OCR Psychology A-level

Areas, Perspectives and Debates

Notes

Part 1: Gender Bias

Gender bias – The differential treatment or representation of men and women based on stereotypes rather than real difference.

Alpha Bias – A tendency to exaggerate differences between men and women, suggesting that there are real and enduring differences between the two sexes. The consequences are that theories devalue one gender in comparison to the other, but typically devalue women.

Examples of Alpha Bias:

1. Psychodynamic explanations for offending behaviour suggests that criminality occurs due to a deviant superego. According to Freud, since females do not experience castration anxiety, they are under less pressure and have less of a need to identify with the moral standards of their same-sex parent, as compared to boys. This suggests that females, in line with the psychodynamic approach, are less moral than males - an idea which has been refuted by Hoffman et al.

2. Wilson's sociobiological theory of relationship formation suggests that sexual promiscuity in males is genetically determined, whereas promiscuous females are going against their 'nature'. Females, from an evolutionary standpoint, need to be more selective when choosing their mates, due to having a limited supply of eggs and requiring more energy and effort to reproduce, compared to men. Therefore, such alpha bias may lead to prejudice and stereotyping of women who engage in these behaviours.

3. Historically, since the 1980s, schizophrenia has been diagnosed more frequently in men compared to women, whereas before this time there had been no significant differences. This is an example of alpha bias, according to Cotton et al, because women are more likely to be able to continue working, maintain good interpersonal relationships and show less distress than men. This means that the schizophrenic symptoms of women may be masked or not severe enough to merit a diagnosis.

Androcentrism – The consequence of beta bias and occurs when all behaviour is compared according to a 'male' standard, often to the neglect or exclusion of women.

Example of Androcentrism:

PMS has been criticised by some as being a social construction, which trivialises female emotion, particularly anger. On the other hand, male anger is seen as a logical response to external pressures (Brescoll and Uhlman).

Androcentrism can result in people assuming that what is true for men is also true for women, thus minimising the differences between men and women. An example of beta bias is research on fight or flight, research is usually conducted with male animals as in females the variation in hormone levels would make research more difficult – it has been assumed that only male samples are needed as what is true for males is true for females, until Shelley Taylor 2000 challenged this, they provided evidence that females produce a tend and befriend respond at times of stress which is adaptive as it ensures the survival of the offspring. This beta bias meant that a real difference was ignored.

Beta bias – A tendency to ignore or minimise differences between men and women. Such theories tend to ignore questions about the lives of women, or insights derived from studies of men will apply equally well to women.

Examples of Beta Bias:

1. Early research conducted into the fight or flight response exclusively used male lab mice because they experience fewer hormonal fluctuations and so changes in adrenaline, due to environmental stressors, could be more reliably measured. However, results from these studies were then generalised to females, ignoring differences between the two sexes (e.g. speed and extent of the fight or flight response).

2. Kohlberg's levels of moral reasoning theory was developed on the basis of studying groups of American males, who all answered questions based on moral dilemmas e.g. the Heinz dilemma. These results were then generalised to represent levels of moral reasoning for both men and women.

Universality – The aim to develop theories that apply to all people, which may include real differences. This describes any underlying characteristic of human behaviour which can be applied to all individuals, regardless of their differences. Bias, lack of validity and issues with reliability reduce the universality of psychological findings.

Evaluation

+ Feminist psychology = Feminist psychology argues that difference psychology arises from biological explanations of behaviour. The social constructionist approach aims to understand behaviour in terms of social processes. Feminist psychology argues that there are real differences but socially determined stereotypes make a far greater contribution to perceived differences. Androcentrism can be countered by a feminist view and the balance can be readdressed. For example, Eagly (1978) acknowledged that women may be less effective leaders than men but this knowledge should be used to develop suitable training programmes and therefore create a future with more women leaders.

— Bias in research methods = If theories and studies are gender biased, the research may find differences between genders but it may not be the genders that differ but simply the methods used to test or observe them. For example, Rosenthal (1966) found that male experimenters are more pleasant and encouraging to female participants and subsequently they perform better in tasks/male participants appeared to perform less well. Secondly, fewer women being appointed at senior research positions means that female concerns are less likely to be reflected in the experimental questions.

— The laboratory experiment may also be an example of institutionalised sexism within psychology = Male researchers have the authority to deem women as "unreasonable, irrational and unable to complete complex tasks" (Nicolson, 1995). Eagly and Johnson noted that studies in real settings found women and men were judged as more similar in styles of leadership than in lab settings, hence having higher ecological validity.

+ Reverse alpha bias describes the development of theories that show a greater emphasis on women = Research by Cornwell et al (2013) showed that women are better at learning because they are more attentive, flexible and organised. Such research challenges the stereotype that in any gender differences the male position must be better and challenges people's preconceptions.

+ Avoiding a beta bias = Beta bias has allowed women greater access to educational and occupational opportunities. However Hare, Mustin and Marecek pointed out that arguing for equality draws attention away from women's special needs, for example equal parenting ignores the biological demands of pregnancy, childbirth and the special needs of women. Therefore, this suggests that some elements of beta bias may actually disadvantage women.

— Assumptions need to be challenged = Gender bias remains unchallenged in many theories. Darwin's theory of sexual selection portrays women as choosy and males as the ones who compete to be

chosen, arguing that women are coy and males as aggressive as they are in competition with other males. However, this view has been challenged as it has been found that women are equally competitive when needed. DNA evidence supports the idea that it is a good adaptive strategy for females to mate with more than one man and this puts females in competition with other females (Vernimmen, 2015)

Part 2: Cultural Bias

Culture – The rules, customs, morals and ways of interacting that bind together members of a society or some other collection of people.

Cultural bias - The tendency to judge all cultures and individuals in terms of your own cultural assumptions. This distorts or biases your judgements.

Cultural relativism – The view that behaviour, morals, standards and values cannot be judged properly unless they are viewed in the context of the culture in which they originate.

Example of Cultural Relativism: Milgram's study into obedience was originally conducted using 40 male American participants, but then also replicated using Spanish students (Miranda et al. found over 90% obedience rates in Spanish students) and Australian students (where only 16% of female participants continued to the highest voltage setting, as shown by Kilham and Mann). This suggests that Milgram's original results were specifically bound to American cultures.

Alpha bias — Cultural relativism can lead to an alpha bias, where the assumption of real differences lead psychologists to overlook universals.

Beta bias — Cultural relativism is often discussed in the context of defining mental disorder. Behaviours that are statistically infrequent in one culture may be more frequent in another, i.e. schizophrenia is claiming to hear voices but this experience is more common in African cultures, where hearing voices is a sign of spirituality and so individuals are more likely to openly report these experiences to their psychiatrist. By assuming the same rules universally we may diagnose some people as mentally ill but relative to the culture they may not be.

Alpha and Beta Bias in Cross-Cultural Research:

Alpha bias — With regards to culture refers to the assumption that there are real and enduring differences between cultural groups. An example is the distinction that is often made between individualistic and collectivist cultures. We would expect individualistic cultures to be less conformist as they are less orientated towards group norms and value the needs of the group over the individual. For example, Takano and Osaka reviewed 15 studies that compared the US and Japan in terms of collectivist/individualism and found that 14 out of 15 studies did not support the common view about differences in conformity. This suggests that there is less of a collectivist/individualist divide in an increasingly global world.

Beta bias — Refers to theories that minimise or ignore cultural differences, They do this by assuming that all people are the same and therefore it is reasonable to use the same theories for different cultural groups. An example is IQ tests. Psychologists use IQ tests to study intelligence in many different cultures as they assume that their view of intelligence applies equally to all cultures. However this may not always be the case. Western societies see intelligence as something within the individual whereas in a collectivist culture intelligence is a functional relationship depending on shared information between the individual and society. The result is that non-western people may appear less intelligent. Such tests are described as taking an "imposed etic" approach, where a test is made in one group and then imposed on another. This approach studies behaviours outside a given group and behaviours which can be universally applied to all groups.

Ethnocentrism – An example of alpha bias and leads to beta bias. Seeing things from the point of view of ourselves and our social group. Evaluating other groups of people using the standards and customs of one's own culture. In its extreme form, ethnocentrism can lead to prejudice and discrimination against 'lesser' cultures.

Indigenous psychologies - A method of countering ethnocentrism, the development of different groups of theories in different countries.

Example of Ethnocentrism: Ainsworth's Strange Situation is an example of cultural relativism due to suggesting that a secure attachment was only characterised by moderate separation and stranger anxiety. Therefore, German mothers, whose children showed little separation and stranger anxiety (thus being insecure-avoidant according to Ainsworth's system), were deemed as cold and rejecting.

The emic-etic distinction — Emic approach is one that emphasises the distinction of uniqueness in every culture, problem with this is that findings are only significant for that culture. The "etic" approach seeks universal aspects of behaviour - one way to do this whilst still avoiding cultural bias is to use indigenous researchers in each cultural setting.

Evaluation

— Bias in research methods: Smith and Bond surveyed research in one European textbook on social psychology and found that 66% of the studies were American, 32% European and 2% from the rest of the world. A considerable amount of psychology is based on middle class academic young adults who are males. This suggests that there is almost an institutionalised cultural bias in psychology, as students would be learning about 'universal' behaviours that were demonstrated only in certain cultures.

— Consequences of cultural bias: The US army IQ test showed that European immigrants fell slightly below white Americans in terms of IQ. This data has a profound effect on attitudes held by Americans towards certain groups of people, leading to stereotyping and discrimination.

— Not all behaviours are affected by cultural bias: Although there may be differences in rates of obedience (Milgram) and conformity (Asch) between collectivist/Eastern and individualist/Western cultures, universal behaviours still exist. For example, Ekman et al. demonstrated that facial expressions for anger, guilt and disgust were universally recognised across all cultures. In terms of attachment, interactional synchrony and reciprocity are universal features of infant-caregiver interactions. Therefore, this suggests that to fully understand behaviour, we must look at both universal and culture-bound examples.

— Worldwide psychology: Researchers are now able to travel more and therefore have a greater understanding of other cultures, alongside having increased opportunities to conduct cross-cultural research. Academics meet to discuss and share ideas at international conferences, which reduces ethnocentrism in Psychology through appreciating that behaviours found in one culture may not be the same as in others, as well as real differences being identified and valued. For example, Bond and Smith noted that not all cultures will be familiar with research traditions and the aims of science, leading to a greater 'Please-U' demand characteristic effect, which may bias the findings.

Part 3 - Free Will and Determinism

Key words

Determinism — The belief that behaviour is controlled by external or internal factors acting upon the individual and beyond their control. There are 3 types of determinism: biological, environmental and psychic.

Biological determinism — The view that behaviour is always caused by internal biological forces beyond our control, such as the influence of genes. For example, research on intelligence has identified particular genes in those with high intelligence, such as the IGF2R gene (Hill et al,1999). Also, genes which affect brain structure and neurotransmitter production (i.e. serotonin and dopamine) may also determine our behaviour e.g. the CDH-13 and MAOA gene being candidate genes for criminality.

Environmental determinism — The belief that behaviour is caused by previous experience through classical and operant conditioning. i.e. phobias are a result of conditioning, as demonstrated by Watson's study on Little Albert and Skinner's Box (operant conditioning determining the behaviour of lab rats). These are external forces, over which we have no control.

Psychic determination — Freud's theory of personality suggests that adult behaviour is determined by a mix of innate drives and early experience. These result in unconscious conflicts over which we have no control. For example, Freud's psychosexual stages of development suggests that each stage is characterised by a conflict which, if unresolved, leads to fixation in adulthood e.g. anal expulsive personalities being the result of fixation at the anal stage.

Free will — Each individual has the power to make choices about their behaviour, without being determined by internal or external forces beyond their control. A common feature of the humanistic approach.

Hard determinism — The view that all behaviour can be predicted, according to the action of internal and external forces beyond our control, and so there can be no free will. For example, behaviourism suggests that all behaviour is the product of classical and operant conditioning, the biological approach sees behaviour as the product of genes and neurochemistry, whilst social learning theory suggests that behaviour is the product of vicarious reinforcement and mediational processes.

Soft determinism — A version of determinism that allows for some element of free will and suggests that all events, including human behaviour, has a cause. For example, the cognitive approach suggests that individuals can reason and make decisions within the limits of their cognitive system.

The importance of scientific research — scientific research is based on the belief that all events have a cause. An independent variable is manipulated to have an effect on the dependent variable. Through repeating the research under controlled conditions (e.g. using a laboratory experiment) and performing statistical tests, a 'cause and effect' relationship can be established between two variables. This increases the scientific credibility of Psychology, through enabling the prediction and control of behaviour.

Evaluation of determinism

— 100% genetic determinism is unlikely to be found for any behaviour. = Studies that compare monozygotic twins have found 80% similarity for intelligence and 40% for depression. This suggests that genes do not entirely determine behaviour and supports an interactionist standpoint. The fact that concordance rates for MZ twins are often higher than for siblings, despite both sharing 50% of genes, may be due to MZ twins being more likely to share the same environment.

— Determinism simplifies human behaviour. = This may be appropriate for non-humans but human behaviour is less rigid and influenced by many factors i.e. cognitive factors which can override biological impulses. For example, aggression cannot be simplified to the action of the endocrine system and adrenaline. There are cognitive factors and accompanying emotions which are just as, or more important, than the biological aspects.

— A determinist position may be used for people to try and justify behaviours if they have committed a crime. = This would be undesirable as it excuses their behaviour. Therefore, a hard deterministic stance

is not in line with the principles of the judicial system, which sees individuals as taking moral responsibility for their actions. Determinism has also led to treatment methods for mental disorders, such as depression through the control of serotonin by using SSRIs and SNRIs. However, this biological deterministic approach does not allow the use of other treatments which are not based on biological mechanisms, such as CBT.

Free Will

The Humanistic Approach — Humanistic psychologists argue that self-determinism is a necessary part of human behaviour. Rogers (1959) claimed that as long as an individual remains controlled by other people or other things they cannot take responsibility for their own behaviour and therefore cannot change it. Only when an individual takes self responsibility is personal growth or 'self-actualisation' possible. By taking such a stance, humanism has been praised as a positive approach, essentially seeing people as good and free to 'better themselves'.

Moral responsibility — The basis is that an individual is in charge of their own actions. The law states that children and those who are mentally ill do not have this responsibility but other than this, there is an assumption that normal adult behaviour is self determined. Therefore, humans are accountable for their behaviour regardless of innate factors or early experience.

Evaluation of free will

— Illusion of free will — A person may choose to do something but these choices are determined by previous reinforcement contingencies, as suggested by the behaviourist approach. This is a hard deterministic stance.

— Challenge to the idea of free will — Benjamin Libet et al (1983) recorded activity in motor areas of the brain before the person had a conscious awareness to move their finger. Chun Soon et al (2008) found activity in the prefrontal cortex up to 10 seconds before a person was aware of their decision to act. This suggests that the motor activity preceding movement occurred before the conscious decision was made, and so implies that all behaviour is pre-determined by up to 10 seconds.

+ Free will has good face validity — In everyday scenarios, we appear to be making our own decisions. Therefore, the idea of free will has good face validity because we appear to have free will in our day to day lives.

+ Free will has high internal validity — Robert et al. found that adolescents with an internal locus of control (an individual's idea of what controls events in their lives) are less likely to develop depression and are more likely to have better mental health, compared to those with an external locus of control. These differences in LOC and mental health states supports the idea that free will can be used to help us determine what controls our life events, and so we make such conscious decisions.

Part 4: The nature – nurture debate

Key words

Environment — Everything that is outside our body, including people, events and the physical world. Any influence on behaviour which is non-genetic.

Lerner identified different 'levels' of the environment, which ranged from pre-natal experiences (e.g. the mother's physiological and psychological state during preganancy) to post-natal experiences (e.g. the socio-historical context within which the child grew up in). The view that the mind is a 'blank slate upon which experience writes upon' is typical of an empiricist/behaviourist approach e.g. John Locke.

Nature — Any influence on behaviour which is genetic e.g. the action of genes, neurochemistry, neurotransmitters and neurological structures.

Heredity — The process by which traits are passed from parents to their offspring, usually referring to genetic inheritance. The heritability coefficient can be used to quantify the extent to which a characteristic has a genetic basis. For example, intelligence appears to have a heritability coefficient of 0.5 (Plomin et al, 1994) and so the influences of nature and nurture are equal.

Interactionist approach — With reference to the nature-nurture debate, this is the view that the processes of nature and nurture work together rather than in opposition. They are linked in such a way that it does not make sense to separate the influences of the two.

Nature - Nurture Debate — The argument as to whether a person's development is mainly due to their genes or to environmental influences. Most researchers accept that behaviour is a product of the interaction between nature and nurture.

Examples of the influence of nature

Genetic explanations — The more closely related two individuals are, the more likely that they will develop the same behaviours. The concordance rate for a mental disorder such as schizophrenia is 40% for MZ twins and 7% for DZ twins. This illustrates how nature plays a part in contribution to the disorder. However, concordance rates for MZ twins are not 100%, despite being genetically identical. This suggests that nurture and the environment also plays a significant role in development.

Evolutionary explanations — These are based on the principle that a behaviour which promotes survival will be naturally selected e.g. running away from fire or avoiding deep water. This is because such behaviours are adaptive, so the individual is more likely to survive to adulthood and reproduce. Bowlby proposed that attachment was adaptive as it meant an infant was more likely to be protected due to displaying social releasers (innate, 'cute' behaviours which activates the adult mammalian attachment system) and features of infant-caregiver interactions (such as interactional synchrony and reciprocity). As such, the infant would be more likely to survive and reproduce as an adult.

Examples of the influence of nurture

Behaviourism — Behaviourists assume that all behaviour can be explained in terms of experience alone. Skinner used the concepts of classical and operant conditioning to explain learning and suggests that attachment could be explained in terms of classical conditioning where the food reduces the discomfort of hunger (negative reinforcement) and is therefore rewarding.

Social learning theory — Bandura proposed that behaviour is acquired indirectly through operant and classical conditioning but also by directly through vicarious reinforcement. He acknowledged that biology had a role to play e.g. the urge to act aggressively could be biological but the way a person learns to express anger is through environmental influences (such as through observing and imitating the methods of expression of anger displayed by the identified role models).

Other explanations — The double blind theory of schizophrenia (Bateson et al, 1956) suggests that schizophrenia develops in children who frequently receive contradictory messages from parents and these conflicting messages prevents the child from developing an internal consistent construction of reality. This is because when the child behaves incorrectly, they are punished by a withdrawal of love from their parents, leading them to believe that the world is dangerous (reflected in paranoid delusions) and confusing (reflected in disorganized thinking).

Evaluation of the nature - nurture debate

+ Diathesis-Stress Model — A diathesis is a biological vulnerability. However not everyone with these 'candidate' genes will develop a disorder. The expression of the gene depends on experience in the form of a stressor which triggers the condition (a diathesis). This has been illustrated by Tienari et al (20040 who studied 145 Finnish adoptees whose mothers had schizophrenia and were then matched with a sample of 158 adoptees without this genetic risk. The two groups were independently assessed after 12 years and of the total 303, 14 developed schizophrenia and 11 of these were from the high risk group. Children without a genetic risk but raised in a family climate characterised by tension and a lack of empathy did not develop SZ. However, children with a genetic risk and who experienced the same family climate did go on to develop SZ. This illustrates how being raised in a "healthy adoptive family" has a protective effect.

+ Nurture affects nature — Maguire et al study of london taxi drivers showed that the region of their brains with spatial memory was bigger than in controls, this is because the hippocampi had responded this way. Maguire et al. studied the brains of London taxi drivers and found a larger grey matter volume in the mid-posterior hippocampus, an area of the brain associated with spatial awareness (skills needed for taxi drivers when they are learning and completing 'The Knowledge' exam). There was a positive correlation between increasingly pronounced changes and an increasing length of time that individuals had been taxi drivers. This demonstrates the interactionist nature of empiricism and nativism, and gives further reason as to why the influences of the two cannot be separated.

+ Epigenetics — Refers to the material in each cell that acts like a switch to turn genes on or off e.g. DNA methylation and histone tail modification. Life experiences control these switches and these switches are passed on when the DNA is replicated semi-conservatively. This is why MZ twins may differ in weight even though they were given the same diets, due to differences in upbringing/ experiences causing differences in the individual expression of genes. For example, Caspi et al (2002) assessed antisocial behaviour in 1000 participants between birth and the age of 26. The researchers found that 12% of men with less MAOA gene expression had experienced maltreatment when they were babies but were responsible for 44% of crimes. This brings a third element into the nature-nurture debate: the experiences of previous generations!

+ Constructivism — Plomin suggested that an individual's 'nature' would determine their 'nurture' through niche-picking or niche-building. For example, a naturally aggressive child would be more likely to play with and befriend other aggressive children. This in turn would increase the aggressiveness of the child. Therefore, the idea of constructivism further emphasises the multi-layered relationship between nature and nurture.

Part 5 - Holism and reductionism

Key Words

Holism — With respect to a behaviour such as memory or mental disorder, perceiving the whole experience rather than the individual feature and or the relations between them. Gestalt psychologists suggest that 'the whole is greater than the sum of its parts' and so it does not make sense to break down target behaviours into their constituent parts, but rather study behaviours as part of an indivisible system.

Reductionism — An approach that breaks complex phenomena into more simple components and implies that this is desirable because complex phenomena are best understood in terms of a simpler level of explanation. This is in contrast with holism. For example, a reductionist explanation of depression would be the consequence of low levels of serotonin in the brain. This is biological reductionism and a neurochemical viewpoint.

Levels of explanation — These are different ways of viewing the same phenomena in Psychology e.g. socio-cultural, psychological, physical, physiological and neurochemical. Reductionism suggests that lower-level explanations will eventually replace higher-level explanations, according to the reductionist hierarchy of science i.e. Sociology, Psychology, Biology, Chemistry and Physics (from top to bottom). Explanations begin at the highest level and progressively reduce down to the bottom of the hierarchy.

Highest level — Cultural and social explanations of behaviour e.g. depression being explained by a withdrawal from social activities, low energy levels and insomnia, which is viewed as odd by society.

Middle level — Psychological explanations of behaviour e.g. depression being explained by Beck's Cognitive Theory (the product of the cognitive triad of automatic negative thoughts, faulty information processing and negative self-schemas) and Ellis' ABC model (an activating event produces an irrational belief which leads to an emotional or behavioural consequence).

Lower level — Biological explanations of behaviour e.g. depression being explained by the action of candidate genes (e.g. 5HT1-D beta controlling the efficiency of synaptic serotonin transport) and neural factors (e.g. abnormal functioning of the left parahippocampal gyrus and the lateral frontal lobes).

Types of Reductionism

Biological reductionism — Reducing behaviour to biology as it is based on the premise than we are biological organisms. i.e. depression can be explained biochemically as a result of low levels of serotonin in the synaptic gaps between neurons. A characteristic feature of the biological approach.

Environmental reductionism — Behaviourist explanations suggest that all behaviour can be explained in terms of simple stimulus response links, i.e. phobias are obtained and maintained using classical and operant conditioning (through repeated pairings between the unconditioned stimulus and the neutral stimulus to produce an unconditioned response, and then leading to a conditioned stimulus producing a conditioned response, as shown through Watson and Rayner's study of Little Albert).

Evaluation of Holism

+ Provides a more complete picture: Some examples of behaviour can only be understood at the holistic level, such as the conformity and deindividuation of Zimbardo's prisoners and guards in his Stanford Prison Experiment. Research into resisting conformity, such as Gamson's work into the role of social support in groups, also makes use of holistic explanations by looking at the interactions within and between groups. Therefore, holistic explanations may provide a more 'complete' picture of behaviour.

— However it is difficult to investigate the many differing types and levels of explanations: This poses a practical problem for researchers who attempt to combine many higher-level explanations, because it becomes difficult to identify which explanation is most influential and therefore which explanation it would be most useful to base treatment upon. Therefore, holistic explanations may not lead to the development of effective treatments for mental health disorders.

— More hypothetical and not based on empirical evidence — Holistic explanations are frequently used by the humanistic approach. However, there is a lack of empirical evidence associated with higher-level explanations and holistic viewpoints may simplify complex phenomena too far. As such, humanism is still seen as a set of rather loosely-joined abstract concepts. Therefore, holistic explanations may not be suited towards more complex behaviours.

Evaluation of reductionism

+ Consistent with the scientific approach — Scientific psychology aims to be able to predict and control behaviour. Therefore, reductionism is consistent with the aims of science because it allows for this.

Smaller, constituent parts of behaviour are easily measured and manipulated under strict laboratory conditions, and so 'cause and effect' relationships between variables can be reliably established. Hence, reductionism raises the scientific credibility of psychology.

+ Practical application in the development of drug therapy — A reductionist approach towards researching and explaining mental disorders has led to the development of powerful and effective drug therapies e.g. SSRIs to treat depression, based on the view that a deficiency in serotonin causes depression (biological reductionism). This also reduces need for institutionalisation, where sufferers can continue with their day to day lives through the use of non-invasive treatment and without regular hospital visits. Therefore, reductionist approaches have had a positive impact on people's lives.

— Ignores the complexity of behaviour — Reductionist explanations may lead to a loss of validity because they ignore the social context where behaviour occurs, which often gives behaviour its meaning. For example, from a reductionist viewpoint, the act of speaking would be the same across all scenarios due to each individual having the same biological mechanism for this. However, such a view ignores the social context of this speaking, such as with the aim of alerting someone, voicing an opinion etc. Therefore, reductionist explanations may simplify complex phenomena too much.

Part 6 - Idiographic and nomothetic approaches to psychological investigation

Key Words

Idiographic approach — A method of investigating behaviour which focuses on individuals and emphasises their uniqueness. Subjective and rich human experience is used as a way of explaining behaviour, without the aim of developing general principles and unifying laws (which is the view of the nomothetic approach).

Associated with methods that produce qualitative data. These methods include studying the individual and not groups and therefore not generalising findings to others. An example is the study of HM and KF, where the idiographic approach was used in the form of case studies, and informed further research into the different types of long-term memory.

Examples of the Idiographic Approach:

1. The psychodynamic approach: Freud used case studies and in-depth interviews to collect qualitative data from Little Hans; data which later formed the basis of the Oedipus and Electra complexes. However, Freud also established his psychosexual stages of development on the basis of similar research methods, arguing that all children pass through the same sequence of stages. This is more similar to a nomothetic approach.

2. The humanistic approach adopts a holistic and 'phenomenological' approach to research, which focuses on the experience of the individual. Such research methods were then used to develop the client-centred approach to therapy and Maslow's hierarchy of needs.

Nomothetic approach — Seeks to formulate general laws of behaviour based on the study of groups and the use of statistical, quantitive techniques. It attempts to summarise the differences between people through generalisations, whilst developing general laws and unifying principles which can be used to accurately predict and control behaviour.

According to Radford and Kirby, the nomothetic approach has produced 3 general laws in psychology:

- classifying people into groups

- establishing the principles of behaviour that can be applied to people in general

- establishing dimensions along which people can be placed, compared, measured

This method is associated with the scientific method such as laboratory experiments and controlled observations, where the influence of extraneous and confounding variables are removed, allowing reliable conclusions to be drawn.

Examples of the Nomothetic Approach:

1. Behaviourists explain all behaviour in terms of simple stimulus-response links which have been learnt through experience. In order to collect valid and reliable data, behaviourists often use laboratory experiments, where strict control upon extraneous and confounding variables allows for a 'cause and effect' relationship between variables to be established.

2. The cognitive approach uses objective methods of measuring brain activity, such as EEG and PET scans. This allows cognitive psychologists to draw inferences about the workings of mental processes.

3. The biological approach also makes use of brain scans to make inferences about localisation of brain function. For example, the use of PET scans by Tulving et al. helped to establish that semantic memories were recalled from the left prefrontal cortex, whilst episodic memories were recalled from the right prefrontal cortex.

Evaluation of the Idiographic approach

+ Qualitative data produces an in-depth and more complete account of an individual = This may support existing theories or challenge general laws and lead to development of improved psychological theories, through the process of deduction. For example, the case studies conducted on HM and Clive Wearing demonstrated that different types of long-term memory are located in different areas of the brain. This led to the further research of localisation and memory.

— However it offers a narrow and restrictived perspective = Theories developed from case studies and (unstructured) interviews may struggle to be generalised beyond the individual, thus reducing the ecological validity of these findings. For example, the humanism widely uses the idiographic approach but is still viewed by many as a set of rather loose, abstract concepts, due to a lack of empirical evidence as well as being specific to the individual. Generalisations cannot be made without further examples to act as a baseline comparison. This means that the idiographic approach does not improve the scientific credibility of psychology.

— The research methods used, such as case studies and unstructured interviews, lack scientific rigour = These methods rely heavily on individual and subjective interpretation. Therefore, conclusions are open to researcher bias, which reduces the reliability of the findings and the extent to which they can be generalised to other individuals. This translates to a lack of validity when developing theories and assumptions based upon the idiographic approach.

Evaluation of the nomothetic approach

+ Highly scientific methods = The nomothetic approach makes use of research methods which objectively produce reliable data through adopting standardised conditions and a high level of control of extraneous and confounding variables. Constituent parts of the target behaviour can be reliably measured through the use of operationalised behavioural categories, thus increasing the internal validity of the findings. Since the findings will not be influenced by researcher bias, the findings have greater scientific creditability due to their method of collection.

+ Enables unifying laws and general principles to be reliably established = The focus on objectively collecting reliable data has led to certain 'norms' or standards of behaviour to be established, such as the average IQ score being 100. Such norms act as a good baseline comparison for intellectual abilities and mental disorders.

— May undervalue the impact of individual experiences = Some have criticised the nomothetic approach as 'losing the whole person' in psychology due to such an emphasis on establishing universal norms and unifying laws of behaviour. For example, research into the frequency of depression or bipolar disorder tells us little about the experiences of sufferers and so little about what treatments may be most beneficial. Therefore, the nomothetic approach, from this standpoint, has done little to improve people's lives in comparison to the idiographic approach.

+ Nomothetic and idiographic approaches may be complementary to each other, rather than contradictory. = For example, Milton and Davis (1996) suggest that research should start with a nomothetic approach and once general laws have been produced the focus should switch to an idiographic approach to develop our understanding and theories.Therefore, either approach can be used depending on the aims and nature of the research.

Part 7 — Ethical implications of research studies and theory

Key words

Socially-sensitive research — Any research that might have direct social consequences for the participants in the research or the group that they represent. Sieber and Stanley defined 'socially sensitive' research as "studies in which there are potential consequences or implications, either directly for the participants in the research or for the class of individuals represented by the research".

The major BPS ethical guidelines are respect, competence, responsibility and integrity. The potential ethical issues which arise as a result of breaching these guidelines include: privacy, confidentiality, valid methodology, deception, informed consent, equitable treatment, scientific freedom, ownership of data, values and the risk/benefit ratio.

Examples of socially sensitive research:

1. Bowlby's monotropic attachment theory = Bowlby was an advisor to the World Health Organisation in the 1950s, following his theory that the critical period for attachment formation with the primary caregiver was the first 2 years of life, and maternal deprivation during this time could have severe emotional and intellectual consequences for the child i.e. affectionless psychopathy/criminality and mental retardation. Therefore, this led to Britain being one of the only countries in the EU not offering free childcare for children under the age of 5.

2. Burt's research into intelligence = Burt (1955) fraudulently published research demonstrating that the heritability coefficient for intelligence was 0.77, and so played a significant part in the development of the 11+ examinations. Despite his work being proven as false and fraudulent, the 11+ exams still exist to this day, as well as the idea that children can be organised according to their 'natural intelligence' from an early age.

3. The consequences of socially sensitive research are: Uses/public policy (e.g. Burt's influence on the 11+ exams), the validity of research (e.g. Burt's work being proven as false) and the implications of the research (on the way in which individuals or groups of people view themselves and the way in which they're viewed by society).

Evaluation of ethical implications of research studies and theory

+ Important that researchers do not stay away from socially sensitive research = This is important because such research may have major positive impacts, such as challenging stereotypes or 'scientific justifications' for discrimination. For example, Scarr argues that only by studying these areas will the general public and scientific community develop a greater understanding for these underrepresented groups.

— Social Control = Socially sensitive research has historically been used as 'scientific justification' for discriminatory practices. For example, during the 1920s and 1930s, some states in the USA issues voluntary sterilization programmes for citizens who were deemed as 'unfit to breed'. These included the mentally ill, the disabled and drug addicts. This was based upon William Shockley's Voluntary Sterilisation Bonus Plan, which encouraged low-IQ individuals to undergo sterilization. Such a programme was based upon his fraudulent and incorrect research where "preliminary research suggested that an increase of 1% in Caucasian ancestry raises Negro IQ an average of one point for low IQ populations, with diminishing returns approaching 100 IQ". Therefore, socially sensitive research can be and has been used for malicious and unjust ends.

— Research could be potentially misused so psychologists should take responsibility for the presentation of findings = For example, Packard proposed the idea of 'subliminal messaging', where he found that when pictures of Coca Cola and popcorn were projected onto cinema screens for split seconds, so that audience members could not see it, their sales increased significantly. However, it was discovered that Packard had completely made up his results! Although the implications in this case were not serious, such an example shows the power of socially sensitive research and how it can be misused.

+ Cost-benefit analysis = When deciding whether certain research projects should be allowed to continue, ethics committees undergo a cost-benefit analysis, where the benefit of the research (such as contribution to the existing field of knowledge) is compared to the costs of breaching ethical guidelines. However, some ethical implications of socially sensitive research may be particularly difficult to predict, such as the impact of such research on legislation and the way in which certain groups of people are perceived by the public.

Part 8 — The Learning Approach: Behaviourism

A01 Introduction and Assumptions:

- The behaviourist approach is an approach to explaining behaviour which suggests that all behaviour is acquired and maintained through classical and operant conditioning. Hence, only behaviour which can be objectively measured and observed is studied, as demonstrated by Skinner's Box. This is due to the founders of behaviourism, Watson and Skinner, disagreeing with the subjective nature of Wundt's introspective methods, and the inability to formulate general laws and universal principles based on his observations.
- From a behaviourist perspective, the basic laws governing learning are the same across both non-humans and humans. Therefore, non-human animals can replace humans in behaviourist experimental research.

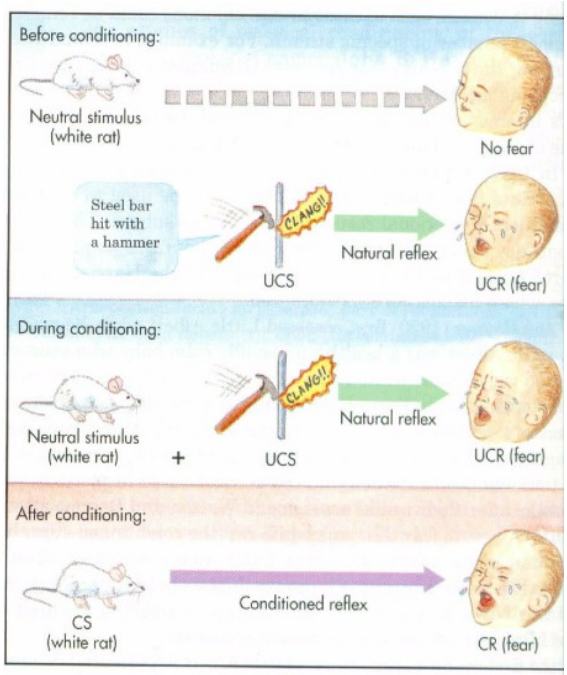
Classical Conditioning and Examples:

- Classical Conditioning = A type of learning which occurs through associations made between the unconditioned stimulus and the neutral stimulus. Before conditioning, the unconditioned stimulus (UCS) produces the unconditioned response (UCR). During conditioning, the neutral stimulus (NS) is repeatedly paired with the UCS, producing an UCR. After conditioning, the neutral stimulus becomes the conditioned stimulus, producing the conditioned response.
- Pavlov demonstrated that dogs could be conditioned to salivate upon hearing a bell, as follows:

1. Before conditioning, the unconditioned stimulus (food) produced an unconditioned response (salivation).
2. During conditioning, the unconditioned stimulus was repeatedly paired with a neutral stimulus (a bell), to produce the same unconditioned response of salivation.
3. An association was made between the unconditioned stimulus and the neutral stimulus.

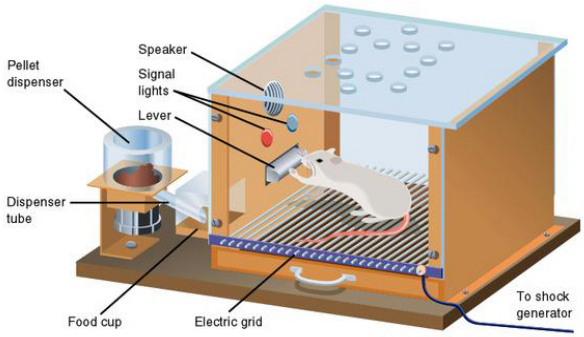
4. After conditioning, the neutral stimulus became the conditioned stimulus, producing the conditioned response of salivation.

- Extinction occurs when the conditioned stimulus is no longer paired with the unconditioned stimulus, so the conditioned response becomes extinct/ disappears.
- Spontaneous recovery occurs when the individual carries out the conditioned response some time after extinction has occurred.
- Generalisation occurs when slight changes in the conditioned stimulus, such as different pitches of the bell used in Pavlov's experiment, still produces the same conditioned response.



Operant Conditioning and Examples:

- Operant conditioning = A type of learning where behaviour is acquired and maintained based on its consequences. Reinforcement increases the likelihood of the observed behaviour being repeated, whilst punishment (an unpleasant consequence of behaviour) decreases this likelihood.
- There are two types of reinforcement - positive and negative. Positive reinforcement occurs when we carry out a behaviour to receive a reward e.g. completing homework to receive praise from a teacher. On the other hand, negative reinforcement occurs when we carry out a behaviour to avoid negative consequences e.g. completing homework to avoid being given a detention.
- Skinner's Box = Skinner demonstrated, using a rat, the mechanisms of positive and negative reinforcement. Positive reinforcement was shown when the rats pressed down on a lever to receive food as a reward, and subsequently learnt to repeat this action to increase their rewards. Negative reinforcement was shown when the rat learnt to press down on the lever to avoid the unpleasant consequence of an electric shock.



A02 Potential Application Questions:

1. An understanding of the role of classical conditioning in the acquisition and maintenance of a phobia of white rats in Little Albert (Watson and Rayner, 1920). It would be particularly useful to discuss the extinction of Little Albert's phobia when the loud bang /conditioned stimulus no longer produced the conditioned response of crying (when the loud bang was not paired with the sight of the rat). Generalisations of his phobia to other white, fluffy objects may also be discussed.
2. Being able to differentiate between classical and operant conditioning. These two types of learning involve different mechanisms and have been demonstrated in different scenarios.

A03 Evaluation:

+ Scientific Rigour = In an attempt to objectively and systematically collect reliable data, the behaviourist approach makes use of highly scientific research methods, particularly the laboratory experiment. Strictly-controlled conditions reduce and control for the effects of confounding and extraneous variables, increasing the reliability and internal validity of the findings (as these are more likely to be replicated when research is conducted under the same conditions). By focusing on behaviour which is observable and can be measured, the behaviourist approach increases the scientific credibility of psychology.

+ Real-Life Applications = An increased understanding of classical and operant conditioning has led to the development of treatments and therapies for serious mental disorders. For example, token

economies have been used as a way of dealing with offending behaviour: inmates who carry out socially-desirable behaviour (such as tidying their cell and avoiding conflicts) receive tokens (secondary reinforcers) which can be traded for privileges (primary reinforcers), such as extra TV-time. Therefore, behaviourist principles have had positive impacts on the lives of many.

— Environmental Determinism = The behaviourist approach sees all behaviour as the product of past reinforcement contingencies, leaving no room for free will or conscious choices. This hard deterministic stance may be a more appropriate explanation for animal behaviour, whereas explanations of human behaviour should also account for emotions, motivations and reasoning skills (e.g. as social learning theory does). Hence, the behaviourist approach may be a limited explanation for human behaviour.

— Cost-benefit analyses with the use of animals in experimental research = Skinner's box caused considerable physical harm to the rats, breaching the BPS ethical guideline of protection from harm. Watson and Rayner's classical conditioning experiments on Little Albert failed to protect him from psychological harm, as well as not offering him the opportunity to withdraw. Therefore, much behaviourist research, at least by modern standards, would be viewed as unethical. However, a cost-benefit analysis may show that the benefit of increased understanding of the different types of learning (classical and operant conditioning) outweigh the ethical costs.

Part 9 — The Learning Approach: Social Learning Theory

A01 Introduction and Assumptions:

- Social learning theory (SLT) suggests that learning occurs both directly, through classical and operant conditioning, and indirectly, through vicarious reinforcement.
- Assumes that learning occurs through the following stages: An observer identifies themselves with a desirable role model. This role model displays or models a specific behaviour, which is imitated by the observer. The likelihood that the observed behaviour will be imitated is increased if the role model is seen to be 'vicariously reinforced' or rewarded. Therefore, the consequences of the observed behaviour are more important than observing the behaviour alone.
- Role Model = A person with whom the observer identifies with. The role model is usually attractive, has high social status, is of a similar age and the same gender to the observer. This model can exert influence indirectly by not being physically present in the environment but, for example, seen in the media.
- Identification = The process by which an observer relates to/ associates themselves with a role model and aspires to become more like that role model.
- Vicarious reinforcement = A type of indirect learning which occurs when an observer sees their role model being rewarded for displaying a certain behaviour. The observer is then motivated to imitate this behaviour, in an effort to receive the same reward.
- Mediational processes = Cognitive processes which mediate/intervene between stimulus and response. The 4 mediational processes are: Attention, retention, motor reproduction and motivation.
- The first two mediational processes are involved with the observation and understanding of the behaviour, whilst the latter two are involved in the actual imitation of the behaviour. This separation means that observed behaviours do not always need to be reproduced at the same time.

A02 Potential Applications:

1. Bandura's Bobo Doll Study (Bandura, Ross & Ross, 1961) involved 72 children (36 boys and 36 girls), aged 3 to 6 years old. The children were divided into three groups: one observed an adult model behaving aggressively toward a Bobo doll, another observed a non-aggressive adult model, and a third group served as a control and saw no model. The study found that children who observed aggressive behavior were more likely to imitate it, supporting the principles of Social Learning Theory.
   In a later 1963 study, Bandura examined the effects of film and cartoon portrayals of aggression, showing similar imitation effects depending on the medium of observation.

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[1] Bandura, Ross and Ross, Imitation of Film-Mediated Aggressive Model, *Journal of Abnormal and Social Psychology*, 1963, 66(1), 3-11.

2. Questions may be based upon why some individuals are chosen as role models rather than others, why some children will not reproduce the observed behaviours (individual differences in the use of mediational processes) and the influence of the media on behaviour, according to SLT.
3. Comparisons with other approaches, specifically about why SLT may be a better explanation for human, rather than animal, behaviour.

A03 Evaluation:

— Bandura's Bobo Doll experiment ignores the biological differences between boys and girls = Social learning theory suggests that we learn from experience, and so ignores other biological or psychological factors, thus adopting environmental determinism. However, Bandura ignored the finding that [2]"boys, in relation to girls, exhibited significantly more imitative aggression, more aggressive gun play, and more nonimitative aggressive behaviour". This may be explained due to boys having higher levels of the hormone testosterone, which has been linked to increased aggressiveness. Therefore, this suggests that SLT may not be a complete explanation for gender differences in behaviour, due to not accounting for the biological and hormonal differences between the sexes.

— Demand characteristics in Bandura's Bobo Doll experiment = Bandura's study may lack internal validity, due to not entirely investigating the effect of aggressive role models because the Bobo doll is specifically designed to be hit. The study may also lack mundane realism because it may not represent or measure how children would be aggressive in day-to-day situations, perhaps towards objects or people that are not meant to be struck. Therefore, participants may have deliberately acted more aggressively towards the doll in order to please the experimenter (the 'Please-U effect'). This reduces the generalisability of the findings.

+ Acknowledges the role of human cognition = Human cognitive and decision-making processes may be considered as more complex than that of animals. SLT has the advantage, over behaviourism, that it recognises the role of mediational processes as the conscious and cognitive insight that humans have into their behaviour. Therefore, SLT may be a better explanation of human behaviour, compared to behaviourism.

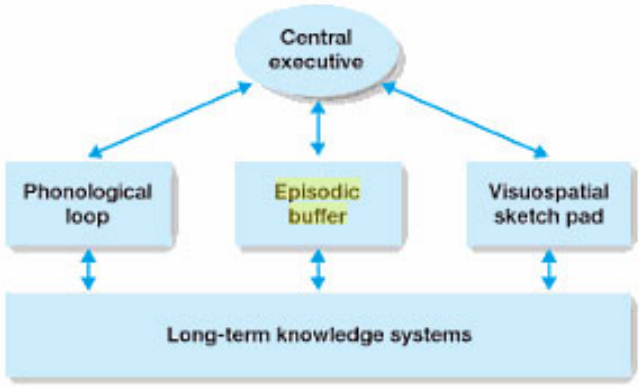
Part 10 — The Cognitive Approach:

A01 Introduction and Assumptions:

- Assumes that the scientific and objective study of internal mental processes is possible. However, as these private processes cannot be directly observed, cognitive psychologists formulate conclusions of their workings, through making inferences, based upon observable behaviours.
- Therefore, much of the work of cognitive psychologists is the indirect measurement of cognition.
- The cognitive approach sees mental processes as being separate from the brain.
- Cognitive psychologists use computer models and theoretical models to better understand and model cognitive processes, through the use of analogies.

The 'Computer Analogy' and Theoretical Models:

- An example of a theoretical model would be the working memory model, which is a diagrammatic representation of short-term memory, made up of the following cognitive components, through which information flows: Central executive, phonological loop, visuo-spatial sketchpad and the episodic buffer.
- Analogies can also be made between the workings of a computer and the functions of the human brain. For example, both contain a



[2] Bandura, Ross and Ross, Imitation of Film-Mediated Aggressive Model, *Journal of Abormal and Social Psychology*, 1963, 66(1), 3-11.

series of 3 processes: input, the use of a processor (e.g. the brain) and the production of a comprehensible output (e.g. computer code or human language).
- The invention of the computer in the 1960s was crucial in the development of cognitive psychology, as psychologists now had a metaphor for the mind.

Schemas:
- Schemas are 'packages' of ideas and knowledge about a certain person, place, object or time. They are generated through experience, becoming more sophisticated through time.
- They also act as mental frameworks, providing us with 'mental shortcuts' so we can process large volumes of data quickly and efficiently, thus avoiding sensory overload.
- However, since schemas are 'pre-conceived', they may lead to perceptual distortions due to having an already established mental framework e.g. James Potter et al (2009) showing that when watching TV, [3]"although viewers may share the same story schema, they appear to make different judgements on the schema elements, and hence their judgements about violence vary".

The Emergence of Cognitive Neuroscience:
- Cognitive neuroscience is defined as 'the scientific field concerned with the study of the biological processes and aspects that underlie cognition, with a specific focus on the neural connections in the brain which are involved in mental processes'.
- A brief history of the emergence of cognitive neuroscience is detailed below:

1. Brain Mapping in the 1870s = Carl Wernicke, based on case studies of patients who all had damage to a specific area of the brain and all suffered from the same type of aphasia (Wernicke's), inferred that Broddman's area 22 must be involved in language comprehension.
2. Objectively Investigating Brain Localisation Theory in the 1970s = Advances in technology meant that it was possible to systematically measure and observe the neural processes which coincide with specific brain functions. For example, using PET scans, Petersen et al (1988) found evidence of Wernicke's area being activated during a listening task and Broca's area being activated during a reading task.
3. Current Focuses of Cognitive Neuroscience = Current research focuses on the neural basis of model-based planning (including the role of the dorsal hippocampus), the neurological basis of autism, and also the neural basis of moral reasoning (involving the ventral striatum).

A02 Potential Application Questions:
1. The current, modern applications of cognitive neuroscience.
2. The use of theoretical and computer models to understand cognition.
3. Explanations of perceptual errors, using knowledge of schemas.

A03 Evaluation:

+ Scientific Methods and Rigour = The emergence of cognitive neuroscience has substantially increased the scientific credibility of psychology, bringing it closer to that of biology, physics etc. This is due to the emphasis on objectively collecting reliable data through direct observation of the neural processes underlying cognition, as seen in PET, CT, MRI and fMRI scans.

— Overly-Abstract Concepts = Cognitive psychology makes extensive use of schemas and analogies as ways of indirectly studying and inferring the cognitive basis of behaviour. However, this reliance of inference means that some ideas in cognitive psychology may seem too abstract and not have enough supporting empirical evidence of such mechanisms being observed. Therefore, this reduces the potential practical applications of cognitive research, as it remains mainly theoretical.

+ Practical Applications of Cognitive Neuroscience = An increased understanding of the neural processes underlying cognition have proven to be useful in many areas. For example, the design and manufacture of modern technology relies on an understanding of behavioural science and human-computer interactions. In education, cognitive neuroscientists can study a child's performance in

[3] W. James Potter, K. Pashupati, R.G. Pekurny, E.Hoffman and K.Davis, Perceptions of Television: A Schema Explanation, *Media Psychology*, 4(1), 2002.

phonological tests to serve as a more accurate prediction of their reading ability. Therefore, the impact of cognitive neuroscience is increasingly seen in the real world.

+ Soft Determinism = The cognitive approach sees humans as being able to reason and make conscious decisions within the limits of what they know or their 'cognitive system', and so adopts a soft deterministic approach. This is more flexible than the behaviourist hard determinism stance because it allows for humans to have some conscious insight into their behaviour: a complexity which differentiates us from animals, and so provides a better explanation for human behaviour than behaviourism.

Part 11 — The Biological Approach:

A01 Introduction and Assumptions:

- According to the biological approach, humans are biological organisms made up of physiological processes.
- Therefore, all thoughts, ideas and cognitive processes must be biological in origin. This means that the mind 'lives' within the brain, and is not separate (as viewed by the cognitive approach).
- The actions of genes, hormones, neurotransmitters and neurochemical mechanisms must be understood in order to explain behaviour fully.

The Biological Basis of Behaviour:

- Heritability coefficients can be used to quantify the genetic or biological basis of a certain characteristic. For example, IQ is said to have a heritability coefficient of 0.5 (Plomin), and so the influence of nature (genetics) and nurture (the environment) are equal.
- Behaviour genetics is defined as [4]"the study of the influence of an organism's genetic composition on its behaviour and the interaction of heredity and environment insofar as they affect behaviour". Therefore, behavioural genetics is crucial in researching the extent to which behavioural characteristics are inherited in the same way as psychological characteristics.
- An individual's genotype is their genetic make-up, where a gene is a short section of DNA coding for specific proteins.
- An individual's phenotype is the physical expression of their genotype.
- Therefore, the interaction between the phenotype and the environment results in individual behaviour.
- Two people may have the same genotype but different phenotypes. This may be due to personal choices they've made to alter their appearance, such as dying their hair or piercing their ears, or due to the influence of epigenetics.
- Epigenetics is a change in gene expression, without altering an individual's genetic make-up. Epigenetic markers, such as DNA methylation and histone tail modification, can be left on DNA through exposure to certain environmental factors, such as specific diets and pollution.

Natural Selection and Evolution:

- Natural selection = The mechanism of evolution. The theory suggests that any genetically-determined behaviour, which gives the individual a selective advantage (increasing their chances of surviving, reproducing and passing down this beneficial allele onto their offspring), will be present in future generations.
- This is due to the genetic transmission of 'beneficial' characteristics from one generation to the next (i.e. heredity).
- Examples of genetically-determined behaviours with a selective advantage include: avoiding fire and deep water (these are the prepared stimuli suggested by Seligman's theory of learned preparedness), certain individuals having longer necks (Lamarck's example of an animal who is better adapted to reaching and eating leaves at the tops of trees) and specific cows producing more milk (increasing the chance of survival of their young).
- Evolution = [5]"The process by which organisms change over time as a result of changes in heritable physical or behavioural traits".

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[4] Encyclopedia Britannica, published on 22.01.17, accessed on 05.07.17, Plomin, R. https://www.britannica.com/science/behaviour-genetics

[5] Darwin, C., On the Origin of Species, 1859.

A02 Potential Application Questions:

1. How certain genetic and psychological disorders demonstrate the interaction between genotype and phenotype.
2. An explanation of why two individuals can have the same genotypes, but different phenotypes.
3. Examples of behaviours which have a 'selective advantage'.
4. Comparative points between the biological approach and the cognitive approach.

A03 Evaluation:

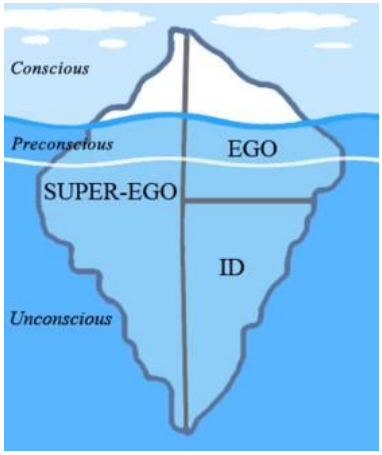
+ Practical application in the development of drugs = An increased understanding of the biological processes which underpin mental health diseases has led to the development of psychoactive drugs e.g. for depression and schizophrenia. These may target specific candidate genes to directly treat the disorder, or may alter neurotransmitter levels to help alleviate symptoms e.g. dopamine antagonists, such as Chlorpromazine, reduce dopamine action and so normalise neurotransmission in the hypothalamus and ventral striatum in the brains of schizophrenia sufferers. The main advantage of such drug treatments, compared to cognitive therapies such as CBT, is that they require minimal effort on the part of the patient. They are non-invasive and not time-consuming, unlike cognitive therapies which require willpower and regular sessions.

— Biological Determinism = The biological approach suggests that all behaviour is caused by internal biological forces over which we have no control i.e. the influence of genes, hormones, neurochemistry etc. However, this has serious implications for the judicial system and the economy. The current judicial system expects individuals to take moral responsibility for their actions, and so such actions cannot be entirely blamed on genetic factors. However, if, for example, a criminal gene or a schizophrenia gene was discovered, this could lead to 'diminished responsibility' of these individuals, as well as shorter prison sentences. The economical impact would be that if such information about genes coding for mental health disorders or criminality were made public, then such individuals may be denied health insurance and jobs on this basis. Therefore, such biological determinism has potentially severe real-life consequences.

— Twin studies cannot differentiate between the effects of nature and nurture = MZ twins usually show higher concordance rates for mental disorders and psychological characteristics compared to DZ twins. From a biological perspective, this is often explained by how MZ twins share 100% of genes with each other, compared to only 50% for DZ twins. However, this makes the naïve assumption that the only differences these twins have are genetic. MZ twins are more likely to grow up in the same household, be exposed to similar experiences and be raised using parenting styles. This may explain the differences in concordance rates between MZ and DZ twins, as opposed to only genetic differences. This may also explain why MZ twins often have higher concordance rates than ordinary siblings, despite both sharing 50% of genes. Therefore, this suggests that behaviour cannot and should not be explained in purely genetic terms (as suggested by the biological approach), without accounting for social contexts, through adopting an interactionist approach.

+ Scientific Rigour and Methods = The biological approach uses EEG, PET and fMRI scans to objectively and systematically measure the biological or neural basis of behaviour. Drugs are also then developed on this basis, whilst family and adoption studies can lead to an increased understanding of the concordance rates and heritability of certain psychological characteristics. This increases the scientific credibility of Psychology, through the strict control of extraneous and confounding variables.

Part 12 — The Psychodynamic Approach:



A01 Introduction and Assumptions:

- Freud adopted the use of psychic determinism = This is the idea that all behaviour is caused by unconscious internal conflicts, over which we have no control.
- There are 3 levels of consciousness: The conscious, preconscious and unconscious.
- We are only aware of our conscious. Contents of the preconscious are revealed through parapraxes, slips of the tongue and dreaming.

Therefore, since we are completely unaware of our unconscious, inferences of its workings can be made through the psychoanalysis (analysing symbols in dreams) and psychotherapy.
- The unconscious stores our biological drives and instincts (e.g. hunger, thirst and sex) as well as upsetting and disturbing thoughts repressed from the conscious.

Freud's Tripartite Personality:

- Freud viewed the personality as made up of three components i.e. 'tripartite'. These are the Id, ego and superego.

5. Id = This is the innate part of the personality, and operates on the pleasure principle. Therefore, the Id constantly demands instant gratification (e.g. to fulfill innate, biological instincts, such as hunger and thirst) and so is in conflict with the superego.
6. Ego = Formed during the first 3 years of life, and operates on the reality principle. The ego helps to resolve the conflict between the id and the superego through the use of defence mechanisms (repression, denial and displacement). The strength of the unconscious depends upon how efficiently the ego resolves this conflict.
7. Superego = Formed at the end of the phallic stage, and operates on the morality principle. This contains the child's internalised sense of right and wrong, based upon their same-sex parent. The superego is in constant conflict with the Id.

Stage	Ages	Focus of Libido	Major Development	Adult Fixation Example
Oral	0 to 1	Mouth, Tongue, Lips	Weaning off of breast feeding or formula	Smoking, Overeating
Anal	1 to 3	Anus	Toilet Training	Orderliness, Messiness
Phallic	3 to 6	Genitals	Resolving Oedipus/ Electra Complex	Deviancy, Sexual Dysfunction
Latency	6 to 12	None	Developing Defense Mechanisms	None
Genital	12+	Genitals	Reaching Full Sexual Maturity	If all stages were successfully completed then the person should be sexually matured and mentally healthy.

The Psychosexual Stages:

- Freud adopted a nomothetic approach by suggesting that there a series of developmental stages through which all children progress, and in the same order.
- Each stage is characterised by a conflict, which must be resolved to pass to the next stage, apart from latency.
- Failure to do so results in 'fixation' at that stage, where dysfunctional behaviours associated with that stage are carried forwards to adulthood.
- The ideas of the Oedipus and Electra Complexes were developed on the basis of case studies conducted on Little Hans, where Freud suggested that Little Hans' phobia of horses stemmed from a fear towards his father, due to having sexual desires for his mother.
- This is an example of the idiographic approach to research (i.e. the use of case studied), but with a nomothetic application (i.e. all boys experience the Oedipus Complex, whilst all girls experience the Electra Complex).

A02 Potential Application Questions:

1. Comparisons between the psychodynamic approach and humanism.
2. Explanation of the case of Little Hans, using the psychosexual stages.
3. Links between the psychodynamic approach and the current scientific status of Psychology (synoptic with Research Methods).
4. Psychodynamic explanations of mental disorders, making links with the tripartite personality and the role of the unconscious.

A03 Evaluation:

— Unconscious Concepts = Since we are unaware of the unconscious, then it is not possible to objectively and systematically measure it. Therefore, this means that, according to Karl Popper, that the psychodynamic approach does not meet the scientific criterion of falsification, leaving it unfalsifiable and a pseudoscience. This does little to improve the scientific credibility of psychology, and indeed has left many with an inaccurate view of psychology as a scientific discipline.

— The use of an idiographic approach / Case studies = Many of Freud's theories, most notably the Oedipus and Electra Complexes, were based on data from individual case studies and interviews. There are several problems with this. The first, is that participants selected to be subjects of case studies are often of some kind of special psychological interest, and so cannot represent the experiences of the general population, so the findings lack ecological validity. Secondly, mainly qualitative data is collected, which means that the researcher draws their own subjective conclusions. This is particularly the case if the researcher knows what they are looking for and/or the aims of the investigation, so the results will be affected by researcher bias. Therefore, Freud's data and theories suffer from limited applications and generalisability.

— Psychic Determinism = Freud suggested that all behaviour is the product of unconscious, internal conflicts (between the Id and the superego, whilst being mediated by the ego) over which we have no control. This means that every action, even 'accidental' slips of the tongue, has some kind of meaning and can give us insight into our unconscious. However, this adds to the subjectivity of interpretations of these meanings, and therefore is not in line with scientific methods of investigating behaviour. This is all in contrast to the hard determinism approach used by behaviourism, reciprocal determinism used by social learning theory, soft determinism used by the cognitive approach and biological determinism used by the biological approach.

+ Practical Applications = Psychotherapy and psychoanalysis are both rooted in the psychodynamic approach and still have modern uses. For example, Kohlenberg et al (2002) found that [6]"FECT / Functional Analytic Cognitive Therapy produced a greater focus on the client-therapist relationship and is a promising approach for improving outcomes and interpersonal functioning. It also appears that a focus during sessions on clients' problematic cognitions about the therapist adds to the efficacy". Therefore, Freud's psychodynamic approach has made a long-lasting contribution towards treatment of various mental disorders, such as depression.

[6] Robert J. Kohlenberg, Jonathan W. Kanter, Madelon Y. Bolling, Chauncey R. Parker, Mavis Tsai, Enhancing cognitive therapy for depression with functional analytic psychotherapy: Treatment guidelines and empirical findings, Cognitive and Behavioral Practice, Volume 9, Issue 3, 2002, Pages 213-229,