



Working collaboratively in research-based education – an SEMH perspective

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Setting context

- One in ten children and young people aged 5 to 16 have a clinically diagnosed mental health disorder and around one in seven has less severe problems (Murphy & Fonagy, 2012)
- Schools are encouraged to consider whether disruptive behaviour is the result of unmet educational or other needs (DfE, 2015 – Mental Health and Behaviour in Schools)

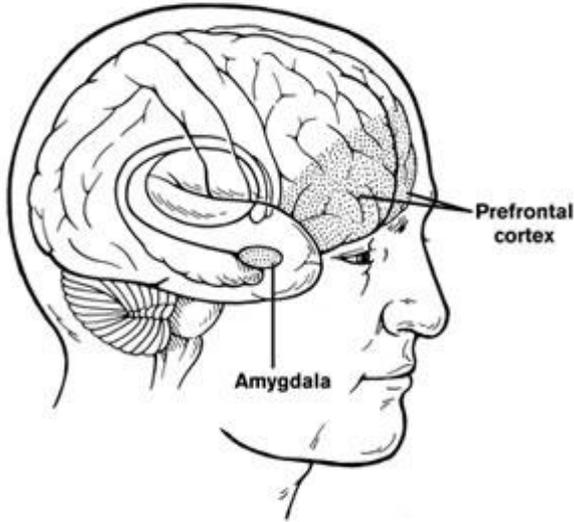
Behaviour (and what's underneath)

SEMH: A learning disability?

“These students have been characterized as ‘*actively inefficient learners*’ because of their difficulties accessing, organizing and co-ordinating multiple mental activities simultaneously in academic areas...”

(Meltzer & Krishnan 2007)

Executive Dysfunction



Executive function (EF)

Cognitive control of emotions, thoughts and behaviour

- School readiness
- Predicts maths and reading scores from preschool to high school (Casey et al, 2002; Duncan et al, 2007; Kimberg et al, 1997)

Executive dysfunction (EDF)

CP deficits in working memory, inhibition, and emotion regulation (Frederickson et al, 2013; Raaijmakers et al, 2008; Schoemaker et al, 2012)

Structural & functional differences in the frontal lobes and amygdala

Reduced grey matter and activation during EF tasks and viewing negative images

(Fairchild et al, 2011; Jones et al, 2009; Rubia et al, 2008; Stadler et al, 2007; Sterzer et al, 2005, 2007)

Executive Dysfunction may help explain problem **behaviours** and poor **academic achievement**

Executive Dysfunction

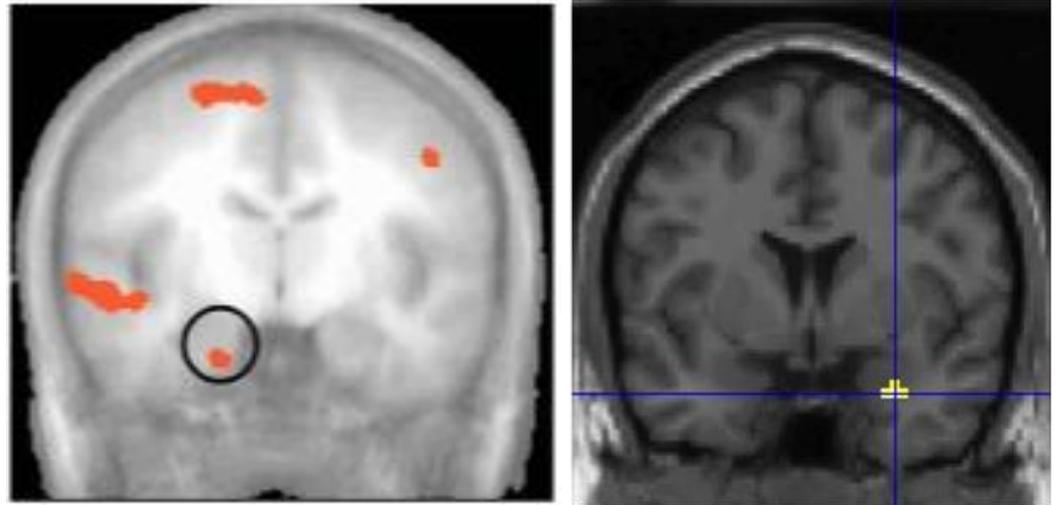
- EF deficits have long been implicated in behavioural difficulties
 - disinhibited, impulsive behaviour
 - high levels of risk taking
 - do not seem to learn from mistakes
 - poorer working memory than non-aggressive boys
 - Our work in primary EBD demonstrated working memory below 1SD for >80% of children in one school (Frederickson et al., 2013)

Social and Emotional Difficulties

- We also know that children with behavioural difficulties often have problems with:
 - Identifying emotions in self and others
 - Responding appropriately to others' emotions
 - A 'hostile attribution bias'
 - Caring about consequences of actions (to self and other)
 - Social use of language
 - Creating and maintaining friendships (leads to cycle of these difficulties)
 - Limited Prosocial Emotions
 - Empathy

Social and Emotional difficulties

- Our initial research showed a deficit for most pupils in emotional recognition, understanding of own and others' emotions and emotion regulation
- Functional differences in amygdala in response to distress emotions – powerful in explaining behaviours to teachers



From Marsh et al., 2008 & Jones et al., 2009, *AJP*

Reward v. Sanctions

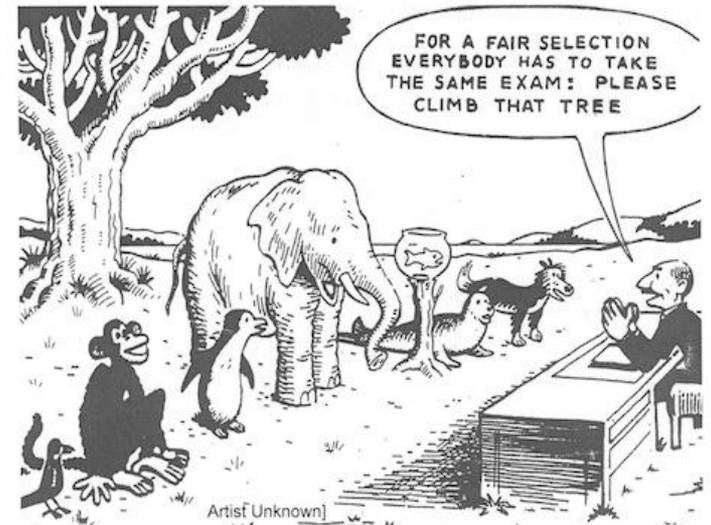
- ○ ‘Brien & Frick (1993) demonstrated a reward-dominant style in clinic cases with behavioural problems
- Evidence from Dadds’ group for decreased -ve emotional response during ‘time-out’
- Some evidence for abnormal neural response to punishment (e.g. Finger et al., 2008; Buckholtz et al., 2010)

What do we do?

Implications for intervention

Why might these approaches not be effective for ALL children?

- Based on **Social Learning Theory**
Assumes children are naturally driven to seek social connectedness, want positive feedback and social acceptance
- Do not account for **individual differences**
e.g. EF profiles and the child's individual goals & motivations
- Do not consider findings from **neuroscience**
i.e. Structural and functional differences in cognitive & emotion control processes



Traditional behaviour management strategies

- Young children learn to make associations between inappropriate behaviours and (threats of) punishment
- Yet, children need to be sensitive to punishment cues in order to learn refraining from inappropriate behaviours
 - Aversive conditioning
- But! Lack of fear in children can explain poor socialization because low fear of punishment reduces the effectiveness of conditioning

Lack of fear

- In a prospective study, fear conditioning using electrodermal responsivity was assessed in children at ages 3, 4, 5, 6, and 8
- Poor **fear conditioning** from ages 3–8 years is associated with aggression at age 8 (Gao et al. 2010a)
- Poor fear conditioning at 3 predisposes to crime at 23 (Gao et al. 2010b)



Lack of fear II

- Children and adolescents with behaviour problems and ADHD showed low skin conductance responses to aversive stimuli as well as to (positive and negative) emotional stimuli and to neutral pictures, compared to children and adolescents with ADHD-only and healthy controls (Herpertz et al., 2005)



Consequences without sanctions

How do you learn about consequences without a system of sanctions?

- Positively reinforce the appropriate behaviours using praise and token economy rewards
- Short- and long-term goal setting activities
- Consider consequences for possible problem solutions during social problem-solving activities

A working example

Summary

- Social, emotional and mental health problems, often displayed as behavioural difficulties, encompass a very broad range of behaviours, and understanding the profile of cognitive and affective strengths and weaknesses is imperative
- There is an increasing weight of evidence pointing to differential trajectories of brain development and behaviour
- Interventions must be individualised as far as possible to take this into account



Thank you

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