies.
- An issue arises when weighing the potential damage of such research against the potential loss if it is not conducted.



DEALING WITH ETHICAL ISSUES WITH HUMAN PARTICIPANTS

Ethical issues are often dealt with in the same way, e.g. lack of informed consent is dealt with by seeking informed consent and the issue of confidentiality is dealt with by protecting confidentiality.

1. Debriefing

- Straight after a study participants should be told the real aims, be able to discuss concerns and be allowed to withdraw their data – but this may not solve embarrassment or low self-esteem.

2. Presumptive consent

- A similar group of people to the prospective participants are asked whether they would agree to take part; if they would, this is presumptive consent.
- For example, Milgram would have presumed there was no potential for psychological harm as 14 students estimated that almost no one would go beyond 450 volts therefore no psychological harm was expected.

3. Ethical committee

- Each institution's ethical committee considers the issues in proposed research, weighing the benefits of the research against possible costs to the participants.
- However, cost-benefit decisions are subjective and costs may not appear until it is too late.

4. Problems with ethical guidelines

- The BPS and APA guidelines offer a 'rules and sanctions' approach, but these may be too general and absolve researcher of responsibility if they have 'followed the guidelines'.
- The Canadian Psychological Association presents hypothetical dilemmas for discussion instead. This is better as it encourages discussion about what is right and wrong.

5. Punishment

- The BPS reviews research it considers may be unethical and can stop psychologists from practicing, although breaking the guidelines is not illegal.

BPS Code of ethics and conduct

- The BPS *Code of Ethics and Conduct* provides ethical guidance for research and practicing psychologists.
- The four ethical principles are: respect (valuing people's dignity and rights), competence (developing and maintaining professional standards and working within the limits of their ability), responsibility (to clients, the public and psychology), integrity (valuing honesty and accuracy).

ETHICAL ISSUES AND NON-HUMAN ANIMALS

NON-HUMAN ANIMALS

Examples of research with non-human animals

- Harlow studied infant monkeys with surrogate mothers. The monkeys became emotionally maladjusted adults but the research helped us to understand emotional development in human infants.
- Blakemore and Cooper raised kittens in an environment with vertical lines, which damaged their brain development but was useful as we know to treat children's visual defects early.
- Ethologists such as Fossey (with gorillas) use naturalistic observations to study animals in the natural habitat without affecting their behaviour.
- Psychological research investigates addiction and tests of drugs for mental disorders (but not other uses), which can cause pain and suffering to animals but potentially helps people with addiction and mental illnesses.

Value of non-human animals

- Most psychological research uses human participants but non-human animals may be used: as they are interesting in themselves, offer greater control and objectivity in research procedures and because we share physiology and evolutionary past justifying generalisation from animal research to humans.
- Mainly we use animals when research procedures would not be possible with human beings, because the benefits of such research outweigh the costs to the animals.

Moral justification

- If animals experience pain and emotions they are sentient so should not be subjected to pain (but just reacting to pain may not be the same). Some animals are self-aware so are sentient.
- Conversely, some humans (e.g. brain-damaged people and infants) are not sentient but wouldn't be used in research without consent, so a lack of sentience is not a moral justification for using animals.
- Singer argued that discrimination based on species (speciesism) is no different from racism or sexism but Gray argues that our responsibility for humans means that racism/sexism and speciesism are not equivalent.
- Singer's view is based on 'the greater good' (utilitarianism) so if animal research can alleviate suffering, it is justifiable. Regan argues that animal research is never acceptable (absolutism). He says that any individual who is the 'subject of a life' (mature mammals) has inherent value so should be treated with respect and has a right not to be used.
- The 'animal rights' argument is challenged by the concept that having rights is dependent on having responsibilities. As animals have no responsibilities in society, they have no rights.

Existing constraints

- The UK *Animals (Scientific Procedures) Act* requires licensed laboratories, researchers and projects for research. It only protects vertebrates (when more than half way through their gestation) and the octopus.
- Licenses are granted if: potential benefits exceed costs (to animals), if research cannot be done using non-animal methods, minimum numbers are used and suffering is minimised (e.g. using anaesthetics).
- The Home Office recommends 'the 3Rs': replace animals with alternatives, reduce the number of animals used and refine procedures to alleviate suffering.
- The BPS guidelines suggest researchers: choose suitable species, consider the animal's previous experience, ensure good care of animals when not being studied and limit the potential harm of controlling food intake.
- Dunayer argues that animal legislation doesn't protect but instead sets standards for harm (like laws relating to slavery).
- Kilkenny *et al.* analysed studies using non-human animals (for psychological and other purposes) and found poor design and reporting, therefore standards should be improved.
- British law requires that any new drug (including antidepressants) must be tested on at least two different species of live mammal.

ETHICAL ISSUES IN APPLICATIONS OF PSYCHOLOGY

PSYCHOLOGISTS AND THE MEDIA

Psychologists appear as experts in the media, such as magazines, radio and TV, to help others to understand people's behaviour.

The role of the BPS

- The BPS provides a contact service for the media and recognises that media involvement raises ethical considerations (e.g. in reality TV programmes) so has produced *Ethical Implications for Psychologists Working on TV: A Guide for Production Companies*.

Informed consent

- Psychologists should ensure that TV programme participants know they are losing the right to privacy and control over what may be used (e.g. over embarrassing segments), especially children who may not fully understand the situation.

Manipulation

- When behaviour is manipulated, e.g. in reality TV, participants should be protected from physical or mental harm beyond any normal risk. Psychologists should not lie or withhold information if participants may object when debriefed.

Other issues

- Psychologists have a duty of care to ensure that TV participants are treated with consideration and respect.
- They should ensure that confidential (non-filmed) discussions can take place between psychologists and participants. TV companies should ensure the psychologist supports participants after the show. Psychologists should not offer advice outside their area of expertise.
- Psychologists should maintain the good reputation of psychology.

PSYCHOLOGISTS AND THE MILITARY

PsyOps apply psychological insights to military concerns.

Improving interrogation techniques

- One military task is to obtain information from the enemy. Psychological operations (PsyOps) help to develop effective interview techniques.
- For example, Hebb *et al.* conducted mind control experiments using sensory deprivation (e.g. physical and social isolation, wearing translucent goggles). Volunteers had hallucinations and didn't know if they were awake or asleep, and were more susceptible to propaganda.
- Although the APA and BPS have no specific statements about torture, Patel suggests they should make such statements and they might refer to obligations under international law, the health impact and ineffectiveness of torture for interrogation.

Training animals for warfare

- Animals can be conditioned for use in human warfare, e.g. sea lions being used to put handcuffs on enemy divers during the Iraq War.
- For example, Skinner's 'Project Pigeon' trained the birds to distinguish allied and enemy ships for piloting missiles (although they were never used).

Propaganda

- Propaganda uses the media to influence attitudes but in political warfare facts are selectively presented.
- For example, in the Vietnam War psychologists found out about Vietnamese grieving practices so leaflets were dropped on particular dates following battles to increase misery and undermine morale in the Vietnamese people.

Positive influences

- Psychologists have positive influences, e.g. to cope with post-traumatic stress disorder and to prepare personnel for possible capture.
- Some magazines (e.g. *The Journal of Peace Research*) and organisations (e.g. *Peace Research Foundation*) focus on research promoting peace.
- For example, research by Sherif *et al.* explored conflict resolution through working on superordinate goals.



END-OF-CHAPTER REVIEW: EXAM QUESTION WITH STUDENT ANSWER

Question Discuss ethical issues arising from *two* applications of psychology in the real world. [15]

Student answer

- Paragraph 1** Ethical issues can arise from the direct application of results to some real-world activity (e.g. in therapy or education) or from the use that research has been put to by others (e.g. for military or for political purposes). An example would be the use of operant conditioning in behaviour therapy and intended warfare (Skinner's rocket-guiding pigeons).
- Paragraph 2** The most famous example is the intelligence test (IQ test). The original test was devised by Galton in the nineteenth century, and was general knowledge based. Galton intended to show the genetic superiority of white middle-class males, which is racist, class biased and sexist.
- Paragraph 3** The modern test started with Binet at the beginning of the twentieth century, and was simply a way of identifying under-performing schoolchildren in order to give them extra tuition. Yerkes devised tests which were used on 1.7 million soldiers in the US Army in World War I. These were biased for the white population and discriminated against immigrants and the native black population, most of them being illiterate. Yerkes and others used the results to argue that Afro-Americans and immigrants were genetically inferior, and didn't need the education that white people got. Also the US government banned some groups from entering the US, and this even resulted in European Jews being returned to Germany to die in the death camps. Yerkes and many psychologists at the time believed that discrimination in favour of white males was a good thing, as breeding with others would 'weaken' the gene pool. IQ testing is still used in the UK in education and in business.
- Paragraph 4** My second example is the media. Psychologists do lots of work in the media, e.g. *Big Brother*, *Castaway* and *Most Haunted*. Often they give opinions on public behaviour, especially if some celebrity has done something stupid or there is a mass killing like the recent one in Whitehaven. The BPS has provided guidelines for this which cover consent, manipulation, care and confidentiality.
- Paragraph 5** Psychologists have to behave ethically, so the one on *Big Brother* resigned in 2005 when he was supposed to cause tension and distress. However it can't always be predicted. The people on *Castaway* were fully briefed by a psychologist but later they were caused distress by media stories about their private lives.
- Paragraph 6** The worst examples are when psychologists give opinions outside their area of expertise. A professor gave an opinion on Paul Gascoigne in a programme, suggesting he had various mental problems including OCD, but he hadn't met Gascoigne and he wasn't even a psychiatrist. Some psychologists are always called upon by the media, e.g. if a celebrity has a gambling problem the media always get Professor Mark Griffiths on the TV. This can damage the reputation of psychology in the public's eyes.
- Paragraph 7** My last example is from the military. Lots of work was carried out on sensory deprivation especially in the 1960s because people thought it would alter conscious states. Because it had lots of negative effects on people it became useful in interrogating prisoners and is used by the Americans in Guantanamo and other bases.

[512 words]

Examiner comments

Oh dear, the classic error! The question asks for two applications, and the candidate has given three. The examiner can either cross out the last one or, as WJEC advises examiners, give credit for the best two. In either case, the military example is the one to go. So the essay loses Paragraph 7.

The essay has a good opening which is creditworthy as 'scene setting'. It is clear that the example is just an example and not one of the applications (otherwise this might have counted as a fourth application!).

Paragraphs 2 and 3 concern intelligence testing which is not covered in this chapter but you can read about it on pages 136–137. The information in these paragraphs demonstrates a good understanding of intelligence testing but the candidate doesn't fully draw out the ethical issues. Protection from harm is implicit in the discussion but the candidate might have considered other ethical issues, for example whether it is appropriate to use such tests with other cultural groups, with the result that such groups may appear inferior. Or might have considered whether it is OK for psychologists to stand by and say nothing, or do psychologists have a responsibility about the uses of their work?

Paragraphs 4 to 6 present an informed commentary about psychology and the media; the information is reasonably accurate and shows awareness of the issues. However, these paragraphs could be considerably improved by putting the BPS information first and then showing how each part applies in the real world, using the examples provided already. This would show a better structure to the essay.

Paragraph 7 has been ignored because it is the third example, which was not required.

This essay has some identifiable relevant information but is not thorough or clear — a requirement of the top band. Therefore it is placed in the second band (8–11) and is awarded marks towards the top end of this band since the descriptors are met (see mark scheme on page 42).

10/15 places the essay as a clear grade C.

Improvement?

The writer has a lot of good information but hasn't really structured it well. Ethical issues are the basis of the question and should be clearly identified and then logically illustrated — too

often here the examiner/reader has to mentally organise the material. Paragraph 3 is a good example where there is slightly jumbled material needing to be more clearly set out. The

structure of the answer could also be improved. For example, in paragraph 4 it would be better to put the BPS Guidelines first and then to use these Guidelines to organise the following material.