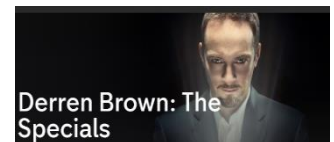
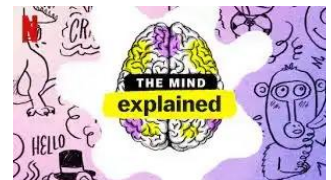
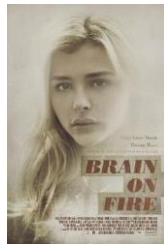


In September, you will be starting the Psychology course

- 1) If you were in for the transition day, you should have a copy of the **Transition Work**
- 2) What should be completed before the beginning of term:
  - a. The Psychology transition work
  - b. Organising a folder ready for the first topic, Research Methods
- 3) You are encouraged to start reading the following books for insight and background
  - a. The Psychopath Test by Jon Ronson (he also has a TED talk)
  - b. Outliers by Malcolm Gladwell
  - c. Opening Skinner's Box by Lauren Slater
  - d. Behave by Robert Sapolsky
  - e. The Psychopath Inside: A Neuroscientist's Personal Journey into the Dark Side of the Brain by James Fallon
- 4) There are also Netflix and other programmes that will be of interest

- a. Shutter Island (Netflix)
- b. The Girl on the Train (Netflix)
- c. Brain on Fire (Netflix)
- d. The mind explained (Netflix)
- e. When They See Us (Netflix)
- f. The Stanford Prison Experiment
- g. Derren Brown: The Specials (4oD) or his Netflix ones!
- h. Making a murderer: dissecting the roots of violence with Adrian Raine (TED talk on youtube)
- i. Three Identical Strangers (4oD)



Please come to the course with an open and inquisitive mind set and look forward to the delights of Psychology.

See you in September.

**This workbook will introduce you to some of the important concepts you need to know for your OCR A-Level in Psychology. Year 12 begins by taking a look at Component One: Research Methods. Completing the tasks inside will help you to understand some of the basics required for this paper.**

**More information about your course can be found on the OCR website which can be found at [shorturl.at/exEZ7](https://shorturl.at/exEZ7).**

# Instructions

**Read the information and complete the tasks given. You may need to use textbooks and the internet to find out the answers. At the back, you will also find a list of Full Potential activities, books and films; these are not compulsory but will help enrich your knowledge of the subject. They are therefore particularly useful for anyone aiming for a high grade in Psychology, or are considering taking the subject at university. It also looks great on UCAS applications!**

**Please note the you will be expected to return your completed workbook to your first Psychology lesson; students will not be allowed to attend their class without it. Please also make sure you learn the key terms for a test.**

**If you have any problems completing your workbook please contact:**

**Ms Harrison: [v.harrison@longdean.herts.sch.uk](mailto:v.harrison@longdean.herts.sch.uk)**

**Miss Rabjohn: [a.rabjohn@longdean.herts.sch.uk](mailto:a.rabjohn@longdean.herts.sch.uk)**

**To learn more about what psychology is, and its history:**

- Watch CrashCourse's YouTube video called "Psychological Research: Crash Course Psychology # 1": <https://youtu.be/vo4pMVb0R6M>**



# Research Methods:

# Experiments

**Just like any other science, Psychology relies on experiments to test its theories. You have probably heard of some of the more famous experiments, such as Pavlov and his dogs, the Stanford Prison Experiment, or Milgram's 'shocking' study of obedience.**

**Experiments are how we carry out an investigation in which one variable (The independent variable, or IV) is manipulated by the experimenter, and the effect of this change on another variable (the dependent variable, or DV) is measured or observed. There are lots of different types of experiments and research methods in psychology. This workbook will cover a few of them.**

What is an experiment?

---

What is the IV?

---

What is the DV?

---

In the examples below, highlight the IVs and draw a box around the DVs. The first one has been done for you.

E.g. Does **drinking energy drinks** increase **how much people talk?**

1. Does talking to a child increase their language ability?
2. Are people more aggressive on hot days?
3. Do students turn up late to school because they stayed up late the night before?
4. Will watching horror films make children have nightmares?
5. Will people who wear red be rated as more attractive?

To learn more about research in psychology:

- Watch CrashCourse's YouTube video called "Psychological Research: Crash Course Psychology #2": <https://youtu.be/hFV71QPvX2I>



# Laboratory Experiments: Harlow's Monkeys

A lab experiment is one that is set up in an artificial environment—typically a laboratory, although can include any setting that has been artificially set up, or where the people taking part in the study (the participants) wouldn't normally be. By creating these situations artificially, the experimenter can control many variables that might influence the participants' behaviour. This means the experimenter can be more confident that any results they get are due to the manipulation of the IV rather than anything else.



Not all psychological studies are carried out on people. Some procedures may be unethical for use on human participants, so animals such as monkeys, rats and cats might be used instead. In 1958, researcher Harry Harlow conducted a lab experiment into attachment—or the unique bond between a baby and its mother. For this experiment, a group of baby monkeys were reared in cages with two wire model 'mothers', one of which was covered in soft cloth. For half of the monkeys, milk was dispensed by the plain wire mother, and for the other half milk was dispensed by the cloth-covered mother. Harlow found that the monkeys spent almost all their time cuddling the cloth mothers, even when

they did not provide them with milk. When frightened, they would also seek comfort from the cloth mother. Before Harlow's experiment, many researchers wondered if babies form attachments with their mothers simply because they were the main sources of food (also known as the 'cupboard love' theory). This experiment showed that 'contact comfort' was more important to the monkeys than food.

To learn more about Harlow's research:

- Watch SciShowPsych's YouTube video "Harlow's Horrifying Monkey Experiments": <https://youtu.be/qEEEu1HEtU0>



To learn more about lab experiments:

- Visit this website from Tutor2u: <https://www.tutor2u.net/psychology/reference/laboratory-experiments>



## Laboratory Experiments:

Use the information on the previous page and your own research to answer the following questions:

1. What is a laboratory experiment?

2. What was the IV in Harlow's experiment?

3. What was the DV in Harlow's experiment?

4. What are the strengths and weaknesses of lab experiments?

Strengths	Weaknesses

**Challenge 1:**

What does the word 'ethics' mean in relation to psychological research?

Why is Harlow's study considered unethical?

**Challenge 2:**

Think of a psychology question you would like to know the answer to. Briefly describe how you could research it using a lab experiment.

# Field Experiments: Bickman (1974)

Like a lab experiment, a field experiment still has a DV that is measured and an IV that is manipulated by the experimenter. However, in a field experiment, the setting is the participants' normal environment (in relation to the behaviour being investigated). For example, an experiment on the effects of listening to music on performance in a test could be carried out on students in a classroom. This would be a field experiment as the conditions of the classroom environment should be familiar to the students.



One example of a field experiment is Bickman's 1974 experiment into the social power of a uniform. In this investigation, Bickman had three male actors dress up as either a security guard, a milkman, or just in ordinary clothes. It was carried out in the streets of New York, where the actors would approach members of the public and ask them to obey one of the following three instructions: pick up a bag; give someone money for a parking metre; and stand on the other side of a bus stop which said 'no standing'. His results found that on average the guard was obeyed on 76% of occasions, the milkman on 47% and the pedestrian on 30%. This suggests that people are more likely to obey an order when instructed by someone wearing a uniform. The researchers believe that this is because the uniform infers a sense of legitimate authority and power.

To watch similar experiments on the power of a uniform, try these links:

- BBC3's "How obedient are we? | Social Experiment": <https://youtu.be/4jcleVvgchs>
- HeroicImaginationTV "Obedience—Obeying a Man in a Uniform": <https://youtu.be/16QMqXljYVU>

To learn more about field experiments:

- Visit this website from tutor2u: <https://www.tutor2u.net/psychology/reference/field-experiments>





# Field Experiments:

Use the information on the previous page and your own research to answer the following questions:

1. What is a field experiment?

2. What was the IV in Bickman's experiment?

3. What was the DV in Bickman's experiment?

4. What are the strengths and weaknesses of field experiments?

Strengths	Weaknesses

## **Challenge 1:**

What does the term 'informed consent' mean in relation to psychological research?

Informed consent was not obtained from the participants in Bickman's study. Why not?

## **Challenge 2:**

Think of a psychology question you would like to know the answer to. Briefly describe how you could research it using a field experiment.

# Quasi Experiments:

## Yuille & Cutshall (1986)

Quasi experiments are different from field and laboratory experiments (or 'true experiments') because the experimenter does not manipulate the IV. Quasi experiments are also known as natural experiments because they make use of 'natural' (i.e. not artificially produced) differences in circumstances to provide the experimental conditions. Quasi experiments are used when it would be impractical, impossible or unethical for the experimenters to manipulate the IV themselves. For example, an investigation into the difference between men and women in correctly identifying facial expressions would be a quasi experiment because the independent variable (the gender of the participant) cannot be changed by the experimenter; the participants are naturally sorted into their experimental groups. Quasi experiments can be conducted in field or laboratory settings.

Two researchers, Yuille and Cutshall carried out a quasi experiment in 1986 to investigate the effect of stress on eyewitness memory. An 'eyewitness' is someone who sees a crime take place. Their accounts of the events they witness are considered highly important in helping the police identify suspects, and they may also be called upon to testify in court. However, psychologists studying memory have raised concerns about the accuracy of eyewitness testimonies, and some argue that the stress of witnessing a crime (especially when there is a weapon involved) may have a negative effect on how well people can remember the events. To investigate this, Yuille and Cutshall looked at interviews from people who had witnessed a robbery in which the thief was shot six times and died. The researchers found that recall was accurate, even when participants were re-interviewed five months later. This suggests that eyewitness testimonies may still be accurate, even during a stressful event.



To learn more about quasi experiments:

- Watch Fred Allcotte's video "Quasi experimental design": <https://youtu.be/vm-7k6unuLo>
- Visit this Tutor2U page: <https://www.tutor2u.net/psychology/reference/natural-experiments>



To learn more about eyewitness testimonies:

- Visit this website from Simply Psychology: [shorturl.at/oBDWY](http://shorturl.at/oBDWY)

# Quasi Experiments:

Use the information on the previous page and your own research to answer the following questions:

1. What is a quasi experiment?

2. What was the IV in Yuille and Cutshall's experiment?

3. What was the DV in Yuille and Cutshall's experiment?

4. What are the strengths and weaknesses of quasi experiments?

Strengths	Weaknesses

**Challenge 1:**

What does the word 'validity' mean in relation to psychological research?

Why is a quasi experiment like Yuille and Cutshall's likely to be more valid than if the crime were recreated in a laboratory setting?

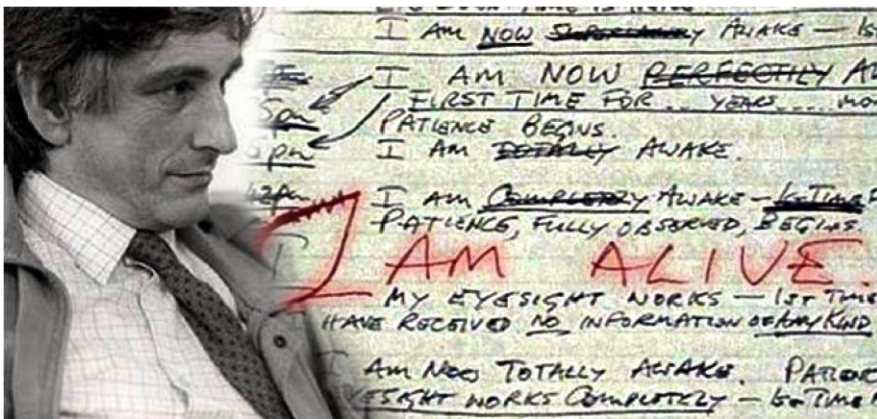
**Challenge 2:**

Think of a psychology question you would like to know the answer to. Briefly describe how you could research it using a quasi experiment.

# Case Studies:

The Curious Case of CW

Case studies are in-depth investigations, typically carried out on a much smaller scale than experiments. They can look at an individual, a group, an event or a community. Data can be gathered through a variety of sources and methods, e.g. observations and interviews. This research method originated from medicine, where a doctor would be interested in looking into a patient's case history in order to diagnose them. Strictly speaking, a case study is not a research method in itself but researchers select methods of data collection and analysis that will generate material suitable for case studies. Sigmund Freud famously used the case study method to carry out investigations on people such as Little Hans and Anna O. It is typical to use initials or pseudonyms for the patients in case studies in order to keep the research confidential, although sometimes the names are revealed after death or the individual chooses to come forward themselves.



Another well-known case study is that of Clive Wearing, or CW. CW suffers from a severe form of amnesia, caused by a viral infection that attacked his brain. Before the infection, CW was a world-class musician and while he can still play piano and conduct a choir just as well as before, he cannot re-

member ever having learned how to play. When it comes to his personal life, there are certain things he can remember such as that he had children from a previous marriage, but he cannot remember their names. He recognises his second wife Deborah and greets her joyously every time they meet, believing that they have not seen each other for years, even if she had only left the room momentarily. Studying CW has helped psychologists uncover a great deal about how memory works.

To learn more about case studies:

- Watch this Research Tube video "What is case study": <https://youtu.be/kynoEFQNEq8>
- Visit this Tutor2U page: <https://www.tutor2u.net/psychology/reference/case-studies>



To learn more about Clive Wearing:

- Watch the BBC documentary "Clive Wearing Living Without Memory": [https://www.youtube.com/watch?v=ipD\\_G7U2FcM](https://www.youtube.com/watch?v=ipD_G7U2FcM)



# Case Studies

Use the information on the previous page and your own research to answer the following questions:

1. What is a case study?

2. Why do case studies usually use initials or pseudonyms?

3. What are the strengths and weaknesses of quasi experiments?

Strengths	Weaknesses

## **Challenge 1:**

Research another case study in psychology. Describe it below, including how it has helped shape our understanding of the field.

# Experimental Design

Another important consideration of research is the experimental design. This is different to the experimental method (e.g. lab, field or natural), and refers to which conditions of the experiment that the participants will take part in. The three options you need to know about are independent groups, repeated measures and matched pairs.

Using the links below and your own research, fill in the boxes about these three experimental designs.

<https://youtu.be/9eZYufPP2-o>

<https://www.tutor2u.net/psychology/reference/revision-note-experimental-design>

<b><i>Independent Groups</i></b>  What is it?	<b>Strengths</b>
	<b>Weaknesses</b>

<b><i>Repeated Measures</i></b>  What is it?	<b>Strengths</b>
	<b>Weaknesses</b>



## Matched Pairs

What is it?

Strengths

Weaknesses

**ACTIVITY:** choose which experimental design would be best for the following research studies. In some cases you have no choice; in others, you should decide which would be most appropriate .

1. A study to see if there is a difference in the ability of grey and white rats in learning to run a maze.



2. A study to investigate whether a twin born first is more confident than a second-born twin.



3. A study to see if watching violent television programmes is likely to make children aggressive.



4. A study to investigate whether people are more likely to make a risky decision when they are in a group than when they are alone.



5. Research into finding a cure for fear of spiders, comparing a treatment group with a non-treatment group.



6. An investigation into whether people prefer gin and tonic or vodka and lime.



**This is not an exhaustive list and you will need to know many more terms during the course. Please learn these terms and their definitions for a test in the first week back at school.**

### **Aim**

The researcher's area of interest – what they are looking at (e.g. to investigate helping behaviour).

### Case study

In-depth investigation of a single person, group or event, where data are gathered from a variety of sources and by using several different methods (e.g. observations & interviews).

### Confidentiality

Unless agreed beforehand, participants have the right to expect that all data collected during a research study will remain confidential and anonymous.

### Confounding variable

An extraneous variable that varies systematically with the IV so we cannot be sure of the true source of the change to the DV.

### Control group

A group that is treated normally and gives us a measure of how people behave when they are not exposed to the experimental treatment (e.g. allowed to sleep normally).

### Debriefing

After completing the research, the true aim is revealed to the participant. Aim of debriefing = to return the person to the state s/he was in before they took part.

### **Deception**

Involves misleading participants about the purpose of a study.

### Ethical guidelines

These are provided by the BPS (British Psychological Society) - they are the 'rules' by which all psychologists should operate, including those carrying out research.

### Experimental group

The group that received the experimental treatment (e.g. sleep deprivation).

### ***Continued...***

#### Extraneous variable

Variables that if not controlled may affect the DV and provide a false impression that an IV has produced changes when it hasn't.

#### Field experiment

An experiment that takes place in a natural setting where the experimenter manipulates the IV and measures the DV.

#### **Hypothesis**

This is a formal statement or prediction of what the researcher expects to find. It needs to be testable.

#### **Independent groups design**

An experimental design where each participant only takes part in one condition of the IV.

#### **Independent variable**

The variable that the experimenter manipulates (changes).

#### Informed consent

Psychologists should ensure that all participants are helped to understand fully all aspects of the research before they agree (give consent) to take part.

#### Laboratory experiment

An experiment that takes place in a controlled environment where the experimenter manipulates the IV and measures the DV.

#### Matched pairs design

An experimental design where pairs of participants are matched on important characteristics and one member allocated to each condition of the IV.

#### Natural experiment

An experiment where the change in the IV already exists rather than being manipulated by the experimenter.

#### Protection of participants

Participants should be protected from physical or mental health, including stress - risk of harm must be no greater than that to which they are exposed in everyday life.

**Continued....**

### Quasi experiment

An experiment often conducted in controlled conditions where the IV simply exists so there can be no random allocation to the conditions.

### Reliability

Whether something is consistent. In the case of a study, whether it is replicable.

### Repeated measures design

An experimental design where each participants takes part in both/all conditions of the IV.

### Right to withdraw

Participants should be aware that they can leave the study at any time, even if they have been paid to take part.

### Sample

A group of people that are drawn from the target population to take part in a research investigation.

### Validity

Whether something is true – measures what it sets out to measure.



# Psychology

Exam Board: OCR

Qualification: A Level Psychology

Course code: 601/5122/5



Longdean School  
'Rejoice in thy youth'

Use this space to create a mind map to show what you have learned from this workbook.  
Use colour and pictures to make it pop!

## *Research Methods*