

Year 11 Psychology Revision

Section A: Research Methods

Experimental Research methods:

Variables
Hypotheses
Experiment types
Experimental design
Sampling
Reliability
Validity
Ethics

Non- Experimental Research methods:

Interviews
Questionnaires
Correlations
Case studies
Observations

Data analysis:

Finding arithmetic means, median, mode, ratios, fractions, percentages, range as a measure of dispersion, know the characteristics of normal distributions.
Displaying data - tables, bar charts, histograms, scatter grams.
Primary and secondary data
Quantitative and qualitative data

Section B: Criminal Psychology

Biological explanations
Learning Theory explanations
Types of Punishment & evaluations
Types of Treatments & evaluations
Research studies: Bandura & Charlton

Section B: Sleep and Dreaming

Functions & features of sleep
Internal & external influences
Sleep disorders
Freud's Theory of Dreaming & evaluations
Activation Synthesis Theory & evaluation
Research studies: Siffre & Freud



What to revise?

Use these knowledge organisers to revise key words and studies. Use the revision material provided which goes into further detail for Paper 2 revision.

EXPERIMENTAL RESEARCH METHODS					
Designing Psychological Research			Hypotheses		
1.	Independent variable (IV)	The variable directly manipulated by the researcher.	17.	Null hypothesis	A prediction that the results will fail to show any difference that is consistent or systematic.
2.	Dependant variable (DV)	The variable being measured in a study.	18.	Alternative hypothesis	A prediction of the outcome of a study based on what is expected to happen.
3.	Operationalisation	Making the variables in an investigation detailed and specific.	19.	Directional hypothesis	A hypothesis that predicts the direction the results will go in.
4.	Extraneous variable	A variable that is not controlled, which could affect the results of a study.	20.	Non-directional hypothesis	a hypothesis that predicts that a difference/relationship will be found, but does not specify what the difference/relationship will be
5.	Confounding variable	An extraneous variable that affects the results of the study so that the effect of the IV is not truly being seen.	21.	Experimental hypothesis	the name given to a hypothesis when used in field and laboratory experiments.
6.	Situational variable	An extraneous variable present in the environment.	Methods of sampling		
7.	Order effects	When participants improve or worsen in the second condition because they have practised or become fatigued.	22.	Biased sample	when the sample recruited is made up of a particular type of person, which may not reflect the target population.
8.	Demand characteristics	When the participant alters their behaviour in response to the perceived aims of the investigation.	23.	Sample	a selection of the target population that is directly studied in an investigation.
9.	Investigator effects	When a researcher unintentionally gives clues to participants, altering their behaviour.	24.	Generalisability	the extent to which the results of a study represent the whole population, not just the sample used.
10.	Participant variables	Extraneous variables specific to the participants of an investigation, for example their mood, ability or personality.	25.	Sampling method	a technique used to gather a representative group of people as a sample from the target population.
11.	Standardised procedure	Where the procedure of a study is the same across all conditions.	26.	Random sampling technique	a technique used to gather a random sample of participants from the target population.
12.	Counterbalancing	Where half of the participant group experience condition A then condition B, while the other half experience condition B then condition A.	27.	Stratified sampling technique	technique that ensures subgroups of the target population are proportionately represented in a sample.
13.	Randomisation	When participants are randomly assigned to condition A or B as their first or second test condition.	28.	Sample error	when a sample differs in qualities from the target population it intends to represent.
14.	Single-blind technique	When information about the study is withheld from participants.	29.	Volunteer sampling technique	a technique that asks for participants by placing an advert for volunteers.
15.	Double-blind technique	When the aims of the study are withheld from both participants and researchers.	30.	Opportunity sampling technique	A technique that recruits participants who are readily available at the time.
16.	Random allocation	When participants are randomly assigned to a condition of the study.	31.	Target population	The group of people being investigated in a study.

Research and experimental design			47	Informed consent	Agreement of participants to take part once they are fully aware of the aims, nature and intended outcomes of a study.
32	Research design	How participants are allocated to the conditions of a study.	48	Debrief	After an investigation, participants are given full disclosure of the study.
33	Experimental design	The name given to research design when used in an experiment.	49	Confidentiality	Not disclosing the identity of participants.
34	Independent measures design	Participants are split into groups, with each group tested in only one condition of a study.	50	Protection of participants	Safeguarding participants against physical and psychological harm.
35	Repeated measures design	The same participants are used in all conditions of a study.	Understanding research methods		
36	Matched pairs design	Different participants are used in each condition of the study but are matched for likeness on important characteristics.	51	Laboratory experiment	A procedure staged in an artificial environment.
Issues of reliability and validity			52	Field experiment	A procedure staged in a naturalistic environment.
37	Reliability	The consistency of an outcome or result of an investigation (a measure).	53	Natural experiment	A study that examines a naturally occurring variable in a real-life situation.
38	Validity	Whether the test measures what was intended.			
39	Internal validity	Whether the measures used in a test genuinely test what they were designed to test.			
40	External validity	Whether the findings are generalisable to the target population			
41	Qualitative methods	Ways of conducting research that find out new information rather than testing a prediction; often resulting in gathering qualitative data.			
42	Quantitative methods	Ways of conducting research that test a prediction and gather quantitative data.			
43	Researcher bias	When a researcher interprets the outcome of a study according to their own view (subjective).			
Ethical issues in psychological research					
44	Ethical issues	Researchers follow codes or rules of conduct when carrying out research to protect participants from harm.			
45	Right to withdraw	Ensuring that participants are clearly aware of their right to leave the study at any point.			
46	Deception	Misleading or lying to participants.			

NON-EXPERIMENTAL RESEARCH METHODS

NON-EXPERIMENTAL RESEARCH METHODS					
Designing Psychological Research					
1.	Interview	A research method designed to gather self-reported information from participants	18.	Covert investigation	Participants are unaware that they are being observed
2.	Structured interview	A set of pre-set questions asked to a respondent	19.	Participant observation	When an observer is involved in the group they are observing
3.	Interview schedule	A list of set questions around the study aim	20.	Non-participant observation	The observer watches and records people without being actively involved
4.	Semi-structure interview	A mix of pre-set questions and unprepared questions asked to a respondent	21.	Inter-rater reliability	When more than one observer codes behaviour and their results are compared to check for agreement
5.	Unstructured interview	A free-flowing conversation around a particular topic with a respondent	22.	Observer bias	When an observer interprets the observed behaviour according to their own views
6.	Social desirability bias	During an interview a respondent may answer a question in a way that is deemed socially acceptable	Data analysis		
7.	Interviewer effects	The characteristics of an interviewer impact the way a respondent answers a question	23.	Data Analysis	Transforming and summarising data to find and show useful information
8.	Questionnaires	A self-report technique designed to ask lots of people questions about a topic	24.	Standard Form	A way of writing large numbers in an abbreviated form such as 10 to the power of 4 instead of 10,000
9.	Closed-ended questions	Have a fixed response to choose from	25.	Decimal form	To the number 10 or 10ths
10.	Open-ended questions	Questions with no fixed response	26.	Decimal places	The number of digits after the decimal point
11.	Correlation	A way of analysing relationships between variables	27.	Rounding	A way of simplifying a number by reducing it to a specified number of decimal places
12.	Co-variables	Two variables that can be plotted against each other to indicate the type of relationship between them.	28.	Rounding	A way of simplifying a number by reducing it to a specified number of decimal places
13.	Case study	A study of a single person, group or event	29.	Significant figures	Digits that have meaning in a number and signify a level of accuracy
14.	Observation	A research method that involves watching and recording behaviour	30.	Estimate	Do a quick, rough calculation of what the results are showing
15.	Naturalistic observation	An observation conducted in an everyday environment where the behaviour being studied is normally seen	31.	Ratios	Compare one thing against another to show proportions
16.	Controlled or structured observation	An observation carried out in a laboratory or controlled environment	32.	Fractions	A way of cutting something up to show proportions
17.	Overt observation	Participants know they are being observed as part of an investigation	33.	Percentage	A fraction of 100 found by multiplying a fraction by 100

32	Descriptive statistics	Ways of summarising data to make raw data easier to understand. Descriptive statistics include mean, mode, median and range	50	Y axis	Vertical line on a chart / graph
33	Raw data	The results themselves without analysis	51	Scatter diagram	A graph used to illustrate a correlation between two variables to see if they co-vary
34	Range	The difference between the highest and lowest score in a set of data, to show the spread of scores	52	Line of best fit	A line on a scatter diagram through the centre of a cluster of points to see if there is a correlation and in which direction (negative or positive) it is.
35	Measures of dispersion	A way of showing the spread of scores and variability	53	Primary Data	Data collected directly for a specific research purpose
36	Mode	In a set of numbers, the most common one (the one found most often)	54	Secondary Data	Data use in a study that have already been collected often for a different purpose
37	Bi-modal	When there are 2 modes in a set of numbers	55	Meta-analysis	A Procedure used to merge and analyse findings from studies focusing on a similar issue in order to draw overall conclusions
38	Multi-modal	When there are more than two modes in a set of numbers	56	Qualitative data	Data that are descriptive not numbers such as words or pictures
39	median	The middle score in a set of numbers	57	Quantitative data	Numerical data
40	mean	The average of a set of numbers, found by adding them all up and dividing the result by how many original numbers there were			
41	Normal distribution	When the mean, median and mode are very similar or the same (bell curve)			
42	Skewed distribution	When median and / or mode differs from the mean			
43	Frequency scores	The number of times each score is found in a data set			
44	Frequency table	Shows how often each score in a dataset is found using tally			
45	Tally	A way of recording each instance of something using a vertical mark for each instance			
46	Frequency diagrams / histograms	Illustrates frequency to show the distribution of continuous data			
47	Bell curve	The shape of a normal distribution curve			
48	Bar chart / graph	A graph to show categories of data; a way of summarising data which can then be compared			
49	X axis	Horizontal line along the base of a chart / graph			

CRIMINAL PSYCHOLOGY KNOWLEDGE ORGANISER

1.	Operant conditioning	Learning from the consequences of actions.	16.	Personality	Characteristics and qualities that make up someone's individual character.
2.	Positive reinforcement	Receiving something pleasant for a behaviour, so we repeat it.	17.	Temperament	The nature someone is born with, which affects their behaviour.
3.	Negative reinforcement	The avoidance of something unpleasant, so we do it again.	18.	Extraversion	behaviour that is outgoing, sensation- seeking and sociable.
4.	Positive punishment	Receiving something unpleasant for a behaviour, so we do not do it again.	19.	Introversion	behaviour that is reserved, calm and quiet.
5.	Negative punishment	Removing something pleasant so we do not repeat the behaviour again.	20.	Unstable neuroticism	a personality trait associated with being over-reactive in stressful situations, over- emotional and anxious.
6.	Primary reinforcer	A reinforcer that satisfies a biological need.	21.	Stable neuroticism	Personality trait associated with being unreactive in stressful situations and emotionally unaffected.
7.	Secondary reinforcer	A reinforcer of no survival value, but we have learned to associate it with a primary reinforcer.	22.	Psychoticism	A personality trait that is cold, lacks empathy, is antisocial and can be aggressive.
8.	Social learning theory	behaviour is learned through the observation and imitation of role models.	23.	Eysenck's personality questionnaire	A questionnaire to measure extraversion, introversion, stable and unstable neuroticism, and psychoticism.
9.	Modelling	learning a new behaviour through paying attention to, retaining and reproducing the behaviour of a role model.	24.	Socialisation	The way you are raised and taught how to behave.
10.	Observational learning	learning new behaviours through watching and modelling a role model.	25.	Holism	The theory of explaining something as a whole.
11.	Role Model	A person who we admire or with whom we share similar characteristics.	26.	Sociologist	A type of researcher interested in the effects of social conditions on behaviour and societies.
12.	Vicarious reinforcement	motivation to model the behaviours of others who we see being rewarded for their behaviour.	27.	Recidivism	When an offender is punished for their crime but commits another crime when released (rate of reoffending).
13.	Identification	temporarily adopting the behaviour of a role model or group.	28.	Rehabilitative	A programme designed to help offenders rather than punish them.
14.	Monozygotic twins	Twins developed from one fertilised egg that has split into two; monozygotic twins are genetically identical.	29.	Detention/ custody	A prison sentence.
15.	Dizygotic twins	Twins developed from two different eggs fertilised during the same pregnancy; dizygotic twins are not genetically identical.	30.	Humanitarian	A concern with the welfare of humans.

31.	Community Sentencing	when an offender serves a sentence in the community rather than in prison; they have to pay back the community by doing jobs such as removing graffiti.	
32.	Curfew	having to be home at certain times, such as between 7 a.m. and 7 p.m.	
33.	Restorative justice	When a victim and offender meet; it is a process used to help a victim recover and make an offender understand the impact of their crime.	
34.	Token economy programme	A programme designed to reward prisoners for prosocial behaviour; prisoners collect tokens that can be exchanged for privileges.	
35.	Anger Management programme	Cognitive behavioural treatment for violent offenders to help them control their anger.	
36.	Psychopath	A person who is characterised by a lack of guilt and emotion, antisocial behaviour and selfishness.	

SLEEP AND DREAMING

1.	REM sleep	A part of the sleep cycle with rapid eye movement caused by eyes moving a lot behind the eyelids when dreaming	19.	Narcolepsy	Inability to control sleeping and waking so experiencing involuntary daytime sleeping
2.	Sleep cycle	A nightly pattern of deep sleep, light sleep and dreaming	20.	Hallucinations	Seeing hearing smelling or tasting or feeling something that is not there such as seeing monsters
3.	NREM sleep	Non-rapid eye movement sleep	21.	Cataplexy	A loss of muscle power and tone, triggered by an onset of strong emotions such as laughter
4.	Sensory blockade	In REM sleep all incoming sensory information is stopped	22.	Unconscious mind	An inaccessible part of the mind that affects behaviour and feelings
5.	Neuron	A nerve cell that transmits information	23.	Id	The part of Freud's personality theory that is demanding, thought of a "I want"
6.	Movement inhibition	In REM sleep wen movement is prevented	24.	Superego	The part of Freud's personality theory that is the conscience "that is wrong because"
7.	Sleep deprivation	Not having enough sleep; this can affect physical functioning such as weight and brain functioning	25.	Ego	The part of Freud's personality theory that is reasoning to balance the demands of the Id and Superego
8.	Circadian Rhythms	Human body rhythms that have a daily 24hour cycle such as the sleep-wake cycle	26.	Manifest content	The story the dreamer tells when they wake up
9	Sleep- wake cycle	A circadian rhythm generally triggered by the day-night cycle	27.	Latent content	The deeper meaning behind the dream
10.	Ultradian Rhythms	Rhythms that occur in a period of less than 24hours such as a sleep cycle	28.	Dreamwork	The transformation of unconscious thoughts into dream content
11.	Endogenous	Internal pacemakers; our biological clock	29.	Neuron	Nerve cells that convey messages around the body
12.	Hormones	Chemical messengers taking messages through the bloodstream	30.	Dreamwork	The transformation of unconscious thoughts into dream content
13.	Melatonin	A hormone involved in setting circadian rhythms including the sleep-wake cycle and blood pressure	31.	Neuron	Nerve cells that convey messages around the body
14.	Pineal gland	A small endocrine gland that produces melatonin. An endocrine gland produces a hormone that is secreted into the bloodstream	32.	Pons	Area of the brain responsible for REM sleep
15.	Exogenous	External cues in the environment that affect out biological clock	33.	Psychosexual changes	Freud theory of child development (oral, anal, phallic, latent and genital stages)
16.	Zeitgebers	External cues that synchronise our biological rhythms for example to a 24hour clock	34.	Phallic stage	The third stage where the child is working through the Oedipus complex (3-5 years old)
17.	Entrainment	When biological rhythms are matched to their environmental triggers, such as circadian rhythms being set in response to external (light cues)	35.	Oedipus complex	Part of Freud's phallic stage; a boy has unconscious feelings for his mother and hates his father, who he sees as a rival and fears will castrate him.
18.	Insomnia	Problems with sleeping at night that cause difficulties during the day			

PAPER 2: PSYCHOLOGICAL STUDIES

Who did the study?	Aim	Participants	What they did	Key findings	Conclusions
<p>CRIMINAL PSYCHOLOGY</p> <p>Bandura, Ross and Ross (1961)</p>	<p>To see if children would imitate aggression that was role-played by an observed adult</p> <p>They were specifically interested in whether the sex of the role model and sex of the child would be an important factor in aggression of the child</p>	<p>36 girls and 36 boys aged between 37 and 69 months Stanford university nursery school</p> <p>Divided into 8 groups for 6 children and a control group of 24 children</p> <p>Control group did not observe a model</p>	<p>4 of the experimental groups were exposed to an aggressive model and 4 were exposed to a non-aggressive model</p> <p>Further divided into male and female children who observed either a male or a female model</p> <p>A female experimenter brought each child individually to an experimental room where they were placed at a table to play with paints and toys</p> <p>The role model was invited in to play with the toys in the opposite corner</p> <p>This corner contained an inflatable Bobo doll</p> <p>Experimenter left</p> <p>Model began to play with the toys</p> <p>Aggressive condition: punished and kicked the bobo doll and shouted 'kick him' 'punch him'</p> <p>Model left the room</p> <p>Child was taken to a different room to play with more toys</p> <p>Child told after 2 mins not to play with the toys anymore</p> <p>Child was then taken to a different room which contained toys that they were allowed to play with such as a Bobo doll</p> <p>They stayed here for 20 mins and their behaviour was recorded</p>	<p>Children who were exposed to the aggressive role model (male or female) displayed more aggression than the control group or the children exposed to non-aggressive role model</p> <p>Children imitate aggression</p> <p>True for physical and verbal</p> <p>They devised new ways of being aggressive too</p> <p>Boys were more likely to copy the same-sex aggressive role model physically than girls were</p> <p>But girls were just as likely as boys to imitate verbal aggression of same-sex role model</p>	<p>Children learn through observation</p> <p>Evidence for the social learning theory</p> <p>Children learn aggression from adult role models</p> <p>Child didn't even have to know the model</p>
<p>CRIMINAL PSYCHOLOGY</p>	<p>To investigate the effects of television on children's behaviour</p>	<p>Primary school children aged 3-8 years old.</p>	<p>Natural experiment because the researchers did not directly manipulate</p>	<p>They made 64 comparisons, 9 of which were significant</p>	<p>Television had little influence on the behaviour of children studied</p>

<p>Charlton et al. (2000)</p>	<p>The researchers were particularly interested to see whether television would cause the children to become more aggressive</p>		<p>the independent variable (introduction of television) Dependent variable was behaviour of the children before and after the television was introduced Measured in terms of prosocial and antisocial behaviour in the playground Researchers went there in 1994 and recorded behaviour of children four months before TV was introduced Video cameras in 2 primary schools and observed behaviour of children aged 3-8 years old over 2 weeks Five years later after TV was introduced they did the same again</p>	<p>5 declines in prosocial behaviour of boys and girls 2 increase in prosocial behaviour of boys playing alone 2 decreases in anti social behaviour of boys and girls No change in antisocial behaviour (kicking, hitting and pushing) Boys had a tendency to display more antisocial acts than girls and girls were more likely to show prosocial behaviour (not significant though) Boys and girls displayed twice as much prosocial behaviour compared to antisocial</p>	<p>Children were not copying the aggression that they had witnessed on TV Might be environmental conditions specific to the island that could explain this Close-knit nature of the community and high levels of adult surveillance over the children may have explained why television had little effect on children's behaviour</p>
<p>SLEEP AND DREAMING Siffre (1975) Man in a cave</p>	<p>To investigate the effects of living underground in a cave without external cues on the 24-hour sleep-wake cycle.</p>	<p>One male participant aged 33 years.</p>	<p>Siffre entered the cave on 14th February and left on 5th September. Electrodes were used to monitor heart, brain and muscle activity during the time he spent in the cave. Each time he awakened, he telephoned a team above ground to let them know he was awake. To ensure that it was not clear what time of day it was, the telephone conversations were kept short. There was light from lamps in the cave and these were switched on and off when Siffre telephoned to say he was awake or feeling sleepy. During the awake periods, Siffre conducted tests on himself - recording blood pressure, tasks to measure mental acuity and memory. Also measured physical dexterity, including: a cycle machine to cycle 3 miles, firing a pellet rifle to test coordination and threading beads on string.</p>	<p>Several psychological and physiological deteriorations were recorded: · memory became poor · confusing thoughts, emotions and panic · low mood · poor dexterity. Siffre's sleep-wake cycle ranged from 18 to 51¼ hours, although each cycle felt like a 'day' to him. A 48-hour sleep-wake cycle was common in two different extended periods of time. Time spent awake was usually far greater than time spent asleep during most sleep-wake cycles. At the end of the sleep component of the study, Siffre believed it to be mid-July, although it was in fact 10th August.</p>	<p>Siffre experienced lasting effects of his time in the cave away from daylight and sleep-wake cycle zeitgebers, including memory lapses and weakened eyesight. This highlights the importance of cues and bodily rhythms. There is a tendency for the sleep-wake cycle to become a 48-hour cycle rather than the 24-hour cycle that is normal in an environment with zeitgebers and external cues. The study highlighted potential serious concerns for NASA in regard to long-range space travel where the effects of disruption to the sleep-wake cycle as a result of isolation from external cues could result in grave deterioration of manual and mental dexterity.</p>

<p>SLEEP AND DREAMING</p> <p>Freud (1909) Little Hans Study</p>	<p>One aim was to help the individual; the other was to build evidence for his theory of how children develop. His study of Little Hans was an opportunity for him to read about a child's actual development with the intention of seeing his theory in practice.</p>	<p>One child participant who was studied from 3 – 5 years old.</p>	<p>Freud gathered reports from Hans parents and some directly from Hans. He focused on dreams and Hans' phobia of horses. Freud looked at Hans' dreams and analysed his unconscious mind and to see what was causing the phobia. He listened to what was said and discussed the hidden symbols with Hans and the family. The analysis was done using Freud's ideas about how children develop – psychosexual stages and Oedipus Complex.</p>	<p>The dream about being made to 'widdle' was the expression of a wish that one of Hans female friends would help him with his 'widdler' (penis) showing Hans increasing sexual curiosity</p> <p>The dream of his mother leaving was the expression of his fear of losing his mother, as he was in the middle of his 'Oedipus Complex' (where boys have sexual fantasies about their mother, fear their father will discover these and castrate them)</p> <p>The fear of losing his mother was displaced as a fear of horses, which Freud argued was evidence that the horse became the representation of his father. Hans is afraid of the horse (his father) because he is anxious that his father will discover his sexual feelings for his mother</p> <p>Once the Oedipus Complex was resolved, Hans' phobia of horses ended.</p>	<p>Hans's anxiety and phobia were a result of 'castration complex' and were resolved through phantasies that Hans considered and the dreams he had which led to the resolution of the Oedipus complex in 1908.</p> <p>Freud claimed that Hans was not a normal child, that he was prone to neurosis, and therefore stated that his findings from the analysis might not apply to other children. However, Hans returned in 1922 to meet with Freud and was a normal, healthy individual.</p>
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