

CIE Psychology A-level

Psychology and Education

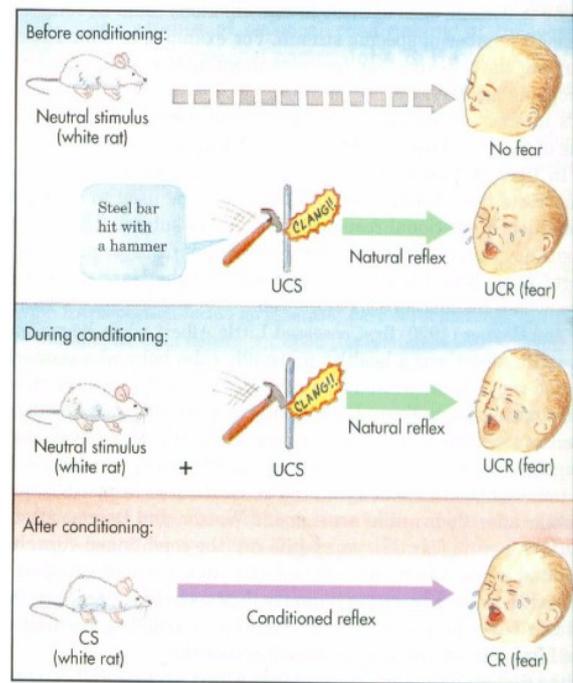
Notes



Part A: Perspectives on Learning Behaviourism

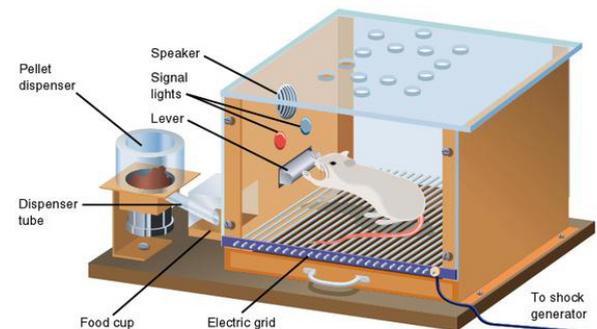
A01 Introduction and Assumptions:

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

The Humanistic Approach

A01 Introduction and Assumptions:

- Assumes that we all have free will and are 'mistresses' and 'masters' of our own development, so we can ignore the influence of internal and external factors on our behaviour.
- Sees self-actualisation, as achieved by being the top level of Maslow's hierarchy of needs, as a crucial part of being human.
- Due to having free will, we also have to ability to progress through this hierarchy of needs and better ourselves.

Incongruence and Self-Actualisation:

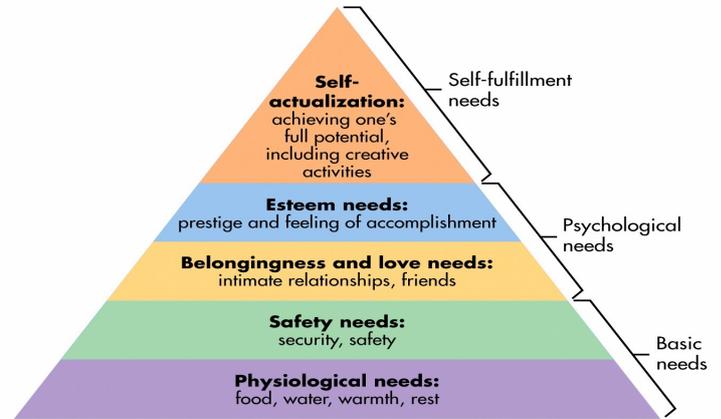
- The 'self' is a term to describe all the ideas and values we have about ourselves, including perceptions of our abilities.
- The 'ideal self' describes our perception of the best version of ourselves.



- When there is too large a gap between the self and the ideal self, we experience incongruence. The consequent negative feelings of low self-worth and low self-esteem prevent us from progressing through Maslow's hierarchy of needs, and so we cannot achieve self-actualisation.
- When there is little or no gap between the self and the ideal self, then we have achieved congruence, allowing us to progress up the hierarchy, with the aim of achieving self-actualisation.
- Self-actualisation refers to the innate desire we all have to become the best version of ourselves, through personal and psychological growth i.e. "achieving one's full potential" (as shown on the right).

Rogerian Therapy, Conditions of Worth and Maslow's Hierarchy of Needs:

- Rogerian therapy aims to reduce the gap between the self and the ideal self, thus increasing increasing the likelihood of achieving congruence and subsequently, self-actualisation.
- According to Rogers and Maslow, conditions such as low self-esteem and low self-worth originate in childhood, where adults restrict the love they show towards their children, by imposing conditions of worth e.g. "I will be proud of you only if you achieve top grades at school". This represents a lack of unconditional positive regard.
- Rogerian therapy views a good therapist as being open, genuine, empathic and most importantly, providing the unconditional positive regard which the patient most likely lacked during childhood.
- These therapies view patients as 'experts' of their conditions, and so they are encouraged to arrive at their own solutions to these problems, with the help of a therapist.



A02 Potential Application Questions:

1. The impact of humanism on counselling psychology.
2. Comparisons with other, reductionist approaches.
3. Explanation of mental disorders using the Maslow's idea of a hierarchy of needs, conditions of worth, a lack of unconditional positive regard in childhood and subsequent incongruence.

A03 Evaluation:

+ **Practical Application to Therapy** = Rogers' client-centred therapy has had a major impact on counselling psychology, and how such therapies are used both in the USA and the UK. This therapy is particularly beneficial due to acknowledging that individuals do have free will and do have the ability to improve themselves, through focussing on developing solutions to the patient's current problems. This is in stark contrast with Freud's psychotherapies, which tend to dwell upon childhood experiences and so may be frustrating for the patient who has identified the cause of their problems. Nonetheless, Roger's client-centred approach is not suitable for treating serious mental disorders, such as schizophrenia or depression.

+ **Holistic Approach** = The humanistic approach is unique in that it adopts holism, therefore focussing on the individual's subjective experiences as a whole, as a method of investigating behaviour. This is in contrast with the cognitive approach (which sees the brain's functions as analogous to a computer), the biological approach (which sees humans purely as biological organisms which are made up of physiological processes) and behaviourism (where all behaviour is seen as the product of past reinforcement contingencies). Therefore, humanism is a refreshing alternative, compared to other reductionist explanations of behaviour.

— **Untestable and subjective concepts** = As with Freud's psychodynamic approach, humanism suffers from a lack of empirical evidence and no possibility of systematically observing and measuring the processes which it describes. Self-actualisation cannot be objectively measured, due to individual differences and a lack of a universal measuring scale. Similarly, congruence may



also be up to personal judgement, especially as opinions of whether one has is their 'ideal self' will differ. This does little to improve the scientific credibility of both humanism and Psychology.

— **A culture-bound explanation of behaviour** = Maslow's ideas of self-actualisation, the need to improve oneself, and congruence can be mostly viewed as attitudes typical of Western, individualist cultures where the needs of the individual are greater than the needs of the group. Therefore, due to this cultural bias, humanism may be more readily accepted by Western cultures who will identify more with these values, as opposed to Eastern collectivist cultures, where such a desire for personal growth may be seen as selfish considering that the needs of the group are greater than that of the individual.

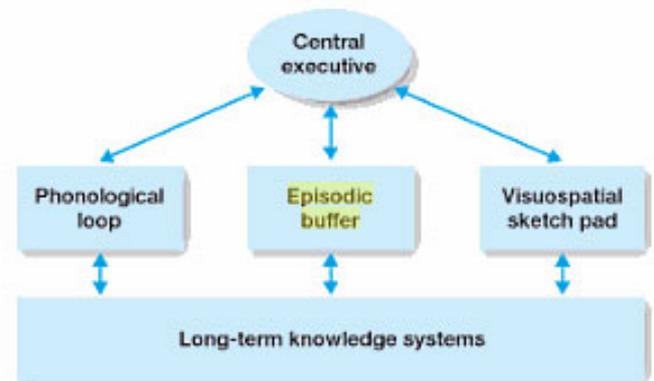
The Cognitive Approach

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 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, ¹“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:

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



- 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 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 B: Special Educational Needs

Definitions, Types and Assessment of Special Educational Needs

- The following domains are areas in which learning disabilities may occur: ²behavioural and social skills, communication, language, visual impairments, neurological impairments, mental health issues, numeracy issues/numerical problems, language difficulties and impairments associated with executive functions.
- ADHD is characterised by a lack of impulse control and poor functioning of the attentional filters. Using the above domains, ADHD mainly affects communication, language and executive functions.

² Special Educational Needs, CIE, Accessed on 28.08.17, Accessed through <http://www.cie.org.uk/images/271195-special-educational-needs.pdf>



- Autism Spectrum Disorders is an umbrella term for multiple autistic disorders, including high-functioning autism and Asperger's Syndrome. The Autism Society defines autism as ³“defined by a certain set of behaviours and is a ‘spectrum condition’ that affects individuals differently”, with symptoms including “delayed learning of language, difficulty making eye contact and difficulty with executive functioning”.
- Gifted children show abilities which are significantly above average for their age group. This is in line with the symptoms above being defined/reduced to 4 domains, as described by CIE e.g. social, intellectual and creative.
- In terms of measuring learning/educational abilities, Bridges (1973) developed a pioneering method - readiness tests. ⁴His findings showed that such tests could accurately predict the educational attainment of children in 86% of cases (first grade) and 73% of cases (second grade). The reliability of such readiness tests was supported through the finding that other individual tests, such as group intelligence tests, were also in accordance with the scores on and predictions made by the readiness test.
- The 1981 Education Act brought considerable changes to the usage and implications of testing for special educational needs. For example, ⁵Armstrong et al (2006) emphasised the importance of taking into account the child's own perception of their intelligence and learning abilities, suggesting that the key in arriving at more accurate diagnoses is “gaining access to children's thinking”.
- This also has important implications for the way in which children with learning difficulties are viewed by teachers, as suggested by ⁶Avramidis et al (2010). These researchers suggested that at the heart of an inclusive educational environment is professional development, and particularly those who underwent university-level/based professional development.

Causes and Effects of Autistic Spectrum Disorders

- Theory of Mind (ToM) can be described as the ability to understand/identify what other people are thinking and feeling, through a ‘mind-reading’-like process.
- Those with autism may have a deficit of ToM, meaning that they cannot understand the emotions of others, or even comprehend that individuals can have emotions different to their own. Such misunderstandings may explain why those with autism have impairments in empathy, social communication and social imagination.
- Other social deficits caused by ToM impairments include a lack of understanding that behaviour impacts how others think and/or feel, alongside problems differentiating fact from fiction, as characterised by poor performance on ‘false-belief’ tasks, such as the Sally-Anne task.
- In this case, where the participants were asked to identify where Sally would look for her marble after it had been moved without her knowledge, 85% of the control group (14 with Down's Syndrome and 27 neurotypical children) correctly answered, compared to 20% of the autistic group. This supports the idea that a ToM deficit is responsible for autistic children being unable to understand that people can believe something that is not true. This lack of understanding of others' viewpoints and emotions may also explain another characteristic trait of autism: difficulties predicting the behaviour or emotional states of others.
- ToM can also be assessed specifically in children below the age of 2 years old, as suggested by Meltzoff (1988), using intentional reasoning tasks. In such tasks, Meltzoff found that 18 month olds, after observing an adult struggling to place beads into a jar, dropped no beads and so imitated the intention of the adult, as opposed to the actual action (which is what would have been predicted by social learning theory). Therefore, this we can assume that children as young

³ What is Autism?, The Autism Society, Accessed on 28.08.17, Accessed through <http://www.autism-society.org/what-is/>

⁴ Lessler, K. And Bridges, J.S. The Prediction of Learning Problems in a Rural Setting, *Journal of Learning Disabilities* (1973), 6(2), pp. 90-94.

⁵ Armstrong, D., Galloway, D and Tomlinson, S. Assessing Special Educational Needs: the child's contribution, *British Educational Research Journal* (1993), 19(2)

⁶ Avramidis, E., Bayliss, P. And Burden, R. A Survey into Mainstream Teachers' Attitudes Towards the Inclusion of Children with Special Educational Needs in the Ordinary School in one Local Education Authority, *Educational Psychology* (2000), 20(2).



as one and a half years old can understand and imitate intention, on the basis of observable behaviour, and so appear to have at least some understanding of ToM.

- Since adults with Asperger's Syndrome can easily perform on false belief tasks, they appear to perform less successfully on 'The Eyes Task', which involves identifying the emotion displayed by a character whose eyes can only be seen. Baron-Cohen et al concluded that since adults with AS continued to perform poorly on such tasks, that they still suffered from ToM deficits, but these deficits simply had to be assessed in another way. This is in line with the original ToM theory and its link with autism!

— Previous research, such as that carried out by Baron-Cohen et al (1985) using the Sally-Anne tasks, has focused on the link between ToM and the cognitive impairments suffered by those with AS. Although this does serve as a comprehensive explanation, ToM deficits cannot explain the desirable characteristics which belong to AS sufferers, such as advanced numerical and logical reasoning. This means that ToM is a limited, and not universal, explanation for autism.

— ToM has close links with perspective-taking, as both involve understanding another person's thoughts and emotions, and thus allowing the observer to take on the perspective of another. However, this also makes drawing the distinction between the two increasingly difficult. For example, Meltzoff's intentional reasoning tasks can be explained in terms of the child taking on the perspective and thus intention of the adult (perspective-taking) as well as understanding the struggles and aims experienced by the adult (ToM). Therefore, this means that it is difficult to differentiate between the mechanisms of ToM and perspective-taking, limiting the theoretical value of both explanations.

— The Eyes Task can be said to have low mundane realism, because the procedure does not represent everyday life where we are usually able to look at the entire person's face and facial expressions, in order to assess their emotions. Verbal cues, such as the tone of their voice, as well as language provide us with essential information about their feelings. Therefore, such studies may produce findings with little ecological validity, because they cannot be generalised beyond the original, specific research settings.

Strategies for Educating Children with Special Needs

- ⁷Renzulli et al (1977) investigated the use of two different approaches in identifying gifted students. They found that the case study method was the better of the two approaches, both in terms of efficiency and effectiveness, compared to the traditional approach. This demonstrates that time and money are important considerations when identifying and educating gifted children, and that these efforts can be minimised through the use of case studies.
- Adjustments may also have to be made for students with dyslexia, such as ⁸through the use of learning aids and time management strategies, as well as appreciating the tendency of dyslexics to develop a deep approach to their learning, such as improving their test scores through increased reading. This was all suggested by Kirby et al (2008).

Part C: Learning and Teaching Styles

- The ⁹Onion Model, proposed by Curry in 1983, suggests that different theoretical frameworks belong in different areas or 'layers' of the model, which is dependent on the strength of the learning context's influence and the types of learning styles which would be used. This had particularly important implications in terms of describing the differences in learning between the two genders!
- Grasha (1974) suggested that there are 6 student learning styles" competitive, collaborative, participant, avoidant, dependent and independent, as measured using the Grasha-Riechmann

⁷ Renzulli, J.S. and Smith, L.H. Two Approaches to Identification of Gifted Students, *SAGE Journals* (1977), 43(8).

⁸ Kirby, J.R., Silvestri, R., Allingham, B.H., Parrila, R. and La Fave, C.B. Learning Strategies and Study Approaches of Postsecondary Students with Dyslexia, *Journal of Learning Disabilities* (2008), 41(1).

⁹ Severiens, S.E. and Ten Dam, T.M. Gender Differences in learning styles: A narrative review and quantitative meta-analysis, *Higher Education* (1994), 27(4), pp 487-501



- Student Learning Style Scales. ¹⁰Further evidence for its' effectiveness, with a minimum correlation coefficient of 0.76, came from a further review from Riechmann and Grasha in 2010.
- In terms of teaching styles, Bennett (1977) suggested that a mixture of both open and closed-classroom techniques are most likely to produce the best academic performance i.e. ¹¹an informal classroom which features a more structured/stringent scheme of learning.
 - In addition, ¹²Ramsden and Entwistle (1981) suggested that the key to effective departmental teaching is allowing the students to be free in their learning and a lenient workload, as corresponding with high scores on 'meaning orientation' (effective teaching) compared to 'reproducing orientation' (poor teaching styles).
 - McCarthy and Bernice suggested that effective learning can be achieved through the use of the ¹³4MAT system, where learners are pushed out of their comfort zone to be exposed to new scenarios, but still retain some familiarity or preference in terms of which learning style they use. This can be used in collaboration with Mulachy's SPELT model (Strategies Program for Effective Learning/Thinking).



Part D: Motivation and Educational Performance:

Intrinsic and Extrinsic Motivation

- Intrinsic motivation means that the individual is driven to work because they gain personal satisfaction from completing a task to a high standard, especially if these tasks are varied and can demonstrate the employee's talents.
- Extrinsic motivation means that the individual is driven to work due to external goals, which are not dictated by personal goals. Intrinsic motivation is far more powerful than extrinsic motivation, and so companies who would like to increase productivity may do so by using personal incentives for the employees (as a method of increasing intrinsic motivation).

Evaluation of Motivators At Work:

- Reward systems, both monetary and non-monetary, are based on behaviourist principles of operant conditioning and specifically, reinforcement (which increases the likelihood that a certain behaviour will be repeated). This therefore shares the same strengths of high scientific rigour and emphasis on objectivity, as the behaviourist approach.
- It may be more effective to take on an interactionist approach when explaining motivation at work because several different factors can produce different levels of motivation amongst individuals. This is summarised in the idea of an 'individual-situational debate'.

¹⁰ Riechmann, S.W. and Grasha, A.F. A Rational Approach to Developing and Assessing the Construct Validity of a Student Learning Style Scales Instrument, *The Journal of Psychology* (1974), 87(2).

¹¹ Back Matter. (1977). *The Elementary School Journal*, 78(1). Retrieved from <http://www.jstor.org/stable/1001123>

¹² RAMSDEN, P. and ENTWISTLE, N. J. (1981), EFFECTS OF ACADEMIC DEPARTMENTS ON STUDENTS' APPROACHES TO STUDYING. *British Journal of Educational Psychology*, 51: 368–383. doi:10.1111/j.2044-8279.1981.tb02493.x

¹³ McCarthy and Bernice, Using the 4MAT System to Bring Learning Styles to Schools, *Educational Leadership* (1990), 48(2), pp.31-37



Maslow's Hierarchy of Needs

- Maslow (1970) suggested that there is a hierarchy of needs, made up of 5 discrete levels. The top level represents self-actualisation, which is the innate tendency to aspire to achieve one's full potential, and was considered by Maslow as the core of being human. This 'growth' need can only be met when the four, lower deficiency needs have been met. These include: physiological needs, safety and security, love and belongingness and self-esteem. Failure to meet any one of these deficiency needs results in incongruence, where our perception of ourselves is not in accordance with our ideal selves, resulting in feelings of worthlessness, and thus a decreased motivation to work!
- More recent changes to Maslow's theory include the additions of cognitive needs, aesthetic needs, self-actualisation and transcendence needs.

The ERG Theory of Motivation

- The ERG theory of motivation is similar to Maslow's reductionist hierarchy of needs in that Alderfer (1972) proposed a hierarchical sequence of human needs, ranging from the most basic to more advanced. The ERG theory is essentially a reorganisation of Maslow's original hierarchy, based upon empirical evidence. As you go up the hierarchy, the level of 'concreteness' increases with each stage, which reflects the extent to which each need can be verified and who it is reliant upon. For example, existential needs are the most concrete and are the same for all individuals, whilst growth needs are the least concrete and depend upon the individual.
- Whereas Maslow suggested that individuals must progress and be motivated by the same sequence of stages, according to the ERG theory, motivations can be taken from multiple and any stage at once.

McClelland's Theory of Achievement Motivation

- McClelland's 1965 theory of achievement motivation suggested that there are only three types of needs, and each need affects different individuals to a different extent. These needs are for achievement, affiliation and power. For example, ¹⁴McClelland suggested that individuals who are easily driven or influenced by the need for achievement are more likely to enjoy skilled work.
- The emphasis with this theory is quantifying the extent to which each stage motivates each individual. This is unlike Maslow's theory which, due to heavily featuring humanistic principles, is very subjective.

Evaluation of Need Theories:

1. It is difficult to assess whether motivations and needs of employees are in a set hierarchical sequence, and whether individuals can adopt multiple stages or 'motivations' at once. In this sense, the theory of achievement and Maslow's reductionist hierarchy of needs can be seen as opposing theories.
2. Subjective concepts are featured specifically in Maslow's work, such as the idea of self-actualisation and incongruence. This means that such concepts cannot be empirically or quantitatively measured, and so may have little predictive value of employees' motivations in real-life organisations.
3. A strength of the use of need hierarchies is the improved understanding of the organisation about the conditions that they need to provide in order for the employees to thrive. For example, according to the ERG theory, existence and relatedness levels must be achieved first and foremost before the growth needs can be achieved and the employee can realise their potential.

Part E: Disruptive Behaviour in School

- Disruptive pupils do not always need to exhibit disruptive behaviours consistently and which are serious. For example, Sullivan et al (2014) suggested that ¹⁵"low-level disruptive and disengaged student behaviours occur frequently and teachers find them difficult to manage".

¹⁴ Collins, J., Hanges, J. and Locke, E.A., The Relationship of Achievement Motivation to Entrepreneurial Behavior: A Meta-Analysis, Cornell University ILR School, 2004.

¹⁵ Sullivan, A.M, Bruce, J, Owens, L., and Conway, R. Punish them or engage them?: Teachers' views of unproductive student behaviours in the classroom, *Australian Journal of Teacher Education* (2014), 39(6).



This is in line with the general idea that disruptive behaviours prevents the individual and other students from learning.

- A very common reason for disruptive behaviour within the classroom is bullying.
¹⁶Kochenderfer-Ladd et al (2008), suggested that the teacher's attitudes towards bullying are important in terms of predicting the extent to which the bullying causes disruption within the classroom. Revenge seeking on peers was implied as a key aspect of bullying, as well as the influence of bystanders, as suggested by ¹⁷Salmivalli et al (2011). These researchers concluded that a lack of defending the victim alongside vicariously reinforcing the bully were both associated with an increased frequency of bullying.
- Immaturity is also an important contributory factor towards disruptive behaviour. For example, ¹⁸Pope et al (1991) suggested that disruptive behaviour is particularly common amongst students (boys in this case) who belonged to either a hyperactive and inattentive-immature group or a hyperactive and aggressive group. This emphasises the importance of aggressiveness and immaturity in the development of such behaviours, which also were highly correlated with peer rejection, suggesting that peers also play an important role in influencing others as to what is acceptable behaviour and what is not.
- In terms of dealing with disruptive behaviour, behaviour modification is a useful technique. It is based upon behaviourist principles, where if disruptive behaviour is punished, whilst the desirable behaviour of others is vicariously reinforced, then this will lead to an increase in the number of productive behaviours because the disruptive individuals will be motivated by the potential rewards. This is based on the assumption that reinforcement increases the likelihood that a behaviour will be repeated, whilst punishment decreases this likelihood. The effectiveness of behaviour modification was supported by ¹⁹Thomas et al (1978), who found that "the majority of teachers displayed individual rates of disapproval that were higher than their individual approval rates", suggesting that behaviour modification techniques could be relatively easily implemented in the classroom.
- Similar principles can be used in the form of cognitive behaviour modification, such as through self-instructional training, as suggested by ²⁰Meichenbaum (1971), which was found to be particularly efficient in developing an awareness of self-control in impulsive children.

Part F: Intelligence

- Intelligence can be considered as the ability to acquire and use knowledge, where IQ is an objective and quantitative measure of intelligence. Individuals can therefore be compared against each other in terms of IQ to establish their intelligence in statistical terms, where IQ scores form a normally-distributed bell curve. The average IQ is 100, where an IQ above 140 is considered a genius and below 70 is considered mentally retarded.
- There are different types of intelligences. This is crucial in explaining why an individual may excel at Mathematics and quickly complete difficult problems, but fails to write even a basic poem.

¹⁶ Kochenderfer-Ladd, B., and Pelletier, M.E. Teachers' views and beliefs about bullying: Influences on classroom management strategies and students' coping with peer victimisation, *Journal of School Psychology* (2008), 46(4), pp.431-453

¹⁷ Salmivalli, C., Voeten, M., and Poskiparta, E. Bystanders Matter: Associations Between Reinforcing, Defending, a Frequency of Bullying Behaviour in Classrooms, *Journal of Clinical Child and Adolescent Psychology* (2011), 40(5)

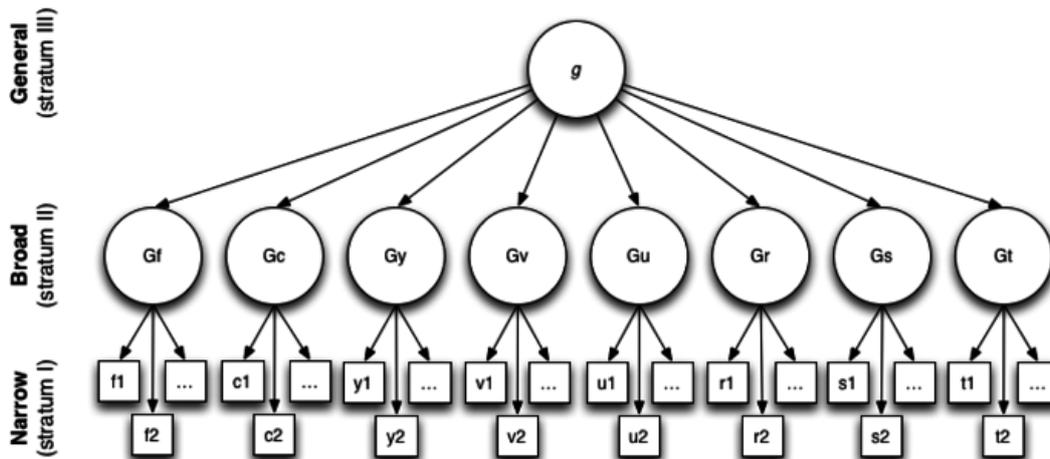
¹⁸ Pope, A. W., Bierman, K. L., & Mumma, G. H. (1991). Aggression, hyperactivity, and inattention-immaturity: Behavior dimensions associated with peer rejection in elementary school boys. *Developmental Psychology*, 27(4), 663-671.

¹⁹ Thomas, J.D., Presland, I.E., Dilys Grant, M., and Glynn, T.L. Natural Rates of Teacher Approval and Disapproval in Grade-7 Classrooms, *Journal of Applied Behaviour Analysis* (1978), 11(1), pp. 91-94

²⁰ Meichenbaum, D. H., & Goodman, J. (1971). Training impulsive children to talk to themselves: A means of developing self-control. *Journal of Abnormal Psychology*, 77(2), 115-126.



- This idea is encompassed by Gardner's Multiple Intelligences Theory, which suggests that there



are 8 broad 'intelligences', ranging from verbal-linguistic and visual-spatial to logical-mathematical and interpersonal.

- On the other hand, the Cattell-Horn-Carroll theory of intelligence takes a more broad and general approach. This theory sees all intelligence as being summarised by the G-factor, from which stem several other intelligences, producing three strata in total (General, Broad and Narrow). The CHC represents a combination of two previous theories - ²¹the theory of fluid and crystallised intelligence.
- Sternberg's Triarchic Theory takes an even simpler approach and views intelligence as the product of 3 subsets - componential, experiential and contextual (also referred to as creative, analytical, and practical). The theory also includes metacomponents, performance components and knowledge-acquisition components to explain variations in intelligence between individuals, whilst the idea of ²²'efficacious automatization' acknowledges the role of previous experiences in the development of intelligence and learning.
- The most popular method of IQ testing is the Stanford-Binet IQ Test, first published in 1916. This method is favoured due to the highly objective and reliable measurement of intelligence, with set norms for each age group (allowing comparisons to be made between individuals) and ²³detailed instructions given to avoid researcher bias and investigator effects. Regular updates/revisions to the original test ensure that these concerns are (and have been) addressed, alongside reflecting changes in average IQs. However, the significant increase in average IQ of Americans between 1932 and 1978 has led some to speculate the reliability and temporal validity of the Stanford-Binet IQ test, as well as attempts to accommodate for children who score above 180 and below 50.
- The Weschler Scale is an alternative intelligence measurement instrument. Research has demonstrated high ²⁴test-retest reliability of between 0.70 and 0.90 after a minimum of 2 weeks after the original testing. The Weschler scale can also be said to have high concurrent validity because the scores of those who'd completed this scale and the Stanford-Binet IQ test displayed a correlation coefficient of 0.88, indicating a strong positive correlation.

²¹ Marris, H. Cattell-Horn-Carroll Theory of Intelligence, *Encyclopedia of Child Behaviour and Development* (2011), DOI: 10.1007/978-0-387-79061-9_472

²² Sternberg, R.J, Toward a Triarchic Theory of Human Intelligence, *Journal of Behavioral and Brain Sciences* (1984), 7(2), pp. 269-287

²³ Terman, L. M., & Merrill, M. A. (1937). *Measuring intelligence: A guide to the administration of the new revised Stanford-Binet tests of intelligence*. Oxford, England: Houghton Mifflin.

²⁴ Weschler, D. *Weschler Adult Intelligence Scale - Fourth Edition*, *Statistics Solutions* (2008), Accessed on 28.08.17, Accessed through <https://pdfs.semanticscholar.org/2858/f906a462c4424192f80361f689bdec24c16d.pdf>



- However, as pointed out previously, there is not only one type of intelligence. For example, Mayer and Geher proposed the idea of emotional intelligence i.e. the ability of individuals to connect with others and display both empathy and sympathy, where the researchers concluded that ²⁵“emotional problem solving requires emotional openness as well as general intelligence”. This means that emotional intelligence is not isolated from or more important than general intelligence!
- Guildford (1950) emphasised the importance of creativity and suggested that it has not been accounted for in general intelligence theories. Indeed, it may be useful in terms of interpreting the information given to the individual - and variations in such interpretations may portray differences in intelligence. Guildford ²⁶suggested that the ‘factorial conception of personality’ is required for a new approach to thinking about creativity and creative intelligence.

²⁵ Mayer, J.D. and Geher, G. Emotional intelligence and the identification of emotion, *Intelligence* (1996), 22(2), pp. 89-113.

²⁶ Guildford, J.P. Creativity, *American Psychologist* (1950), 5(9): 444-454

