

**GCSE (9–1)**  
*Teacher Guide*

# PSYCHOLOGY

J203  
For first teaching in 2017

## Guide to Core Studies 2

Version 1



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### **Bickman, L. (1974) The Social Power of a Uniform**

*Journal of Applied Social Psychology, 1974. Vol 4, 1, pp. 47-61.*

#### **1. Background**

- Research has shown that there are a number of different variables that can influence levels of obedience. These include the setting, the number of people around and the culture in which the situation occurs.
- Joseph and Alex (1972) pointed out that uniforms serve to identify the wearer's status, group membership and legitimacy.
- Throughout history a uniform has been used as a symbol of authority.
- The operation of authority can be understood through the application of social power theory.
- Until this study, research dealing with uniforms had not examined the effect it may have on others; instead it had investigated the effect a uniform has on the wearer e.g. Zimbardo, 1969.
- The overall purpose of this study was therefore to measure the relative degree of social power that uniformed authorities possess in relation to getting others to obey them and to determine the basis of this power.

#### **Experiment 1**

This guide looks at four different experiments conducted by Bickman in 1974.

#### **2. Aim**

- The purpose/aim of Experiment 1 was to examine if uniformed people, acting out of role, actually have greater power than non-uniformed people. This was done to examine the limits of the power of a uniform.

#### **3. Hypothesis**

- A uniformed guard has more ability to influence individuals than a person in a lower-authority uniform (milkman) or wearing no uniform (conventional dress).

**Bickman, L. (1974) The Social Power of a Uniform**  
*Journal of Applied Social Psychology, 1974. Vol 4, 1, pp. 47-61.*

### 4. Method

#### (i) Research method/design

- This was a field experiment conducted on a street in Brooklyn, New York, USA. The experiment was designed as an independent measures design though one cannot be certain that participants did not take part in more than one condition.
- The independent variables were whether the experimenter:
  - (a) Was dressed as a civilian (the lowest level of authority), a milkman (the middle level of authority) or a guard (the highest level of authority).
  - (b) Told the participant to pick up litter, to provide a dime to pay for a parking meter, to move at a bus stop.
- The dependent variables were:
  - (a) The levels of obedience in relation to a uniform.
  - (b) The levels of obedience in relation to the situation.

#### (ii) Sample

- 153 adult pedestrians, the average estimated age of which was 39 years.
- 43% were male, 57% were female.
- 86% were white, 11% were black, the race of the remainder could not be determined.
- 85% were judged, on the basis of dress, to be middle class.

A pedestrian was chosen to be a participant if he was the first person who came along who could not have observed interaction between the experimenter and the previous pedestrian participant. Selected pedestrians were always alone.

#### (iii) Apparatus/materials

- Civilian: sports jacket and tie.
- Milkman: a white milkman's uniform and milkman's basket containing empty milk bottles.
- Guard: a guard's uniform resembling that of a policeman with a badge and insignia, but no gun.

**Bickman, L. (1974) The Social Power of a Uniform**  
*Journal of Applied Social Psychology, 1974. Vol 4, 1, pp. 47-61.*

#### 4. Method

... continued

##### (iv) Procedure

- Four white, males aged between 18 and 20 years, all of a similar physique acted as the experimenters.
- Experiments were conducted on weekdays with 77% of the data collected during the afternoons.
- Each experiment involved the experimenter giving a pedestrian (participant) orders to do a specific task. These were:
  - (a) Picking up a bag. The experimenter (in appropriate dress) stopped the chosen participant and pointed to a small paper bag lying on the ground and said, 'Pick up this bag for me!' If the participant did not immediately comply the experimenter added that he had a bad back. The participant was considered to have obeyed if he picked up the bag.
  - (b) Dime and meter. The experimenter stopped the chosen participant, pointed to a confederate standing beside a car parked at a parking meter and said, 'This fellow is over-parked at the meter but doesn't have any change. Give him a dime!' If the participant did not comply immediately, the experimenter added that he had no change either. The participant was considered to have obeyed if he gave the confederate a dime or made a sincere effort to find change by searching for it.
  - (c) Bus stop – No Standing. In this situation a person was chosen to be a participant if he was standing alone at a bus stop. The participant was approached and told, 'Don't you know you have to stand on the other side of the pole? The sign says 'No Standing.' The 'No Standing' actually referred to the fact that it is illegal for a bus to stand/wait in a bus stop for a prolonged period of time without picking up passengers. If the participant did not obey immediately the experimenter added, 'Then the bus won't stop here, it's a new law.'
- In all three situations, if the participant did not obey after the explanation, the experimenter left.

### **Bickman, L. (1974) The Social Power of a Uniform**

*Journal of Applied Social Psychology, 1974. Vol 4, 1, pp. 47-61.*

#### **5. Key Findings**

- In every situation, participants were more obedient to the higher authority figure i.e. the guard, regardless of the fact that he was acting out of role.
- There was no significant difference between obedience to the milkman and obedience to the civilian.
- The effect of the uniform was similar in each situation i.e. more participants obeyed the guard than either the milkman or the civilian.

The results are shown in the table below:

**Percentage of obedience over the three situations**

Uniform	% obeying in each of the following situations		
	Paper bag	Dime and meter	Bus stop
Civilian	36	33	20
Milkman	64	57	21
Guard	82	89	56

### **Bickman, L. (1974) The Social Power of a Uniform**

*Journal of Applied Social Psychology, 1974. Vol 4, 1, pp. 47-61.*

#### **EXPERIMENTS 2, 3A and 3B**

These were variations on Experiment 1.

- Experiment 2 used a field experiment to see whether being observed by another person would affect obedience. The experiment was also conducted on a street in Brooklyn, New York. Participants were adult pedestrians whose average age was estimated to be 46 years. The dime and meter situation was acted out with the experimenter either remaining at the site throughout or, once the request had been made, walking round the corner out of sight. Results showed that being observed (surveillance) had no effect on obedience.
- Experiments 3A and 3B gathered data through questionnaires. Experiment 3A examined the perceived legitimacy of a request whilst Experiment 3B examined predicted behaviour in relation to perceived levels of authority – did participants think they would be more likely to obey a guard, a milkman or a civilian when asked to do the three tasks used in Experiment 1? Participants were students from Smith College, a private women's college located in Northampton, Massachusetts, USA. Results showed that a guard was not perceived as acting with more legitimacy than either a civilian or a milkman i.e. participants did not think that the dress of the character made a request any more legitimate. Findings did however suggest that the nature of the situation might influence obedience levels as, overall, more participants said they would obey in the paper bag condition than either the dime and meter or the bust stop condition.

#### **6. Conclusions**

- Uniformed people, (even when acting out of role), have greater power than non-uniformed people.
- Power and legitimacy seem to be related to the type of uniform worn / the more legitimate the social power shown by an individual through the wearing of a uniform, the more likely their requests/orders will be obeyed.
- Levels of obedience may be related to the situation.
- Although, in theory, a situation influences obedience levels, in practice the appearance of the person giving the order has a greater effect.
- Predictions relating to obedience behaviour are not good predictions of actual behaviour.

**Morrell, G., Scott, S., McNeish, D., Webster, S., (2011) The August riots in England: Understanding the involvement of young people**  
*The National Centre for Social Research (NatCen).*

## 1. Background

- In early August 2011, there were outbreaks of significant crime and disorder in some of England's major cities. Cities involved included London, Birmingham and Salford.
- In London, riots and disturbances occurred in Tottenham, Wood Green, Peckham and Clapham Junction Station (in Battersea).
- The first riot was in Tottenham.

### **Background to the Tottenham riot**

- Tottenham had previous experience of riots. A demonstration outside the police station in 1985 (following the death of a local woman who had collapsed during a police raid on her home) became violent with the result that a police officer was killed in intense rioting on the Broadwater farm estate in Tottenham. Despite some recent improvements in relationships there remained a deeply embedded distrust of the police amongst people in Tottenham.
- Tottenham is an area of high unemployment where 48% of children are classified as living in poverty. Decline in local industry and subsequently in retail on its high street were seen as factors as being responsible for the lack of jobs. Many young people therefore possessed feelings of hopelessness in the face of limited job and career opportunities.
- Despite its difficulties, Tottenham was generally considered a good place to live. Young people and residents interviewed by the researchers expressed pride in the openness and tolerance of local people that fostered a sense of belonging.
- Community stakeholders considered recent investment in secondary schools was beginning to lead to improvements in educational achievement though this had come too late for those over the age of 18.

## 2. Aim

- The overall aim of this study/report was to explore what triggered the youth involvement in the August riots of 2011.

**Morrell, G., Scott, S., McNeish, D., Webster, S., (2011) The August riots in England: Understanding the involvement of young people**  
*The National Centre for Social Research (NatCen).*

### 3. Hypothesis

- The question Morrell et al. sought to answer was: 'Why did young people get involved in the riots?'
- To address this the NatCen report describes:
  - (a) *What* occurred in the affected areas – for this GCSE specification, the focus is on what happened in Tottenham.
  - (b) *Who* was involved in the riots.
  - (c) *Why and how* young people got involved – for this specification particular thought should be given to anti-social collective behaviour and dispositional factors that influenced involvement or non-involvement.

### 4. Method

#### (i) Research method/design

- This was a report prepared for the Cabinet Office by Morrell et al. on behalf of the National centre for Social Research (NatCen).

#### (ii) Sample

- The researchers aimed to speak to around 30 people in each of the five areas studied – Tottenham, Peckham, Clapham Junction, Salford and Birmingham - and two unaffected areas – Poplar in east London and Firth Park in Sheffield.
- Each sample comprised a roughly even split of over and under 18s and diversity with respect to gender, ethnicity and work status.

#### (iii) Procedure

- Participants were interviewed on a one to one and face to face basis.
- In addition to the interviews, larger discussion groups were conducted with young people, community stakeholders and residents.

#### (iv) What happened in Tottenham?

- The riots and disturbances began in Tottenham in North London on Saturday 6 August 2011 following a peaceful protest in response to the police handling of the shooting of Mark Duggan. An alleged incident between a young girl and the police sparked clashes which escalated to wide-scale rioting. Windows were smashed, and offices, shops and homes were looted and set on fire.
- The disturbances began at 19:20 on the evening of 6 August and it was not until 06:15 on 7 August that all looting ended and 12:00 when fire crews had all fires under control.

**Morrell, G., Scott, S., McNeish, D., Webster, S., (2011) The August riots in England: Understanding the involvement of young people**  
*The National Centre for Social Research (NatCen).*

## 5. Key Findings

### (a) Who was involved?

- Data from interviews with young people and stakeholders suggested all kinds of people were involved: mixed age groups; all ethnicities; people in work, training and education; and the unemployed. This data allowed the researchers to compile a typology of involvement to represent who was involved and what they did. This is shown in the table below:

#### A typology of involvement

<b>Watchers:</b> young people who were present at the incidents and observed some of what happened but did not become involved in criminal activity.	(i)	Bystanders: young people who happened to be there – lived locally or were passing through when the events occurred.
	(ii)	The curious: young people who deliberately chose to be there to see what was going on.
<b>Rioters:</b> young people who were involved in violent disturbances and vandalism.	(i)	Protesters: young people who acted because of a specific grievance or set of grievances.
	(ii)	Retaliators: young people who acted to get their own back on the police or the ‘system’.
	(iii)	Thrill-seekers: young people who got involved to get the excitement or ‘buzz’.
<b>Looters:</b> young people involved in breaking into shops, stealing from broken-into shops or picking up stolen goods left on the street.	(i)	Opportunists: young people who saw the chance to steal things for themselves or family, or to sell on.
	(ii)	Sellers: Young people who planned their involvement to maximise their ‘profits’.
<b>Non-involved</b>	(i)	Stay-aways: young people who chose not to get involved or observe.
	(ii)	Wannabes: young people who weren’t there but would have liked to have been.

- Analysis showed that the involvement of young people was not necessarily restricted to a single type of behaviour e.g. some young people were both rioters and looters.

**Morrell, G., Scott, S., McNeish, D., Webster, S., (2011) The August riots in England: Understanding the involvement of young people**  
*The National Centre for Social Research (NatCen).*

## 5. Key Findings

... continued

### (b) Why did people get involved (or not)?

- Motivators for involvement in rioting and/or looting were found to be: benefiting from an exciting experience, an opportunity to get free stuff, and/or the chance to get back at the police.
- Young people identified:
  - (i) A range of 'nudge' factors which helped them or others towards getting involved.
  - (ii) A range of 'tug' factors which helped to prevent or inhibit their involvement.

In both cases, some of the factors were situational/social and some of the factors were dispositional/individual.

- Situational/social nudges (facilitators) and tugs (inhibitors) are shown in the table below:

**Situational/social factors affecting decision-making in young people**

	<b>Nudges (facilitators)</b>	<b>Tugs (inhibitors)</b>
<b>Group processes</b>	Feeling disinhibited and swept along by the power of the group, seeing others 'get away with it', feeling anonymous.	Actively thinking toward future goals and not focusing on the 'here and now'.
<b>Peer pressure</b>	Friends getting involved.	Friends not involved.
<b>Information</b>	Seeing it on the TV, getting texts/ Facebook/BBM messages.	Didn't get any messages, not watching TV.
<b>Circumstances</b>	Not otherwise occupied, it was nearby/ easy to get to.	More difficult to get to (further away, no buses).
<b>Presence of authority figure</b>	No adult telling them not to, everybody was doing it and nobody seemed to be getting caught.	Parents, relations or youth workers telling them not to.

Morrell, G., Scott, S., McNeish, D., Webster, S., (2011) *The August riots in England: Understanding the involvement of young people*  
*The National Centre for Social Research (NatCen).*

## 5. Key Findings

... continued

- Dispositional/individual nudges (facilitators) and tugs (inhibitors) are shown in the table below:

### Dispositional/individual factors affecting decision-making in young people

	Nudges (facilitators)	Tugs (inhibitors)
<b>Previous criminal activity</b>	Easy to get involved, 'this is what they do round here'.	Been caught once, know the risks.
<b>Attitudes towards authority</b>	Cynicism/anger towards politicians, authority, negative experience of the police.	No negative experience of the police.
<b>Prospects</b>	Poor job prospects, low income, limited hope for the future, 'nothing to lose'.	In work or expectations of work, aspirations – a lot to lose.

### Other factors affecting decision-making in young people

	Nudges (facilitators)	Tugs (inhibitors)
<b>Family attitudes</b>	Relatives not disapproving	Disapproving, 'not brought up like that'.
<b>Community</b>	Attachment to a community with a culture of low-level criminality.	Attachment to a community with pro-social values (including religious communities).
<b>Belonging</b>	Little sense of ownership or stake in society	Sense of ownership or stake in society.
<b>Poverty and materialism</b>	Desire for material goods but no means to pay for them.	Adequate resources to purchase desired goods.

**Morrell, G., Scott, S., McNeish, D., Webster, S., (2011) The August riots in England: Understanding the involvement of young people**  
*The National Centre for Social Research (NatCen).*

## 5. Key Findings

... continued

- Two clear decision-making processes were found to interact and influence whether or not a young person got involved. These were:
  - (i) Their beliefs about right and wrong.
  - (ii) Their assessment of the risks of involvement weighed against the benefits.

Example: someone who initially believed the rioting/looting was justifiable may have ended up deciding the personal risk was too great and so did not get involved.

## 6. Conclusions

- Anti-social criminal behaviour (e.g. the Tottenham riots) is influenced by collective behaviour/group processes.
- Anti-social criminal behaviour (e.g. the Tottenham riots) is influenced by situational/social factors.
- Anti-social criminal behaviour (e.g. the Tottenham riots) is influenced by dispositional/individual factors.
- Anti-social criminal behaviour (e.g. the Tottenham riots) is influenced by an individual's beliefs about what is right and what is wrong.
- Anti-social criminal behaviour (e.g. the Tottenham riots) is influenced by an individual's assessment of the costs and benefits of involvement.

The full report can be found here: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/60531/The\\_20August\\_20Riots\\_20in\\_20England\\_20\\_pdf\\_201mb\\_pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/60531/The_20August_20Riots_20in_20England_20_pdf_201mb_pdf)

## **Wilson, B. A., Kopelman, M., & Kapur, N. (2008). Prominent and persistent loss of past awareness in amnesia: Delusion, impaired consciousness or coping strategy?**

*Neuropsychological Rehabilitation, 18(5-6), pp527 - 540.*

### **1. Background**

- Severe memory loss, as in the amnesic syndrome, is often associated with differing degrees of lost orientation for person, age, time or place, and with varying degrees of memory distortion.
- Loss of awareness for time and place are usually associated with the acute phases of a brain injury (High, Levin and Gary, 1990), with severe amnesia, or with the more advanced stages of a primary degenerative dementia.
- Complete loss of self-knowledge, including loss of personal identity is extremely rare in neurological disease (Kopelman, 2002).
- Lack of age awareness may occur in some neurological conditions, especially in the acute stages of a brain insult (Zangwill, 1953).
- Distorted memories may take two broad forms:
  - (i) Flawed 'episodic memories' in which there is either distortion of events that have occurred, such that events that never occurred may be introduced or mislocation of a true event to a different time or place.
  - (ii) Flawed 'semantic memories' where there are distortions in belief and knowledge structures. Delusions that accompany marked memory impairment could be seen to fall into this category (e.g. Schacter and Scarry, 2000).
- Delusions may be defined as false beliefs, held as absolute convictions, not amenable to argument, not culturally explicable, and that are often bizarre and usually preoccupying.
- An hallucination, on the other hand, is a false perception occurring without any identifiable external stimulus (Hahn, 2003).
- Consciousness can be defined in several ways including:
  - (i) Consciousness is an organism's awareness of its own self and surroundings (Damasio, 2000).
  - (ii) Cartridge (2001) suggested that, in addition to awareness of self and one's surroundings, there should be an ability to respond to environmental factors.
- This study reports on a very amnesic patient who, despite playing and conducting music and writing diary entries several times a day, consistently denied he was conscious at the time.
- This study was the first to report about a patient who denied being conscious since the onset of their illness.

### **2. Aim**

- The aim of this case report/study was to document the neurophysiological assessments and psychological experiences of Clive wearing who suffered from a severe and rare case of both anterograde and retrograde amnesia.

## Wilson, B. A., Kopelman, M., & Kapur, N. (2008). Prominent and persistent loss of past awareness in amnesia: Delusion, impaired consciousness or coping strategy?

*Neuropsychological Rehabilitation, 18(5-6), pp527 - 540.*

### 3. Who was Clive Wearing?

- Clive Wearing (CW) was born in the United Kingdom in 1938.
- He was an outstanding musician and gifted musical scholar.

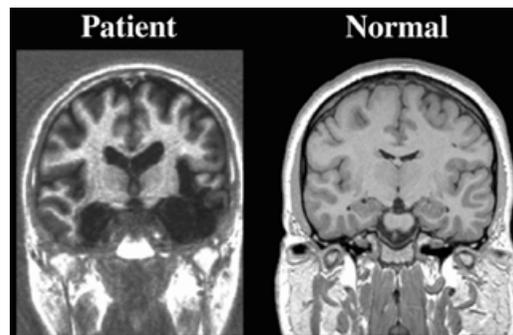
### 4. Method

#### (i) Research method/design

- This was a longitudinal case study which gathered in-depth detailed information about Clive wearing who suffered a severe and rare case of amnesia following a viral infection – encephalitis.

#### (ii) Outline of the study

- In March 1985, aged 46 years, CW developed an influenza-type illness with headaches and fever. He was admitted to hospital days later and diagnosed with herpes simplex viral encephalitis (HSVE). The virus destroyed large sections of his brain.
- CW was referred to Barbara Wilson in October 1985. A previous psychological report said that CW was experiencing extremely severe episodic memory deficits, some semantic memory impairments but that his immediate memory span was normal.
- Neurological assessment in November 1985 stated that CW's Verbal and Performance IQ scores, although in the average range, had declined from his pre-encephalic ability. His short-term memory (STM) was normal but his long-term memory (LTM) was severely impaired.
- In July 1991 an MRI scan was carried out on CW's brain. This showed marked bilateral abnormalities in the following brain areas: hippocampal formations, amygdalas, mammillary bodies, and temporal poles. There were also abnormalities in many other brain areas e.g. left fornix, left medial frontal cortex.



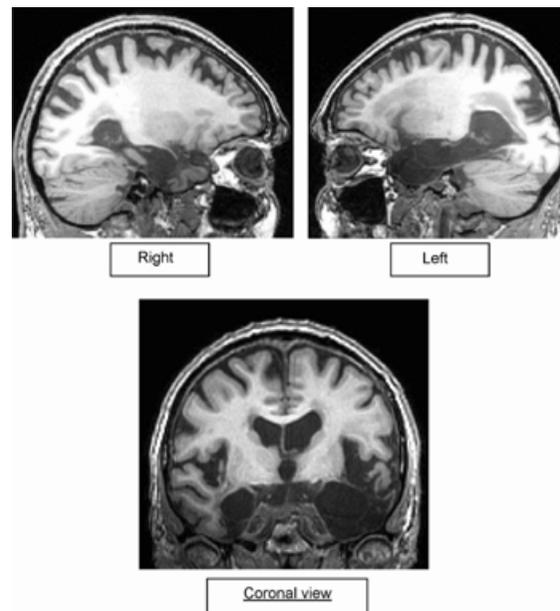
CW's MRI scan from 1991 compared with a non-brain damaged age-matched control

Wilson, B. A., Kopelman, M., & Kapur, N. (2008). Prominent and persistent loss of past awareness in amnesia: Delusion, impaired consciousness or coping strategy? *Neuropsychological Rehabilitation, 18*(5-6), pp527 - 540.

## 4. Method

... continued

- A second MRI (3-Tesla) was carried out in January 2006. Comparing the 1991 and 2006 scans and, allowing for improved imaging technology, there was very little change .



MRI 2006 showing that CEW had extensive damage to the temporal cortices, greater on the left than the right.

## Wilson, B. A., Kopelman, M., & Kapur, N. (2008). Prominent and persistent loss of past awareness in amnesia: Delusion, impaired consciousness or coping strategy?

*Neuropsychological Rehabilitation, 18(5-6), pp527 - 540.*

### 4. Method

#### ... continued

- CW was assessed on many occasions over the following 21 years. He always scored zero on tests of delayed recall (LTM) and showed an inability to lay down new semantic information (form new memories). He therefore suffered both retrograde and anterograde amnesia.
- The assessments also showed that CW:
  - (i) Still had the ability to talk, read, write, conduct and sight-read music.
  - (ii) Could recall very few facts from before his illness. He knew who he was, that he was a well-known musician, where he went to school, where he studied music and that he was married but details were very patchy and he had lost most of his episodic memory for the 45 years prior to his illness.
- CW's memory function remained largely unchanged over the 21 years.
- For many years, CW did not appear to accept that he had a memory disorder, attributing his problems to the fact that he had not been conscious since he became ill. For example, if shown his diaries, he accepted that the entries were in his handwriting but said, 'But I wasn't conscious when I wrote that, I'm now conscious for the first time.'

### 5. Key Findings

#### (a) Findings summarised

- Clive Wearing was found to suffer from:
  - (i) Marked brain abnormalities.
  - (ii) Retrograde and anterograde amnesia.
  - (iii) The inability to transfer information from STM to LTM.
  - (iv) Decreased Verbal and Performance IQ.
  - (v) Loss of episodic memory.
  - (vi) Some loss of semantic memory.

## Wilson, B. A., Kopelman, M., & Kapur, N. (2008). Prominent and persistent loss of past awareness in amnesia: Delusion, impaired consciousness or coping strategy?

*Neuropsychological Rehabilitation*, 18(5-6), pp527 - 540.

### 5. Key Findings

... continued

#### (b) Considerations – in relation to CW's belief about his state of consciousness

- **Was CW suffering from a delusion?**

- In 1995 Wilson et al. suggested CW's preoccupation of having just regained consciousness could perhaps be interpreted as a delusion. However, the authors feel that CW may have just been attempting to explain to himself why he couldn't remember things as he did not report other psychiatric features associated with delusions.

- **CW's belief that he was not previously conscious**

- CW's primary brain damage was in the limbic areas which meant that although he had core consciousness (he had a brief short-term memory – see Damasio, 200), he did not have autobiographical consciousness because he had severe memory impairment both for episodes prior to his illness and for the years afterwards. The authors therefore suggest that the severity and extent of CW's temporal lobe damage related to his failure to recognise the existence of his past consciousness.

- **Was CW's belief simply a form of coping strategy**

- The authors suggest that CW's repeated denials of previous experiences (lack of memory) could be seen to be a form of coping strategy to deal with the discontinuity in his stream of consciousness. His belief that he now had the impression of being conscious for the first time helped him to cope with his absent memory and provided a justification for his subsequent statements and behaviours.

### 6. Conclusions

- There is an interaction between cognition and physiology.
- Physiological causes in the brain such as brain damage in the hippocampal and limbic regions affect the social and cognitive interactions of the individual.
- The viral infection encephalitis can lead to severe brain damage/abnormalities.
- Brain damage/abnormalities can result in both retrograde and anterograde amnesia.
- Brain damage/abnormalities can have severe negative effects on memory.

Study can be found here: <http://www.tandfonline.com/doi/full/10.1080/09602010802141889#abstract>

**Braun, K.A., Ellis, R., Loftus, E.F. (2002). Make my memory: How advertising can change our memories of the past**  
*Psychology & Marketing, Jan 2002, Vol. 19, No. 1.*

This study reports on two experiments conducted by Braun, Ellis and Loftus. Both experiments investigated whether the use of autobiographical referencing can cause imaginings of experiences (even impossible ones) that lead consumers to become more confident that certain events happened to them as children.

## 1. Background

- Marketers use autobiographical advertising as a way to create nostalgia for their products. However, the use of such referencing can lead consumers to focus more on the feelings evoked by their memories than rational product information (Sujan, Bettman & Baumgartner, 1993).
- Because consumers may use advertising as a cue to recollect past experiences, there is the possibility that recently generated advertising images may alter what they remember.
- Evidence has shown that cues that get people to think over and over again about manufactured childhood events can be a relatively easy way to create false memories or beliefs about childhood (Loftus, 1997).
- Research has shown that marketers can increase the likelihood consumers will activate their memories by focusing on experiential information (Wells, 1986) or using dramatic narratives in advertising campaigns (Boiler, 1990).
- Autobiographical adverts may lead consumers to imagine themselves in the advertised event, and this vicarious experience may alter how they remember their own past.
- Autobiographical memory can be defined as a memory of past personal experiences.
- Alterations in recollection of past events are possible because of the reconstructive nature of memory (e.g. Braun, 1999).
- Memories that have had time to fade are particularly prone to distortion, creating false memories. With suggestion and imagination, a significant minority of people can be led to believe that they have had experiences that are manufactured (e.g. Loftus and Pickrell, 1995).
- This study investigated whether it was possible for a marketer to influence childhood memories through advertising.

## Experiment 1

### 2. Aim

- The first experiment aimed to investigate whether autobiographical advertising can prompt consumers to imagine their childhood experiences so their memories become more consistent with the images evoked in the advertising i.e. to determine whether autobiographically focused advertising can directly affect how consumers remember prior childhood experiences.

### 3. Hypotheses

- Elements and images portrayed in advertisements will appear as part of a consumer's reconstructed memory, regardless of whether or not the events had actually happened.
- If an advertisement causes imagining of a childhood experience, this imagination process will lead consumers to believe the ad-based experience actually happened to them as a child. (This is known as advertising inflation.)

**Braun, K.A., Ellis, R., Loftus, E.F. (2002). Make my memory: How advertising can change our memories of the past**  
*Psychology & Marketing, Jan 2002, Vol. 19, No. 1.*

#### 4. Method

##### (i) Research method/design

- This was a laboratory experiment with an independent measures design (participants only took part in one condition). Data was gathered through the use of questionnaires.
- The independent variable (IV) was whether the participant viewed a Disney advertisement or a non-Disney advertisement.
- The dependent variable (DV) was the difference between the scores given in Week 1 and Week 2 for the critical item in a questionnaire (shaking hands with a favourite TV character at a theme resort). A score of zero would indicate no memory change, a positive score a memory inflation and a negative score a memory deflation.

##### (ii) Sample

- 107 undergraduates (64 females, 43 males) from a Midwestern university in the USA.
- Participants received course credit for take part.

##### (iii) Apparatus/materials

- A questionnaire listing twenty childhood events (known as a Life-Events Inventory – LEI).
- The target event was, 'Met and shook hands with a favourite TV character at a theme park'. This item appeared fourth on the list.
- An advert for the Walt Disney World resort can be seen on page 6 of the original study: <https://faculty.washington.edu/eloftus/Articles/BraunPsychMarket02.pdf>

**Braun, K.A., Ellis, R., Loftus, E.F. (2002). Make my memory: How advertising can change our memories of the past**  
*Psychology & Marketing, Jan 2002, Vol. 19, No. 1.*

## 4. Method

... continued

### (iv) Procedure

- Participants were randomly allocated to one of the two conditions which placed 46 in the Disney ad condition and 51 in the non-Disney ad (control) condition.
- **Week 1:** Participants completed a questionnaire which asked them to rate, on a line scale from 0 – 100 (where 0 = definitely did not happen, 100 = definitely did happen), the likelihood that an event happened to them before they were ten years old. Twenty childhood events were listed, including the critical event 'Met and shook hands with a favourite TV character at a theme resort'.
- **Week 2:** Participants in the experimental group were given the Disney ad whilst those in the non-experimental (control) group were given a non-Disney ad. Participants were asked to:
  - (a) Write down how the ad made them feel and what it made them think about.
  - (b) Rate the ad as 'unfavourable', 'favourable', 'bad-good', 'unpleasant-pleasant' on four 100 mm line attitude scales where a higher score indicated more favourable attitudes.
  - (c) Rate four statements, using scales of 0 – 100 (where 0 = strongly disagree and 100 = strongly agree) how involving the ad was for them.
- The experimenter then said there had been a problem with coding the results of the questionnaire completed in Week 1 so would they please complete it again. Participants then undertook a short distraction task after which they were asked, in a different questionnaire, about their memories of Disney. Finally, as a way of assessing demand characteristics, participants were asked what they thought the purpose of the experiment was and whether or not they believed their memories of Disney had been influenced by the advertising.

**Braun, K.A., Ellis, R., Loftus, E.F. (2002). Make my memory: How advertising can change our memories of the past**  
*Psychology & Marketing, Jan 2002, Vol. 19, No. 1.*

## 5. Key findings

- Two independent judges coded participants' responses. They had no knowledge of the experimental hypotheses. Their inter-rater reliability was 0.83.

### Autobiographical effects of the advertising

- Out of the 46 participants in the experimental group, 30 (65%) mentioned memories of Disney World, 34 (74%) mentioned that the ad caused them to imagine the experience.
- Even those who had not visited the park in the past were able to imagine the experience.

### Imagination inflation

- Significantly more participants in the experimental group (90%) compared to the non-experimental group (47%) increased their scores from Week 1 to Week 2 in relation to their confidence that they had personally shaken hands with Mickey, at a Disney resort, when a child. These results are shown on page 9 of the original study:

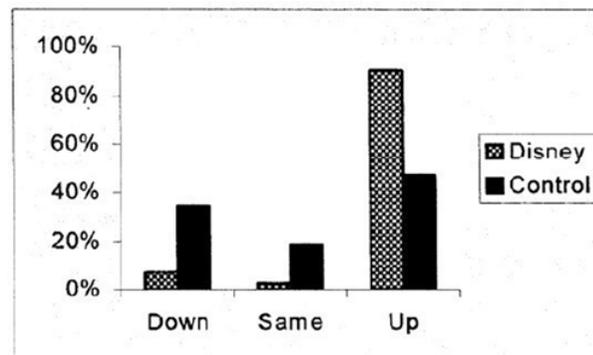


Figure 2. Experiment 1: Change in LEI "shaking hands"

### Disney memory

- 34 participants from each group reported having visited a Disney park in the past.
- There were significantly more positive thoughts in the Disney ad condition than the non-Disney ad condition.
- There were no differences in the negative thoughts between the two conditions.
- More ad elements were used in the recall descriptions given by participants in the Disney ad condition than the non-Disney ad condition.

### Demand

- No demand characteristics effects were found as no-one was able to correctly identify the purpose of the experiment.

**Braun, K.A., Ellis, R., Loftus, E.F. (2002). Make my memory: How advertising can change our memories of the past**  
*Psychology & Marketing, Jan 2002, Vol. 19, No. 1.*

## EXPERIMENT 2

Experiment 2 was a variation of Experiment 1.

- The aim was to determine whether false information in advertising about childhood experiences at Disney could make participants believe those events actually happened to them. There were three groups in this experiment. Group 1 received an advert suggesting they had shaken hands with Bugs Bunny at Disney Land (an impossibility because Bugs Bunny is a Warner Brothers character); Group 2 received an ad suggesting they had shaken hands with Ariel, the Little Mermaid (an impossibility as she had not been introduced as a Disney character when they participants were under the age of 10 years). Group 3 (the control group) received a non-autobiographical, informational Disney ad. Participants were psychology undergraduates (104 females, 63 males) from a Western University in the USA who received course credit for taking part. The same basic procedure from Experiment 1 was followed and findings showed that:
  - (a) The two autobiographical ads were more involving for participants than the informational ad.
  - (b) All groups increased their confidence that they had shaken hands with a cartoon character but the increases were more pronounced in the two autobiographical conditions: 76% in the Ariel condition, 78% in the Bugs Bunny condition, 62% in the non-autobiographical condition.

## 6. Conclusions

- Autobiographical advertising can make consumers more confident that they have experienced an advertised-suggested event as a child.
- Autobiographical advertising can influence how consumers remember the past.
- Featuring impossible events in autobiographical advertising can cause people to believe they have experienced the events.
- Autobiographical referencing/advertising can lead to the creation of false or distorted memory.

**Williams, J. et al. (1992). Bizarreness in dreams and fantasies: Implications for the activation-synthesis hypothesis**  
*Consciousness and Cognition 1(2):172-185, June 1992.*

## 1. Background

- In 1997, Hobson and McCarley proposed the activation-synthesis model/hypothesis of dreaming. This suggests that near-random patterns of brain activation (which are the result of other processes such as memory consolidation) are combined and interpreted (synthesis) by the brain, resulting in the bizarre (and characteristic) features of dreams.
- The key characteristics of dreams are: illogical content, intense emotions, acceptance of strange content, strange sensory experiences and difficulty remembering dream content.
- The activation-synthesis model sees dreams as the brain's flailing attempt to make sense of new patterns of activation and attempts to explain the apparently inexplicable nature of dreams by suggesting that often the brain tries to deal with patterns of activation that do not occur in wakefulness so that it has to come up with explanations for these bizarre patterns of activity.
- The model helps to make sense of one of the puzzling features of dreams: that they often combine the 'day residue' of present situations and experiences with memories from years or even decades before.
- The model accounts for common themes in dreams as people may all share similar fears, sources of embarrassment, or worries for the future that may happen to be activated. At the same time, the model also accounts for individual differences as how the brain chooses to interpret and explain the pattern of activation may reflect something of the person's unique world.
- Circuits in the brain stem are activated during REM sleep. Once these circuits are activated, areas of the limbic system involved in emotions, sensations and memories - including the amygdala and hippocampus - become active. The brain synthesises and interprets this internal activity and attempts to create meaning from these signals, which results in dreaming.
- The activation-synthesis model/hypothesis is a neurobiological explanation of dreaming and dream bizarreness may therefore be the experiential correlate of REM sleep neurophysiology.
- However, while dreams are considered strange by most adults, few seem to experience the same kinds of discontinuity and incongruity in fantasy that are typical of their dreams.
- The authors suggest that it seems unlikely that the two brain states of wakefulness and REM sleep, which are physiologically different, can be associated with cognitively identical states of mind.
- They therefore set out to show that the brain basis of such cognitive features as dream bizarreness is found in REM sleep neurophysiology and that this bizarreness offers support for the activation-synthesis hypothesis of dreaming.

## 2. Aim

- The aim of this study was to assess the bizarreness in dreams and fantasies as a way of showing support for the activation-synthesis hypothesis of dreaming.

**Williams, J. et al. (1992). Bizarreness in dreams and fantasies: Implications for the activation-synthesis hypothesis**  
*Consciousness and Cognition 1(2):172-185, June 1992.*

### 3. Hypotheses

- No actual hypothesis is stated for this study but a possible one could be:
  - Bizarreness is more prevalent in dreams reports than in wake-state fantasy reports made by the same participants.

### 4. Method

#### (i) Research method/design

- This study used the self-report method to gather data about the bizarreness of dreams and fantasies. The self reports were recorded at home by participants in the form of a written journal.

#### (ii) Sample

- 12 students (2 male, 10 female) enrolled in a biopsychology course at Harvard University Extension School in Cambridge, Massachusetts, USA.
- Age range was 23-45 years of age.

#### (iii) Apparatus/materials

- Writing equipment and paper for recording dream and fantasy reports.
- Hobson et al.'s (1987) Bizarreness Scale (for details see the original article page 174).

#### (iv) Procedure

- During term time, the students were asked to record, upon waking during the night and in the morning, any and all dreams remembered.
- Mental activity occurring during waking was also recorded if it met the following definition of fantasy: apparently spontaneous mentation of a narrative and/or perceptual nature without clear links to external stimuli or conscious intention (these were then considered 'fantasies').
- All dream and fantasy reports were kept in a written journal.
- A total of 60 dreams and 60 fantasies were selected from the journals submitted by the 12 students on the basis of:
  - (i) Length (in excess of 5 lines). The 120 reports varied in length from 30-600 words.
  - (ii) The presence of descriptions of formed visual perceptions.
- Reports were divided into one sentence units and scored separately for bizarreness using a bizarreness coding scale devised by Hobson et al. (1987). The first stage of the scoring system described the locus of the bizarre item: the plot (characters, objects, activities, place or time); the thoughts of the dreamer or dream character; or the feeling/emotion of the dreamer or dream character. The second stage described the type of bizarreness as either a discontinuity, an incongruity or an uncertainty. (This means that the bizarreness of sentence units were categorised as to locus and type.)
- Three judges scored all 120 reports for bizarreness after the reports had been transcribed and coded randomly to ensure unbiased scoring.
- Judges worked individually so inter-rater reliability could be determined.

**Williams, J. et al. (1992). Bizarreness in dreams and fantasies: Implications for the activation-synthesis hypothesis**  
*Consciousness and Cognition 1(2):172-185, June 1992.*

## 5. Key findings

- Judges agreed about 80% of the time on both bizarreness and non-bizarre items but as the definition of bizarreness was somewhat ambiguous, analysis focused on items on which two or more judges agreed. Judges were also able to blindly assess a random sample of dream and fantasy reports with 88.7% accuracy.
- Dream reports were significantly longer than fantasy reports.
- Bizarreness was more than twice as prevalent in dream reports than fantasy reports.
- Dreams scored higher than fantasies for: plot discontinuity, plot incongruity, uncertainty, and thought incongruity, with plot discontinuity showing the greatest difference.
- No items in either dreams or fantasies were scored as: thought discontinuity, emotion discontinuity or emotion uncertainty.
- Bizarreness in dreams usually came from nearly all participants whereas bizarreness in fantasies came from only a few participants.
- Dreams were always set in remote times or places (12/12 participants) while fantasies were far more often current in both time and place (6/12 participants).
- Fantasies involved the first person (self) only in a third of the reports (4/12 participants) while dreams always involved more than one character (12/12 participants).

## 6. Conclusions

Problems with home-based self reports should not be ignored. For example there was a lack of control over both the environments and reporting/recording techniques; and one cannot be certain that both dream and fantasy reports were not omitted or edited to prevent embarrassment.

- Findings support the physiological model of dreaming/the activation-synthesis hypothesis which predicts a difference between REM sleep dreams and waking fantasies (due to the difference in the neural activity of the brain between the two states).
- Dreams contain more bizarreness as well as other 'dreamy' features such as remoteness of time and place than fantasies.
- Dreams and fantasies are two quite different modes of information processing (though there is a continuity of cognitive features across states which parallels the physiological continuity of the wake-sleep boundaries).
- Dreams differ from fantasies in relation to the number of people involved/the remoteness of time/the remoteness of place.

# Sleep and dreaming

## Freud

### **Freud, S. (1918). 'The Wolfman study'**

***An Infantile Neurosis and Other Works, Volume XVII (1917-1919), Vintage Classics; New Ed edition (2001).***

#### **1. Background**

- Freud lived in Vienna and treated people who were often quite wealthy. He trained as a doctor and as a young man became very concerned about the lack of knowledge and treatment for mentally ill people.
- Freud developed a theory, the main focus of which was how the unconscious is, by far, the largest part of the mind and has great influence on the individual.
- Freud focused on neurosis – mental problems that the individual can be aware of (like phobias), rather than psychosis – mental problems where the individual has lost touch with reality.
- Freud used case studies to gather in-depth, detailed data about an individual. He used methods such as free association, dream analysis and slips of the tongue to try to uncover an individual's unconscious wishes, desires, thoughts and fears.
- Dream analysis is where the patient/individual describes a dream and the analyst looks for meaning in the dream. The manifest content of the dream is the description of the dream itself and the latent content of the dream is the underlying unconscious thoughts that are revealed through analysis of the manifest content. Freud aimed to access the latent content in his patients' dreams so he could explain the manifest content.
- The case of the Wolfman played an important role in Freud's development of his theory of psychosexual development.
- This case history is entitled 'From the History of an Infantile Neurosis' and is therefore deliberately incomplete, concentrating exclusively on the infantile neurosis of Freud's patient who became known as the Wolfman. This study only looks at the Wolfman's key dream and Freud's initial analyses of the dream, it does not cover the complete history of the patient's illness, treatment and recovery.

#### **2. Aim**

- The aim of this case history was to document the Wolfman's infantile neurosis and to try to reveal the latent content of his dream about wolves as a way to explain its manifest content and the Wolfman's fear of wolves.

#### **3. Who was the wolfman?**

- Sergei Pankejeff was a Russian aristocrat born in 1886 in Odessa. Freud gave him the pseudonym 'Wolfman' to protect his identity.

### **Freud, S. (1918). 'The Wolfman study'**

*An Infantile Neurosis and Other Works, Volume XVII (1917-1919), Vintage Classics; New Ed edition (2001).*

#### **4. Method**

##### **(i) Research method/design**

- This was a longitudinal case study which gathered in-depth, detailed information about the infantile neurosis of Sergei Pankejeff – the Wolfman. The part of the study relevant for this GCSE specification documents only the child's infantile neurosis which was reported to and analysed by Freud fifteen years after it had come to an end.

##### **(ii) Outline of the study**

- Freud reported that:
  - (i) Sergei's initial relationship with his father was excellent and that he aspired to be a 'gentleman' like him.
  - (ii) In 1906, the Wolfman's older sister, Anna, committed suicide by poisoning herself and he began experiencing symptoms of depression. In 1907 his father overdosed on sleeping pills, so also committed suicide. Soon after, the Wolfman began seeking treatment for his own depression and, in 1910, his physician took him to Vienna to have treatment with Freud.
  - (iii) The Wolfman's early years had been dominated by a serious neurotic disorder which began shortly before his fourth birthday as anxiety hysteria (animal phobia) and then turned into an obsessive-compulsive neurosis, religious in content, the effects of which persisted into his tenth year.
- Much of Freud's analysis of the Wolfman's infantile neurosis centred on a dream that he had as a young child – shortly before his fourth birthday.
- **The dream:** 'I dreamt that it is night and that I am lying in my bed (the foot of my bed was under the window, and outside the window there was a row of old walnut trees. I know it was winter in my dream, and night-time). Suddenly the window opens of its own accord, and terrified, I see that there are a number of white wolves sitting in the big walnut tree outside the window. There were six or seven of them. The wolves were white all over and looked more like foxes or sheepdogs because they had big tails like foxes and their ears were pricked up like dogs watching something. In great terror, evidently of being eaten by the wolves, I screamed and woke up. Obviously fearful that the wolves were going to gobble me up I screamed and woke up. My nurse hurried to my bedside, to see what had happened. It was some time before I could be convinced that it had only been a dream, because the image of the window opening and the wolves sitting in the tree were so clear and lifelike. Eventually I calmed down, feeling as if I had been liberated from danger, and went back to sleep.' The dream was described by the Wolfman in slightly different ways on different occasions.
- The Wolfman had always connected the dream with fear he had felt for a picture of a wolf, in an upright standing position, he had seen in a book of fairy tales. Freud, however, after several years of therapy, arrived at alternative explanations of the dream.

### **Freud, S. (1918). 'The Wolfman study'**

***An Infantile Neurosis and Other Works, Volume XVII (1917-1919), Vintage Classics; New Ed edition (2001).***

#### **5. Key findings - Freud's analysis of the dream**

- In his first analysis of the dream, Freud thought that the 'only action in the dream was the opening of the window, for the wolves were sitting quite still in the branches of the tree, to the right and left of the tree trunk, not moving at all, and looking right at me', contained a 'reversal' and that it represented the boy himself who had seen something and that the opening of the window implied that what he had seen was eye-opening and had caused him to feel extremely anxious, as if he had seen something he was not supposed to see. The opening of the window led Freud to the conviction that behind the dream lay a real event: an unconscious traumatic memory of something that had taken place earlier, this being an experience when he was one and a half years old – he had been suffering from malaria and would sleep during the afternoons in his cot in his parents' bedroom. One day he woke up and witnessed them having sex from behind, this was named by Freud as the primal scene.
- The symbol of the wolf, according to Freud, represented the boy's father and he interpreted the stillness of the wolves as they sat in the tree as a representation of the opposite – the violent motion the boy witnessed during the primal scene.
- Freud suggested that the upright position of the wolf (as shown in picture of the dream scene drawn by Sergei) might have reminded Sergei of the position taken by his father in the primal scene.
- Freud made further progress in understanding the dream when, during a later therapy session, Sergei remembered that he had had the dream shortly before Christmas, which happened also to be his birthday, when the idea surfaced that the tree was a Christmas tree. The dream showed Sergei that the gifts that were intended for him were hanging on the tree but instead of actual presents they had turned into wolves. The dream ended with the fear that the wolf/wolves (probably representing his father) would gobble him up, so he sought refuge with his nurse. Freud thought Sergei had a subconscious desire to be seduced by his father (represented in the dream by the anticipated pleasure gained from receiving presents) and thought that this unconscious wish for the sexual satisfaction he longed to receive from his father succeeded in refreshing the long-forgotten memory trace of the primal scene that showed what sexual satisfaction from his father looked like – he had seen an expression of pleasure on his mother's face during the sexual act and wanted to experience the same pleasure. However, as his mother had obviously been castrated by his father's actions as she had no penis, he became extremely frightened and developed a fear of his father and castration anxiety (illustrated by him dreaming that the wolf/wolves would gobble him up). He therefore sought refuge with his nurse whom he considered a less dangerous figure than his father. The boy repressed his unconscious fear of his father but projected it consciously as a fear of wolves.
- Freud suggested that one of the reasons the wolves were white had its roots in the primal scene – the white derived from the white of the bedlinen and the parent's underclothes.
- Freud also suggested that because the wolves in the dream 'big tails like foxes', they represented compensation for the boy's fear of castration.
- Freud continued to provide psychoanalytic treatment for several years and went on to offer alternative interpretations of the Wolfman's dreams. Although after a year of treatment Freud declared Sergei 'cured', Pankejeff continued to seek psychoanalysis until his death in 1979, aged 93 years. This ongoing therapy is however not the focus of this GCSE specification.

# Sleep and dreaming

## Freud

### **Freud, S. (1918). 'The Wolfman study'**

***An Infantile Neurosis and Other Works, Volume XVII (1917-1919), Vintage Classics; New Ed edition (2001).***

#### **6. Conclusions**

- The unconscious mind can have significant influences on human behaviour.
- Traumatic events can be repressed into the unconscious.
- Repressed memories can be projected to the conscious mind.
- The roots of disturbing dreams can be found in the unconscious mind.
- Phobias may be caused by childhood experiences which have been repressed into the unconscious mind.

NB: Although Freud's interpretations of the Wolfman's dreams can undoubtedly be questioned, it is worth noting that almost 100 years after his death, his theories and ideas still provoke much discussion and psychoanalysis still plays a key role in therapy and treatment for many psychological disorders.



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