



# Reliability of Cognitive Processes Contents

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Reconstructive Memory: The E ect of Schema on Memory

# Reconstructive Memory: The E ect of Schema on Memory

### What is reconstructive memory?

- Memory is not like a camera, it does not record an event faithfully or with 100% accuracy, rather it is retrieved as fragments of the event, sometimes omitting key pieces of information or inserting information which was not present at the time of the event; sometimes recalling the sequences of the event in a di erent order to the original; sometimes being in uenced by other people's recall of the event or by media reports of the event
  - Information after the event is one way in which reconstructive memory (RM) may be manifest i.e. you are present at a birthday party but your recall of the party will be in uenced by discussing it with others afterwards, by viewing photos of the party on social media, by your memories of other birthday parties
- afterwards, by viewing photos of the party on social media, by your memories of other birthday parties you have attended in the past

  Confabulation is another way in which RM occurs in which recall of the event is impacted by distortion
- Confabulation is another way in which RM occurs in which recall of the event is impacted by distortion of the information, fabrication of details (e.g. inserting details not present at the time of the event), misinterpretation of the information

### What is the relevance of schema and reconstructive memory?

- A schema is a set of pre-existing ideas, beliefs and concepts an individual has about people, places, events, ideas etc. which means that schemas may give rise to distorted memory
- When you experience an event either directly or indirectly it is usual for schematic activation to guide your understanding/expectation of that event e.g. you plan a holiday to Italy where you expect to see a lot of people waving their arms around in an excitable way and eating pasta (not at the same time of course!) hence schemas also contribute to stereotypes
  - The problem with having set and pre-determined schemas is that they can interfere with accurate
- recall—this happens when someone recalls an event not as it truly happened but as a result of schematic interference i.e. their schemas 'got in the way' of 100% accurate recall of the event (generally people are unaware of this happening)
- Schemas are relevant to RM as they produce biased recall e.g. you are in a pub and there is a ght, the police ask you what you witnessed and you say that one man was bleeding but in fact this is not true your schema for 'ght' added blood at the scene because it ts your schema for 'ght'
- Cultural schemas may lead to incorrect and faulty recall of material which does not align with or t into a person's schema based on their own culture





Your memory of a childhood birthday party may be very di erent to someone else's – even though you were both present at the same time.

# Which research studies investigate reconstructive memory and schema?

■ Bartlett (1932) – cultural schemas produce distorted recall of a culturally unfamiliar story

Bartlett (1932) is available as a separate Key Study – just navigate the Reliability of Cognitive Processes section of this topic to nd it (Two Key Studies of Reconstructive Memory). Bartlett's study is also included in Two Key Studies of Cognitive Processing which can be found in the Cognitive Processing section of this site



### **Examiner Tips and Tricks**

You can use Bartlett (1932) to answer a question on schema theory too (see the above comment on where to indithis) as this research was based on how cultural schemas impact recall, producing memories which are unreliable



### Reconstructive Memory: Eye Witness Testimony

## Reconstructive Memory: Eyewitness Testimony

### What is reconstructive memory?

- Memory is not like a camera, it does not record an event faithfully or with 100% accuracy, rather it is retrieved as fragments of the event:
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  - sometimes recalling the sequences of the event in a di erent order to the original;
  - sometimes being in uenced by other people's recall of the event or by media reports of the event
- Information after the event is one way in which reconstructive memory (RM) may be manifested i.e. you are present at a birthday party but your recall of the party will be in uenced by discussing it with others afterwards, by viewing photos of the party on social media, by your memories of other birthday parties you have attended in the past
- Confabulation is another way in which RM occurs in which recall of the event is impacted by distortion of the information, fabrication of details (e.g. inserting details not present at the time of the event) and misinterpretation of the information

# What is the relevance of reconstructive memory & eyewitness testimony?

- When someone is present at a crime then they become an eyewitness (EW) to that crime; when they give an
  account of what they saw and heard at the crime scene this is known as eyewitness testimony (EWT)
- EWs generally want to help the police they have sincere intentions about telling the 'truth, the whole truth and nothing but the truth' to the police who take their original EWT and in court when they are acting as a witness (usually for the prosecution) One of the reasons for EWT lacking accuracy is the very
- acting as a witness (usually for the prosecution) One of the reasons for EWT lacking accuracy is the very fact
- that EWs have this need to help: they may
- work too hard to recall what they witnessed and in doing so they may fall prey to the manifestations of
- RM outlined above (e.g. confabulation) Another key and highly researched error when obtaining EWT is
  - when leading questions are used by the police (or in court though this is o cially not permitted)
    - A leading question is one in which the answer is contained in the question, there is the assumption that there is one 'true' response to the question e.g. What attracted you to your billionaire husband? i.e. the interviewer 'leads' the witness to the response



- A leading question is an example of information after the event as it provides an extra layer of
  information to that which was witnessed at the scene, it may insert (or remove) key information that
  could lead to the real culprit of the crime getting away with it (or even worse, to an innocent person
  being convicted of the crime)
  - An example of a leading question is: So did you see him with the weapon? as opposed to 'So did you see him with a weapon?';
  - The use of 'the' suggests that there de nitely was a weapon (and that he must have been holding it) whereas 'a' leaves it open as to there even being a weapon present at all
- The police may not be aware that they are using leading questions with EWs but this is something that they should address as juries tend to nd EWT very compelling and in the absence of DNA evidence they may use it to come to a verdict



It is crucial for justice to be done that eyewitnesses give testimony that is based on what they actually witnessed rather than giving a reconstructed version of events.

# Which research studies investigate reconstructive memory & eyewitness testimony?

■ Loftus & Palmer (1974) – the use of leading questions has an e ect on EWT



Loftus & Palmer (1974) is available as a separate Key Study – just navigate the Reliability of Cognitive Processes section of this topic to nd it (Two Key Studies of Reconstructive Memory)

#### **Examiner Tips and Tricks**

Make sure that you keep the question topic in mind when you are answering exam questions. For example, to qualify for the top mark band (7–9 marks) in an SAQ you need to focus fully on the question, ensure that your knowledge and understanding is 100% accurate and that you use relevant research

### Worked Example

ERQ (Extended Response Question) - 22 marks

To what extent could memory be said to be reconstructive? [22]

The command term 'To what extent' requires you to o er arguments as to how far memory could be said to be reconstructive but also to identify and discuss why this may not always be the case e.g. because the research method used lacks ecological validity so cannot be a true re ection of real life memory in action

Have a look at this paragraph for an example of how to use this command term for this essay:

Loftus and Palmer (1974) suggested a hypothesis of reconstructive memory to explain why true and accurate recall of an event may become impaired and distorted. This explanation is as follows: a person receives two sources of information regarding an event that they have witnessed – the rst is the information obtained from perceiving the event itself; the second is the information supplied or acquired after the event. If there is some di erence between the two sources, integration of post-event information can lead to memory distortions. Loftus & Palmer's research demonstrates how external cues, such as leading questions, made available after an event, can a ect an eyewitnesses' subsequent memory of that event, suggesting that memory is reconstructive to a very great extent.



Two Key Studies of Reconstructive Memory: Bartlett (1932) & Loftus & Palmer (1974)



#### Examiner Tips and Tricks

You can also use Bartlett (1932) to answer a question on Schema Theory. You could also use Loftus & Palmer (1974) for a Schema Theory question but you would have to be very careful to focus your response around the schematic activation which may have resulted due to the change of verb per critical question. Students often mis-handle this study when they apply it to schema so it may be better to use Riso et al. (2006) instead

## Key Study: Bartlett (1932)

Aim: To investigate the e ect ofcultural schemason reconstructive memory

Participants: 20 male undergraduate students from the University of Cambridge in the UK

Procedure: Bartlett instigated a procedure known as serial reproduction, in which one participant read the story then reproduced it in writing; this was then read to a second person who then wrote his own memory of the story which was then read to a third person who then produced his own version of the story and so on

Results: Bartlett found that the resulting stories bore little similarity to the original Native American folk tale. The changes made by the participants included:

- Omission: Key details of the story were ignored or missed out, particularly unfamiliar or unpleasant details such as a contorted face or black coming out of a mouth. Participants even omitted the key idea that ghosts were ghting which is surprising as this is the title of the story. Ghosts were soon dropped from the re-telling of the story as they do not t with the way that adult males see the world, particularly in relation to war; details such as a contorted face were omitted as they may have caused unpleasant memories.
- Assimilation and sharpening: Story details were changed to suit the participants' own cultural schemas e.g. 'canoes' became 'boats'; 'paddling' became 'rowing'. Details such as the spirit wound were re-interpreted as a esh wound with words such as 'therefore' and 'because' inserted to explain the events.
- Levelling: The story became shorter the original story was approximately 350 words and the participants' version was around 180 words

Conclusion: Cultural schemas contribute to the reconstructive nature of memory i.e. memory is not a passive state in which events are recorded like a camera would record them, instead memory is an active



process in which pre-existing information and expectations may interfere with the accuracy and reliability of the memory

### Evaluation of Bartlett (1932)

#### Strengths

- Bartlett's study was one of the rst pieces of research to highlight the role of schema in reconstructive memory e.g. two people who witness the same event may give very di erent accounts of what they have seen
- Understanding the ways in which schemas may interfere with accurate recall of events has
  good application to educational settings in terms of how learning takes place and to the criminal
  justice system in terms of eye-witness testimony (see Loftus & Palmer 1972 below and the Revision
  Note on Eye Witness Testimony)

#### Limitations

- This is very dated research: university students in the UK are much more aware of wider multi-cultural issues today than they were in the 1930s which means that the results may lack temporal validity. It is unclear as to whether the memory distortions were the product of schematic interference or to
- other factors such as poor overall memory, lack of attention, personal learning styles (some people are visual learners for example so an aural task would not suit them as much as viewing a cartoon of the story)

#### Key terms:

- Assimilation
- Levelling
- Reconstructive memory

## Key Study: Loftus & Palmer (1974)

Aim: To investigate the e ect of leading questions on eyewitness testimony (EWT)

Participants: 45 undergraduate students from the University of Washington, USA for Experiment 1; 150 participants from the same university for Experiment 2

Procedure: Two lab experiments which used an independent measures design for both Experiment 1 and Experiment 2

Experiment 1: Participants were shown seven Im clips of tra c accidents. After each Im they Iled in
a questionnaire based on what they had witnessed about the accident – the questionnaire included
several 'Iler' questions and a critical question



- The critical question (independent variable) was: 'About how fast were the cars going when they smashed/hit/bumped/collided/contacted each other?' Each participant was in one of the ve conditions i.e. each participant was asked only one of the critical questions containing only one of the ve verbs. Participants had to estimate the speed in miles per hour
- Experiment 2: 150 participants divided into three groups of 50 each. All participants watched a one-minute Im of a multiple-car accident. They then answered some questions about the Im The critical guestion was, 'How fast were the cars going when they hit/smashed each other?' Each
- participant was randomlyallocated to either the 'smashed', 'hit' or control condition. The control group were not asked any questions about the speed of the cars

The participants were asked to return a week later. They were asked several questions about the accident in the Im. The critical question was, 'Did you see any broken glass?' with the response being 'yes' or 'no'.

There was not, in fact, any broken glass in the Im

#### Results:

Experiment 1: Participants in the 'smashed' condition estimated the highest speed out of all the ve conditions at 40.8 mph; participants in the 'contacted' condition estimated the lowest speed out of all the ve conditions at 31.8 mph

Experiment 2: 43 participants in the 'Smashed' condition reported having seen broken glass as opposed to 7 participants reporting seeing broken glass in the 'Hit' condition

Conclusion: Leading questions may lead to unreliable EWT by providing information after the event

### Evaluation of Loftus & Palmer (1974)

#### Strengths

- This research has huge implications for the ways in which EWTs should be questioned hence it has great application to the wider world
- The standardisedprocedure and control of variables make this study easy to replicate which increases its reliability

### Limitations

- Watching recorded footage of a tra c accident is not the same as experiencing the event in real life so the study lacks ecological validity
- The participants might have been prone to response bias i.e. the emotive quality of the words may have prompted the participants to think that a higher or lower speed estimate was expected of them (e.g. 'smashed' sounds like it should be given a high estimate)

#### Key terms:

- Eyewitness testimony
- Information after the event



Response bias



### **Examiner Tips and Tricks**

If you are asked a 22-mark ERQ about the extent to which memory could be said to be reconstructive remember that you are not being asked to only focus on the negative aspects of research on this topic. You should give a balanced account, considering a range of arguments as this is good critical thinking for any essay-type question



Cognitive Biases: Illusory Correlation

# Cognitive Biases: Illusory Correlation

### What is cognitive bias?

- A cognitive bias is a faulty or distorted way of perceiving or understanding the world A cognitive bias is a
- kind of heuristic i.e. a short-cut way of thinking which minimises cognitive e ort and energy and maximises quick, easy solutions to problems and to decision-making
   Cognitive biases are not the same as prejudice or discrimination, but it could be argued that they
- contribute to the formation of stereotypes and to the establishment and perpetuation of limited, sometimes harmful, problematic attitudes Cognitive biases include (but are not limited to):

illusory correlation;

- con rmation bias;
- the availability heuristic;
- anchoring bias;
- the just-world hypothesis (which is covered in a separate CognitiveBias Revision Note in the Reliability of Cognitive Processes)
- A cognitive bias has the characteristics of System 1 thinking (see the Revision Note on Thinking & Decision-Making: the Dual Process Model included in Cognitive Processing) in that it is based on intuitive, automaticthinking which requires little or no analysis or re ection

### What is Illusory Correlation?

- Illusory Correlation (IC) is a cognitive bias which occurs when people assume that there is a
  relationship between two variables when in fact this relationship does not exist or is based on
  stereotypical assumptions which lack tangible evidence
- Some examples of everyday ICs are:
- Blondes have more fun (the IC is the linking of hair colour and enjoyment of life);
- Italians are highly excitable (the IC involves generalising a speci c behaviour to a whole nation);
- A gambler who believes that wearing their 'lucky shirt' will help them to win at the roulette table (the IC is the belief that arbitrary factors such as clothing choice can have any in uence over the outcome at a gambling game)



- All ICs are not necessarily negative or harmful e.g. My right knee is aching which means that rain is on the way, but some ICs can be at the root of bigoted behaviour such as racism, sexism, homophobia etc.
- One explanation for the development of ICs is the cognitive miser explanation: the world is a complex, busy place and we are bombarded on a daily basis with a multitude of messages and information so using ICs to understand the world means that less cognitive energy needs to be expended than if one were to fully focus on the subtle and varied explanations for speci c behaviours/types of people



A gambler may use illusory correlations in the mistaken belief that this will increase their winnings e.g. always going to the same 'lucky' croupier's table

### Which research studies investigate illusory correlation?

 Hamilton & Gi ord (1976) – illusory correlation favours the majority rather than the minority in terms of group size

Hamilton & Gi ord (1976) is available as a separate Key Study – just navigate the Reliability of Cognitive Processes section of this topic to nd it (Two Key Studies of Cognitive Biases)

This study can also be found as part of the Sociological Approach topic Formation of Stereotypes which you can nd as a separate Revision Note on this site





### **Examiner Tips and Tricks**

Illusory correlation and Hamilton & Gi ord's (1976) study is also relevant to the Sociological Approach – The Individual & the Group – Formation of Stereotypes so you can 'double up' this study for use with two separate exam questions. BUT if you use this study twice on the same exam, please be sure to place the emphasis of your response on the cognitive bias if you are answering a Cognitive Approach question or on the formation of stereotypes if you are answering a Sociocultural Approach question

### Worked Example

SAQ (Short answer question): 9 marks

Explain one theory of one cognitive bias using one relevant study. [9]

The command term 'Explain' requires you to give good detail and some depth of both the theory and the supporting study.

Have a look at this paragraph for an example of how to use this command term for this SAQ:

Hamilton and Gi ord (1976) use the theory of illusory correlation to explain how stereotypes develop. Illusory correlation is when two events occur simultaneously, and incorrect inference is drawn from this co-occurrence, particularly if the event or behaviour is notable or unusual. They argued that negative behaviours are relatively rare, and that people from minority groups are also relatively rare (because, logically, there are not as many of them as there are of the majority group), so when one sees a minority person performing a negative act, it is more memorable than when one sees a person from a majority group performing the same act.



Cognitive Biases: Just World Hypothesis

## Cognitive Biases: Just World Hypothesis

### What is cognitive bias?

- Acognitive biasis a faulty ordistorted way of perceiving or understanding the world
- A cognitive bias is a kind of heuristic i.e. a short-cut way of thinking which minimises cognitive
  e ort and energy and maximises quick, easy solutions to problems and to decision-making
  Cognitive biases are not the same as prejudice or discrimination, but it could be argued that they
- contribute to the formation of stereotypes and to the establishment and perpetuation of limited, sometimes harmful, problematic attitudes Cognitive biases include (but are not limited to)

illusory correlation;

- con rmation bias;
- the availability heuristic;
- anchoring bias;
- the just-world hypothesis (which is covered in a separate Cognitive Bias Revision Note in the Reliability of Cognitive Processes)
- A cognitive bias has the characteristics of System 1 thinking (see the Revision Note on Thinking & Decision-Making:the Dual Process Model included in Cognitive Processing) in that it is based onintuitive, automatic thinkingwhich requires little or no analysis or re ection

### What is the Just-World Hypothesis?

- TheJust-World Hypothesis (JWH), proposed byLerner (1960) is a cognitive bias theory based on the (mistaken) idea that the world is a fair place in which good people are rewarded and bad people are punished ('just' i.e. that justice will be done)
- The JWH can be explained in terms of people wishing to believe in a rational world which (to them at least) makes sense because the alternative (that bad things do happen to good people) is a frightening one to contemplate
- The JWH is a factor in victim-blaming i.e. if the world is a fair and just place then bad things should only happen to bad people, so if someone is homeless then they've probably brought it on themselves; if a woman is attacked then she probably encouraged the attack via her clothing or behaviour; if someone collapses on the pavement then they're probably drunk, it's their own fault etc.



- Victim-blaming also involves inding reasons not to help people who are not 'worthy' of help because (according to the JWH) they have contributed to their own hardship or misfortune
- This can make the individual feel better about not helping them, as it eases the burden of guilt
- The JWH may be explained as a means by which people avoid having to dwell on their own vulnerability as potential victims of crime or disaster i.e. hearing about increasing poverty levels in their own country might lead to thoughts such as, "I work hard, that could never happen to me. Those people who can't pay their bills must be lazy."
- The JWH may also be explained as a mechanism used to manage anxiety as it (mistakenly) enables the individual to feel that the world is a safe place as long as they behave in a way which will protect them from harm i.e. by being a 'good' person



Is he drunk - or ill? And will this determine the type of help (if any) he is given?

### Which research studies investigate the just-world hypothesis?

Piliavin et al. (1969) – the JWH is a factor in the type of victim who is given help (drunk or disabled)

Piliavin et al. (1969) is available as a separate Key Study – just navigate the Reliability of Cognitive Processes section of this topic to nd it (Two Key Studies of Cognitive Biases)



#### **Examiner Tips and Tricks**

The JWH and Piliavin et al.'s (1969) study are also relevant to the Year 2 Relationships topic (Socia Responsibility) so you can 'double up' this study for both Paper 1 and Paper 2 topics



#### Worked Example

ERQ (Extended Response Question) - 22 marks

Discuss one or more cognitive biases. [22]

This essay question requires you to examine research in the light of speci c theories.

Have a look at these paragraphs for an example of how to analyse the theory and also how to conclude an essay (something which students often struggle to do successfully):

The just-world hypothesis – that victim-blaming may account for the lack of help in the 'drunk' condition – may not be the only explanation for Piliavin et al.'s (1969) ndings. An alternative explanation might be that people are more likely to be wary of someone who appears to be drunk: their behaviour may be unpredictable; they may turn violent; they may vomit, all of which may well put people o helping them. Additionally, the 'drunk' condition was used on 38 trials compared to the 65 trials for the 'cane' condition: if an equal number of trials had been used for each condition, then the results would be more comparable. It is also possible that some participants may have witnessed the procedure more than once as it was run on the same stretch of track over a period of a few months which would give rise to demand characteristics possibly resulting in a disinclination to help.

In conclusion there appears to be some strong evidence to suggest that the just-world hypothesis is a key factor in victim-blaming as evidenced in the lower number of people who helped in the 'drunk' condition. Piliavin's research does point to the just-world hypothesis as one valid explanation of bystanderism based on type of victim and their 'worthiness' in terms of how much people perceive that they have contributed to their own misfortune.



# Two Key Studies of Cognitive Biases: Hamilton & Gi ord (1976) & Piliavin et al. (1969)

#### **Examiner Tips and Tricks**

You can also use Hamilton & Gi ord (1976) to answer a question on the Formation of Stereotypes (Sociocultural Approach) and you can use Piliavin et al. (1969) to answer a question on the Bystander E ect (Relationships option in Year 2 of the IB Psychology course)

# Key Study: Hamilton & Gi ord (1976)

Aim: To investigate illusory correlation as a cognitive bias

Participants: 40 undergraduate students from a university in New York state, USA (20 males; 20 females)

#### Procedure:

The participants were presented with two hypothetical groups - i.e. these were not real groups consisting of real people with given characteristics. The participants were told that Group A consisted of 26 members and that Group B consisted of 13 members

The participants then read a series of statements which each described a particular behaviour performed by either a member of A or B e.g. John, a member of A, visited a friend in hospital The behaviours described in the statements were classi ed as either desirable or undesirable. Both A and B were assigned more positive than negative behaviours at a ratio of 9:4 (positive to negative) and two thirds of the statements overall were attributed to members of A

Thus, members of A were presented as performing more behaviours overall than B and positive behaviours were more frequent from both groups than negative behaviours

The participants were then asked to provide ratings for the following measures:

- . Given a list of 20 attributes, assign each to either group A or B
- . Given a particular example of a behaviour, say whether this behaviour was performed by a member of A or B
- . Estimate how many negative behaviours can be attributed to either A or B

Results: The mean scores showed that participants attributed more desirable social behaviours (6.7) to members of Group A than to members of Group B (6.0); undesirable social behaviours were attributed more to Group B (5.6) than to Group A (4.4)



Conclusion: The results suggest that illusory correlation may be based on group size: the smaller group, B, appears more distinctive than the larger group A so that any undesirable behaviours are linked more often to the minority group, B, than to the majority group A. This has implications in terms of how minority groups are viewed by society

### Evaluation of Hamilton & Gi ord (1976)

#### Strengths

- The measures (rating scales) used in the study could be cross-referenced by the researchers to check for consistency across them which should ensure both reliability and internal validity
  The ndings could be used to inform awareness-raising as a means to reduce prejudice and increase
- tolerance of minority groups

#### Limitations

- The procedure does not fully re ect how people respond in real-life situations where they are exposed to minority groups which reduces ecological validity
- The study is rather simplistic in its use of statements about hypothetical people and situations which makes it di cult to draw very meaningful conclusions from the indings

#### Key terms:

- Illusory correlation
- Minority Majority

# Key Study: Piliavin et al. (1969)

Aim: To investigate the degree of help given to a victim who appeared to be either drunk or disabled

Participants: A eld experiment which used an opportunity sample of 4,450 passengers (55% white; 45% black) using the New York subway between Harlem and The Bronx during the hours of 11am until 3pm over the course of several months. The journey lasted 7.5 minutes without any stops

#### Procedure:

- A staged (fake) procedure which was conducted inside one carriage of the aforementioned
   Harlem/Bronx subway route. 4 confederates were used: 2 females as observers, 1 white male aged 24
   – 29 to model helping behaviour and 1 male victim aged 26 35 (either white or black, dressed
   identically; the 'drunk' victim smelled of alcohol and the 'cane' victim had a cane to indicate that he
   was disabled)
- 103 trials were conducted by alternating teams of researchers over the total course of the research's duration



- The female confederates took seats and kept notes, while the male victim and male model stood near a pole in the centre of the train
- After passing the rst station (approximately 70 seconds into the journey) the victim collapsed
- In the "no help" condition, the model did nothing until the train slowed to a stop, and then helped the victim to his feet
  - In the "helping" condition, the model came to the victim's assistance
- The collapse occurred in what the researchers referred to as the critical area which was in the
- immediate vicinity of the victim

There were four di erent helping conditions used in both "drunk" and "cane" situations:

- . Critical area early: the model stood in the critical area and waited approximately 70seconds after the collapse to help
- . Critical area late: the model stood in the critical area and waited approximately 150seconds after the collapse to help
- . Adjacent area early: the model stood a little further way, adjacent to the critical area and waited approximately 70 seconds after the collapse then helped the victim
- . Adjacent area late: the model stood a little further way, adjacent to the critical area and waited approximately 150 seconds after the collapse then helped the victim

Results: The victim in the 'cane' condition received spontaneous help on 95% of the trials (62 out of 65 times) - i.e. there was very little need for the model to help rst; people helped the apparently disabled man immediately upon his collapse. The 'drunk' condition received help on 50% of the trials (19 out of 38 times)

Conclusion: The results support the Just-World Hypothesis as the victim in the 'cane' condition was helped 50% more than the victim who appeared to be drunk. It is possible that people operate a system of judgement when deciding who to give help to - i.e. does the victim 'deserve' help or not?

### Evaluation of Piliavin et al. (1969)

#### Strengths

- The study is high in ecological validity due to the use of the natural setting and unarti cial behaviour of the naïve participants
  - The use of two observers should ensure inter-rater reliability

#### Limitations

The procedure is likely to have been a ected by a range of extraneous variables that were impossible to control, for example:



- individual di erences such as personality and mood
- some of the participants experiencing the procedure more than once if they used that route regularly
- participants in the carriage obscuring the view of the observers
- The ethics of the study are problematic:
  - no informed consent
  - deception of participants
  - possible psychological harm
  - no right to withdraw
  - no debrie ng

#### Key terms:

- Just-World hypothesis
- Field experiment
- Confederates



#### Examiner Tips and Tricks

With a study such as Piliavin et al. (1969) do ensure that you have learnt all of the parts of the study in as much detail as possible: it is not often that eld experiments feature in your IB Psychology course and this particular one o ers a wealth of potential critical thinking points.

For example, the study generated both quantitative (in the form of number of helpers) and qualitative data (in the form of passenger's comments and body language) and used a standardised procedure in a natural setting which is a very di cult task to undertake and one which not many other researchers have managed to match