National 5 Psychology 2020-2021 Head Start Booklet

Hello!

The idea with this booklet is that you could work through it yourself if you are planning on taking National 5 Psychology next year. Please pass it on to anyone in St Ambrose who you know is planning on taking it. There are 12 lessons in total, which would each take about 1-2 hours. This means that over the course of around 6 weeks, you could work through 2-3 a week and it would really prepare you for the course next year. The plan will be that once the timetable is sorted for next year, I will get a Teams page set up to provide additional support and recorded video versions of some harder parts of the introduction course, so if you want added to this early can you email me on gw17ramagezoe@glow.sch.uk to say you are planning on taking Higher next year. You can also ask any questions via this email or have your work marked. This teams page will have a shared area with some other recommended resources, like documentaries etc that would be useful to watch. It would be good if you either got a notebook to do tasks in, or kept a word document with your tasks. Once we get into May/June I will also mark work and give feedback.

Mrs Ramage

The booklet is split into 3 sections. These are totally independent blocks of 5, so you can work through them at different times or in any order, but the more of the 3 blocks you manage the easier the start of next year will be for you. The most important part is to actually try the tasks after each lesson.

Block 1 – Research Methods

1.1 – The research process in Psychology

1.2 - Variables

1.3 - Types of research method

1.4 - Ethics

Block 2 – Social Psychology: Conformity

2.1 - Defining conformity and different types

2.2 - Types of social influence

2.3 - Evaluating research: Focus on Mori and Arai 2010

2.4 - Situational factors that affect conformity

2.5 - Individual factors that affect conformity

Block 3 – Individual Psychology: Sleep

3.1 - Stages of Sleep

3.2 - Dement and Kleitman 1957 study

3.3 - Restoration Theory of Sleep

LESSON 1.1 - The research process in Psychology

Ok, so welcome to National 5 Psychology. As a subject, it is the scientific study of the mind and behaviour. It's important to understand what we mean by this and why research is so central to Psychology. So, lets start by thinking about what makes science special. Think about the following:

Gossip, Advertisements, Superstitions, Scientific Explanation, Common Sense.

Task 1.1.1 - In your notebook, rank these from what you would judge to be LEAST reliable up to what you would judge to be MOST reliable. Write a sentence explaining why you put at least two things where they are.

Task 1.1.2 - read the below guardian article and then answer the questions

Stammerers targeted by school bullies

Most children with stammers get bullied persistently at school and many are scarred for life by the experience, according to evidence published yesterday by the British Psychological Society.

Researchers found that 83% of the adult stammerers they questioned had experienced bullying at school, including name-calling, threats, rumour-spreading, theft of belongings and physical aggression. Nearly one in five victims said they were bullied every day, and 71% said it happened at least once a week. In almost every case the bullying started after the onset of stammering and so could not be regarded as its cause. Typically, children started stammering by age 10 and the bullying began between 11 and 13.

Three-quarters of the victims said the bullying affected their schoolwork and nearly half reported long term effects, including low self-esteem, anxiety, nightmares, hatred of teachers and paranoia.

A man, 62, told the researchers: 'As a child I spent the best part of an afternoon trying to say one word. As long as I live I shall never forget that day: the fear, the tension, sweat running down my small body, the facial distortion and eye movements. It was unbelievable.'

A woman, 36, said: 'The bullying has haunted me all my life. I sometimes have difficulty staying in employment and often wonder if this could be an effect of the school bullying.'

A man, 30, said: 'I was really hurt by the laughter and the jibes. Emotionally it has made a big dent in me.' Another victim spoke of the constant fear of being asked to speak in school. 'Even years later I can't overstate the constant fear, day in day out, right from the first week of school. It never improved.'

A man, 47, said 'My worst experience was at 14 to 15 years when I was asked to recite a Masefield poem, Quinquireme of Nineveh. The teacher took sadistic pleasure in making me stand and recite it until I finished. I couldn't finish, unable to get the words out, but he carried on insisting I finished, sneering and angry.' An 18-year-old said: 'I became physically ill; I only had a 59% attendance rate. I attempted to commit suicide when I was 14. My parents thought it was

just an allergic reaction to a sleeping drug.' The study, by Siobhan Hugh-Jones of Leeds University and Peter Smith of Goldsmith's Centre, University of London, found that teachers and parents were usually unaware of the bullying or did nothing about it. Most of the stammerers in their sample were middle-aged and so attended school before teachers became more aware of the problems of bullying. 'However, as yet there is little sign that the particular difficulties of dysfluent children in school are fully recognised, despite the fact that it is likely that every average sized school will have at least five children who stammer', the researchers said in today's issue of the British Journal of Educational Psychology.

Children might not know they had a problem with a stammer until they encountered difficulties at school. 'The verbal demands produced in the classroom environment – from answering the register

to reading aloud – are often very different to the informal, relaxed speech that the child has become accustomed to with family and friends 'Dysfluent children may also have to deal with a stereotypical view of stammerers as being awkward, shy and of lower intelligence. Some become adept at managing their stammer, but many are unable to control their overt symptoms: the more they try, the more they stammer.' The study found that stammerers had difficulty making friends, perhaps a main reason why they experienced more bullying than other pupils.

John Carvel, Education Editor, The Guardian, 4 June 2006. From the Guardian Unlimited archive.

Questions:

1. Identify at least two things in the article that are personal accounts of how it feels to be bullied
2. Identify at least two things in the article that are statistics based on research
3. Why do you think it is important to carry out research instead of only looking at people's personal experiences?

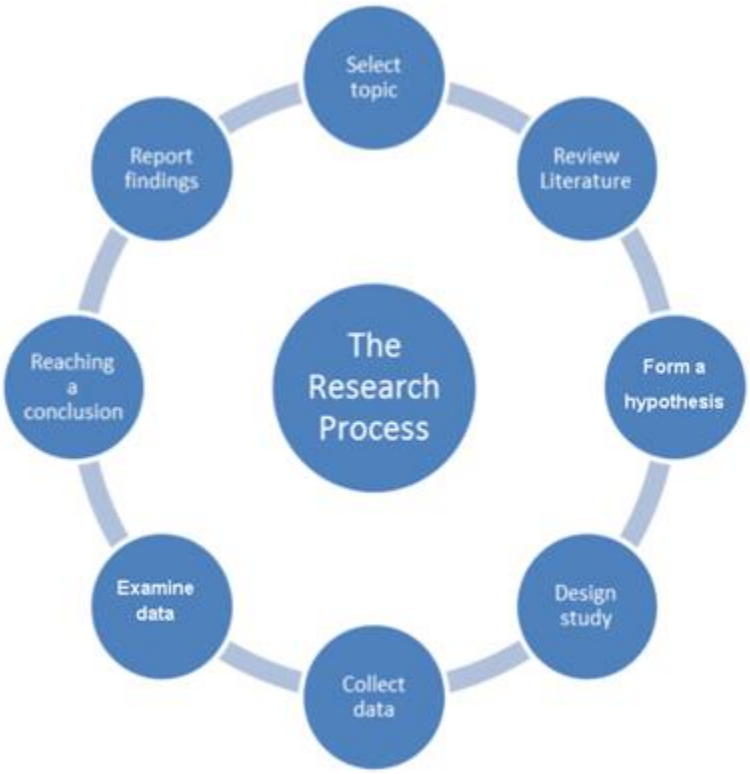
In task 1, you probably have scientific explanation at the top – this is what we would expect, because you know it to be reliable because it will have been tested out and checked, it is not just someone's opinion. In the next task, you probably identified that it is important to use research in order to get an overall picture instead of just individual experiences which might not be reflective of most people.

When we are talking about Psychology being a science based on research, we mean that it is not just common sense – there always needs to be research evidence to back up any theories, this research evidence needs to come from a range of methods like controlled experiments with clear procedures and no bias. Often it might be backing up what our personal experience tells us, but it's important to test out all our ideas properly so that it is not subjective (an opinion), but objective (fact based).

Over this first block of lessons, you'll learn about how Psychological research is carried out (to gather evidence for any theories, like discussed about) and have the chance to look at a couple of research studies.

Psychology shares the scientific method with physics, chemistry and biology. Theories must be backed up with valid, reliable evidence gathered through research. Even the most obvious ideas must be tested through experiments and confirmed as true or false e.g. aggressive parents cause children to be unhappy.

The scientific method involves a cyclical process where we generate ideas, form them in to a testable statement (called a hypothesis), and carry out experiments to confirm or refute (disprove) our original hypothesis. If the evidence does not support the idea, then we have to go back to the start and change our ideas (hypothesis) about the cause of behaviour.



Choosing a topic	You would consider everyday behaviour that is interesting or unusual behaviour that is interesting
Reviewing literature	Find out about current theory, knowledge and understanding. Provide information and results from previous studies.
Forming a hypothesis	Create a statement to investigate. Identify variables or co-variables e.g. eating cheese (IV) keeps you awake at night (DV)'.

Designing a study	Choose your method e.g. experiment, interview. Operationalise the variables (this means make them specific so that someone else would know exactly what you were doing). What type of cheese? How many hours sleep is normal? Consider ethical issues – consent, deception, confidentiality, right to withdraw, protection from harm, debrief.
Collecting data	Record data in appropriate formats. Researchers may use a raw record sheet or database before analysing the data and putting it in to graphs.
Examining data	Calculate measures of central tendency and distribution. Display data in graphical formats
Reaching a conclusion	Explain what the data shows. Relate the data to the hypothesis and current theory shown in the literature review stage.
Report findings	Write up findings in a report – normally consists of an abstract, intro, method, results, conclusion. Should be peer reviewed.

You will learn more about some of these stages as we move through this first block of lessons.

Task 1.1.3

Create a mindmap in your notebook showing what happens at each stage of the research process – it can be written or in pictures.

LESSON 1.2 - Variables

In psychology experiments are carried out. These are controlled ways trying to test out ideas of why people behave the way they do in order to get evidence for or against theories.

Most experiments are really super simple. We just change one thing and see what effect that change has on a behaviour. In an experiment, the Independent Variable (IV) is the thing we change. For example, if you wanted to find out whether "*drinking orange juice improves concentration levels in class"* then we would give half the class a glass of orange juice first thing in the morning and half the class nothing at all. We would then compare the two halves' concentration levels using some kind of concentration test. If we found that one half had better concentration levels than the other then we could come to the conclusion that something must

have caused that. If the only difference between the two groups was orange juice or not (the Independent Variable - IV) then we can assume that orange juice affects behaviour.

In experiments, the thing that we MEASURE to see if it has been affected is called the Dependent Variable (DV). Read back through the Orange Juice experiment above and see if you can notice what would be measured at the end (pause to go back and read). Yes – the concentration levels were measured, so this would be called the Dependent Variable. If you've done other scientific subjects, this might be called the output variable – in Psychology we call it the DV.

Task 1.2.1 - try an experiment at home with your family

Let's ask the question - "is music helpful or unhelpful for memory?". In order to carry out this mini experiment you will need to write out two lists of ten random words. Now get someone in your family who is happy to take part. You are going to show them the first list for 45 seconds in silence, then hide it and get them to write out as many words as they can remember. Now you are going to do the task again with your second list of words, but this time can you play some loud music while they read and then write them out? Score both rounds and compare.

Answer the following questions:

A) What was the independent variable? (the thing you changed)

B) what was the dependent variable? (the thing you measured / compared)

Task 1.2.2 - here is a list of possible research questions. For each one, identify what the IV and DV would be. Keep going back to your IV and DV definitions to help you.

A) Hippo intelligence is improved by mud

B) Eating potatoes helps your memory

C) Chocolate makes people feel happy

D) People are more aggressive if they watch violent TV shows

E) People who sit at the front of the class do better on tests

Task 1.2.3 - Sort out the following statements and decide if they are about the IV or the DV

Changed by the experimenter

Measured by the experimenter at the end

What you measure to work out if the IV had an effect or not

The thing in the experiment which is different between the conditions

Task 1.2.4 - Look up the experiments by Bickman 1974 (obedience) and Bandura 1961. For each one, decide what you think IV is and what you think the DV is.

The previous 3 tasks can be submitted for marking.

LESSON 1.3 - Research methods in Psychology

Experimental Method: Lab Experiment

Side note: We aren't going to focus on these just now but as well as the Independent Variable (that the experimenter changes) and the dependent variable (what they measure) there are also extraneous variables (anything else that could affect the results of the experiment that you did not intend to – like imagine you did an experiment on if light affects sleep but some had caffeine that day and some did not – the caffeine would be an extraneous variable – EV).

In Psychology, a laboratory is any environment where we have a lot of control (e.g. we could turn a classroom into a "lab" as long as we controlled things like noise, an EV, that could distract people). The main feature of a lab experiment is it is very controlled. This means the experimenter will have standardised instructions (so that every participant gets the same instructions) and standardised procedures (so that the order everything happens in etc is the same for each participant).

Lab experiments are widely used in psychology because of this **high level of control** – because we can see clearly if the IV has affected the DV. So lab experiments are best at showing that the effect (DV) has come about because of the cause (IV) and NOT because of the influence of some EV (random or confounding…revise!)

Another good feature of a lab experiment is that because it's so controlled, you can write down in excellent detail what you did. This means that someone can **copy** it and hopefully find out what you did (and if they didn't ask why….). So a lab experiment is easy to **replicate** and this helps check the findings.

However, the bad thing about using a lab experiment is it means that the environment isn't a real life one, and so the results might not really show how someone would act in real life.

Task 1.3.1 - Look at the lab experiment below and then answer the questions after.

Dement and Kleitman 1957
The key aim of their experiment was to find out if people just dream during one particular stage of sleep, or if we dream all the time during sleep.
In their study, they used nine adults (seven male, two female) who came to a sleep laboratory and were hooked up to a PSG machine which measures your brain waves so that you can see what stage of sleep someone is in. The participants had been told to avoid alcohol and caffeine that day and the lab was kept quiet. The participants slept in the sleep lab and were woken several times during the night by the researchers during different stages. When they were woken, they were asked if they had been dreaming and how long for.
Dement and Kleitman found that participants were much more likely to say that they had been dreaming if woken during REM sleep (80% of the time they said they had) compared to if they were woken during the non-REM stages (they only said they'd been dreaming in stage 1, 2 or 3 just 9% of the time).

A) What is the main feature of a lab experiment?

B) Identify something Dement and Kleitman controlled

C) If you were trying to work out when people dream in their everyday life, why might it be an issue to use a lab experiment like Dement and Kleitman?

Experimental Method: Field Experiment

The problem with **lab experiments** are that they are **low** in **ecological validity** – which means because they are **artificial settings** or **tasks** you might not get the same result in a real situation (or a more **natural environment** than a lab). So psychologists have got round this problem by using the **field experiment.** In short, a field experiment takes place in any **real-life situation or setting**.

Like a lab experiment, there will be an independent variable that the experimenter has changed and a dependent variable that they will measure, but the big difference is since it is taking place in a real life setting there is much less control over EVs so other things could affect the experiment too.

Task 1.3.2 - Look up Bickman's 1974 Uniform Experiment and answer the following questions:

A) How can you tell this is a field experiment?

B) What would be an advantage of it being a field experiment?

C) What would be a weakness of it being a field experiment?

LESSON 1.4 - Ethics in Psychology Research

No matter what you are doing in psychology it must be done **ethically**. Ethics in research are very important. Ethics is all about making sure that your participants, your research team and anyone who possibly night be affected by the research is **protected from harm**.

Ethics in psychology research are outlined by the organisation in charge of psychology – the **British Psychological Society** (BPS). If you want to carry out research you have to follow its code of ethics. If you do not, you could find yourself banned from being a psychologist!

I remember the 6 main points in the BPS code of ethics using the acronym CAN DO CAN'T DO WITH PARTICIPANTS (CDCDWP). Here they are explained:

1. Consent - everyone taking part in research should **agree** to it. They should also know what they're agreeing to. This is called informed consent. If you can't get consent before you start the research you can get consent afterwards (**retrospective consent**) But you can only do this if there's no other way to do your research. The BPS also say that in order to give their own consent participants need to be over 16, or else a guardian would need to give consent.

2. Deception - You should avoid **lying** to participants as far as possible. If you have to then you should make sure this is absolutely necessary and make sure you tell them the truth about the research at the end. You would then need to get retrospective consent from the participants.

3 Confidentiality - As far as possible, everyone who takes part in your research should not have their names published or any other details about their performance in your research made

known to anyone else. Participants should be treated with dignity and their privacy should not be invaded.

4 Debrief - All participants should have the chance to talk about the research afterwards. This helps them to understand what has happened and can help sort out any bad feelings they had about it.

5 Withdraw - anyone taking part in your research should have the right to stop doing it if they want to. There should be **no pressure** on them at all to continue. This means that if they were being paid or something to take part, they should still be paid even if they quit. There should be no negative consequences at all for stopping an experiment.

6 Protection from harm - ll psychology research should **protect** those carrying it out and taking part from any harm (psychological or physical). It should not **upset** anyone, **offend** anyone or make anyone anywhere feel **bad/uncomfortable/worried/frightened** and so on.

There are many ways you can make sure these ethical guidelines are followed. Some of these are:

a. Getting full **written consent** for any participant taking part in research
b. Making sure that everything is **explained** to participants before and/or after the research
c. Keeping all participants names **anonymous**
d. Making sure that your research is not scary or dangerous – and if it has to be, making sure that you know how to deal with any problems which might arise.

Task 1.4.1 - Read the following scenarios and then in your jotter for each one identify any of the 6 ethical guidelines you think have been broken and why (you might think more than one have been broken)

a. An experiment which makes children watch violent TV movies

b. Where a experimenter refuses to let a participant leave the room during an experiment

c. Where the results of an experiment using a family are discussed in a school meeting

d. An experiment which involves an experimenter pretending to collapse on the street

e. An experiment which asks participants to give electric shocks to learners for getting answers wrong

f. Any experiment using animals

Task 1.4.2 - Research the Watson and Raynor 1920 study called “Little Albert”. Identify at least three ethical issues you would have with this study in your jotter.

Task 1.4.3 – as part of your National 5 Psychology you will need to plan your own experiment. Have a little go at this just now by thinking up what your topic could be (anything to do with human behaviour that you are interested in – sleep, memory, phobias, mental health etc) and then work out what your variables would be and how you would make sure it was ethical.

For example, I might say “I’m interested in if sleep has an effect on memory. My variables would be how much sleep people get and how well they do on a memory test. I would make sure it was ethical by only using over 16s and getting their consent before taking part, as well as keeping their memory test scores private”.

Block 2 – Social Psychology: Conformity

LESSON 2.1 - Defining conformity and different types

What is conformity?

This is a change in behaviour or beliefs as a result of real or imagined social pressure. So basically – it is when someone acts or thinks differently because of the group they are in. Rewrite the above underlined definition in your jotter and cover up some different words each time – see if you can start to say the definition correctly.

Task 2.1.1

Can you think of a time when you or someone else has changed their behaviour or beliefs because of pressure from...

Peers? (e.g. think about if people ever all behave the same way / buy the same stuff due to others at school)

Strangers? (e.g. maybe when abroad – do people just go with what the group are doing?)

Media? (e.g. can you think of any times people have followed online trends or trends in the media?)

Types of conformity

Kelman (1958) stated there are 3 types of conformity:

- **Compliance –** When someone changes their **behaviour but not their beliefs** due to a group
    - There is a change in how the person acts in front of others, but not in what they actually think. This means the change will just be temporary – they will go back to their original behaviour once not in that group.
- **Internalisation –** When someone changes **behaviour and beliefs** to identify with a particular group and the change is permanent (we agree with them and start to value it also)
    - There is a change in behaviour and a permanent change in beliefs, even once we are not part of that group any more

Task 2.1.2

In your jotter, decide what type of conformity is happening in each of these scenarios.

A) Sophie listens to the same music as her friends, even though she doesn't really like it

B) Ryan initially becomes a vegetarian because his girlfriend is, but his attitude towards the meat industry changes and he intends to only eat vegetarian food in future

C) Laura laughed at a Kevin Bridges joke because her friends did, but deep down did not find it funny

D) Jill joined the school choir in primary school because all her friends did, but she still continues to be a member of a choir now she is an adult

Task 2.1.3 - Exam Style Question

1. Explain different types of conformity (4)

   With an **explain** question we want to put in our own example of each one – so once you've given the definition, add an example. Try and do it without your notes.

LESSON 2.2 - Types of social influence

So the big question for today is what leads to people conforming? What motivates them? According to Deutsch and Gerrard (1955) there are two main reasons for conforming – informational social influence and normative social influence.

Informational social influence

First of all, we have informational social influence. This is when someone is feel unsure of how they should act, they look around and see everyone doing a consistent behaviour, and think "well, that must be right.." and so they act this way too. In short, it is conforming to try and be right.

For example - Dave goes to play golf with friends who often play. They get to the second tee, and he goes to his bag to get his four iron out. All of the others have a three-wood in their hands. He doubts his judgement, since they all play often, and instead changes to use the same club as them.

In Psychology, we always back up our theories with research, so below is a research study that shows people conforming for this reason.

Study	Jenness (1932) - beans in a glass jar study
Aim	To see if a majority view will cause people to conform when they are unsure
Method	Participants were asked to estimate how many beans they thought were in a jar. Each participant had to make an individual estimate, and then do the same as a group. Participants were then interviewed individually again and asked if they would like to change their estimate.
Results	Almost all participants changed their estimate closer to that of the group.
Conclusions	It appeared that when unsure of the correct answer, people will tend to conform to what the rest of a group thinks - even though there is no reason to

believe the group will be any more accurate. This is informational influence because they were conforming to be **right** since they weren't sure of the answer.

In the Jenness study we know it is because of informational social influence because the task made them feel unsure and also they got to give their final answer alone in private, so they would have no other reason to conform other than to try and be more correct.

Normative Social Influence

Normative social influence happens when people DO NOT feel unsure – they know how they would normally behave but they look around and see everyone doing something and think "I don't want to be the odd one out" and so they behave this way too, in order to fit in. We are not in doubt, but we feel pressure from the group to act the same, in order to be liked/accepted.

For example - Dave only needs to work until 5.30, and believes that people who are efficient at their work should be able to leave on time. However, everyone else in his office works until at least 6.30, and so he stays every night too. He wants to be accepted and admired by those around him, even though he believes there is no need to stay this late.

Below is a study that shows normative social influence.

Study	Asch (1951)
Aim	Asch wanted to see whether people would conform to others' incorrect estimates if the task was easy, and under what conditions they would conform
Method	50 males participants took part in a lab experiment, and were told it was an experiment into visual perception. They were placed in a group with 7 other individuals, who were all actually actors. They were shown a series of 18 cards and asked to match the line to a choice of 3 comparisons. The confederates (actors) had all been told to give the same incorrect answer on 12 out of the 18 trials. The true participant was always last or second from last to answer. This put them in a position of having to choose between giving the clearly correct answer or conforming to the majority and giving the wrong answer.
Results	The average rate of conformity was found to be 32%, despite the fact that participants could see the correct answer very clearly.. 75% of participants conformed at least once.

Asch noted that when participants gave correct answers, the way they expressed their answers was influenced by the group, with participants often appearing withdrawn or embarrassed.

Conclusions When interviewed after the experiment, most of them sai they did not believe their conforming answers, but had gone along with the group out of fear of being ridiculed or thought of as being peculiar.

People conformed because they wanted to fit in - normative influence.

We will move on to look at some of the individual and group factors that affected conformity in this experiment.

Do you notice that in Asch, the task was much easier so people would know the right answer, but they still conformed because they were answering in front of others and wanted to fit in?

Task 2.2.1 - In your jotter, explain how the Jenness study shows informational social influence whereas the Asch study shows normative social influence.

Task 2.2.2 - answer the following questions without your notes

A) Which **type of social influence** means that we conform in order to be **liked and accepted**?

B) Which type of social influence makes people conform when they feel unsure and want to behave correctly?

C) What did participants have to do in Jenness's study? (highlight 3 steps that happened)

D) What percentage of Asch's participants conformed at least once?

LESSON 2.3 - Focus on Mori and Arai 2010

In Higher Psychology, we will have some **key** research studies that we need to know really well. We are going to learn about one of these today. The study is below – read it, note down any questions you have to email me, and then do the tasks on it.

Study	Mori and Arai (2010) - an updated version of the Asch line study, with a particular focus on gender differences
Aim	This study aimed to replicate Asch's experiment without the needs for actors/confederates, to ensure that nobody was acting unnaturally. It used both males and females, to find out if there are gender differences in how likely people are to conform.
Method	Participants wore filter glasses, which allowed them to look at the same image but see different things. This meant everyone was really taking part. They were again given a line matching task (but remember, one participant was seeing a different correct answer to everyone else). This study used 104 male and female Japanese students participated who got put into groups of 4. They had to do the line matching task, saying their answer out loud. The minority participant (the one with the different answer) went third, so that they could see if they said what they really saw or conformed to what the people before them had said.
Results	For female participants, conformity was around a third (4.41 out of 12 trials). This is similar to the original Asch findings. However, it was found that the male participants did not conform at a significant level.
Conclusions	Men in this newer study did not conform whereas women conformed more.

Task 2.3.1 - Design a cartoon strip in your jotter showing what participants had to do in this study.

Task 2.3.2 - Often in Psychology we EVALUATE a study – this means thinking about how well it was carried out or what the limitations are. Think about the following things:

Asch only used male participants in his study, whereas Mori and Arai used both males and females. This means the result can be generalised to both genders and it also let them find out about gender differences in conformity.

In Asch, there were confederates who might have given the game away if they acted unnaturally. Mori and Arai used the filter glasses instead, meaning everyone would have been acting naturally.

Mori and Arai's study took place in Japan, Asch's in the USA. Due to each being in one country with its own particular culture, we don't know if the results would have turned out the same elsewhere in the world – we can't generalise them to anywhere else.

Mori and Arai only used students as their participants, so the results cannot be generalised to people of different ages.

We can say that larger samples are more reliable – Mori and Arai had a sample of over 100 (104) so we can say this is more reliable.

Question: In your jotter, explain one strength and one weakness of Mori and Arai's study that you think are quite easy to understand.

LESSON 2.4 - Situational factors that affect conformity

Conformity doesn't stay the same all the time – there are some situational and individual factors that affect how likely someone is to conform. Situational factors means things to do with that situation that make conformity more or less likely. There are 4 we are going to learn about:

1. Size of Group

This refers to how big the group is. Asch re-ran his experiments (1955) with various numbers of confederates and found that conformity varied depending on the size of the group. Increased group size made a difference up to a certain point.

- One confederate = almost no conformity
- Two confederates = 12.8% conformity
- Three confederates = 33.3% conformity
- The addition of more confederates, up until 7, made a slight increase in conformity levels, then it stayed pretty consistent after this.

In real life situations, it can generally be said that a larger group size or greater majority will increase conformity. This is purely to do with how many people are in a group, and it seems that a group of over 3 causes more conformity.

2. Similarity of group

Influence tends to be stronger when we are with people we know, such as family, friends or people who are like us like other pupils.

Abrams et al. (1990) found that if participants feel that they share characteristics with the majority, they were more likely to conform to normative social influence like in the Asch experiment. Even just being in the same situation as another person (e.g. in the same class, on the same plane) means that we have something in common and may assume they are similar to us.

3. Social Support

This means if anyone is on your side (social support) or everyone is against you (no social support). Studies have found that when there is a totally unanimous decision amongst participants it appears to apply more pressure to conform, and conformity levels increase.

Asch (1951) conducted another variation of his study where he instructed one confederate to act as an ally to the true participant by disagreeing with the others so that they were no longer unanimous. The ally answered before the true participant. This produced a sharp drop in conformity, which fell to 5.5%.

Task 2.4.1

Answer the following questions in your jotter

1. What size of group made a difference to conformity in Asch
2. Describe what is meant by social support
3. Describe what happened in the Asch experiment when Asch added in social support

LESSON 2.5 - Individual factors that affect conformity

Individual factors are different from situational factors because it is the personality traits or things about us as individuals that make us more or less likely to conform. There are 4 individual factors that affect conformity below.

1. Sex

The Mori and Arai (2010) study suggested that women are more likely to conform than men. Eagly (1987) suggested that this happens because women are more likely to take on the nurturing role of promoting harmony in the group, while men are happier to maintain their independence.

2. Cultural Differences

There are two main types of culture round the world – collectivist and individualistic. Pause and research some of the differences between these.

Smith and Bond (1993) found that countries where family and society were seen as important, such as Asia and Africa **(collectivist cultures)** were more likely to conform than people from countries that are more **individualistic** (e.g. Western Europe). Specifically, they found that Belgians have the lowest level of conformity and Fijian Indians the highest

Study	Kim and Markus 1999 - Conformity in choosing a pen
Aim	To look at the difference between collectivist and individualistic cultures when asked to make a simple decision where they could blend in or stand out
Method	Researchers presented American and Asian participants with a bunch of orange and green pens that had a majority of one colour and a minority of the another.
Results	Americans tended to pick the minority coloured pens to stand out, whereas Asians tended to pick the majority coloured pen to blend it.

3. Age

One review of studies reported that conformity levels remain static between the ages of 10 and 14, after which, the ability to dissent rises until age 18. It then remains steady throughout early adulthood (Steinberg and Monahan, 2007).

In a sense, age is also a situational factor, as we are more likely to conform when people are a similar age to us or older, compared to if they are younger than us.

Task 2.5.1: Answer these in your jotter

a. Name three individual differences that can affect conformity?

b. Describe the method and results of the Kim and Markus (1999) study on culture.

c. Which cultures did Smith and Bond (1993) find **most and least** conforming?

d. What different things do people from collectivist and individualistic cultures tend to value?

e. What are two differences in the participants used for Mori and Arai's (2010) study compared to the original Asch study?

f. What did Mori and Arai find out about sex differences in conformity? Would you say this is generalisable?

Task 2.5.2: In your jotter, create a mind map with situational and individual factors that affect conformity. You should do this without notes.

Task 2.5.3: Exam Question- Well done – you've reached the end of conformity. Try this exam question. You can email it in for marking.

Rosie and her three friends are discussing where to go on holiday but their budget is limited. Rosie's friends want to go abroad but she wants to stay in the UK. Rosie agrees to go abroad. Explain factors affecting conformity that might have contributed to Rosie's decision to go abroad on holiday. You should use research evidence (8).

Answer this question in your jotter – you should try and cover things like age, gender, size of group and social support. You would explain a factor and how it might have affected Rosie but then you also need to give evidence for it (remember – Psychology is a science so we always try give evidence, like the results of a study, to back up our points if we can). Below is an example of a sentence that would get 3 marks.

Culture has an effect on conformity, with collectivist cultures conforming much more than individualistic cultures. If Rosie was raised in a collectivist culture which values family and group goals this could explain why she conformed easily. This is backed up by Smith and Bond who found much higher conformity in countries like Fiji which are collectivist compared to countries like Belgium which are individualistic.

This question should take you about 15 minutes to answer – give it a go now and email it to me for marking.

Task 2.5.4: Go onto quizlet via this link https://quizlet.com/_8bz1fa?x=1qqt&i=171fbg and try the set called Conformity using the LEARN function. Keep going until you can get them all right. You can also get someone at home to test you using the FLASHCARD section.

Block 3 – Individual Psychology: Sleep and Dreams

LESSON 3.1 - Stages of Sleep

Task 3.1.1

Before we start at all, write down 3 questions you have about sleep in your jotter (the course also covers dreams, but we are going to leave that until we are all together in class). See if they get answered as part of this intro home learning, and if not then ask them when you come back to school.

How do we study sleep?

In keeping with the scientific method, researchers are trying to make controlled observations about behaviour. This is obviously more difficult to do while people are sleeping, but one way of gathering evidence is using a polysomnography (PSG) - this records physical changes in the brain and body during sleep. It monitors various bodily functions using electrodes to detect any electrical activity happening, including the brain (using the EEG part), eye movements (using the EOG part), muscle activity (using the EMG part) and hearth rhythm (using the ECG part). It also measures things like breathing functions so as to help diagnose disorders like sleep apnea.

It works by attaching over 20 electrodes to a patient which record all these body functions while a person is asleep. This might happen in a sleep lab or just in someone's home (although this is a more recent development). A sleep technician is present and monitors the person during sleep. The PSG produces a graph at the end.

A PSG can be used to diagnose or rule out sleep disorders and study what happens during sleep.

Task 3.1.2

A) Outline which body functions a PSG measures

B) Watch a YouTube video about someone going for a PSG as part of a sleep study and write a brief description of what is involved

C) Explain in your own words what you think an advantage is of now being able to carry out sleep studies using PSGs in people's own homes

Stages of sleep

Think about your own sleep – you probably have an idea that it isn't always the same – for example, when you're just waking up vs deep sleep. However, there are actually 4 very distinct stages of sleep. As we move through these stages, we gradually go into a deeper sleep, becoming harder to wake. A PSG makes it very clear when people changes stages as the size and speed of electrical brain wave changes.

Stage 1 is when people are just drifting off. This about that feeling of being between wakefulness and sleep – like drifting off in the car but still hearing everything that is going on. It is a light stage of sleep so you can easily be woken and are still aware of noise around you. If you waken someone up during this stage they often say they aren't sleeping. This stage only lasts around 5-10 minutes. Sometimes during this stage a hypnic jerk can happen which is an involuntary movement (like a "twitch") due to the body changing as it falls asleep. During stage 1, brain waves called theta waves start to appear which are slower brain waves that we have when awake.

Stage 2 lasts around 20 minutes. This is when activity decreases and conscious awareness of the world fades away. There are brain waves during this stage called sleep spindles which seem to be involved in blocking out external noise and keeping us asleep.

Stage 3 is "deep" sleep and the brain waves are very slow brain waves called delta waves. During this stage because we are in such a deep sleep, parasomnias can occur. These would include things like bed wetting and sleep walking.

REM Sleep is very different from all other parts of sleep (in fact, stage 1-3 often get called non REM sleep to contrast). The EEG pattern on the PSG suddenly becomes much faster, with Beta and Alpha brain waves occurring. Your eyes will be rapidly moving from side to side beneath the eyelids. However, the rest of the body does not move (it is temporarily paralysed). If woken during this stage, people nearly always report they have been dreaming (which is why we stay still – it keeps us safe from acting out our dreams).

Just to complicate things further, sleep does not progress through these stages in sequence. Sleep begins in stage 1 and progresses into 2 then 3, but after stage 3 stage 2 is repeated then we enter REM. Once REM sleep is over, the body returns to stage 2 and repeats the cycle (no need to go back to Stage 1 unless we wake up). Sleep cycles through these stages approximately four to five times throughout the night.

Task 3.1.3 - in your jotter, draw out a table with each stage of sleep, what brain wave occurs during this, and 1-2 key details about this stage. Get someone at home to test you on these until you know each one.

Task 3.1.4 – Identify 3 big things that only happen in REM sleep compared to the other 3 stages (non-REM sleep).

LESSON 3.2 – Key study for sleep – Dement and Kleitman 1957

Key study – Dement and Kleitman 1957

Study	Dement and Kleitman 1957

Aim	They had three key aims: to find out if you dream during a particular stage, to see if your eye movements relate to your dreams, and to see if someones perception of how long they have been dreaming matches up to reality.
Method / Procedure	In their study, they used nine adults (seven male, two female) who came to a sleep laboratory for a polysomnography. The participants had been told to avoid alcohol and caffeine that day. The participants slept in the sleep lab and were woken several times during the night by the researchers. They were asked if they have been dreaming, and if so, what their dream had been about and how long it had been going on for.
Findings	Dement and Kleitman found that participants were much more likely to say that they had been dreaming if woken during REM sleep (80% of the time they said they had) compared to if they were woken during nREM sleep (they only said they'd been dreaming in stage 1-4 9% of the time). They also said that their dream was shorter if they had been woken five minutes into REM, whereas if they were woken up 15 minutes in they said it was longer. In terms of eye movements, these did appear to link to what participants had been dreaming about. e.g. a participant who had been making left-to-right eye movements reported a dream about people throwing tomatoes at each other. Participants generally fell back asleep within five minutes.

Task 3.2.1 - questions in jotter

A) What did Dement and Kleitman find out? Try and make at least 3 points

B) What most surprises you about the different stages of sleep?

C) What do you think is a strength of holding this experiment in a sleep lab?

D) What do you think is a weakness of holding this experiment in a sleep lab?

LESSON 3.3 - Restoration Theory of Sleep

A theory is an idea of why a behaviour happens and it needs to be backed up by scientific evidence. Restoration Theory of Sleep tells us what it proposes is the purpose of sleep in the name – to restore us.

This theory was proposed by Oswald in 1966 and he said that sleep appears to be universal amongst all animals (even fruit flies) so it must have an essential purpose – this theory argues that sleep is necessary for the body to restore (to rest and recover from exertions).

Remember we can split the stages of sleep up into 1-3 (non-REM) and then REM sleep? This theory specifically says that non-REM sleep is for the **body** to restore while REM sleep is for the **brain** to restore. Examples of things that could be happening during non-REM in the body would be minor injuries being repaired or waste chemicals being removed from muscles. Examples of things that could be happening during REM for the brain would be replenishing neurotransmitters or adenosine being reduced.

So, what evidence is there for this theory? Below are three different studies that provide support. For each one, you really just need to know the result and why it backs up the theory.

Evidence 1: Rechstaffen (1989) deprived rats of both REM and non-REM sleep by forcing them to run on a treadmill type device when they started to fall asleep. After a week of this sleep deprivation they lost weight, even though they were eating more than normal. After 2 weeks they had lost even more weight. After 4 weeks, all of the rats had died. During this time their body temperature had become unstable too. This suggests that without sleep the rats were not getting the chance to repair and their bodies deteriorated to the point of death.

Evidence 2: Peter Tripp was a radio DJ studied by psychologists when he decided during the 1970s to try and stay awake for 200 hours to raise money for charity. By 100 hours he could only perform one or two of the daily mental tasks that psychologists set him. He struggled to even remember the alphabet. From around 100 hours onward, he started to experience hallucinations thinking that people's ties were trying to strangle him or that his room was on fire. This shows the impact on the human brain when people don't get enough sleep, suggesting that without restoration there is a negative effect (e.g. maybe due to a build of adenosine etc).

Evidence 3: Shaprio (1981) carried out a study with people who run ultramarathons. He found that after races, their sleep lasted for 90 minutes extra on average for the next two nights. In particular, their non-REM sleep lengthened. This shows that sleep must be essential for repair after a big exertion like an ultramarathon when the body is more worn out or else their bodies would have just repaired during the day, but extra non-REM sleep was required instead.

Task 3.3.1 - without notes, in your jotter, try and answer the following questions.

A) According to restoration theory, what is the main point of sleep?

B) What is the difference between non-REM vs REM sleep according to this theory?

C) What is an example of a process the theory says might be happening during non-REM sleep?

D) What is an example of a process the theory says might be happening during REM sleep?

E) Describe two pieces of evidence that back up the ideas of restoration theory and why they support this theory.