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# Risk Assessment and Management of People with Autism Spectrum Disorder:

More Questions Than Answers!

The 5<sup>th</sup> Bergen International Conference on Forensic Psychiatry

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# Scope

- Risk Assessment and Management in ASD

- Central Issue:

Unstructured

vs

Structured Professional judgement

- Problem

Paucity of Literature

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# Overview

- Review of ASD and the literature in relation to forensic practice
- Highlight work by Shine and Cooper-Evans in looking at an SPJ informed approach
- Present a range of assessments that I've found helpful and which may support formulation and intervention in ASD and forensic issues

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# Looking Forward

- Today's presentation is based upon:
  - a review of the last 5 years literature: 'ASD + Forensic' Search
  - My clinical practice over the last 18 years
- A call to arms to you researchers out there
- All illustrative cases referred to are based upon a montage of people I have met over the span of my career in order to ensure no individual's rights to privacy are compromised in anyway.

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# DSM – V: Diagnostic Criteria for ASD

- A. Persistent deficits in social communication and social interaction across multiple contexts, as manifested by the following, currently or by history:
1. Deficits in social-emotional reciprocity,
  2. Deficits in nonverbal communicative behaviours used for social interaction
  3. Deficits in developing, maintaining, and understanding relationships

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# DSM – V: Diagnostic Criteria for ASD

B. Restricted, repetitive patterns of behaviour, interests, or activities, as manifested by at least two of the following, currently or by history:

1. Stereotyped or repetitive motor movements, use of objects, or speech
2. Insistence on sameness, inflexible adherence to routines, or ritualized patterns of verbal or nonverbal behaviour
3. Highly restricted, fixated interests that are abnormal in intensity or focus
4. Hyper- or hypo-reactivity to sensory input or unusual interest in sensory aspects of the environment

# Prevalence of ASD in General

- Estimates of ASD in the general population – 1.1% (95% CI = 0.3 – 1.9)
  - Estimating the Prevalence of Autism Spectrum Conditions in Adults - Extending the 2007 Adult Psychiatric Morbidity Survey. (2012) NHS.
- Study specifically in children and young people – 1.15%
  - Idring, S. et al. (2012) Autism spectrum disorders in the Stockholm Youth Cohort: design, prevalence and validity. PLoS One, 7(7): e41280.
- Estimates of Learning Disabilities in ASD – 52.6% - 56.1%
  - Fombonne, E., Quirke, S. and Hagen, A. (2011). Epidemiology of pervasive developmental disorders. In Amaral D.G., Dawson G. and Geschwind D.H. eds. (2011) Autism spectrum disorders. New York: Oxford University Press, pp. 90 – 111.

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# Criminal Justice System Studies

- Relatively few studies looking at ASD in the Criminal Justice System (CJS), and findings among those that have been carried out are variable.
- Some studies found over representation of ASD within the forensic settings
  - (e.g. Cashin et al (2009) Autism in the criminal justice detention system. J. Forensic Nurs.)
- While others have found the rate of offending in ASD no higher than the general population
  - (e.g. Mouridsen et al (2008) Pervasive Developmental Disorders and Criminal Behaviour. Int. J. Offender Ther.)



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# Prevalence of ASD in Delinquent or Suspected Delinquent Populations

- 428 cases referred to Family courts in Japan – 3.2% – 18.2% & higher rate of Sex related crimes
  - Kumagami T, Matsuura N. Prevalence of pervasive developmental disorder in juvenile court cases in Japan. *J Forensic Psychiatry Psychol.* 2009;20:974–987
- Young offenders referred for forensic psychiatric evaluation – 15%
  - Siponmaa L, Kristiansson M, Jonson C, Nydén A, Gillberg C. Juvenile and young adult mentally disordered offenders: the role of child neuropsychiatric disorders. *J Am Acad Psychiatry Law.* 2001;29:420–426.

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# Prevalence of ASD in Delinquent or Suspected Delinquent Populations

- Incidence of ASD symptoms in first time child arrestees – 3.45%
  - Geluk CAML, Jansen LMC, Vermeiren R, Doreleijers TAH, Van Domburgh L, De Bildt A, Twisk JWR, Hartman CA. Autistic symptoms in childhood arrestees: longitudinal association with delinquent behavior. *J Child Psychol Psychiatry*. 2012;53:160–167.
- Higher level of ASD in suspected Juvenile Offenders and higher rate of sex related crimes
  - ‘t Hart-Kerkhoff LA, Jansen LM, Doreleijers TA, Vermeiren R, Minderaa RB, Hartman CA. Autism spectrum disorder symptoms in juvenile suspects of sex offenses. *J Clin Psychiatry*. 2009;70:266–272

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# Nature of Offending Behaviour

- Higher incidence of sex related crimes
- Male arsonists compared with other violent offenders are more often diagnosed with ASD – 7.1% versus 2.5%
  - Enayati J, Grann M, Lubbe S, Fazel S. Psychiatric morbidity in arsonists referred for forensic assessment in Sweden. J Forensic Psychiatry Psychol. 2008;2008(19):139–147

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# Nature of Offending Behaviour

- Higher rate of offences against the person, and lower rates of property offenses and probation violations in 12 – 18 year olds
  - Cheely CA, Carpenter LA, Letourneau EJ, Nicholas JS, Charles J, King LB. The prevalence of youth with autism spectrum disorders in the criminal justice system. J Autism Dev Disord. 2012;42:1856–1862
- Offenders with ASD were less likely to have comorbid LD

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# Caveats

- Variability in approach to identifying ASD and related symptoms,
- None of the studies above used ADOS-II and ADI-R type approach which tend to be viewed as Gold Standard
- Not all studies clearly partial out the impact of comorbid psychiatric difficulties and their contribution to risk
  - Newmann SS, Ghaziuddin M. Violent crime in Asperger syndrome: the role of psychiatric comorbidity. J Autism Dev Disord. 2008;38:1848–1852

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# Offending and Core ASD Symptoms

ASD does not cause violence, and when violent behaviour occurs in people with ASD it is the results of third variables, including:

- Poor parental control
- Family environment
- Criminality
- Bullying
- Psychiatric comorbidity

Del pozzo et al (2018) Violent Behaviour in Autism Spectrum Disorders: Who is at risk? Aggression and Violent Behaviour. 39: 53-60

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# Offending and Core ASD Symptoms

In a contrasting review of the literature by Im (2016) evidence was found to suggest that Core ASD deficits were associated in at least some cases of violence, including:

- Theory of Mind Deficits
- Weak Central Coherence
- Empathic Failure
- Social Communication deficits
- Sensory difficulties
- Intense preoccupations with a narrow range of interests
- Emotional Regulation (Executive Functioning?)

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# Offending and Core ASD Symptoms

Sexual offending often a manifestation of core ASD symptoms

Mogavero (2016) Autism, sexual offending and the criminal justice system. *Journal of Intellectual Disabilities & Offending Behaviour*, Vol. 7 (3). P116 - 126

Young people with ASD have as much interest in sexual behaviours as those without

They often bring to this interest a barrier in terms of delayed social and emotional development

Lack of knowledge and skills in how to integrate sex and sexuality into part of a healthy lifestyle



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# Offending and Core ASD Symptoms

Problematic sexual behaviours relating to Core ASD include:

- Fixed Interests, in terms of particular people or objects that become sexualised, e.g. particular ethnic groups
- Deficits in understanding relationships, e.g. touching the breasts or genitalia of a stranger or care worker one likes
- Difficulties in developing age appropriate peer relationships, e.g. finding it easier to relate to much younger children
- Difficulties with empathy/Theory of Mind and understanding the perspective and/or distress of others

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# Autism Specific Forensic Formulation

Offending Related Autism specific factors identified within their work include:

Shine & Cooper-Evans (2016)

1. Unrelenting and obsessive pursuit of circumscribed interests
  - In terms of putting others at risk inadvertently in relation to the primary pursuit of an interest
  - Directly in terms of a specified individual becoming the target of interest
  - Directly in terms of the subject matter itself being criminal in nature

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# Autism Specific Forensic Formulation

2. Deficits in Theory of Mind leading to impaired social understanding and poor problem solving
  - Perspective taking difficulties
  - Limited generation of social problem solving strategies
  - Lack of empathy
  - Failure to anticipate consequences
  - Cognitive inflexibility and rigid adherence
  - Social naivety

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# Autism Specific Forensic Formulation

3. Seeking Sensory Stimulation or avoidance of sensory overstimulation
4. Disruption to idiosyncratic cognitive rules or rigid behavioural routines or difficulties coping with change

Shine & Cooper-Evans (2016) “Developing an autism specific framework for forensic case formulation” *Journal of Intellectual Disabilities and Offending Behaviour*, 7 (3) pp. 127-139.

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# Formulation framework (Shine & Cooper Evans)

Assesses link between ASD and Offending in 3 Stages

1. Distal Historical Factors
2. Proximal Factors
3. Current Functioning

Should be completed alongside a Structured Professional Judgement Tool to capture generic criminogenic factors

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# Formulation framework (Shine & Cooper Evans)

## 1. Distal Historical Factors

- Accessing and utilising data from developmental history
- Should incorporate information from evidence based tools in line with NICE Guidance, e.g. ADI-R
- Purpose is to confirm diagnosis and establish temporal order of ASFs relevant to offending history

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# Pathological Demand Avoidance (PDA)

Term first used in 1980's by Elizabeth Newson

Specific subgroup of children who were often seen as:

- Too sociable,
- Too imaginative,
- Too comfortable with role play, to be autistic

Now accepted to be part of ASD, and in the UK it is recognised by the National Autistic Society and The Department of Education – though not by ICD-10/DSM-V

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# Pathological Demand Avoidance (PDA)

The central difficulty in PDA is the individuals avoidance of, or extreme resistance to day to day demands.

Based upon an underlying state of anxiety and the subsequent need to feel in control.

Demands reduce a sense of control, which leads to an increase in anxiety which leads to compulsive and obsessive attempts to avoid the demands in order to return to a state of equilibrium



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# Pathological Demand Avoidance (PDA)

The need for diagnostic clarity in relation to PDA is particularly important as normal autism friendly strategies have not been found to be particularly effective.

PDA is not:

- Oppositional Defiant Disorder
- Attachment Disorder
- Attention Deficit and Hyperactivity Disorder

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# Pathological Demand Avoidance (PDA)

Criteria for PDA ([www.pdasociety.org.uk](http://www.pdasociety.org.uk))

1. Passive early history
2. Continues to resist and avoid ordinary demands of life, with strategies of avoidance
3. Surface sociability, but apparent lack of social identity
4. Lability of mood, impulsive, led by need to control
5. Comfortable in role play and pretend
6. Language delay
7. Obsessive behaviour

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# Pathological Demand Avoidance (PDA)

Clarity of diagnosis in relation to PDA is important from the point of understanding how best to match strategies, e.g. novelty and distraction often works better than rigid adherence to structure and routine for this group.

It is important in terms of helping staff understand that they are not just 'naughty children or young people', or indeed mislabelled as simply ODD, CD or later ASPD.

It is important in gaining conceptual clarity in relation to future research both generally and in terms of potential forensic pathways

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# Pathological Demand Avoidance (PDA)

Differentiating between pathological demand avoidance and antisocial personality disorder: A case study.

Trundle, Craig & Stringer (2016)

Highlight similarities and overlaps between PDA and antisocial personality disorder (ASPD) which may lead to clinical and diagnostic confusion.

Similarities – Aggression, mood swings, controlling, etc.

Differences – Social understanding, and regard for social norms

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# Pathological Demand Avoidance (PDA)

PDA is not Reactive Attachment Disorder

The Coventry ASD vs Attachment Problems Grid

<http://drawingtheidealself.co.uk/>

What does attachment and trauma look like in someone with ASD?

How would attachment interrelate with ASD to contribute to future risk?

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# Formulation framework (Shine & Cooper Evans)

## 2. Collation of Proximal Factors

- Index Offence Analysis to determine nature of problem behaviours using functional analytic principles
- Clarifying the function of offending behaviour and how it may relate to functionally similar offence paralleling behaviours
- Autism Specific Factors and their role in the offence chain need to be established and clarified.

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# Autism Specific Factors

Empathy in Autism

Executive Difficulties

Cognitive inflexibility and rigid adherence

Limited generation of social problem  
solving strategies

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# Empathy

- Higher rates of criminal behaviour explained by deficits in social-emotional reciprocity, e.g. lack of empathy and poor social reciprocity

Murrie, C., & Warren, I. (2002) Asperger's syndrome in forensic settings. *Int. J. Forensic Ment. Health.* 1(1), 59–70

- However, how best should the construct of empathy be thought of in relation to ASD and offending
- The various tools available have neither been constructed nor validated with ASD in mind



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# Empathy - ASD vs Psychopathy

High Psychopathic Traits – Affective Resonance

ASD – Problems with cognitive-perspective taking

Lockwood et al., (2013) Dissecting empathy: high levels of psychopathic and autistic traits are characterized by difficulties in different social information processing domains. *Front. Hum. Neurosci.*

Reduced empathic concern and cognitive empathy performance were dissociable

Oliver et al (2016):

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# Empathy

Interpersonal Reactivity Index (Davis, 1980)

- Perspective Taking – Cognitive Understanding (Theory of Mind)
- Empathic Concern – Affective understanding (Compassion/Concern)
- Fantasy – Ability to identify with hypothetical/ fictional characters
- Personal Distress – Ability/Inability to cope with the distress of others

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# ASD and Executive Functions (EF)

ASD as Developmental Disorder of Higher Brain Function  
Krsnik & Sedmark (2017) in Executive Functions in Health and Disease

Cognitive flexibility deficits lead to poor adaptive responding in a dynamic environment

Many differences in the literature as to what constitutes Executive Functions and their subcomponents, however, for the purposes of this presentation I will refer to Suchy (2015)

Suchy (2015). Executive Functioning: A Comprehensive Guide for Clinical Practice.

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# ASD and Executive Functions (EF)

Executive Functions as prerequisite for goal directed action

Allow for the generation of plans, solutions and structuring

Underpinned by working memory, mental flexibility and information retrieval

Initiation and maintenance of behaviour towards a goal

Make appropriate response selections

Meta Tasking of multiple goals

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# ASD and Executive Functions (EF)

## Social Cognition

Understanding of implied verbal communication

Understanding of non verbal communication, e.g. facial expressions, posture, gesture, etc.

Understanding of Social Situations

Understanding of one's own emotional state in relation to the above

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# Executive Functions & Offending

Executive dysfunction predicts delinquency but not characteristics of sexual aggression in adolescents.

Burton et al (2016)

Lower executive functioning in violent individuals with schizophrenia and antisocial personality disorder compared to healthy controls

Sedgwick et al (2017)

Violent offenders impaired on attentional tasks, set shifting, working memory and planning tasks

Zou et al (2013)

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# Executive Functions & Offending

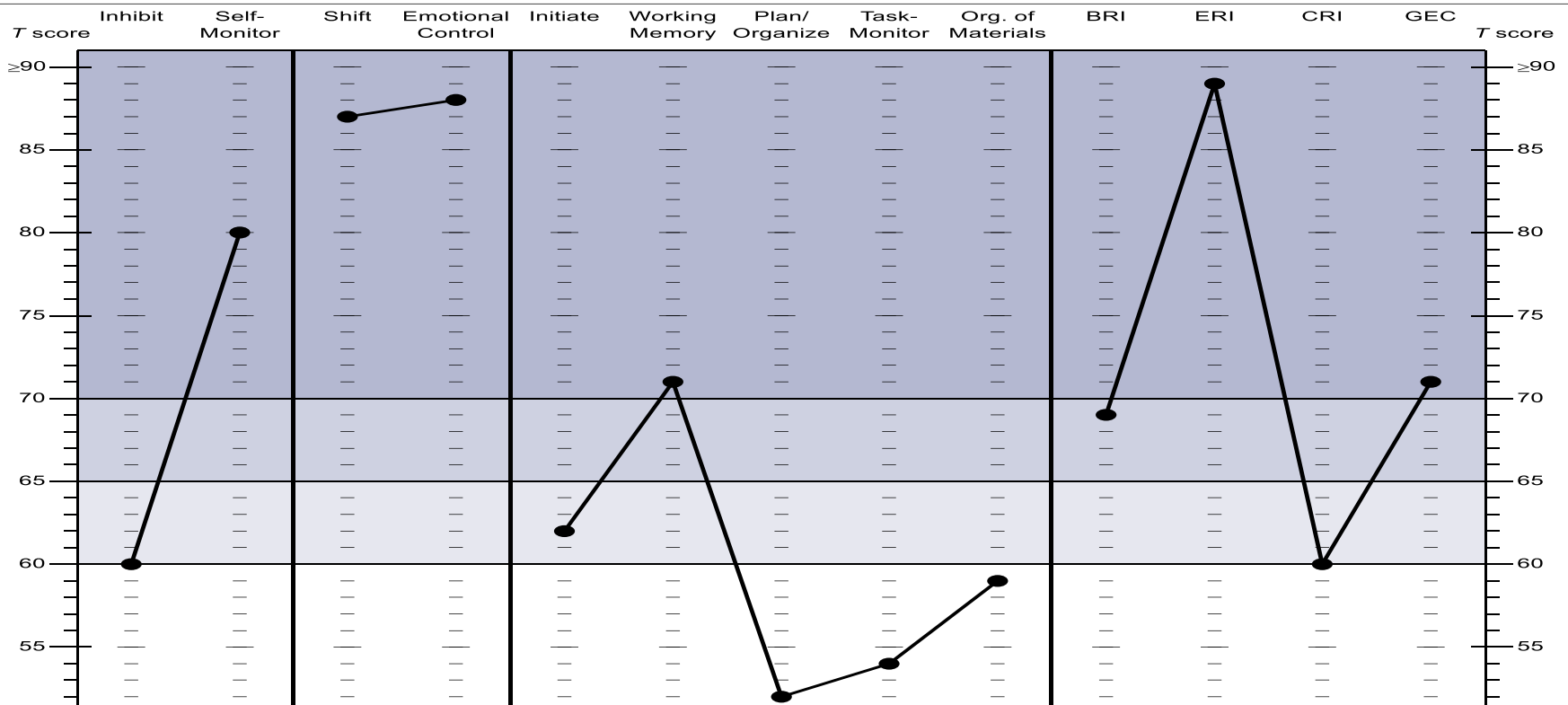
Sex offenders who offend against children had lower EF than those who offended against adults

Joyal et al (2014)

“Violence should be considered as the end product of a chain of life events, during which risks accumulate and potentially reinforce each other ... This systematic review did not find evidence of predispositions or neurobiological alterations that solely explain antisocial or violent behaviour”

Van der Gronde et al (2014)

# EF – Sexual Offending





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# Formulation framework (Shine & Cooper Evans)

## 3. Current Factors

Collection of information on current behaviour

Review of hypothesised Offence Paralleling Behaviours

Formulation between ASD and offending created

PBS process lends itself well to establishing functionally equivalent behaviours

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# Assessment and Intervention

Comprehensive Care Pathway Approach

Assessments

Cognitive – WISC V and  
Wechsler Non Verbal Scale of Intelligence

Academic – Wechsler Individual Achievement Test 3<sup>rd</sup>  
Edition

Executive – Behaviour Rating Inventory of Executive  
Function 2<sup>nd</sup> Edition

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# Assessment and Intervention

Comprehensive Care Pathway Approach

Assessments

Social-Emotional – SEDAL

Sensory-Motor Skills – Sensory Profile 2

Communication – Test of Abstract Language Comprehension

General Development – Vineland, Short Child Occupation Profile (SCOPE)

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# Assessment and Intervention

Primary Intervention is Positive Behaviour Support

Emotional Regulation – Zones of regulation, adapted DBT

Social Skills Groups

Autism specific sex education programme

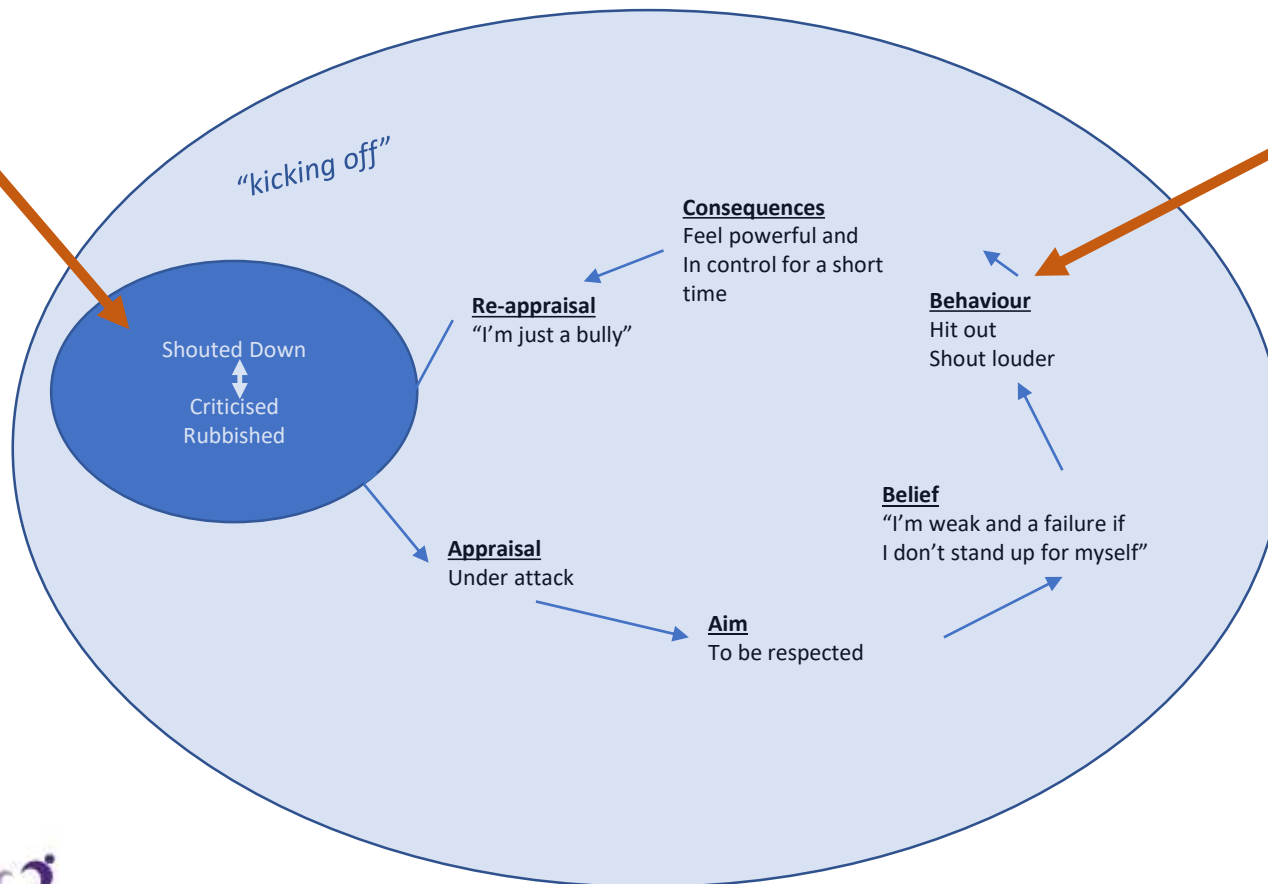
Looking towards developing Executive Function Interventions, such as the Spark\* programme

Cognitive Analytic Therapy

# Cognitive Analytic Therapy (CAT)

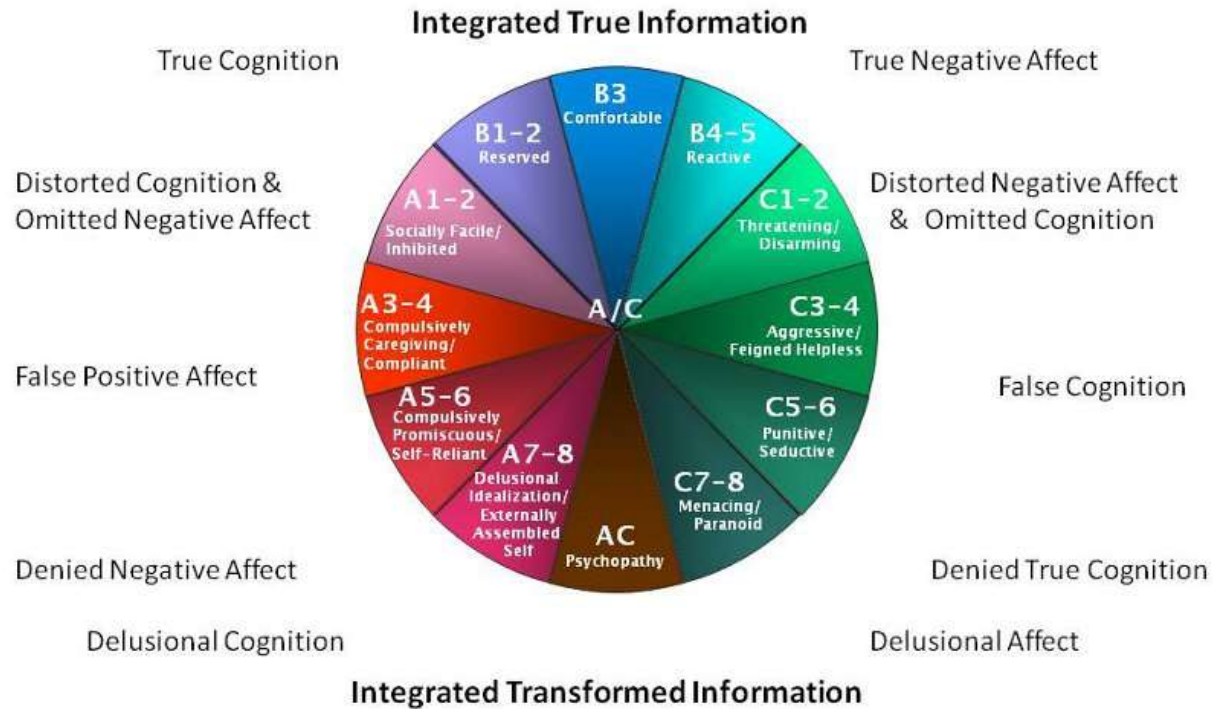
Relational  
Role

Procedural  
Sequence



# Crittenden's Attachment

## DMM Strategies in Adulthood



**Dominant and controlling**

**abusing**

**Compulsively compliant**

**abused**

*Helpless victim*

**Rejecting, Ignoring**

**Unseen and alone  
Needs remain unmet**

Feel unable to relate  
Feel separated and alone  
Feel damaged

**Present a 'False self'  
Fake good  
Placate People**

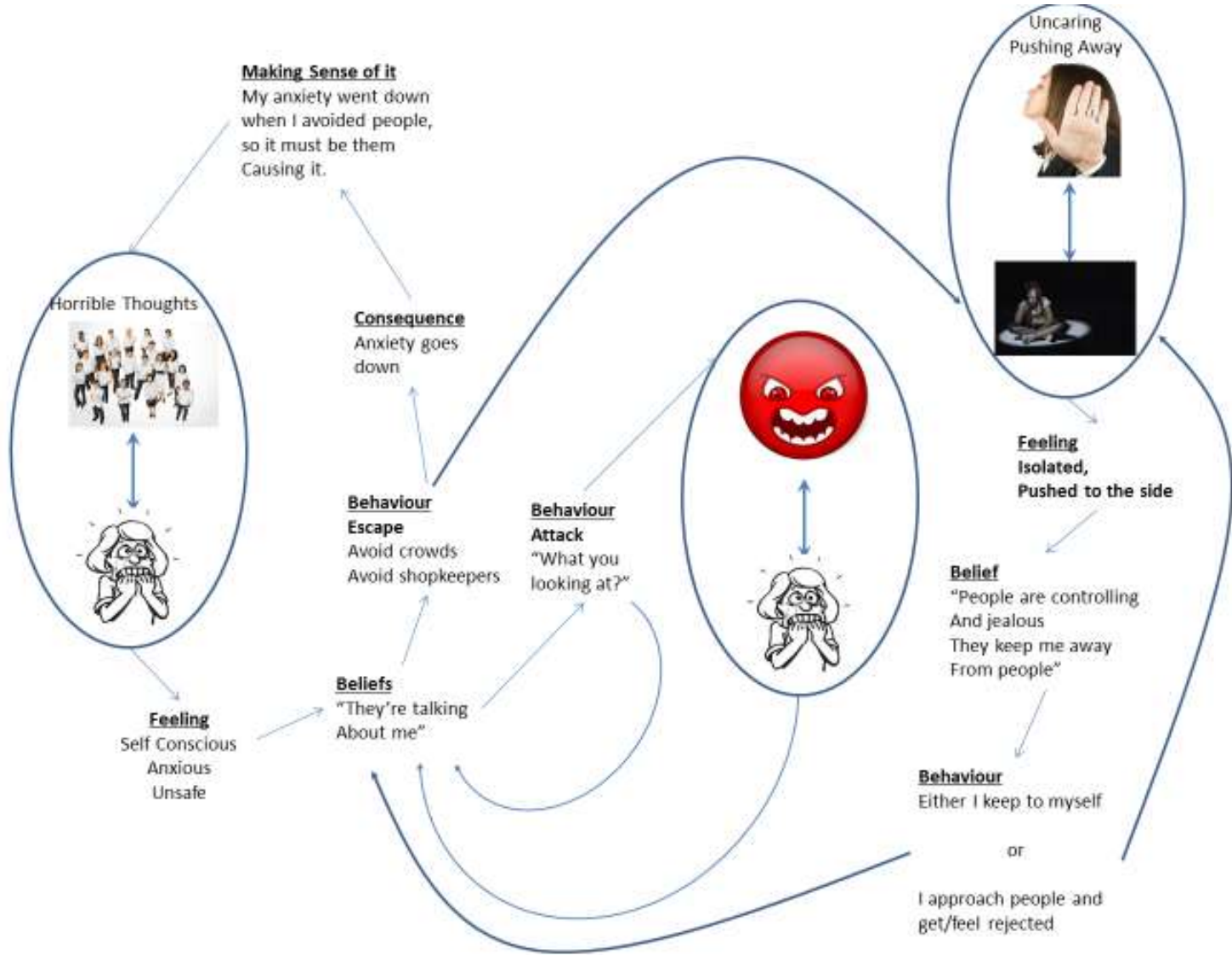
**Dismiss Self and  
cut off from own  
feelings**

Aim  
Avoid abuse (feared or real)  
Establish relationships  
Without others seeing  
Self as inadequate

**Control by physical means  
and Invasion of boundaries.  
Project helplessness onto  
Others and seek weak victim  
to make self safe and powerful**

**"I can't be in a normal  
Relationship, I'm not good  
enough"  
"I'll be humiliated"  
"The only way to be intimate  
is to be powerful and in control"**

Aim  
To be in intimate fulfilling  
relationship without  
being exposed and  
seen as vulnerable or  
shameful.  
Escape from helplessness.





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# Concluding Summary

There is a paucity of research still in relation to ASD and Offending in terms of incidence and the nature of offending found.

People with ASD may or may not be more likely to offend, however, consideration of core ASD features at an individual level is clearly required.

In the absence of a currently validated approach to ASD, Shine & Cooper-Evans' (2016) work on integrating ASD specific factors within a structured process provides a good starting point for thinking about risk and its management.

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# Concluding Summary

Further work I feel needs to be done in thinking about this approach relates to:

- Issues of diagnosis, e.g. ASD vs PDA and how this relates to risk
- Issues of construct validity, e.g. how we construe empathy
- Developing overlooked areas, e.g. the comorbidity of attachment
- Integrating a cognitive neuropsychological perspective, e.g. EF
- Researching the effectiveness of early interventions and adapted approaches, e.g. emotional regulation, psychosexual training, CAT