

Section 1:

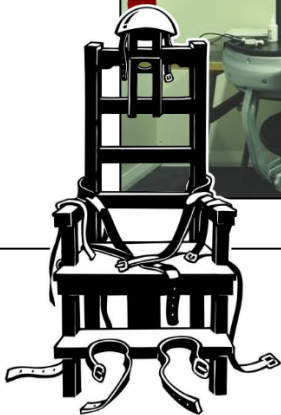


Social Psychology

Year 1

Milgram
Obedience

Bocchiaro
Whistleblowers



COMPONENT 02 AS Level H167 /02
Advanced Level H567 /02

Psychological Themes Through Core Studies

Psychology 'Boot Camp' ('Start-Up' Work)



Please tick off these sections as we go & record your levels of confidence for each in the right hand column:

1. Confident of material
2. Ok – but still need to clarify some bits (Specify in comments)
3. Unsure about this idea (Specify in comments)



1. Component 02: Social Psychology	Tick	Rating & Comments
(a) The Social Approach: Defining Principles & Concepts		
(b) Outlining a study : The Sections (Aims & Hypotheses, Method: Design, Sample, Procedure, Materials, Results, Conclusions)		
(c) Core Study 1: (Classic) Milgram (1963)		
(d) Core Study 2: (Contemporary) Bocchiaro <i>et al.</i> (2012)		
(e) Comparisons: Milgram vs Bocchiaro <i>et al.</i>		
2 . Component 02: Evaluation Themes		
(a) Ethics		
(b) Ecological Validity		
(c) Quantitative Vs Qualitative Data		
(d) Longitudinal Vs Snapshot studies		
(e) Generalisation		
(f) Usefulness of research		
(g) Validity		
(h) Reliability		
3. Component 01: Research Methods – The Basics		
(a) Aims, Alternate vs Null Hypotheses		
(b) One & Two Tailed Tests		
(c) Independent (IV) & Dependent Variables (DV)		
(d) Operationalising Variables		
(e) Samples & Sampling Technique		
4 . Component 01: Research Methods – Self-Report		
(a) Questionnaires vs Interviews		
(b) Questionnaire items: Open & Closed Qs + Rating Scales		
(c) Designing a questionnaire		
(d) Writing up your project		
(e) Evaluating Questionnaires		

Section One:

Social Psychology

Defining Principles & Concepts

- A major influence on people's behaviour, thought processes & emotions are **other people & society**.
- All behaviour occurs in a **social context**, even when nobody else is physically present. This forms a series of rules known as **Social Norms**.
- An individual's behaviour is affected by the **situation**.
- Concerned with how the individual **relates to others** / learns from others.
- Focus on how the individual behaves in a **group** e.g. decision making, conformity



Psychology

Introduction

Social psychology attempts to explain our behaviour through an understanding of social processes. Whenever we are not alone we are influenced by the people around us, what they are doing, how they behave, and their characteristics. We imitate others, for example role models in the media, we conform to what others think and do in an attempt to fit in, and we sometimes make judgements about people, based on the way they look or act, and whether we identify with them because they are in the same social group.

How is Social Psychology studied?

It is difficult to study the influence of social processes on behaviour, because we are not usually aware of their influence. It is essential therefore that participants do not know that they are being studied, or exactly what aspect of social behaviour is being investigated. This raises several problems, not least the ethics of deceiving people. Laboratory studies involve setting up a situation to see how participants behave, and are frequently conducted because they allow the experimenter to control extraneous variables that could affect the participants' reactions.

Field studies are more naturalistic and overcome many of the problems that can arise from the participants knowing that they are being studied: demand characteristics. Conducting studies in everyday environments makes for higher ecological validity. This makes the findings more generalisable to how social processes affect us in everyday life. Observation is a very useful method to use when studying social psychology as social behaviour and reactions can be directly observed.

Research Methods: Field experiments, Laboratory experiments, Surveys, Observations.

Strengths	Weaknesses
<ul style="list-style-type: none">▪ Supporting research often takes place in a real life setting.▪ Supporting research has real life applications▪ Adopts scientific methods to conduct research.▪ Findings from research has useful implications – helps to solve / avoid problem behaviours.▪ Supports nurture – good news, means problem behaviour can be changed by changing the environment.	<ul style="list-style-type: none">▪ Deterministic – the social situation / environment shapes behaviour – free will?▪ Dangerous to make wide-ranging generalisations across all social groups.▪ Much of the supporting research broke ethical guidelines – damages reputation of the approach.▪ Supporting research often takes place in laboratories – reducing Ecological Validity▪ Reductionist – ignores physiological and cognitive influences on behaviour.

NOT
FOLLOWING
ORDERS
ST
FOLLOWING
ORDERS

Milgram (1963)

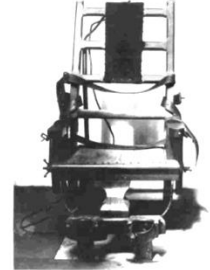
'Behavioural study of obedience'
Journal of Abnormal and Social Psychology, 67, 371-378.



Background

At a Glance:

We're all capable of doing awful things to others if told to by someone in authority...



This is one of the most widely-known studies in psychology, possibly because of the *shocking* methods which were used and also the unpalatable results.

Who was Stanley Milgram?

Stanley Milgram, a psychologist at Yale University, conducted a study focusing on the conflict between obedience to authority and personal conscience. He examined justifications for acts of genocide offered by those accused at the World War II, Nuremberg War Criminal trials. Their defence often was based on "obedience" - that they were just following orders of their superiors. Milgram's career also produced other creative, though less controversial, research; such as, the small-world method (the source of "**Six Degrees of Separation**") He died in 1984 aged only 52 years of age.



Stanley Milgram



- From 1933-45, millions of innocent people were systematically slaughtered on command. Such inhumane actions may have originated in the mind of one person, but they could only have been carried out on such a massive scale because large numbers of people obeyed.

- History and observation suggest that for many people obedience is such an ingrained behavioural tendency that it will override training in ethics, empathy and moral values. This is because, when given extreme commands by legitimate authority figures, subordinates adopt an **Agentic State** where they become the instrument for carrying out another person's wishes.

- The adoption of the agentic state can account for horrific acts committed in the name of obedience eg the atrocities of WWII, the Balkans conflicts, the atrocities in Rwanda.

- The aim of this study was to investigate the process of obedience by testing how far an individual will go in obeying an authority figure, even when the command breaches the moral code that an individual should not hurt another person against his will.

definition

Obedience: To **obey** is to do as instructed, usually in response to an individual rather than a group. When a group of people exerts pressure we tend to use the concept of conformity rather than obedience. We conform to group norms (the patterns of behaviour which are typical or representative of a group) whereas we obey a leader. A further difference between obedience and conformity is the extent to which your personal opinions change as well. Obedience is less likely to involve an alteration of private belief.

Theory/ies on which the Study is based



Theory/ies on which the study is based

- Obedience is the psychological mechanism that links individual action to political purpose. It is the dispositional feature that binds people to systems of authority. It is an active or deliberate form of social influence.
- According to Milgram (1992) obedience involves the 'abdication of individual judgement in the face of some external social pressure'.
- Obedience involves (a) being ordered or instructed to do something, (b) being influenced by an authority figure of superior status, (c) the maintenance of social power and status of the authority figure in a hierarchical society.
- A person commanded by a legitimate authority usually obeys – it is a ubiquitous and indispensable feature of social life.
- Obedience serves a number of productive functions with the very survival of society depending on its existence.

Dispositional vs Situational explanations of behaviour

Q. Why is the behaviour occurring?

A. "It's because that's just what that person is like." (Disposition)

A. "It's because of the situation that the person finds themselves in." (Situation)

Obedience is often linked with undesirable behaviour, indeed Milgram starts his article with reference to the behaviour of German SS officers in the Second World War. Early psychological research into the Holocaust focused on the idea that something distinctive about German culture or personality led to the high levels of conformity and obedience necessary for genocide to take place. This is often referred to as Milgram's "**Are the Germans different hypothesis**". Related to this is the **Dispositional Hypothesis**. This is the idea that behaviour is being driven by the individual's natural personality.

While Milgram was interested in this idea, he was also interested in the social processes that take place between individuals and within groups. The idea that we can explain events such as the Holocaust by reference to the social processes operating in the situation, rather than the characteristics of the individuals involved, is called the **Situational hypothesis**. (E.g behaviour driven by the situation rather than the individual's natural disposition.)



'Big Idea': The **Agentic Shift**

Milgram used this term to describe a state where individuals give up their own responsibility, deferring to those of higher status. The command of the authority figure is chosen above their own personal morals. Have

you ever done anything unpleasant simply and accounted for your actions by saying... "They told me to do it"



Memory Device: Agent Smith
(The Matrix) / Agentic Shift

Milgram introduced his study saying that it was a commonly observed social fact that 'the individual who is commanded by a legitimate authority ordinarily obeys'. Milgram set out to test this experimentally in a number of other studies including this first one. He sought to answer the following research questions:

- Why do people obey authority?
- What are the conditions that foster obedient behaviour?
- What are the conditions that foster independent behaviour?

Before we examine the aims it is worth mentioning that in relation to the background of this study you'll often hear reference to Milgram's "Are the German's different?" Hypothesis. Milgram was initially interested in seeing if Germans were naturally more obedient compared to other nationalities.



Class Discussion

In small groups, consider the following questions before reporting back to the class:

- What do you think Milgram meant by 'legitimate authority'?
- Suggest two reasons why you think people obey.
- People are different (individual differences). Can you think of one reason why some people are more obedient than others?
- A hypothesis is the researcher's statement of what he expects to find. State a suitable hypothesis for this study.

Aim



The aim of the study was to investigate how obedient people would be to orders from a person in authority that would result in pain and harm to another person. More specifically the aim was to see how large an electric shock participants would give to a helpless man when ordered to by a scientist in his own laboratory.

Before the main procedure

Before carrying out the main study, Milgram told psychology students about his procedure. This would involve ordering people to give electric shocks to a helpless man whom they believed to be a fellow participant. The electric shocks would increase in intensity up to 450V. Students estimated that only 3% of participants would obey the orders and give all the shocks.

Research Method

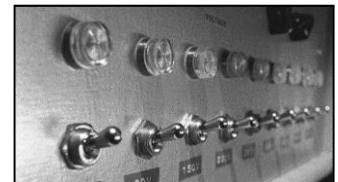


Design



• Although Milgram refers to this study as an experiment, it is generally considered a **controlled observation** as there was, in fact, no independent variable.

- The study took place in a laboratory at Yale University so conditions could be controlled eg who was teacher / learner, the learner's recorded and thus standardised responses, the experimenter's 'prods'.
- Data was gathered through observations made by both the experimenter who was in the same room as the participant and others who observed the process through one-way mirrors. Most sessions were recorded on magnetic tape, occasional photographs were taken through the **one-way mirrors** and notes were made on unusual behaviours.
- **Prior to the study:** 14 Yale Seniors, all Psychology majors, estimated the percentage of participants who would administer the highest level of shock. Estimates ranged from 1-3% (mean 1.2%).



Sample

Milgram used an advertisement to recruit participants. He advertised in a newspaper and used **direct mail solicitation**, for 500 hundred New Haven men to take part in a scientific study of memory and learning at Yale University. Everyone was paid **\$4.50** simply for coming to the laboratory. The payment did not depend on remaining in the study.

The final group of participants consisted of **40 men** aged between 20 and 50, who came from **various occupational backgrounds**:

- 37.5% were manual labourers.
- 40% were white-collar workers.
- 22.5% were professionals.

All were from the **New Haven** district of North America. The way these participants was recruited is called **Self Selected Sampling**. This is because the participants chose to volunteer. They approached the organisers not the other way around e.g coming up to someone on a street.

Two further participants took part: the part of the experimenter was played by a biology teacher, and the part of the learner or victim was a **47-year-old accountant**. Both of these men were accomplices of Milgram or **confederates**. (Or Stoges)



Memory Device

“Faulty”

Imagine some *faulty (40)* wiring in Milgram’s lab creating sparks...

Original Advert

Public Announcement

WE WILL PAY YOU \$4.00 FOR ONE HOUR OF YOUR TIME

Persons Needed for a Study of Memory

*We will pay five hundred New Haven men to help us complete a scientific study of memory and learning. The study is being done at Yale University.

*Each person who participates will be paid \$4.00 (plus 50c carfare) for approximately 1 hour’s time. We need you for only one hour: there are no further obligations. You may choose the time you would like to come (evenings, weekdays, or weekends).

*No special training, education or experience is needed. We want:

Factory workers	Businessmen	Construction workers
City employees	Clerks	Salespeople
Laborers	Professional people	White-collar workers
Barbers	Telephone workers	Others

All persons must be between the ages of 20 and 50. High school and college students cannot be used.

*If you meet these qualifications, fill out the coupon below and mail it now to Professor Stanley Milgram, Department of Psychology, Yale University, New Haven. You will be notified later of the specific time and place of the study. We reserve the right to decline any application.

*You will be paid \$4.00 (plus 50c carfare) as soon as you arrive at the laboratory.

TO:

PROF STANLEY MILGRAM, DEPARTMENT OF PSYCHOLOGY,
YALE UNIVERSITY, NEW HAVEN, CONN. I want to take part in this study of memory and learning. I am between the ages of 20 and 50. I will be paid \$4.00 (plus 50c carfare) if I participate.

NAME: (PLEASE PRINT).....

ADDRESS.....

TELEPHONE NO..... Best time to call you.....

AGE..... OCCUPATION..... SEX.....

CAN YOU COME:

WEEKDAYS..... EVENINGS..... WEEKENDS.....

Distribution of Age And Occupational Types In The Experiment

Occupations	20-29 Years <i>n</i>	30-39 Years <i>n</i>	40-50 Years <i>n</i>	Percentage of total (Occupations)
Workers, skilled and unskilled	4	5	6	37.5%
Sales, business, and white-collar	3	6	7	40.0%
Professional	1	5	3	22.5%
Percentage of total (Age)	20%	40%	40%	

Procedure Outline

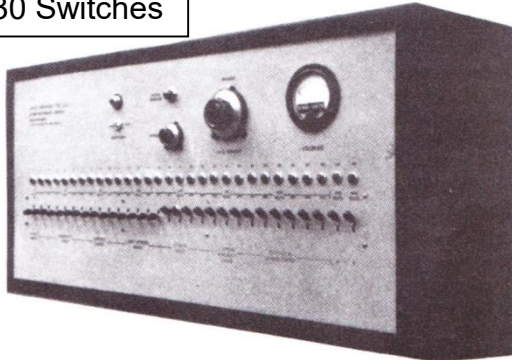
Prior to the study: 14 Yale Seniors were provided with a detailed description of the experimental situation. They were asked to reflect carefully on it, and to predict the behaviour of 100 hypothetical subjects. More specifically, they were instructed to plot the distribution of obedience of “100 Americans of diverse occupations and ranging in age from 20 to 50 years” who were placed in the experimental condition.

Main Study: This is a **single blind** experiment because the participants were deceived about the true purpose of the research, as you will see. (If the experimenter was deceived as well, it would be called ‘double blind’). When each participant arrived, they were told that the purpose of the experiment was to see how punishment affected learning. The ‘naïve’ participant was introduced to the other participant and both were asked to draw lots to see who would play the part of the teacher and who would be the learner. The confederate always got the part of the learner.

The learner was strapped into a chair in the next door room (**See Figure 1.1**) and an electrode attached to his wrist. The learner was given the following task: He would hear a list of word pairs (e.g Blue/Girl, Fat/Neck) and later be given one word and a choice of four possible partners. He must identify which of the four was correct. Every time the learner got a question wrong, he would receive an electric shock administered by the teacher and the shocks increased in intensity with each mistake. The teacher did this using a shock generator, a machine with switches labelled for each level of electric shock, as shown below:

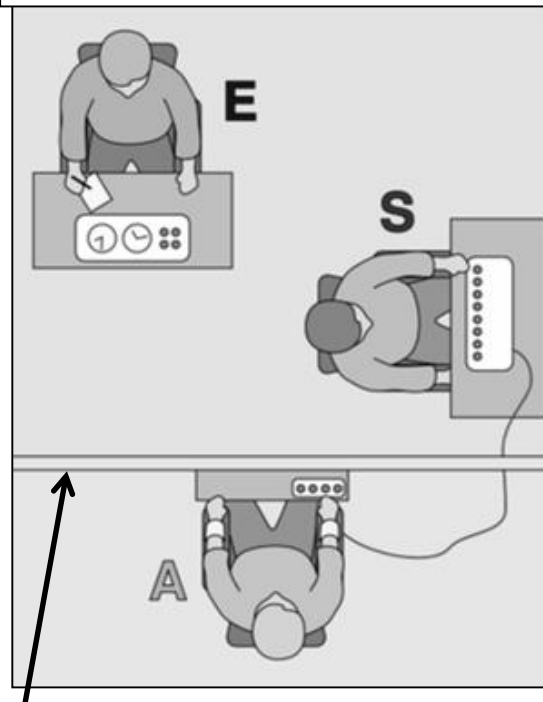
The ‘teacher’ was given a sample shock of **45 volts** to demonstrate that the machine was working, though in fact that was the only time it did work. For the rest of the experiment the learner only pretended to be receiving shocks.

30 Switches



Description	Volts
Slight shock	15 30 45 60
Moderate shock	75 90 105 120
Strong shock	135 150 165 180
Very strong shock	255 270 285 300
Intense shock	195 210 225 240
Extremely intense shock	315 330 345 360
Danger: Severe shock	375 390 405 420
XXX	435 450

Figure 1.1: Room Layout for experiment: **E** (Experimenter), **S** (Subject), & **A** (Actor)



“Buffer”

The wall acted as a ‘buffer’ and allowed the participants to distance themselves from their actions. They could hear the reactions but couldn’t see the face of the person they were shocking. A buffer is anything that comes between a person and them taking responsibility for their actions.

Exercise 1

1. If you had volunteered to take part in this study, how would you feel at this stage about what you had volunteered to do (remember you are 'blind' to the deception)?
2. If you felt uneasy about the experiment would you have felt able to take your money and go? Why or why not?
3. The participants were told the supposed purpose of the experiment. What was the real purpose of the experiment?
4. The participants were all volunteers. In what way(s) do you think that people who volunteer are different from people who don't answer advertisements?
5. In what other ways was this sample biased? (Suggest at least two ways.)

- After a few practice questions, the experiment proper began. The 'learner' produced (via a tape recording) a set of predetermined responses, giving approximately 3 wrong answers to every correct one.
- For each of these the teacher gave him an electric shock which was received in silence until they got to shock level 300. At this point the learner pounded on the wall and then gave no response to the next question.
- When the 'teacher' turned to the experimenter for guidance, he was given the standard instruction, 'an absence of response should be treated as a wrong answer'.
- After the 315 volt shock the learner pounded on the wall again but after that there was no further response from the learner – no answers and no pounding on the wall.
- If the teacher felt unsure about continuing, the experimenter used a sequence of 4 standard 'prods', which were repeated if necessary:



Prod 1: Please **C**ontinue.

(C)



Prod 2: The experiment **R**equires that you continue.

(R)



Prod 3: It is **A**bsolutely essential that you continue.

(A)



Prod 4: You have no other choice, you **M**ust go on.

(M)



Memory
Device

If the teacher asked whether the learner might suffer permanent physical injury, the experimenter said: "Although the shocks may be painful, there is no permanent tissue damage, so please go on." If the teacher said that the learner clearly wanted to stop, the experimenter said: "Whether the learner likes it or not, you must go on until he has learned all the word pairs correctly. So please go on."

Exercise 2

1. Identify the independent variable (IV) and dependent variable (DV) in this experiment.
2. Why do you think it was important to have a standardised set of responses for the experimenter?
3. Do you think that this study has ecological validity? In other words, do you think the participants would behave as they would in 'real life' with an authority figure, and do you feel that the results can be applied to real life? Why or why not?
4. When we consider ethics, it is suggested that we should ask whether the ends justify the means. Briefly outline the means and ends in this experiment.
5. Before you look at the results, write down what you think they will be. What percentage of people do you think continued beyond 315 volts?

Key Findings

Pre-test Survey: There was considerable agreement between the 14 Yale Seniors on the expected behaviour of hypothetical subjects. All respondents predicted that only an insignificant minority would go through to the end of the shock series (estimates ranged from 0 to 3%, class mean was 1.2%).

Main Study: The findings from this study may surprise you.... They are as follows:



Quantitative Data (Numbers)

- All 40 participants (100%) were prepared to go to at least 300 volts (Shock Level 20)
- 9/40 (22.5%) stopped at 315 volts
- Over half of the participants (26/40 or 65%) went all the way with the electric shocks.



Qualitative Data (Written detail)

- People who observed the experiment through one-way mirrors also expressed complete astonishment at the participants' behaviour.
- Milgram noted that the participants showed signs of extreme tension: most of them were seen to 'sweat, tremble, stutter, bite their lips, groan and dig their fingernails into their flesh' and quite a few laughed nervously and smiled in a bizarre fashion. Three even had 'full-blown uncontrollable seizures'.

One observer noted: *"I observed a mature and initially poised business man enter the laboratory smiling and confident. Within 20 minutes he was reduced to a twitching, stuttering wreck, who was rapidly approaching the point of nervous collapse."* (p. 377 original Journal article)

Example Qualitative Data

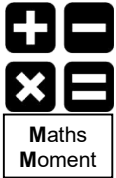
"I think he's trying to communicate, he's knocking... Well it's not fair to shock the guy... these are terrific volts. I don't think this is very humane... Oh I can't go on with this; no, this isn't right. It's a hell of an experiment. The guy is suffering in there. No, I don't want to go on. This is crazy" [Subject refused to administer more shocks]

"He's banging on the wall in there. I'm gonna chicken out. I'd like to continue, but I can't do that to a man....I'm sorry I can't do that to a man. I'll hurt his heart. You take your cheque... No really, I couldn't do it."

- On completion of the test many obedient participants heaved sighs of relief, mopped their brows, or nervously fumbled cigarettes. Some shook their head, apparently in regret; some remained calm throughout

Distribution of Breakoff Points		
Verbal designation and voltage indication		Number of Participants for whom this was the maximum shock
Slight Shock	15	
	30	
	45	
	60	
Moderate Shock	75	
	90	
	105	
	120	
Strong Shock	135	
	150	
	165	
	180	
Very Strong Shock	195	
	210	
	225	
	240	
	195	
Intense Shock	255	
	270	
	285	
	300	5
Extreme Intensity Shock	315	4
	330	2
	345	1
	360	1
Danger: Severe Shock	375	1
	390	
	405	
	420	
XXX	435	
	450	26

- At the end of the experiment all participants were debriefed. They were reunited with the victim, assured there had been no shocks, and told that their behaviour was entirely normal and that their feelings of conflict were shared by the others.
- They were also sent a follow-up questionnaire, which showed that **84%** felt glad to have participated, and **74%** felt they had learned something of personal importance. Only one person reported that he felt sorry to have participated.



1. Express as a ratio the number of participants who went all the way to 450 volts compared to the number of participants who stopped before this point (26:14).
2. What is 65% expressed as a ratio?

Conclusions

Milgram drew two main conclusions from this study:

1. People are much more obedient to destructive orders than we might expect and considerably more than psychology students suggested in their estimates. In fact, the majority of people are quite willing to obey destructive orders.
2. People find the experience of receiving and obeying destructive orders highly stressful. They obey in spite of their emotional responses. The situation triggers a conflict between two deeply ingrained tendencies: to obey those in authority, and not to harm people.

Also to consider:

- Inhumane acts can be done by ordinary people.
- People, will obey others whom they consider legitimate authority figures even if what they are asked to do goes against their moral beliefs.
- People obey because certain situational features lead them to suspend their sense of autonomy and become an agent of an authority figure.
- Individual differences, such as personality, influence the extent to which people will be obedient.



Overall, the results supported the **situational hypothesis** rather than the **dispositional hypothesis**.

Explaining the high levels of Obedience:

Why was there such a high level of Obedience in this study?

Milgram identified the following nine possible factors in the situation that might have contributed to the high levels of obedience seen.

1. The study was carried out in the respectable environment of a top university.
2. The aim of the study appeared to be a worthwhile one.
3. The learner appeared to have volunteered and so had an obligation to the experimenter.
4. The teacher also volunteered and so had an obligation to the experimenter.
5. Features of the design, for example payment, increased this sense of obligation.
6. From the perspective of the teacher, he might equally well have been unlucky enough to have been the learner and to have endured the shocks.
7. The rights of participant to withdraw and of the scientist to expect compliance were not obvious.
8. The participants were assured that the shocks were not dangerous.
9. The learner appeared to be comfortable with the procedure for the first 300V.

Later Variations On The Procedure *(Beyond the Core Study)*

- What we have described here is Milgram's first published study. However, over the following 10 years he refined his procedure. (This is why, if you watch footage of the procedure some details might differ from the original procedure in the first published study)
- As well as refining the basic condition, Milgram also tested the effect of a number of variations Results are shown in the form of the percentage of participants who went to the maximum 450V in each condition.
- In general, giving the participant greater distance from the learner or less personal responsibility for decision-making, increased obedience, while reducing the apparent power of the experimenter, or making the situation appear less respectable or scientific, reduced obedience.
- These variations have been replicated many times by different researchers. Luttkie (2004) reviewed these studies and concluded that Milgram was right about some but not all of his conclusions.
- In particular, the presence of disobedient participants and the physical closeness of the learner reliably reduces obedience. However, most studies have found that varying the location of the study makes little difference to obedience.

Percentage giving 450V in variations of the Milgram procedure

Victim is silent throughout	100%
Standard procedure	65%
Location in 'seedy' office	48%
Victim in same room	40%
Orders given by phone	20.5%
No lab coat worn	20%
Fellow participants disobey	10%
Participant chooses voltage	2.5%

Exercise 3

1. What do both of the key findings tell us about obedience? [Think about the original research questions.]
2. Which of the findings do you find are surprising, and why?
3. In what way is it important that the results were so unanticipated?
4. Why do you think that it was important for the participants to be debriefed?
5. What features of this experiment made it more likely that participants would behave more obediently than they would normally? (Note: in a sense these features are demand characteristics.)
6. Milgram says that obedience is 'an indispensable feature of social life'. Do you agree? Why or why not?

Key Terms

Obedience: When you change your opinions, judgments, or actions because someone in a position of authority has told you to.

Conformity: (Not to be confused with obedience!) A change in a person's behaviour or opinions as a result of real or imagined pressure from a person or group of people.

Single Blind Experiment: Research procedure where the researchers do not tell the participants if they are being given a test treatment or a control treatment. In situations where both the participant and the researcher are unaware of group allocation this is called **Double Blind**.

Ecological Validity: The degree to which the behaviours observed and recorded in a study reflect behaviour that actually occurs in natural settings.



BLAGGER'S GUIDE

TEST YOURSELF

Milgram

For each of the AS/Year 1 Core Studies make sure you know a toolkit of important terms

Obedience

Agentic Shift

Are the Nazis different?

Situational hypothesis vs Dispositional hypothesis

Authority Figure

40 Males (20-50) (40=faulty! As in faulty wiring causes electric shocks...)

New Haven

Self-Selected / Advert \$4.50c

Yale University

Single blind

Teacher (Stern Biology teacher)

Clipboard & White/grey lab coat

Learner (47)

Experimenter (31, biology teacher)

Confederate / Stooge

Shock generator (15v – 450v) XXX

30 Switches

Fixed Lottery

Paired word list (Blue/Girl, Fat/Neck)

45v test shock

4 Prods (CRAM)

White coat /clipboard

Taped responses

All Ps went to 300v (100%)

9 dropped out after 315v

Max 450v = 65% (26/40)

Estimate by 14 psychology students before study was no higher than 3%.

“Faulty”

Distribution of break-off point (40 Ps)

No. of Participants	Voltage / Shock Level
26	450
1	375
1	360
1	345
2	330
4	315
5	300

Evaluating Milgram



Ethics

At the time of the Milgram experiment ethical guidelines had yet to be introduced...!

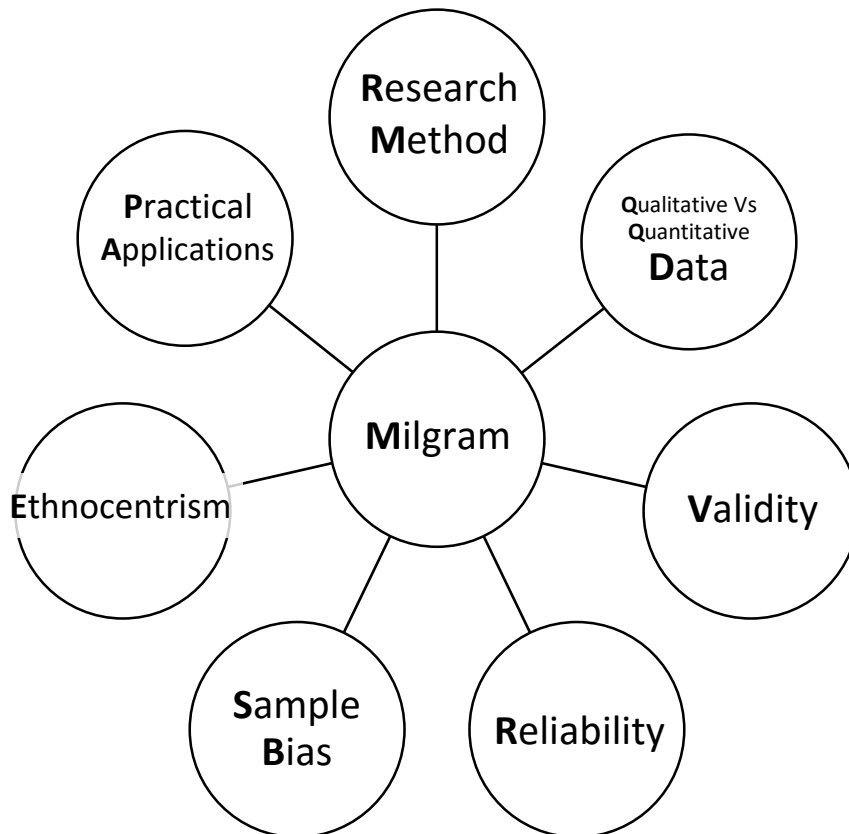
Use the section on BPS guidelines in your Themes and Perspectives reader to help you complete the following table:

Ethical Guidelines: Application to Milgram
1. Informed Consent:
2. Deception:
3. Debriefing:
4. Right to Withdraw:
5. Confidentiality:
6. Protection of Participants:
7. Protection of Colleagues:
8. Observational Research:

EVALUATION


Milgram (1963)

Please complete the spider graph below, write key +/- points around the outside. Use arrows to link your points to the correct themes if necessary.



Homework: What needs to be in my Summary?

Background

- The **Social Psychology assumptions** - always include this in the first study in a new approach
- Obedience Definition + **The Agentic shift** 
- ⊙ Aims + Hypothesis *Are the Germans Different Hypothesis*

Method Design, Materials, Sample, Procedure

- **40 American males** + details of backgrounds. The advert + **self selected sampling**. The confederates used... + their **personalities**.
- Special equipment used? E.g scientific looking apparatus - the shock generator, white lab coat, clip board.
- The setting (**Yale**). The events of the study...start to finish inc. "CRAM" + **diagram of setup**.

Results

- **Quantitative data**: e.g what level did all Ps go to? How many dropped out at certain points, how many went to 450?
- **Qualitative data**: Written observations e.g behaviour of participants during study - nervous laughter, digging fingers into palms of hands

CONCLUSIONS

- What did Milgram conclude?

Notes

Milgram's (1963) study of obedience

AIM

To investigate how far people will go in obeying an authority figure.

PROCEDURE

Subjects were led to believe that the experiment was investigating the effects of punishment on learning. The subjects were tested one at a time and were always given the role of teacher (through a fixed lottery). The subject saw his apparent co-subject (in reality an actor) strapped into a chair with electrodes attached to him, since he was to be the 'learner'. The subject ('teacher') was told the shocks would cause no permanent tissue damage and was given a trial shock of 45 volts.

The subject then started the experiment in the shock generator room next door by testing the learner over an intercom, and was told by the experimenter (the authority figure) to administer increasing levels of electric shock for each wrong answer (which the actor gave often). In the basic set-up of the experiment the subject received feedback reactions from the learner he was 'electrocuting' only by a thump on the wall at 300 volts followed by no further reply. The experiment finished when either the subject refused to continue (disobeyed the experimenter's request), or had reached the maximum shock on the scale (450 volts). The subject was then fully debriefed as to the real nature of the experiment, re-introduced to the learner in a friendly way and reassured that no damage had been done since the learner had not really received any shocks at all!

Subjects

They were 40 males between the ages of 20 and 50 from a range of occupations and were drawn from the New Haven area. They were obtained by newspaper ad's for participation in a study of learning at Yale University and were paid \$4.50 just for turning up.

The learner

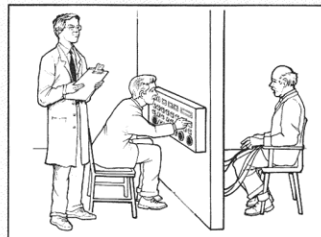
An actor was required to play the role of the learner – an Irish-American, 47-year-old accountant who appeared mild-mannered and likeable.

Apparatus

Two rooms in the Yale Interaction Laboratory were used – one for the learner containing an 'electric chair' and an answering device, the other for the teacher and experimenter with an electric shock generator. The generator did not actually give shocks to the learner, and was used to measure the dependent variable of obedience. It was a convincing machine with a row of 30 switches ranging from 15 to 450 volts in increments of 15 volts, and was marked with descriptive terms of the shock effects – ranging from 'slight shock' through to 'Danger: severe shock' and 'XXX'.

The experimenter

He was 31 years old, dressed in a grey laboratory coat, and appeared somewhat stern and impassive through the experiment. If at any point the subject showed reluctance to administer the shock, he would command them to continue with standardised prompts ranging from "please continue" to "You have no other choice, you *must* go on".



RESULTS

Levels of obedience expected

Psychology students and professional colleagues were asked what percentage of subjects would administer the highest degree of shock (450 volts) – the answers ranged from 1 to 3, with a mean of 1.2.

Levels of obedience obtained

65% of subjects continued to the maximum shock level of 450 volts. No subject stopped before 300 volts.

Subjects' realisation of shock effects

In the post-experimental interview the subjects were asked "How painful to the learner were the last few shocks that you administered to him?". The mean response was 13.42 out of 14 – 'extremely painful' on the scale.

Behavioural reactions to the study

"In a large number of cases the degree of tension reached extremes that are rarely seen in sociopsychological laboratory studies. Subjects were observed to sweat, tremble, stutter, bite their lips, groan and dig their fingers into their flesh. These were characteristic rather than exceptional responses to the experiment... One sign of tension was the regular occurrence of nervous laughing fits... Full-blown, uncontrollable seizures were observed for 3 subjects. On one occasion we observed a fit so violently convulsive that it was necessary to call a halt to the experiment. In the post experimental interviews subjects took pains to point out that they were not sadistic types, and that the laughter did not mean they enjoyed shocking the victim". Milgram (1963).

EVALUATION OF METHODOLOGY

Experimental validity

The procedure was well standardised and obedience was accurately operationalised as the amount of voltage given. Orne and Holland (1968) however, have argued that the subjects did not really think that the learner would come to harm. They suggested that the subjects were involved in a '*part of ignorance*' with the experimenter and obeyed in much the same way as a member of a magician's audience will comply and put their head under a guillotine which has just split a cabbage head in two! The genuine distress of the subjects, their ratings of the shock pain and their comments during debriefing count against this criticism, as does the study by Sheridan and King (1972).

Ecological validity

Some psychologists have suggested that the experiment is an artificial test of obedience and therefore **lacks 'mundane realism'** or ecological validity. Milgram argues that while there are important differences between experimental and real life obedience, there is a fundamental similarity in the psychological processes at work – especially the process of agency. The subjects were also American, male and volunteers – an unrepresentative sample that may have already been more obedient and helpful, but later studies have found similarly high rates of obedience using other samples and more everyday tasks and contexts (see replications and field studies of obedience). The methodology also caused numerous ethical problems (see ethics and obedience studies).

CONTEMPORARY

Bocchiaro *et al* (2012)



Background: Disobedience & Whistleblowing

theguardian

The Guardian - Saturday 22 November

“There were hundreds of us crying out for help:
The afterlife of the **Whistleblower**”

Whistleblowers speak out because they feel they have to, often at great personal cost. But years later, do they think it was worth it?

In his former life, Dr Raj Mattu was an internationally recognised cardiologist. On course for a professorship in London, he nonetheless jumped at the chance to return to his home town of Coventry in 1997, to set up a medical school at Warwick University and help turn the large district Walsgrave hospital into a teaching facility. It was a choice he would live to regret.

He found problems straight away. Patient safety was at risk through broken equipment and misallocation of resources; there were factions among staff and tensions with management. In the months before he arrived, senior clinicians had narrowly failed to pass a vote of no confidence in CEO David Loughton. Little was as it should be.

As the youngest consultant but one of the best-trained, Mattu worked long hours trying to improve things. All the same, one issue kept returning: the so-called “5 in 4” system of squeezing an extra bed into cardiac wards designed for four, a policy that left essential services such as oxygen, mains electricity and suction less accessible to some patients. Already convinced this was quietly costing lives, staff including Mattu pleaded for the practice to end, but management wouldn’t listen.

When the inevitable day came, it was on Mattu’s watch. A man of 35 went into cardiac arrest and staff could neither reach the tools they needed nor rearrange the beds in time. They watched in shock as their patient’s life drained away; afterwards the furious cardiologist and two senior nurses filed a serious clinical incident report. The 5-in-4 policy was not reviewed.

Now cardiac consultants passed a vote to replace their management-friendly clinical director with Mattu, but CEO Loughton rejected their choice. Instead, Mattu was offered a pay rise, which the medic interpreted as trying to buy his silence, and refused. When the Care Quality Commission (CQC) came calling in April 2001, he was one of five clinical staff to raise the alarm. Mystifyingly, the CQC passed the complainants’ names to Loughton. Yet when its report emerged that September, chief executive Peter Homa spoke of the “worst ever [patient safety report] produced for any Trust” and an “excess death rate” of 60% (against a subsequent high of 29% at the notorious Mid Staffs).

Dr Raj Mattu: ‘I’m not alone: there are hundreds of whistleblowers crying out for help. In fact, I’m almost unique in that I’ve come out the other



When Loughton denounced the CQC findings, and insisted to the BBC that no one had died or been harmed because of the 5-in-4 policy, something snapped inside Mattu. After taking advice from the General Medical Council (GMC), British Medical Association and Medical Protection Society, Mattu appeared on Radio 4's Today, revealing that, in the opinion of medical staff, at least two patients had died unnecessarily on overcrowded wards, and that management knew and had done nothing. So a whistleblower is made.

Whistleblowers have always been with us, but this century they have attained a kind of ubiquity, leading the news on a weekly basis. Last month, a whistleblower reported massive accounting irregularities at Tesco; this month it was alleged mortgage fraud on an unimaginable scale at JP Morgan Chase. As I write, allegedly dangerously lax hygiene at a dental practice in Nottingham has been revealed. And all this while Laura Poitras's documentary about Edward Snowden screens at cinemas around the country.

So why now? Partly, it's because economic self-interest has become king. If a senior executive earns £400k, or £1m, he or she has a lot to lose. A whistleblower is a threat to the business – and in UK law, a threat to a management whose first legal duty is to shareholders, rather than customers or workers. Globalisation and the internet have further loosened the old social and commercial ties.

Who are the whistleblowers, and what makes them do it when most of us don't? The Hollywood-created image is of the awkward outsider; brave, but destined for maverick isolation anyway. In short, not like us. But most of the people I meet in the course of writing this article are essentially conservative. They spoke out because they felt they had to. The real story lies in what happened next.

Last month I sat in Raj Mattu's kitchen, eating biscuits and drinking tea. He told me that the decision he made back in September 2001 still haunts him every day, that his lives then and now might as well belong to different people.

At medical school, he had trained with world-renowned experts, been drawn to cardiology, and risen through the ranks fast. Then came Coventry. After Mattu spoke to the BBC, management moved quickly, and a disgruntled temporary doctor levelled a charge of bullying against him. Mattu and two fellow consultants were suspended; all were prevented from talking to colleagues or the media, their disputes recast as employment matters rather than public interest disclosures.

Soon, the single complaint against Mattu had become 35, then 200, ranging from questions over his qualifications to charges of serious criminal conduct outside of work. These were sent to the GMC, CQC, the Strategic Health Authority and three different police forces; by 2009, all had been investigated and found to be false. Mattu was also subject to three separate tax inquiries, despite having undertaken no private work. In 2010, ill and suffering from depression, he was finally sacked by managers who questioned the validity of his ailments and found him "unmanageable".

Before we met, Mattu and I spoke several times on the phone, including one conversation so full of names, dates and surreal events that I almost doubted his sanity. Two hundred charges? How could there be that much smoke without a fire? He sighed. "You clearly come from the same world I like to live in. But what you describe is not what happens. I'm not alone: there are hundreds of whistleblowers crying out for help. In fact, I'm almost unique in that I've come out the other end."

Last April, 13 years after Mattu spoke up, an employment tribunal that ran for six months produced a remarkable 400-page document that detailed the systematic destruction of one man's career by managers, some of whom remain in the NHS and one of whom, David Loughton, is now a CBE. The report found that management had created a culture of fear, and Mattu had been victimised for raising concerns over patient safety; he will be awarded compensation. The case against him, meanwhile, is thought to have cost the NHS £6m-£10m so far.

Today Mattu betrays little bitterness, and says he was helped by a city-wide campaign. Local ska band the Selecter played a benefit and at a celebration party, attended by 1,200 people, where singer Pauline Black (a radiologist) duetted with him on the Beatles' Let It Be and Hey Jude. Music, he thinks, has kept him sane. Two years ago, his wife Sangeeta secretly entered him for the Voice; he was invited to the heats, but didn't find the time to go.



But there were dark times, too. The couple had wanted to start a family, but felt unable to while the case was ongoing. Now they are thinking about it. And you know what? Theirs is the happy story.

Hexaco Personality Questionnaire

For each statement indicate your typical responses. Answer quickly & give your first impressions for each statement.

**This is adapted by Mr Huckstep from the 60 item version by Kibeom Lee, & Michael C. Ashton. Full version: <http://hexaco.org>*

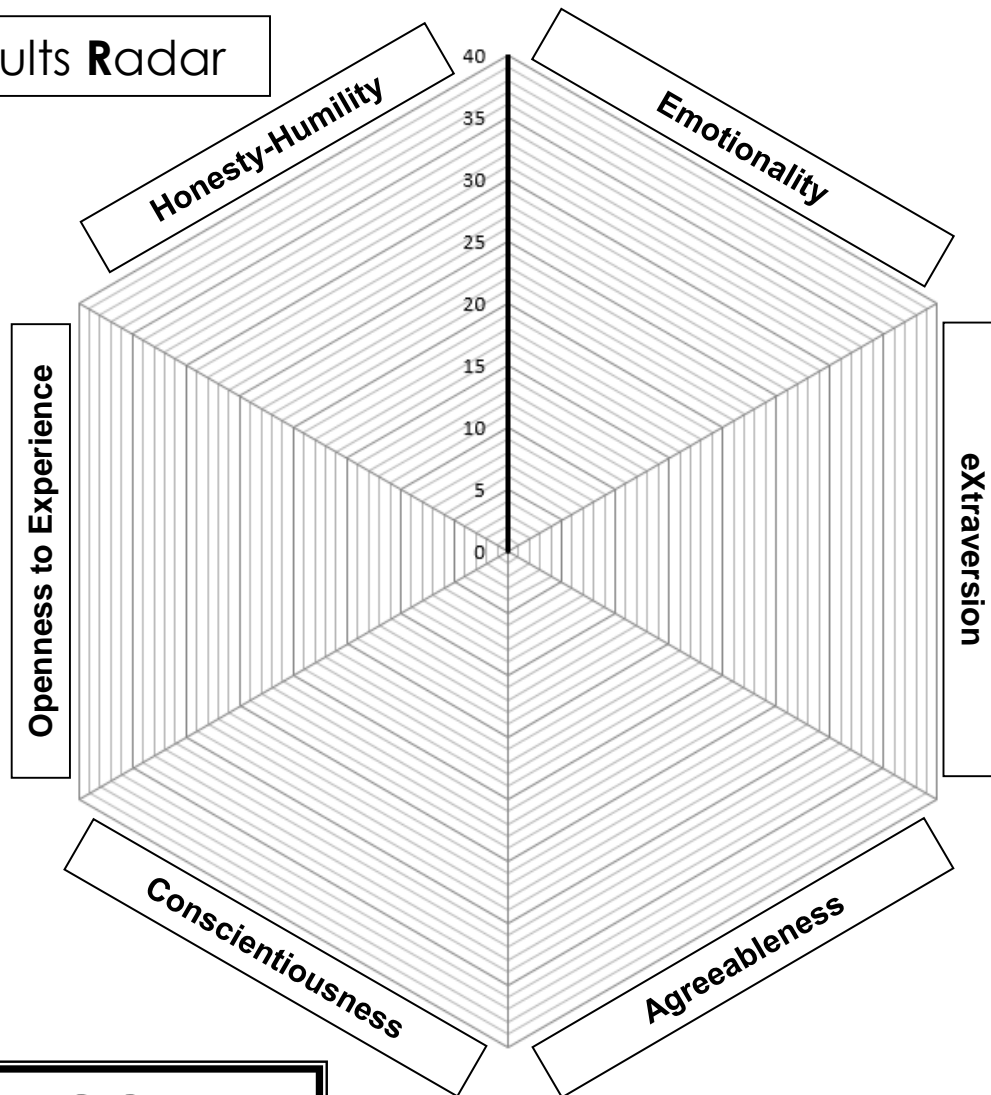
SD=Strongly Disagree, D=Disagree, N=Neither agree or disagree, A=Agree, SA=Strongly Agree

No	Statement	SD	D	N	A	SA
		1	2	3	4	5
1	I would be quite bored by a visit to an art gallery.					
2	I plan ahead and organise things, to avoid scrambling at the last minute.					
3	I rarely hold a grudge, even against people who have badly wronged me.					
4	I would feel afraid if I had to travel in bad weather conditions.					
5	I wouldn't use flattery to get a raise or promotion at work, even if I thought it would succeed.					
6	I'm interested in learning about the history and politics of other countries.					
7	I often push myself very hard when trying to achieve a goal.					
8	People sometimes tell me that I am too critical of others.					
9	I rarely express my opinions in group meetings.					
10	I sometimes can't help worrying about little things.					
11	If I knew that I could never get caught, I would be willing to steal a million dollars.					
12	I would enjoy creating a work of art, such as a novel, a song, or a painting.					
13	When working on something, I don't pay much attention to small details.					
14	People sometimes tell me that I'm too stubborn.					
15	I prefer jobs that involve active social interaction to those that involve working alone.					
16	Having a lot of money is not especially important to me.					
17	People think of me as someone who has a quick temper.					
18	On most days, I feel cheerful and optimistic.					
19	I feel like crying when I see other people crying.					
20	If I had the opportunity, I would like to attend a classical music concert.					
21	When working, I sometimes have difficulties due to being disorganised.					
22	My attitude toward people who have treated me badly is "forgive and forget".					
23	I feel that I am an unpopular person.					
24	When it comes to physical danger, I am very fearful.					
25	If I want something from someone, I will laugh at that person's worst jokes.					
26	I've never really enjoyed looking through an encyclopaedia.					
27	I do only the minimum amount of work needed to get by.					
28	I worry a lot less than most people do.					
29	I would never accept a bribe, even if it were very large.					
30	People have often told me that I have a good imagination.					
31	I always try to be accurate in my work, even at the expense of time.					
32	I am usually quite flexible in my opinions when people disagree with me.					
33	The first thing that I always do in a new place is to make friends.					
34	I can handle difficult situations without needing emotional support from anyone else.					
35	I would get a lot of pleasure from owning expensive luxury goods.					
36	I make a lot of mistakes because I don't think before I act.					
37	Most people tend to get angry more quickly than I do.					
38	Most people are more upbeat and dynamic than I generally am.					
39	I don't think of myself as the artistic or creative type.					
40	People often call me a perfectionist.					
41	I sometimes feel that I am a worthless person.					
42	Even in an emergency I wouldn't feel like panicking.					
43	I wouldn't pretend to like someone just to get that person to do favours for me.					
44	I find it boring to discuss philosophy.					
45	When people tell me that I'm wrong, my first reaction is to argue with them.					
46	When I'm in a group of people, I'm often the one who speaks on behalf of the group.					
47	I remain unemotional even in situations where most people get very sentimental.					
48	I'd be tempted to use counterfeit money, if I were sure I could get away with it.					

Scoring – Use the form on the next page and transfer your scores across for the six 'domain scales'. Pay close attention to whether the item is **reversed or not**... Then complete the results radar to get an impression of the spread of scores – remember, this is just to get an idea of the Psychometric scales used in Bocchiaro!

Reversed Item scoring: 1=5, 2=4, 3=3, 4=2, 5=1. (Max score for each domain = 40)			
Item	Honesty - Humility		Score
5	HH1	I wouldn't use flattery to get a raise or promotion at work, even if I thought it would succeed.	
11R	HH2	If I knew that I could never get caught, I would be willing to steal a million dollars.	
16	HH3	Having a lot of money is not especially important to me.	
25R	HH4	If I want something from someone, I will laugh at that person's worst jokes.	
29	HH5	I would never accept a bribe, even if it were very large.	
35R	HH6	I would get a lot of pleasure from owning expensive luxury goods.	
43	HH7	I wouldn't pretend to like someone just to get that person to do favors for me.	
48R	HH8	I'd be tempted to use counterfeit money, if I were sure I could get away with it.	
Total			
Emotionality			
4	E1	I would feel afraid if I had to travel in bad weather conditions.	
10	E2	I sometimes can't help worrying about little things.	
19	E3	I feel like crying when I see other people crying.	
24	E4	When it comes to physical danger, I am very fearful.	
28R	E5	I worry a lot less than most people do.	
34R	E6	I can handle difficult situations without needing emotional support from anyone else.	
42R	E7	Even in an emergency I wouldn't feel like panicking.	
47R	E8	I remain unemotional even in situations where most people get very sentimental.	
Total			
eXtraversion			
9R	X1	I rarely express my opinions in group meetings.	
15	X2	I prefer jobs that involve active social interaction to those that involve working alone.	
18	X3	On most days, I feel cheerful and optimistic.	
23R	X4	I feel that I am an unpopular person.	
33	X5	The first thing that I always do in a new place is to make friends.	
38R	X6	Most people are more upbeat and dynamic than I generally am.	
41R	X7	I sometimes feel that I am a worthless person.	
46	X8	When I'm in a group of people, I'm often the one who speaks on behalf of the group.	
Total			
Agreeableness			
3	A1	I rarely hold a grudge, even against people who have badly wronged me.	
8R	A2	People sometimes tell me that I am too critical of others.	
14R	A3	People sometimes tell me that I'm too stubborn.	
17R	A4	People think of me as someone who has a quick temper.	
22	A5	My attitude toward people who have treated me badly is "forgive and forget".	
32	A6	I am usually quite flexible in my opinions when people disagree with me.	
37	A7	Most people tend to get angry more quickly than I do.	
45R	A8	When people tell me that I'm wrong, my first reaction is to argue with them.	
Total			
Conscientiousness			
2	C1	I plan ahead and organize things, to avoid scrambling at the last minute.	
7	C2	I often push myself very hard when trying to achieve a goal.	
13R	C3	When working on something, I don't pay much attention to small details.	
21R	C4	When working, I sometimes have difficulties due to being disorganized.	
27R	C5	I do only the minimum amount of work needed to get by.	
31	C6	I always try to be accurate in my work, even at the expense of time.	
36R	C7	I make a lot of mistakes because I don't think before I act.	
40	C8	People often call me a perfectionist.	
Total			
Openness to Experience			
1R	OE1	I would be quite bored by a visit to an art gallery.	
6	OE2	I'm interested in learning about the history and politics of other countries.	
12	OE3	I would enjoy creating a work of art, such as a novel, a song, or a painting.	
20	OE4	If I had the opportunity, I would like to attend a classical music concert.	
26R	OE5	I've never really enjoyed looking through an encyclopedia.	
30	OE6	People have often told me that I have a good imagination.	
39R	OE7	I don't think of myself as the artistic or creative type.	
44R	OE8	I find it boring to discuss philosophy.	
Total			

Results Radar



HEXACO-PI-R

Honesty-Humility: Persons with very high scores on the Honesty-Humility scale avoid manipulating others for personal gain, feel little temptation to break rules, are uninterested in lavish wealth & luxuries, & feel no special entitlement to elevated social status. Conversely, persons with very low scores on this scale will flatter others to get what they want, are inclined to break rules for personal profit, are motivated by material gain, & feel a strong sense of self-importance.

Emotionality: Persons with very high scores on the Emotionality scale experience fear of physical dangers, experience anxiety in response to life's stresses, feel a need for emotional support from others, & feel empathy & sentimental attachments with others. Conversely, persons with very low scores on this scale are not deterred by the prospect of physical harm, feel little worry even in stressful situations, have little need to share their concerns with others, & feel emotionally detached from others.

eXtraversion: Persons with very high scores on the Extraversion scale feel positively about themselves, feel confident when leading or addressing groups of people, enjoy social gatherings & interactions, & experience positive feelings of enthusiasm & energy. Conversely, persons with very low scores on this scale consider themselves unpopular, feel awkward when they are the center of social attention, are indifferent to social activities, & feel less lively & optimistic than others do.

Agreeableness (versus Anger): Persons with very high scores on the Agreeableness scale forgive the wrongs that they suffered, are lenient in judging others, are willing to compromise & cooperate with others, & can easily control their temper. Conversely, persons with very low scores on this scale hold grudges against those who have harmed them, are rather critical of others' shortcomings, are stubborn in defending their point of view, & feel anger readily in response to mistreatment.

Conscientiousness: Persons with very high scores on the Conscientiousness scale organise their time & their physical surroundings, work in a disciplined way toward their goals, strive for accuracy & perfection in their tasks, & deliberate carefully when making decisions. Conversely, persons with very low scores on this scale tend to be unconcerned with orderly surroundings or schedules, avoid difficult tasks or challenging goals, are satisfied with work that contains some errors, & make decisions on impulse or with little reflection.

Openness to Experience: Persons with very high scores on the Openness to Experience scale become absorbed in the beauty of art & nature, are inquisitive about various domains of knowledge, use their imagination freely in everyday life, & take an interest in unusual ideas or people. Conversely, persons with very low scores on this scale are rather unimpressed by most works of art, feel little intellectual curiosity, avoid creative pursuits, & feel little attraction toward ideas that may seem radical or unconventional.

CONTEMPORARY

Bocchiaro, P., Zimbardo, P.G and Van Lange, P.A.M (2012)

To defy or not to defy: An experimental study of the dynamics of disobedience and whistleblowing. *Social Influence*, 7, (1), 35-50.



1. Theory/ies on which the study is based



Social power refers to the influence an individual has to change another's thoughts, feelings or behaviours. Individuals in authority, be it legitimate or illegitimate, have social power to influence those with lower social status within their social hierarchy.

People have strong inclinations to obey legitimate authority, irrespective of their beliefs, feelings or intentions.

- Independent behaviour/defiance involves the rejection of social influence/power to behave in accordance with one's own internal attitudes, morals and beliefs.
- Disobedience/defiance to unjust authority is a precondition for social progress.

What is a Whistleblower? A whistleblower is a person who exposes/informs on a person or organisation regarded as engaging in unlawful or immoral activity.

- In most situations, with defiant behaviours one would anticipate a relatively lower level of whistle-blowing than disobedience because it involves a potential direct confrontation of the defiant & the authority.
- One might expect obedient individuals to be considerably different from 'defiants', the latter being, for example, more honest and prosocial. However it is impossible not to consider that certain behavioural contexts, because of their unusual nature, are likely to reduce the power of individual factors in predicting behaviour (see Blass, 1991). Therefore one might expect personality variables to influence an individual's decision to obey, disobey and openly defy an authority demanding them to act in unethical ways.



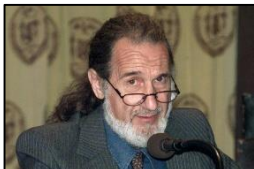
Famous Whistleblowers



Mark Felt – the Watergate scandal toppled the presidency of Richard Nixon. This FBI figure was the secret informant who helped Washington Post reporters Bob Woodward and Carl Bernstein. He became a symbol of shadowy Washington sources dishing out information in clandestine meetings, his identity was kept secret until 2005.



Linda Tripp - This former White House staff member was a key figure in the Monica Lewinsky scandal that led to an attempt to remove President Bill Clinton from office during his second term.



Frank Serpico - This New York City police officer, later portrayed by Al Pacino, attempted to confront the rampant corruption within the police department. He left the force after being shot in the face during a botched drug raid and later moved out of the country



Karen Silkwood - Like Frank Serpico, she was played in a movie named for her, in this case by Meryl Streep in 1983. She died mysteriously in 1974 in the midst of a campaign to challenge Kerr-McGee about the safety of a nuclear facility.



Jeffrey Wigand This former tobacco company executive made enemies by claiming on "60 Minutes" in 1996 that cigarette companies were fully aware that they were packing their products with addictive levels of nicotine. He was played by Russell Crowe in the 1999 film "The Insider."

2. Background



Milgram found that people have strong inclinations to obey legitimate authority, irrespective of their beliefs, feelings or intentions.

Previous research has allowed us to gain important knowledge of the mechanisms of obedience. However there is little understanding about the nature of disobedience to unjust authority. Little is known about the following:

(a) **Who** are the people that disobey or blow the whistle?

(b) **Why** do they choose the challenging moral path?

(c) Do they have **personal characteristics** that differentiate them from those who obey?

- This study took the first step towards stimulating research on these topics. It used the generic Milgram paradigm as a starting point – authority requesting immoral actions of participants – but aimed to go well beyond it in providing participants the option to take personal action against an unjust system (here an unethical experiment) by giving them the chance to obey, disobey or blow the whistle against authorities who encouraged immoral behaviours.
- The study also aimed to replicate Milgram's findings of a wide gap between **people's predictions of their own and others' degree of (dis)obedience when contrasted with the actual behavioural outcomes** in his experiment (Milgram, 1974).
- The researchers' interest in understanding the personal (individual) as well as the social (situational) nature of variations in (dis)obedience led them to collect a variety of personality and values information from their participants.

3. Research Method



Bocchiaro et al consider this study as a laboratory experiment. However, like Milgram, there was in fact no independent variable so the study may be best viewed as a laboratory *study*, or as Bocchiaro et al say a '**Scenario Study**'.

- The study took place in a laboratory at the VU University in Amsterdam, so conditions could be controlled eg. the procedure was standardised so the experimenter-authority behaviour and cover story were consistent throughout the experimental period. Two specially prepared rooms were used. Timings for when the experimenter left the room were kept the same for all participants.
- Data was gathered on the number of participants who obeyed by writing a statement in support of the sensory deprivation study; those who disobeyed by refusing to write the requested statement and those who became whistle blowers by reporting the experimenter's questionable conduct to the Research Committee, and through the scores on the 2 personality inventories (Dutch version of the 60-item HEXACO-PI-R this measured the six major dimensions of personality, and a nine-item Decomposed Games measure – this measured Social Value Orientation - SVO).



TASK

You can take the online version of the HEXACO-PI-R here: <http://hexaco.org/hexaco-online>

Honesty-Humility
Emotionality
eXtraversion
Agreeableness (versus Anger)
Conscientiousness
Openness to Experience

- 138 comparison students from The VU University were provided with a detailed description of the experimental setting. They were then asked "What would you do?" and "What would the average student at your university do?"

4. Sample



- 149 undergraduate students (96 women, 53 men, mean age = 20.8, SD = 2.65) took part in the research in exchange for either €7 or course credit.

- NB. A total of 11 participants were removed from the **initial sample of 160** because of their suspiciousness about the nature of the study. [Note: Remember the 138 Ps in the comparison group as well...]

5. Procedure Outline



8 pilot tests, involving 92 undergraduates from the VU University in Amsterdam, were conducted to ensure the procedure was credible & morally acceptable. These tests also served to standardise the experimenter-authority behaviour throughout the experimental period.

- The **comparison group** was provided with a detailed description of the experimental setting. They were then asked “What would you do?” and “What would the average student at your university do?”
- Participants were informed about what their task was, about the potential benefits/risks of participation, and about their right to withdraw at any time with no penalty. They were also assured of the confidentiality of the information collected.
- Each participant was greeted in the laboratory by a male, Dutch experimenter who was formally dressed and had a stern demeanour.
- The experimenter proceeded with a (seemingly unjustified) request for each participant to provide a few names of fellow students and then presented the cover story.

▪ The gist of the **Cover Story**:

- The experimenter & an Italian colleague were investigating the effects of sensory deprivation on brain function.
- A recently conducted experiment on 6 participants in Rome who spent some time completely isolated, unable to see or hear anything, had disastrous effects – all panicked, their cognitive abilities were temporarily impaired, some experienced visual and auditory hallucinations. 2 participants asked to stop because of their strong symptoms but were not allowed to do so because invalid data may then have been collected.
- The majority said it had been a **frightening experience**.
- The experimenters wanted to replicate this study at the VU University using a sample of college students as there was currently no data on young people but some scientists thought that their brains may be **more sensitive to the negative effects of isolation**.
- Although it was *difficult to predict what would happen*, the experimenter wanted to proceed with the experiment.
- A University Research Committee was evaluating whether to approve the study and were collecting feedback from students who knew details about the experiment, to help them make their decision.
- Participants were told that Research Committee forms were in the next room.



So, what did participants have to do? What data was collected?

- Participants had to write a statement to convince the students they had previously indicated to participate in the experiment. Statements would be sent to the identified students by mail.
- The experimenter left the room for 3 minutes to allow participants to reflect on the action-based decisions they were about to make.
- Participants were then moved to a second room where there was a computer for them to use to write their statement, a mailbox and the Research Committee forms.
- Participants were told to be enthusiastic when writing their statements and had to use two adjectives among “exciting”, “incredible”, “great” and “superb”. Negative effects of sensory deprivation were **not** to be mentioned.

- The experimenter told participants to begin and left the room for 7 minutes.
- If a participant believed the proposed research on sensory deprivation violated ethical norms he/she could anonymously challenge it by putting a form in the mailbox.
- After the 7-minute interval the experimenter returned and invited the participant to follow him back to the first room where he/she was administered two personality inventories, probed for suspicion, fully debriefed and asked to sign a second consent form, this time fully informed.

The entire session lasted approximately 40 minutes.

6. Key Findings



Of all the respondents in the comparison group:

Only 3.6% indicated they would obey the experimenter.

- Most believed they would be either disobedient (31.9%) or whistleblowers (64.5%).

- When asked to predict the behaviour of other typical students at their university, only 18.8% thought an average student at VU University would obey, while they believed most other students would either disobey (43.9%) or whistleblow (37.3%).

▪ Of the 149 participants in the experimental situation:

- 76.5% obeyed the experimenter (n = 114),
- 14.1% disobeyed (n = 21)
- 9.4% (n = 14) blew the whistle.

Among whistleblowers:

6.0% (n = 9) had written a message (Anonymous whistleblowers)

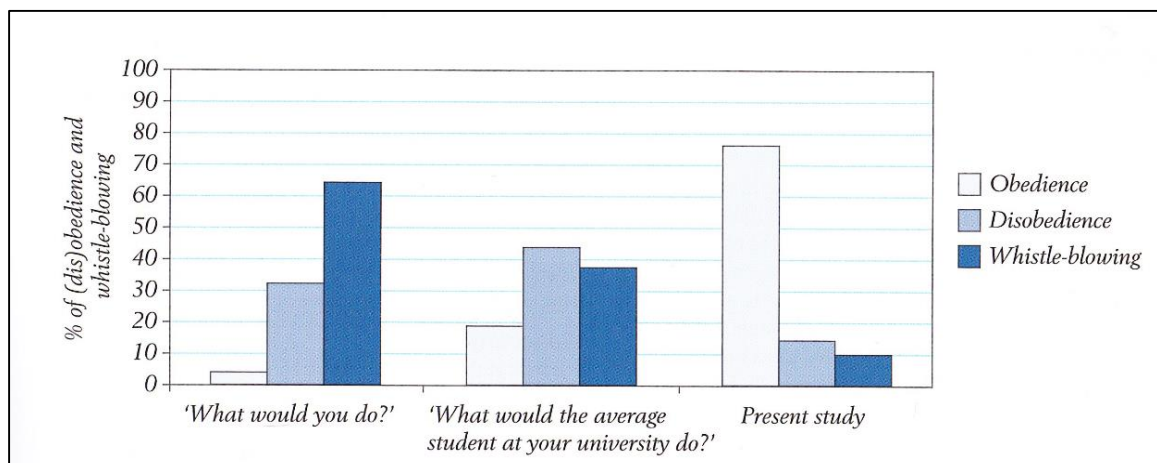
3.4% (n = 5) had refused to do so (Open whistleblowers).

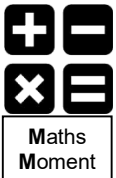
- **No significant differences** were found in any of the groups in relation to gender, religious affiliation (Christian/Islamic), or religious involvement (defined in terms of church attendance).

- However **a significant difference** was observed with regard to **faith** (defined as a confident belief in a transcendent reality), $X^2(2,149) = 6.74, p = .03$

Faith

- Results for individual differences in personality among the three groups showed **no statistically significant differences** in any of the six personality factors measured by the HEXACO-PI-R.
- Results in terms of SVO showed that “prosocial” and “individualistic” participants were not unequally distributed among the three groups, $X^2(2,118) = 2.25, p = .32$





1. In the comparison group, convert the given percentages to actual raw number of participants (*These % look like they have been rounded, work out the likely whole numbers...*)
2. Of the 149 participants in the experimental situation, what was the ratio of people who obeyed the experimenter versus those who did not (*Obey vs Disobey + Whistleblowers*)

7. Conclusions *“Courage is hard to muster”*



People tend to obey authority figures, even if the authority is unjust.

How people think/what people say they and others will do in a given situation **often differs from what actually happens.** The internal cognitive processes of ordinary people wanting to appear “good” often differ from the outward pervasive power of situational forces that bind behaviour to a range of seemingly innocuous features in any given behavioural context

- Individuals behave in **completely different ways than expected** when they find themselves in certain circumstances that are unfamiliar and somewhat extreme.
- Behavioural acts of both disobedience and whistleblowing are psychologically, socially and economically demanding for people, notably whistleblowers.
- Behaving in a moral manner is challenging for people, even when the reaction appears to observers as the simplest path to follow.
- With regard to faith, there appears to be a trend suggesting that whistleblowers have more faith than either obedient or disobedient individuals.



Notes



Whistleblower (Exposes/informs on unlawful or immoral activity)

'Defiant'

Laboratory

"Scenario study"

VU University Amsterdam

2 Rooms

HEXAC-PI-R

6 major dimensions

9 item decomposed games measure

Social Value orientation

Comparison study:

138 students

"What would you do?" / "What would the average student at your university do?"

Experimental group: 149 (96F 53M)

Paid 7 euros

11 removed from original 160 due to suspiciousness

8 pilot tests 92 undergraduates

Male Dutch experimenter, formally dressed, stern demeanour

Cover Story:

- Italian colleague - sensory deprivation on brain function.
- Recent study (Rome): 6 Ps, isolation, Can't see or hear, disastrous effects – all panicked, cognitive abilities impaired, visual & auditory hallucinations. 2 Ps asked to stop, not allowed to (invalid data)
- Majority reported **frightening experience**.
- Replicate study at VU Uni, college students (Young Ps – brains more sensitive to isolation)
- Difficult to predict what would happen
- Research Committee evaluating approval – required feedback from Ps (Committee in next room)
- Ps to write a statement convincing students to participate.
- Experimenter left room for 3 mins; Ps to reflect on action based decisions
- Ps moved to 2nd room; computer used to write statements, mailbox & Research Committee forms.
- Told to use 2 adjectives e.g "exciting", "incredible", "great" & "superb".
- Don't mention negative effects of sensory deprivation
- Experimenter left room for 7 mins.
- If P believed sensory deprivation violated ethical norms, could anonymously challenge it (form in mailbox)
- After 7 mins experimenter returned, Ps did 2 personality inventories, probed for suspicion, fully debriefed, signed consent form.
- Entire session approx 40 mins

Results: Comparison group (Pretest) *self-report data*

- 3.6% stated they would obey experimenter
- Most believed they would be either disobedient (31.9%) or whistleblowers (64.5%).
- Predicting behaviour of other students: 18.8% thought average student would obey; most other students would either disobey (43.9%) or whistleblow (37.3%).

Experimental group

- 149 Ps: 76.5% obeyed (n=114); 14.1% disobeyed (n=21); 9.4% (n=9) blew the whistle.

Of Whistleblowers:

- 6.0% (n = 9) had written message (Anonymous whistleblowers)
- 3.4% (n = 5) refused to do so (Open whistleblowers).
- **No sig. differences:** Gender, religious affiliation (Christian/Islamic), religious involvement (church attendance).
- **Sig. difference** with regard to faith (confident belief in transcendent reality) [$\chi^2(2,149) = 6.74, p = .03$]

Conclusions: People obey authority figures, even if authority is unjust.

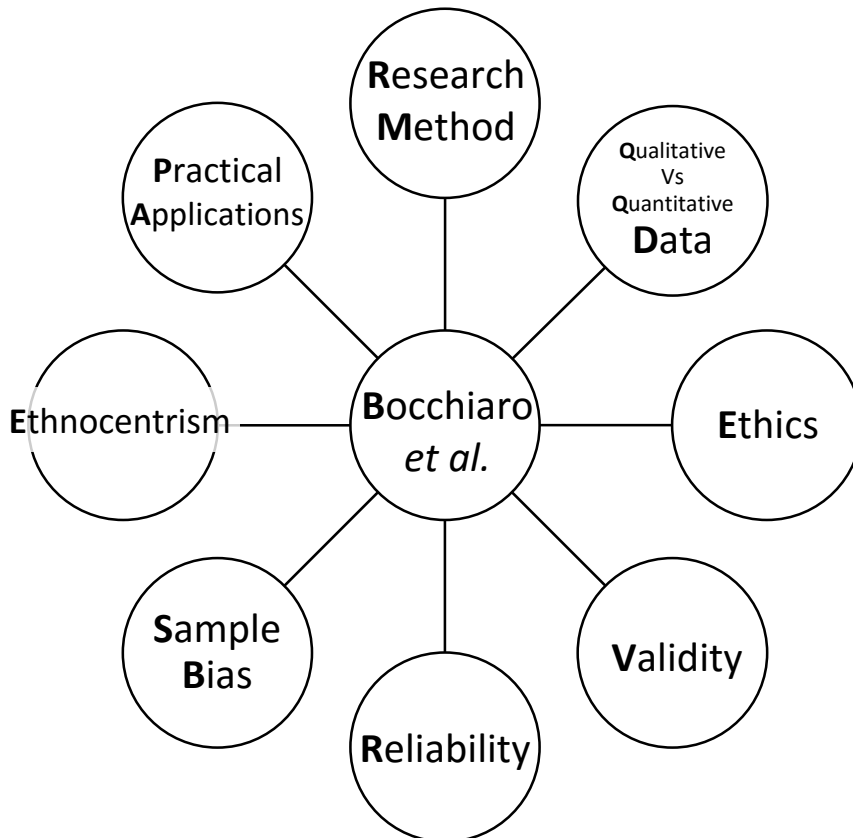
- Contrast between what people think others will do vs actual behaviour
- Internal cognitive processes differ from outward power of situational forces that bind behaviour to range of innocuous features in any given behavioural context
- Ps behave in unexpected ways in certain circumstances that are unfamiliar & somewhat extreme.
- Behavioural acts of disobedience & whistleblowing are psychologically, socially & economically demanding
- Behaving in moral manner is challenging, even if it appears to be as simplest path to follow
- Whistleblowers have more faith than either obedient or disobedient individuals

Test yourself: See how many points you can recall on a piece of paper – then check to see any that you might have missed...

EVALUATION

Bocchiaro *et al.* (2012)

Please complete the spider graph below, write key +/- points around the outside. Use arrows to link your points to the correct themes if necessary.



EVALUATION Bocchiaro *et al.*

The Research Method

The study was a laboratory procedure. Like Milgram, the authors refer to it as an 'experimental' study, although it had only one condition. Laboratory studies such as these have particular + & - . Because the procedure takes place in a highly controlled environment it is possible to eliminate many extraneous variables and be reasonably confident that it is the independent variable we are interested in that is affecting the dependent variable. Laboratory procedures are straightforward to replicate, making them reliable. The potential weakness of laboratory studies lies in the realism of the environment and the participants' tasks. In this case the procedure was very lifelike because the situation being investigated was that of a psychologist carrying out a study, and this is exactly what happened - there was nothing artificial about the procedure.

Qualitative & Quantitative Data

The data gathered in this study was quantitative, in the form of percentages of participants displaying obedience, disobedience and whistle-blowing behaviour. This was a strength because the researchers were interested in making comparisons between rates of disobedience and whistle-blowing (by definition quantitative), and comparing these to estimates. This requires the use of quantitative data.

Ethical Considerations

As a behavioural study of obedience, this study might have raised some of the same ethical issues as Milgram's study, however the researchers were clever in designing the study so as to minimise these problems. The situation was relatively low in stress because participants were not ordered to inflict direct harm, as Milgram's participants were. Also, they were left alone when deciding whether or not to obey, and were not 'prodded'. This is quite different from having to refuse to obey an experimenter face-to-face while being told that 'the experiment requires that you continue'. In addition, extensive piloting was carried out to establish that participants considered the procedure to be acceptable, and participants had the opportunity to withdraw their data if they were not satisfied with the ethical conduct of the study. The design of the study necessarily involved deceit. This is an ethical issue, however deceit can be acceptable in research, provided that participants are informed of the true nature of the study as soon as possible and that they are happy about the study once they are aware of it. These conditions were met.

Validity

All laboratory studies set out to represent a real-life situation, with varying degrees of success. This was unusual for a laboratory procedure because the real-life situation it set out to represent was that of taking part in a laboratory study! Therefore, in spite of the artificial surroundings and unusual task, **ecological validity** was actually very good.

Reliability

Remember that reliability means **consistency**. A procedure has external reliability if we can precisely replicate it and consistently get the same results when we do so. Laboratory procedures such as that used in this study are generally easy to replicate. Such a study also has internal reliability if we can be reasonably sure that all participants have a similar experience. In this study conditions were well standardised, so it does seem that this study has good **internal reliability**.

Sampling Bias

The sample in the main study was made up of 149 undergraduate students from a Dutch university. The sample size was large for a lab study - this is a strength as it reduces the probability that results are affected by extraneous participant variables. However, the sample characteristics & sampling method are less good. Volunteer sampling is good in terms of ethics but is unlikely to lead to a representative sample as most people do not volunteer. The population from which the sample is drawn - undergraduates at a Dutch university - may be unrepresentative of the general population, and may not generalise to other age groups & cultures.

Ethnocentrism

Although the researchers looked at a sample from a single population (students from a Dutch university), they did assess religious affiliation as one of the variables that might affect obedience. Religion is strongly associated with culture, and in this study no religious differences were found, e.g between the behaviour of Christian and Muslim participants. There was therefore some account taken of culture. This was limited, however, so the study can still be said to be to some extent ethnocentric.

Practical Applications

Whistle-blowing is under-researched and of great interest to people in many fields. There has, for example, been considerable publicity recently about whistle-blowing over poor-quality care provided in the health service.



Comparison of Studies



Milgram's study of destructive obedience Vs Bocchiario's et al.'s experiment into Disobedience towards unjust authority

The Topic: Obedience

The studies by Milgram and Bocchiario et al. are both about social psychology, specifically about obedience to orders or instructions to commit acts that go against the moral codes of the individuals receiving those orders or instructions. However, Milgram's study involved direct orders to commit an act of physical violence - administering painful and possibly dangerous electric shocks. This was based on an attempt to understand the role of destructive obedience during the Holocaust. On the other hand, Bocchiario et al. were concerned with more everyday situations in which people comply with unethical instructions. Accordingly their study involved a more typical workplace situation: giving instructions to mislead people into taking part in a distressing procedure. Another difference was that Bocchiario et al. were interested in whistle-blowing as a third option, in addition to the options of obedience and disobedience.

The Research Method and Design: Laboratory procedures with a single condition

Both studies were described by the authors as experimental, although they had only a single condition. Both studies were carried out in a laboratory and both involved a situation where participants were aware that they were taking part in research but were not aware of the nature of the study. In both studies the procedure involved the experimenter giving the participant an instruction. However, a key difference was that Milgram's orders were to directly inflict pain on another person and put them in danger. In contrast, in the Bocchiario et al. study, participants were ordered merely to write a message.

Sampling and Sampling: Mixed-sex students vs male adults

Both of these studies employed a volunteer-sampling method involving responses to an advert. However, Milgram's advert was placed in a newspaper, whereas that used by Bocchiario et al. was placed in a student cafeteria. Milgram used an all-male sample, whereas Bocchiario et al. used a mixed-sex sample. The target population was different, however. Milgram used adults aged 20 to 50 and from a variety of occupations. Bocchiario et al. studied just undergraduate students with a much younger mean age and a smaller age range.

Experimental material & measurement of the dependent variable: Quantitative data on rates of obedience

The two studies used rates of obedience as the main dependent variable. For Milgram this was the number of people giving the full 450V shock. For Bocchiario et al. it was the number of people writing the message to persuade other students to take part in sensory deprivation. Bocchiario et al. also measured the frequency of whistle-blowing.

Both studies involved collecting quantitative data in the form of obedience rates. In addition to the headline obedience rates, Milgram also collected qualitative data in the form of transcripts of what participants said and observations of their behaviour. Bocchiario et al. also collected additional information but this was quantitative, including personality traits and values orientations. There was thus a much greater emphasis on quantitative data in the Bocchiario et al. study.

Applications: Real-world atrocities vs whistle-blowing in the workplace

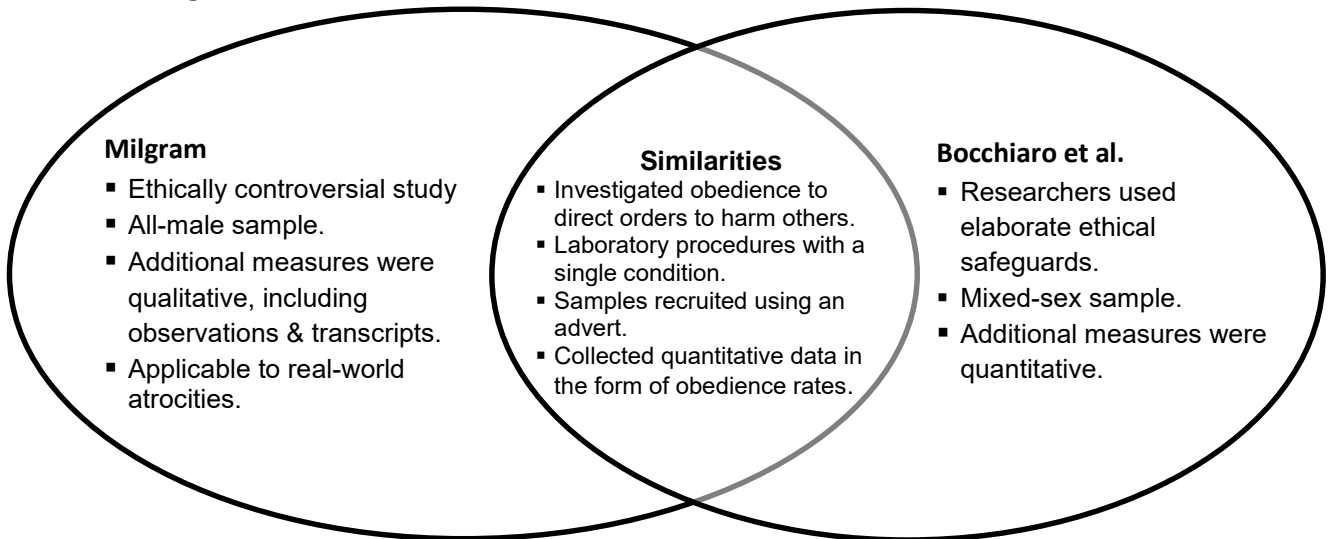
Both these studies have applications in understanding, predicting and tackling the tendency to obey orders that directly or indirectly lead to harm and suffering in others. Milgram's study is directly applicable to predicting atrocities, and is used for exactly this purpose by the International Criminal Court. Bocchiario et al.'s study is more relevant to understanding more everyday injustice, such as that in the workplace. In particular the low rates of whistle-blowing in this study help us to understand why it often takes so long for really bad practice at work to be identified and challenged.

Key Theme: Responses to People in Authority

Both studies found that participants were willing to act unethically when ordered to by people in authority.

Milgram used a laboratory procedure to test destructive obedience, showing that people are surprisingly likely to obey orders to carry out immoral acts. Bocchiario et al. used a similar laboratory procedure to show that people were also surprisingly likely to obey instructions to encourage people to take part in an unethical experiment. They also found that people rarely took the opportunity to blow the whistle on the experimenter.

Venn Diagram Comparison



Practise Questions

Here are some of the sorts of questions that you could be asked in Sections A and B of your AS exam, and some examples of successful and less successful answers.

Section A: Core Studies

- From the study by Milgram on obedience:
 - Describe the sample. [2]
 - Suggest one problem with generalising from this sample. [2]
- Milgram claimed that his study of obedience produced two 'surprising findings'. Outline both of these findings.
- Milgram's study has been strongly criticised. Outline one reason why Milgram should have conducted his study. [2]
- Outline **one** difference between Milgram's study of obedience and Bocchiaro et al.'s study of disobedience and whistle-blowing. [3]
- Outline one similarity between Milgram's study of obedience and Bocchiaro et al.'s study of disobedience and whistle-blowing. [3]
- From the study by Bocchiaro et al. into disobedience and whistle-blowing, explain what is meant by 'whistle-blowing' [2]
- What is a pilot study? [2]
 - Give two reasons why Bocchiaro et al. conducted a pilot study. [2]
- Explain what Bocchiaro et al. found about the relationship between dispositional factors and whistle-blowing. [2]

Section B: Areas, Perspectives and Debates

- Outline how social psychology explains behaviour. [2]
 - Suggest one strength of claiming that behaviour is only due to nurture. Support your answer with evidence from one appropriate core study. [3]
 - Suggest one weakness of claiming that behaviour is only due to nurture. Support your answer with evidence from one appropriate core study. [3]
 - Explain how any one core study can be considered to be located within the area of social psychology. [5]
- Discuss the extent to which social psychology can be viewed as useful. Support your answer with evidence from core studies. [12]

Example Answers: Section A

4. Outline one difference between Milgram's study of obedience and Bocchiaro et al.'s study of disobedience and whistle-blowing [3]

Finn's answer: The participants in Milgram's study had to give people electric shocks but the people in Bocchiaro's study had to write a letter.

Commentary: Finn has given a key difference between the two studies: the behaviour chosen to measure obedience was very different in each study. However, he could have given more detail, e.g. he could have clarified that the difference he is outlining is the behaviour that was being observed in each study, or he could have expanded his descriptions of 'give people electric shocks' and 'write a letter' to demonstrate greater knowledge and understanding of the studies and how they differ. There are lots of differences between the two studies: the sample sizes were different, they were conducted in different countries, and it could be argued that they differ in terms of the ethical issues that they raise. Bocchiaro measured personality differences in his studies, whereas Milgram did not.

Rey's answer: One difference between the two studies is the way in which they gathered information estimating the behaviour of the participants. Before he conducted his study, Milgram asked psychology students to estimate how many people out of 100 would obey his orders to give electric shocks to another person.

In contrast to this, Bocchiaro asked a sample of participants (who were not taking part in the actual experiment) to read a detailed description of the study and to respond to two questions. The first was asking them what they would do and the second asked them to say what the average student at their university would do.

Commentary: This is a very good answer which gives a clear account of an interesting difference between the two studies. Charlotte starts by describing the difference (the way they collected information estimating the behaviour of the participant) and then goes on to give information about how this was done in both studies.

5. Outline one similarity between Milgram's study of obedience and Bocchiaro et al.'s study of disobedience and whistle-blowing. [3]

Finn's answer: They both showed that people obeyed.

Commentary: We say: This is a correct statement but Finn has not taken into account the command word 'outline', nor the fact that there are three marks available here. This answer needs some expansion. This could stay as the first sentence but would need to be followed by further sentences describing the obedience in each study.

Rey's Answer: Both studies demonstrate the power of authority. In Milgram's study around two-thirds of the participants continued to obey the instructions to give electric shocks to the learner right up until the 450 volt level. In Bocchiaro's study obedience was even higher, with three quarters of participants competing the statement that they were asked to write.

Commentary: This is a much stronger answer and Rey has obviously taken note of the command word 'outline' and has not simply identified a similarity between the two studies but has provided some further information to back up the first sentence.

8. Explain what Bocchiaro et al. found about the relationship between dispositional factors and whistle-blowing.[2]

Finn's answer: *There was no relationship.*

Commentary: This is broadly correct and would gain credit although even a two-mark question requires some elaboration. Finn really needs to expand this answer a little more and demonstrate that he does understand what was found.

Rey's answer: *There was no relationship between personality and whistle-blowing, which was a little bit surprising. There was a small relationship between depth of faith – the stronger your faith the more likely you were to whistle-blow.*

Commentary: A very good answer from Rey. She is correct in stating that none of the personality variables showed any relationship with whistle-blowing and that depth of faith showed only a moderate relationship. The fact that Rey has gone on to explain the direction of this relationship is a further strength.

Section B: Areas, Perspectives and Debates

9 (b) Suggest one strength of claiming that behaviour is only due to nurture. Support your answer with evidence from one appropriate core study.

Finn's answer: *One strength is looking at the factors in the person's environment.*

Commentary:

We say: This is a very short answer which doesn't really make a clear point. Why is looking at the factors in the person's environment a strength? There is definitely the start of a valid point here but Finn needs to make sure that he explains himself clearly to the examiner.

Rey's answer: *One strength is that it allows us to recognise that people are not always to blame for their negative behaviours. Milgram's study shows us that people gave electric shocks not because they were cruel sadistic people but because the social situation made it very difficult for them to behave otherwise.*

Commentary: This is much better. Rey has identified a clear and very interesting strength and has given evidence from one study to back up this point.

9 (c) Suggest one weakness of claiming that behaviour is only due to nurture. Support your answer with evidence from one appropriate core study.

Finn's answer: *One weakness is ignoring biological explanations.*

Commentary: Although this is as short as Finn's previous answer, this is making a valid point. What is missing is the support from an appropriate core study, which has been explicitly asked for in the question.

Rey's answer: *One weakness is that it means that we might ignore individual personality or biological factors when trying to explain a behaviour. For example there might have been significant differences in biological measures such as anxiety between those who did help and those who didn't in the Piliavin study [A Level study], but a focus solely on nurture would mean that the researcher would not be looking for this.*

Commentary: This is another clear answer from Rey. There is a clear point being made that is the same point that Finn made in his answer. Rey has also responded to the second part of the question, which asks for support from an appropriate core study.

Notes

Social Psychology:Self Assessment

Please rate your **confidence percentage** for each section.

80 - 100 % Grade A	70 % Grade B	60 % Grade C	50% Grade D	< 40 % Grade U
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100 % ← ----- → **0 %**

Rationale	Row 1: 'Initial' Confidence % after completing study. Ratings less than 60% (Grade C) need attention.
	Row 2: 'Review' - When revising for section tests target those areas still less than 60%
	Row 3: 'Final' Revision % (Mod 5) Areas below 60% need immediate action. Please raise these with your teacher - we don't want you entering final revision not expecting to achieve at least a Grade C!

Milgram (1963)

Section	Review Point	% Rating	Areas to Target <i>(Please give details!)</i> And... Progress made on Previous Targets
Background <i>Including main theories</i>	1.Initial		
	2.Review		
	3.Final		
Method (Inc Aims/Hyps)	1.Initial		
	2.Review		
	3.Final		
Results	1.Initial		
	2.Review		
	3. Final		
Evaluation	1.Initial		
	2.Review		
	3.Final		

Bocchiaro et al. (2012)

Section	Review Stage	% Rating	Areas to Target <i>(Please give details!)</i> And... Progress made on Previous Targets
Background <i>Including main theories</i>	1.Initial		
	2.Review		
	3.Final		
Method (Inc Aims/Hyps)	1.Initial		
	2.Review		
	3.Final		
Results	1.Initial		
	2.Review		
	3.Final		
Evaluation	1.Initial		
	2.Review		
	3.Final		

Learner – Teacher Dialog

*(Designed to be used most during final revision but can be used at **any** point to iron out areas of difficulty)*

Date	<u>Learner Comment</u>	<u>Teacher Response</u>

Notes
