Course Start

Course Start is independent learning you need to complete as a fundamental part of your introduction to the course. It should take you approximately 3 hours to complete.

Course Name	IB PSYCHOLOGY
How this **Course Start** fits into the first term of the course	During the first term you will learn about Cognitive Approaches to Psychology including memory, thinking and decision making and cognitive biases.
How will my **Course Start** learning be used in lessons?	It will highlight the • importance of research in Psychology • importance of understanding the historical context of ideas
Course Start learning objectives	• To introduce students to aspects of Cognitive Psychology - specifically reconstructive memory • To emphasise the importance of Psychology research to the explanations of human behaviour • To introduce aspects of research methods
Study Skills	• Note taking • Academic reading, note taking and essay writing skills • Understanding data • Critical thinking skills

Expectations for: IB PSYCHOLOGY

Our specification is: IB

What this course involves
Yr 1 focus on Cognitive, Biological and Sociocultural topics
Yr 2 an integration of the Yr 1 themes into Mental Health and Human Relationships
All students complete a simple experiment. Assessment is mainly through essays.

Course Start IB Psychology (Year 1): Cognitive Psychology & Eyewitness testimony

1. Watch the 4 BBC Eye-Witness videos:

https://www.youtube.com/playlist?list=PL45AB31EB55229143

2. Read a summary of the article: Loftus, E. F., & Palmer, J. C. (1974). Reconstruction of automobile destruction: An example of the interaction between language and memory. Journal of Verbal Learning & Verbal Behavior, 13(5), 585-589.

Background:

- Memory involves interpreting what is seen or heard, recording bits of it and then reconstructing these bits into memories when required.
- This infers recall can be distorted or biased by certain features of the situation.
- Loftus and Palmer conducted many studies investigating ways in which memory can be distorted, many of which show that EWT is highly unreliable because it can be influenced by such things as subtle differences in the wording of questions.
- This study focuses on the effects of 'leading questions' on an individual's ability to accurately remember events.
- The expectation was that any information subtly introduced after the event through leading questions – questions phrased in a way suggesting the expected answer – would distort the original memory.

Aim:

The aim of this study was to investigate how information supplied after an event, influences a witness's memory for that event.

Experiment 1:

Method:

- This was a laboratory experiment using an independent measures design.
- The independent variable (IV) was the wording of a critical question hidden in a questionnaire.
- This question asked, ***"About how fast were the cars going when they hit / smashed / collided / contacted / bumped each other?"***
- The dependent variable (DV) was the estimated speed given by the participant.

Sample: 45 students were divided into five groups with nine participants in each group.

Procedure:

- All participants were shown the same seven film clips of different traffic accidents which were originally made as part of a driver safety film.

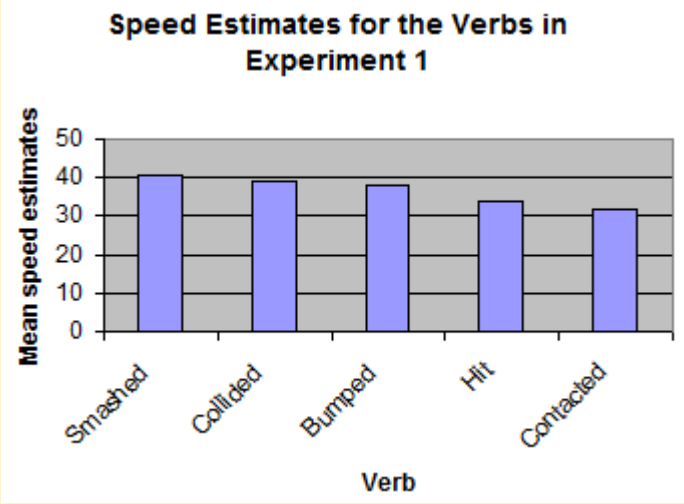
- After each clip participants were given a questionnaire which asked them firstly to describe the accident and then answer a series of questions about the accident.
- There was one critical question in the questionnaire: "**About how fast were the cars going when they hit each other?"**
- One group was given this question while the other four groups were given the verbs ***"smashed', 'collided', 'contacted' or 'bumped', instead of 'hit'.***

Results of the first experiment:

Table 1. Speed estimates for the verbs used in the estimation of speed question

Verb	**Mean estimate of speed (mph)**
Smashed	40.8
Collided	39.3
Bumped	38.1
Hit	34.0
Contacted	31.8

The results in table 1show that the **phrasing of the question brought about a change in speed estimate**. **With smashed eliciting a higher speed estimate than contacted.**



Experiment 2:

Method:

- This was also a laboratory experiment using an independent measures design.
- The independent variable (IV) was the wording on a question in a questionnaire:
- One group was asked, ***"About how fast were the cars going when they smashed into each other?"***
- A second group was asked, ***"About how fast were the cars going when they hit each other?"***
- A third group was not asked about speed.
- One week later, all participants were asked to complete another questionnaire which contained the critical question, ***"Did you see any broken glass?"***
- The dependent variable (DV) was whether the answer to this question was, **"Yes/No."**

Sample: 150 students were divided into three groups with 50 participants in each group

Procedure:

- All participants were shown a one-minute film which contained a four-second multiple car crash.
- They were then given a questionnaire which asked them to describe the accident and answer a set of questions about the incident.
- There was a critical question about speed:
- One group was asked, "About how fast were the cars going when they smashed into each other?"
- Another group was asked, "About how fast were the cars going when they hit each other?"
- The third group did not have a question about vehicular speed.
- One week later, all participants, without seeing the film again, completed another questionnaire about the accident which contained the further critical question, "Did you see any broken glass – Yes/No?" There had been no broken glass in the original film.

Results of the second experiment:

Table 2. Response to the question 'Did you see any broken glass?'

Response	**Smashed**	**Hit**	**Control**
Yes	16	7	6
No	34	43	44

These results show that the **verb (smashed) in the question did have a significant effect on the mis-perception of glass in the film.**Those participants that heard the word 'smashed' were more than twice as likely to recall seeing broken glass.

Conclusions:

- The verb used in a question influences a participant's response i.e. the way a question is phrased influences the answer given.
- People are not very good at judging vehicular speed.
- Misleading post event information can distort an individual's memory.
- It is proposed that two kinds of information go into our memory for a 'complex occurrence' such as this.
- Firstly, the information gleaned during the perception of the original event. Secondly, the post-event information that is gained after the fact. Information from the two sources will integrate over time and we will be unable to decipher which source the information comes from.
- We are therefore unable to tell whether our memory is accurate.

Explanation of results

- To account for the results of the second experiment, Loftus and Palmer developed the following explanation called the reconstructive hypothesis:
- They argue that **two kinds of information go into a person's memory of an event**.
- The first is the information obtained from **perceiving an event** (e.g. witnessing a video of a car accident), and the second is the other **information supplied to us after the event** (e.g. the question containing hit or smashed). Over time, the information from these two sources may be **integrate**d in

such a way that we are unable to tell from which source some specific detail is recalled. **All we have is one 'memory'.**

- For example in Loftus and Palmer's second experiment, the participants first form some memory of the video they have witnessed. The experimenter then, while asking, "About how fast were the cars going when they smashed into each other?" supplies a piece of external information, namely, that the cars did indeed smash into each other. When these two pieces of information are integrated, the participant has a memory of an accident that was more severe than in fact it was. Since broken glass corresponds to a severe accident, the participant is more likely to think that broken glass was present.

Evaluation of Explanation

- One way in which we could criticise this argument is to recognise that it is not only the type of question asked but also many other factors which could influence your memory of an event.
- Other factors which include food, alcohol, emotions, environment, who you were with, what the event meant to you, and so forth.
- Some psychologists have made a further criticism of the argument. They do not agree with Loftus that post event information changes the witness's original memory, never to be retrieved again.
- They suggest that witnesses merely follow the questioner's suggestions, leaving the original memory intact for retrieval under appropriate conditions.
- The main strength of Loftus' argument is its wider implications. Based on evidence like that of Loftus's, the Devlin Report (1976) recommended that the trial judge be required to instruct the jury that it is not safe to convict on a single eyewitness testimony alone, except in exceptional circumstances or when there is substantial corroborative evidence.
- Loftus's reconstructive hypothesis has also meant that the police and lawyers are urged to use as few leading questions as possible (i.e. questions suggesting to the witness the desired answer), although in reality this practice is still widely carried out.

3. Watch the following TED Talk:

https://www.ted.com/talks/elizabeth_loftus_the_fiction_of_memory?language=en

Make some brief notes:

4. In Psychology you will need to read original Psychological journal articles.

Read the following study: Loftus, E. F., Loftus, G. R., & Messo, J. (1987). Some facts about "weapon focus." *Law and Human Behavior, 11*(1), 55-62.
https://faculty.washington.edu/gloftus/Downloads/LoftusLoftusMessoWF.pdf

Here is a brief summary:

Weapon focus refers to the concentration of a witness's attention on a weapon which results in them having difficulty recalling other details of the scene and identifying the perpetrator of the crime. Previous research carried out has shown that people fixate their gaze for longer, faster and more often on unusual or highly informative objects.

Aim: To provide support for the Weapons focus effect when witnessing a crime.
Method: Laboratory experiment
Participants & Details: The participants were 36 students from the University of Washington aged 18-31, half were recruited via advertisements and paid $3.50, the others were psychology students participating for extra credits. All participants were shown 18 slides of a series of events in a Taco Time restaurant. For both groups the slide was the same except for one slide. This slide was the independent variable. In the control group the second person in the queue hands the cashier a cheque, in the experimental group the same person pulls a gun on the cashier. The dependent variable was recognition of that person; it was measured by a twenty item multiple choice questionnaire. Participants were also show 12 photos in random sequence and asked to rate how confident they were of their identification on a scale of 1-6 (1 = guess, 6 = very sure).
Results: Answers to the questionnaire about the slide show showed no significant difference between the two groups. In the control condition (cheque) 38.9% made a correct identification, in the experimental condition (gun) it was only 11.1%. Eye fixation data showed an average fixation time of 3.72 seconds on the gun, compared to 2.44 seconds on the cheque.
Conclusions: The participants spent longer looking at the weapon and therefore had more difficulty in picking the suspect from the line-up.

Your first graded IB Psychology assessment:

Using the four sources of information answer, the following question on a word/google doc in <u>500-700</u> words (and bring a print out to the first lesson).

'To what extent is eye-witness testimony reliable?'

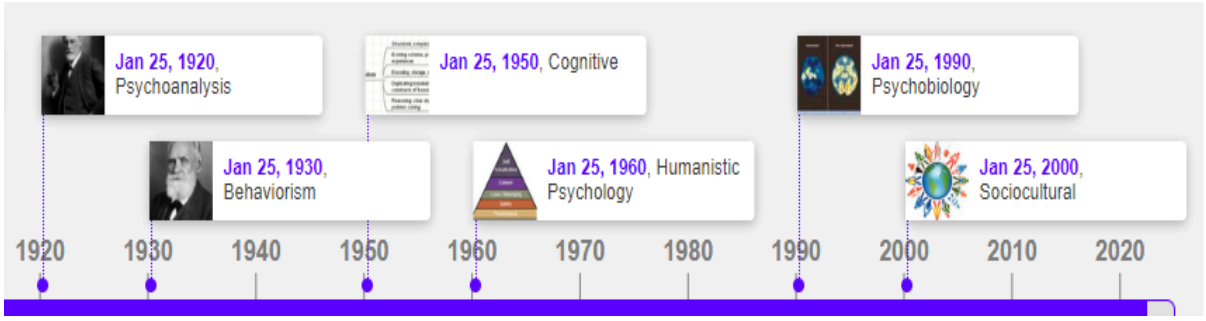
Course Information:

- **IB Assessments are graded 0-7 (7 =highest)**
- **You will use a fantastic online textbook, which requires a small one-time payment which we will collect in the first half-term. Although you won't have access to the full site yet, please take a look** https://www.thinkib.net/psychology

A Brief History of Cognitive Psychology

Read the following and answer the questions that follow

Look at the timeline of some **key approaches** to Psychology since the 1920s



Psychoanalytic (Psychoanalysis) Perspective

- focuses on deciphering how **the unconscious mind** governs conscious processes in ways that interfere with healthy psychological functioning.
- It is built on the foundational idea that biologically determined **unconscious forces drive human behaviou**r, often rooted in **early experiences** of attempting to get our basic needs met. However, these remain out of conscious awareness (Pick, 2015).

Behaviourism

- is a theoretical perspective in psychology that emphasises the role of learning and **observable behaviours** in understanding human and animal actions.
- Behaviorism is a theory of learning that states all behaviours are **learned** through **conditioned interaction** with the **environment**.
- Thus, behaviour is simply a response to **environmental stimuli.**
- The behaviourist theory is only concerned with observable stimulus-response behaviours, as they **can be studied** in a **systematic and observable** manner.
- Some of the key figures of the behaviourist approach include **B.F. Skinner,** known for his work on operant conditioning, and **John B. Watson**, who established the psychological school of behaviourism.

Cognitive Psychology

This article from VeryWell mind discusses the history of this field, and current directions for research. It also covers some related career options.

- Although it is a relatively young branch of psychology, it has quickly grown to become one of the most popular subfields.

- **Cognitive psychology** grew into prominence between the **1950s and 1970s.**
- Prior to this time, **Behaviourism** was the dominant perspective in psychology.
- **Behaviourism** holds that we learn all our behaviours from interacting with our environment. It focuses strictly on observable behaviour, not thought and emotion.
- **Cognitive Psychologists** became **more interested** in the **internal processes** that affect behaviour instead of just the behaviour itself.
- This shift is often referred to as the '**cognitive revolution'** in psychology.
- During this time, a great deal of research on topics including memory, attention, and language acquisition began to emerge.
- In **1967,** the psychologist **Ulric Neisser** introduced the term **cognitive psychology**, which he defined as the study of the processes behind the perception, transformation, storage, and recovery of information.
- **Cognitive psychologists** see the mind **as if it were a computer**, taking in and processing information, and seek to understand the various factors involved.

Cognitive psychologists explore a **wide variety of topics** related to thinking processes. Some of these include:

- **Attention**--our ability to process information in the environment while tuning out irrelevant details
- **Memory** - short-term, long term, different types of memory
- **Forgetting**
- **Decision-making** - choice-based behaviour--actions driven by a choice among other possibilities

Current Research in Cognitive Psychology

- Current research on cognitive psychology helps play a role in how professionals approach the treatment of mental illness, traumatic brain injury, and degenerative brain diseases.
- Thanks to the work of cognitive psychologists, we can better pinpoint ways to measure human intellectual abilities, develop new strategies to combat memory problems, and decode the workings of the human brain—all of which ultimately have a powerful impact on how we treat cognitive disorders.

Careers in Cognitive Psychology

- Many cognitive psychologists specialise in **research with universities** or government agencies.
- Research psychologists in this area often concentrate on a particular topic, such as memory.
- Others take a **clinical focus** and work directly with people who are experiencing **challenges related to mental processes**. They work in hospitals, mental health clinics, and private practices.

- Others work directly on **health concerns related to cognition,** such as degenerative brain disorders and brain injuries.
- Treatments rooted in cognitive research focus on **helping people replace negative thought patterns with more positive, realistic ones**.
- With the help of cognitive psychologists, people are often able to find ways to **cope and even overcome such difficulties.**

Having read the above bullet-pointed article answer the following questions:

1. When did Cognitive Psychology start to become popular? (1 mark)
2. Name the 2 popular approaches that came *before* Cognitive Psychology (3 marks)
3. Who reputedly coined the term '*cognitive psychology'* and why do you think it was called a '**revolution**'? (5 marks) **HINT:** Write 1 small paragraph summarising the difference between Cognitive psychology and both the Psychoanalytical approach and the Behaviourist approach
4. Identify **four thinking processes** that Cognitive Psychologists explore (1 mark)
5. What **two career paths** might Cognitive psychologists follow? (1 mark)

[Total 10 marks]

Stretch and Challenge (*Optional*)

Investigate two psychological approaches that have come *since* the cognitive revolution e.g. Humanism and Cognitive Neuroscience