

Applied Psychology

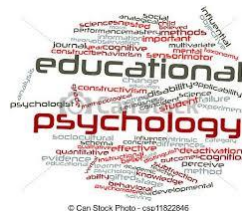
Lecture 3: Inclusion and Challenging Behaviour

Stacey Coleman

Aims:

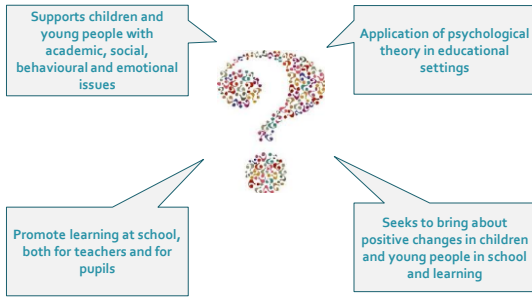
- To introduce students to the discipline of educational psychology
- To explore inclusion in schools
- To introduce behavioural, emotional and social difficulties in classrooms
- To discuss the biopsychosocial model in terms of the development of problems

What is Educational Psychology ?



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What is Educational Psychology?





The British Psychological Society
Promoting excellence in psychology

BPS –
Educational
Psychology

• <https://www.youtube.com/watch?v=qRhtzq-laK8&x-yt-ts=1422579428&x-yt-cl=85114404>

Educational
Psychology versus
the Psychology of
Education

Psychology of Education

- Distinct from educational psychology
- Research focusing on processes of learning and adaptation to schooling
- Deals with:
 - General theories of learning
 - Typical development

Contributions to Research and Theory in Educational Psychology

- Theories of Learning
 - Skinner: Radical behaviourism
 - Thorndike: Active learning
 - Bandura: Social learning theory
- Social, Moral and Cognitive Development
 - Piaget: Cognitive development
 - Vygotsky: Zone of proximal development
- Theories of Intelligence and Mental Testing

(Davey, 2011, p. 346)

Theories that inform Educational Practice

- Piaget's Cognitive Development Theory
 - Views child as active agent in development
 - Constructivist approach
 - Interactions with the world produces schemas

Disequilibrium is the starting point for growth

Assimilation extends schemas

Accommodation changes or creates schemas

Stage	Approximate Age
Sensorimotor Learn through world primarily through senses	0 – 18 months/2 years
Pre-operational Thinking becomes tied to doing	18 months/2 years – 7 years
Concrete operational Ability to connect one thing to another	7 – 11 years
Formal operational Adult reasoning	11 years onwards

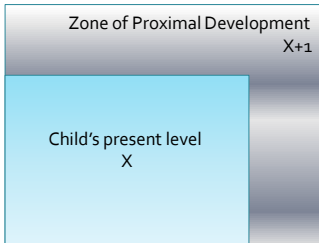
Impact on Education

- Emphasis on the developmental progression of stages in children's cognition
- A 'discovery-based' approach
- Criticisms:
 - Children show cognitive capabilities at a younger age than the theory predicts (Baillargeon & DeVos, 1991)
 - Ignores the active role of social agents
 - Stages might not be qualitatively distinct

Theories that inform Educational Practice

- Vygotsky's Sociocultural Theory
- Focuses on active role of others in transmitting cultural knowledge to the child
- Child = apprentice
- Move from interpsychological to intrapsychological
- Shift towards self-regulation, e.g., private speech

Vygotsky's Sociocultural Theory



• Scaffolding

- Guidance and support provided by adults and other children provided in ZPD.
- Children acquire knowledge and skills

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Impact on Education

- Theory applied in the form of scaffolding
- Flexible and contingent support helps children master new or challenging tasks
- In guided participation studies adults are more effective scaffolders than peers
- Peers can be effective when trained in how to give support

Inclusion and Challenging Behaviour

Assessing pupils

- The role of the EP includes assessing pupil characteristics
- Assessment of pupils
 - Covering cognitive, academic, behavioural and socio-emotional characteristics
 - Complex psychological theory and research; psychometric tests of intelligence

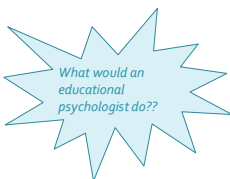
Assessing pupils

- EP's also monitor links between individual pupil functioning and class dynamics
 - E.g., in the case of bullying
- Bullying creates negative psychological and social outcomes and cannot be separated from the classroom context
- EP's role is to provide a comprehensive assessment of pupil functioning and broader social problems
- EP's may then be able to help schools implement broad intervention strategies

Bullying

Example:

A young pupil has been underperforming for some time – despite the best efforts of her teacher – and has shown a recent increase in unauthorised absences from school.



Types of need

• Specific learning difficulty	• Moderate learning difficulty
• Severe learning difficulty	• Profound and multiple learning difficulty
• Behavioural, emotional and social difficulties	• Speech, language and communication needs
• Hearing impairment	• Visual impairment
• Multisensory impairment	• Physical disability
• Autism spectrum disorder	• Other difficulty/disability

Behavioural, emotional and social difficulties

- These difficulties form the basis of a SEN statement for over 150,000 pupils in the UK (DCFS, 2009)
- Can include:
 - Internalising disorders (e.g., GAD)
 - Externalising disorders (e.g., Conduct disorder)
 - Attention problems (e.g., ADHD)

Internalising disorders

- Increasing attention is being paid to the emergence of anxiety and depressive symptoms in children
- Anxiety and mood disorders often co-occur
- Verhulst (2001): between 6 and 10% of children/adolescents have some kind of anxiety disorder
- Lower prevalence for depression (3%), with markedly more depressive symptoms/disorders experienced by females (Hammen & Rudolph, 2003)

Internalising disorders

- Range of biological, social and cognitive factors play a role in the development of anxiety and depression in children/adolescents
- Both appear to have a common genetic basis, whilst manifestation of anxiety symptoms more strongly predicted by environmental factors (Eley & Stevenson, 1999)

Internalising disorders

- Cognition also highly implicated; negative thinking patterns (e.g., self-perceptions and biased beliefs) play a key role in creating and maintaining feelings of emotional distress (Banerjee, 2008)
- These can affect social and academic competence; in turn create a vicious cycle where anxiety and depression cause problems at school and make the emotional difficulties even more severe

Externalising and attention-deficit disorders

- Pupils with these disorders attract a great deal of EP's attention due to the disruption they can cause to their own learning, the learning of their peers, and interactions at school more generally
- Disruptive behaviour interferes with academic tasks and positive social relationships

Externalising and attention- deficit disorders

- Prevalence rate in children/adolescents around 7% (Costello et al., 2003), and more prevalent in males
- Conduct disorder and ADHD often co-occur
- Range of biological, social and cognitive factors play a role in their development

Externalising and attention- deficit disorders

- Attention-Deficit / Hyperactivity Disorder
 - Greatest research base on neurophysiological factors involved in ADHD
 - Certain medications that stimulate certain areas of the brain shown to be helpful in counteracting ADHD problems;
 - But, twin studies show importance of environmental factors (Burt et al., 2001)

Externalising and attention- deficit disorders

- Attention-Deficit / Hyperactivity Disorder
 - Combination of biological and socio-environmental factors MUST be considered in order to understand this disorder
 - ADHD is **not** correlated with low intelligence (Lloyd, 2015) – sadly the need for diagnosis arises because of poor performance and disruptive behaviour in the classroom

Attention
Deficit
Hyperactivity
Disorder
(ADHD)

Treatment?

Medication?

Counselling / talking
therapies?

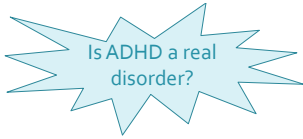
ADHD
treatment

- Most is known about the neuropsychological factors involved in ADHD
- Smith, Barkley and Shapiro (2007): medications that stimulate certain areas of the brain responsible for attention can be helpful in countering ADHD problems
- BUT – a combination of medication and social-environmental factors must be taken into account

ADHD
treatment

NICE guidelines (2015):

- School-age children: first-line treatment should be group-based parent-training programmes. Can include psychological treatment (CBT).
- Drug treatment is NOT indicated as the first-line treatment for all school-age children with ADHD. This should be reserved for those with severe symptoms and impairment or for those with moderate levels of impairment who have refused non-drug interventions.
- <http://www.nice.org.uk/guidance/cg72/chapter/1-recommendations#treatment-for-children-and-young-people>



ADHD has achieved somewhat celebrity status...

- Requires little introduction...
- Global phenomenon, spreading rapidly (particularly in western countries)
 - Increasing dominance of US psychiatric models
 - Need for new markets for pharmaceutical companies
 - Changing approaches to schooling
- Broad consensus that ADHD is a genuine **neurodevelopmental disorder**; however many critics still question the legitimacy of ADHD.

Symptoms and Support



- Many international experts and organisations have endorsed ADHD as a valid medical disorder
- Many research studies have documented the validity of the disorder, as well as its adverse impact on the lives of those living with ADHD

Biological basis?

- Findings from genetic and neurological studies have given weight to the argument that ADHD is a valid disorder.

Genetic

- E.g., Tannock (1998);
- Numerous family-genetic studies have reported a higher prevalence rate of psychopathology, particularly ADHD, in parents of children with ADHD.

Biological basis?

- Passmore (2014)
- Twin and adoption studies consistently show a much greater incidence of ADHD among MZ twins than DZ twins.
 - If one twin has symptoms of ADHD, the risk that the other will have the disorder is as high as 75-90%

Neurological

- Dopamine, norepinephrine and serotonin have been implicated in the maintenance of ADHD symptoms

Biological basis?

Neurological

- Dopamine: essential for attention
- Norepinephrine: affects arousal, alertness, attention and mood
- Serotonin: responsible for regulating functions such as mood, impulsivity and learning
- Studies have shown abnormalities in these neurotransmitters (particularly dopamine) in individuals presenting with ADHD symptoms.
- Professionals/researchers therefore maintain that children with ADHD have a deficiency in these neurotransmitter chemicals (e.g., Barkley, 2013)

Biological basis?

Neurological

- Neuro-imaging studies involving children with ADHD have shown a decreased size of the prefrontal cortex, resulting in deficits in functions such as response inhibition and working memory.
- Ratey and Hagerman (2008):
 - PET scans show that participants with ADHD displayed 10% less brain activity than the control group when taking part in an attention task.
 - Brains of individuals with ADHD use less glucose/glucose more slowly (brains main energy source)

However...

- There are still critics that maintain that ADHD is not, and should not be diagnosed as, a medical disorder/condition
- Some critics argue that ADHD is nothing more than an example of 'medicalisation' of behaviours in children which are the most annoying and problematic for adults to control (Mather, 2012)
- Child neurologist Fred Baughman (2006) is one of the biggest critics...

Arguments against ADHD as a medical disorder

- Baughman (2006)
- "Virtually all symptoms of ADHD relate to classroom behaviour. Children won't do homework, fidget, squirm, interrupt, and are forgetful and disorganised are assumed to have a biochemical imbalance in their brain. These children can be difficult to control in a classroom and in many cases are more compliant when drugged. However, there is absolutely no scientifically valid evidence that compliant-drugged students learn faster" (p. 13)

Arguments against ADHD as a medical disorder

- Others view ADHD as a social construct
 - The result of performance-driven cultures/societies
- Medication used to treat symptoms (such as Ritalin) argued to be nothing more than a method of performance enhancement
- Label of ADHD is viewed as a salvation to some – it allows them to avoid feelings of failure and simply blame their behaviour on brain functioning/genetics, rather than accepting personal responsibility for their problems
 - Diller (1998)

Disagreements on definition of ADHD

- No consensus on an agree definition for ADHD!
- DSM-5 (2013) = 'neurodevelopmental disorder'
- ICD = 'hyperkinetic disorder'
- Also multiple interchangeable terms used:

Attention Deficit Disorder (ADD)	Hyperkinetic Disorder (HKD)
Hyperkinesis	Minimal brain damage (MBD)
Disorder of attention motor control and perception (DAMP)	

Lack of biological marker?

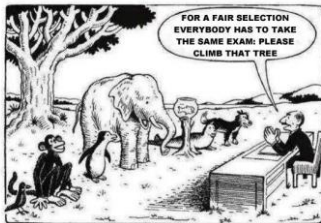
- There is yet to be a discovery of a biological marker or characteristic for ADHD.
- Currently no objective medical 'tests' which can detect the presence of ADHD
 - NOT 'symptoms'
- The biological theory of impaired brain functioning is perhaps the most widely accepted theory as it suggests that ADHD is the result of a malfunction in brain processes and/or structures.
 - However, some note that associations between variables (e.g., abnormal behaviour and brain abnormalities) does not automatically signify **CAUSATION**

Diagnosis is subjective

- Diagnosis largely based on DSM and ICD and is subjectively identified by medical professional through the use of behavioural checklists and rating scales
- Often whether a person obtains a diagnosis of ADHD can be a matter of degree and personal opinion

Over use of drugs in children

- In the UK between 1994 and 2004, the prescription of methylphenidate increased by 7600% (Cohen, 2006)
 - Ritalin the most commonly known, CNS stimulant
- Cornier (2008): we should be extremely concerned regarding the number of children who are diagnosed with ADHD and, therefore, the number of children taking prescribed medication.
- Also questions raised re: influence of pharmaceutical companies
 - Potential for bias, especially where these companies are funding research into the efficacy of such treatments for ADHD



OUR EDUCATION SYSTEM

ADHD is defined in the DSM-5 as

'a persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development, has symptoms presenting in two or more settings (e.g., home, school, or work; with friends or relatives; in other activities), and negatively impacts directly on social, academic or occupational functioning. Several symptoms must have been present before the age of 12 years.'

Some implications of ADHD in adulthood

- ADHD and gambling disorder (Breyer et al., 2009)
 - Approximately 4 times more likely in males; male more likely to gamble than females; impulsivity trait
- Reckless driving (Jerome et al., 2006)
- Marital/relationship troubles (Anastopoulos et al., 2009)

Any questions?



Seminar this
week

- Final assessment session!
