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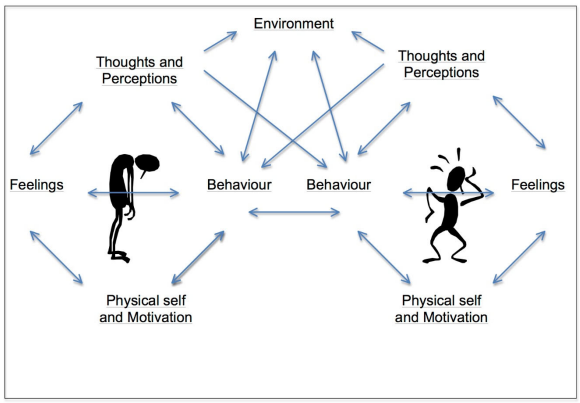
Integrating neurodevelopmental and mental health assessments



2

General tips on assessment

- Multidisciplinary approach
- Triangulate assessment if possible, using parent, teacher (or other) and self report
- Behavioural measures – obtain baseline measure of function
- Structured history where possible
- Prolonged/triangulated assessment: Observation in different settings, with different people
- Corroborative information
- Rule out other explanations for changes in presentation
- Don't underestimate the child or young person
- At the same time, do not assume they understand without checking and confirming as much as is possible

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Assessment tools

- Clinical interview/structured interview schedules: ADIS-C, Kiddie SADS – none adapted for ASD apart from ADIS-C
- Self-report measures (parent/teacher versions available for some) : Beck Youth Inventory, Spence, MASC, RCADS – again none normed for ASD

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Reviews of anxiety assessment in ASD

- Groundhuis et al 2012
- Lecavalier et al 2014

Appropriate (with conditions)

ADIS-C, MASC, CASI-4R, PARS

Potentially appropriate

SCARED, ADAMS, RCADS

Not appropriate

RCMAS, NCBRF, CBCL

See Hallet et al 2013, Sterling et al, 2015

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Wigham and McConachie (2014) review

- Of 8 tools, only the SCAS, RCADS and SCARED were considered to be robust tools in terms of measurement properties
- Few studies using these tools consider content validity – ie are the items valid for children with ASD? Are we measuring what we think we're measuring?
- Confirmatory factor analysis failed to support the original factors of the parent rated Spence Children's Anxiety Scale-Parent Version (Magiati et al. (2017)

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Challenges for measuring anxiety in ASD (see Lecavalier 2014)

- Unpicking anxiety vs autism symptoms (e.g. do the rituals cause distress?)
- IQ and self-report – problems with alexithymia
- Unique presentation of anxiety in ASD
- How to differentiate anxiety or mental health problems from behaviourala difficulties– resistance or demand avoidance or aversion is not always anxiety
- Physical or functional symptoms (much more common in ASD) may be signs of anxiety (does alexithymia lead to functional expression of anxiety?)
- Individuals with ASD may be more vulnerable to functional problems eg high rates of chronic unexplained pain, GI symptoms
- Need to include adaptive functioning

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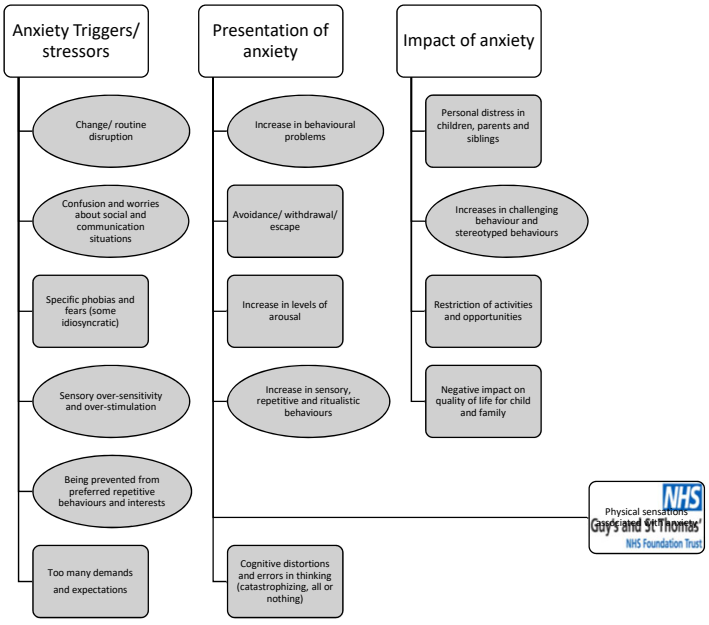
Key themes from focus groups



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Atypical fears

(Kerns and Kendall, 2014)

- Anxiety around routine (in the absence of generalised worry)
- Unusual specific fears (in the absence of generalised sound/sensory sensitivity) eg babies crying, happy birthday song
- Social fearfulness (in youth who lack an awareness of social judgment)
- Compulsive/ritualistic behaviour (in the absence of a desire to prevent distress/feared outcome) eg mealtime rituals, keep legs uncrossed

NHS
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http://www.autismsciencefoundation.org/news/autism-science-foundation-announces-2014-research-enhancement-grant-recipients

- Kerns et al 2016

- Adapting ADIS-C to include questions, probes and clinician-rated probes
  - To facilitate differential diagnosis of anxiety and ASD
  - To capture unconventional or ambiguous anxiety-like behaviour

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Anxiety Scale for children with autism (Rodgers et al, 2016)

- Adapted version of the RCADS
- The Anxiety Scale for Children- ASD (ASC-ASD©) is a 24 item self-report anxiety questionnaire, with four sub-scales: Separation Anxiety (SA), Uncertainty (U), Performance Anxiety (PA) and Anxious Arousal (AA), for use with young people aged between 8-16 years with a diagnosis of autism spectrum disorder (ASD).
- No norms as yet but recommended clinical cut-off of 24
- Free to download https://research.ncl.ac.uk/neurodisability/leafletsandmeasures/anxietyscaleforchildren-asd/

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Other measures

- Intolerance of uncertainty?
  - IUS-C and IUS-P
- Cognitive flexibility?
  - BRIEF, Flexibility Scale
- Alexithymia
  - Toronto alexithymia scale (TAS-20)
  - Children's Alexithymia scale (CAM)
  - The way I feel (based on the TAS-20)

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Mental state

- The *mental state examination* (MSE) is a structured way of observing and describing a patient's current *state* of mind, under the domains of appearance, behaviour, mood, affect, speech, thought process, thought content, perception, cognition and insight.

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Assess:

- Appearance: dress (dishevelled, 'quirky', inappropriate for temperature), self-care, hygiene, alertness
- Behaviour: Agitation, Psychomotor slowing, hyperactivity, compliance, eye-contact, repetitive / ritualistic behaviours, habits, self-injurious behaviour
- Affect: Facial expression, eye contact, congruence, reactions (overt or under – emotional blunting), flatness,
- Mood: Subjective/objective, anhedonia, apathy, motivation, suicidal thoughts/ plans, references to future activities / plans
- Speech: rate, tone, volume, flight of ideas, mutism,
- Thoughts: coherence, consistency, talking past the point, depressed cognitions, obsessional thoughts, rumination

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Mental state ctd…..

- Delusions, hallucinations
- Other unusual sensory experiences (déjà vu, jamais vu, depersonalisation, derealisation, intrusive imagery)
- Level of insight into the problem

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For ASD…

- Measurement of adaptive and intellectual function may also be crucial, to put the above into the context of the child's ability
- ABAS or Vineland for adaptive function
- Wechsler for intellectual function

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Functional assessment

- Get a good baseline:
  - Frequency
  - Duration
  - Intensity
  - Identify antecedents and consequences – essential for identifying triggers and maintaining factors
  - Measures – QABF - Attention, Escape, Physical, Tangible, and Nonsocial

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Example function of a behaviour

- LJ hits his mother every time he is prevented from using the internet. Gradually his mother loses the will to restrict internet use.
- LA has meltdowns after about ten minutes when taken out shopping. Eventually her parents go shopping alone while one of them stays at home with LA.
- What is the child communicating, what is a more adaptive reaction or behaviour that could be taught?

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Formulation

- Why is it important?
  - Broader, more detailed and more individual than diagnosis
  - Allows for collaborative sharing
  - Clarifies the maintaining factors and goals for therapy
  - Allows for testing of hypotheses

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What might an ASD-specific formulation look like?

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Common ASD-Predisposing factors

- **Personal predisposing factors:**

diagnosis of ASD, temperament, emotional dysregulation, genetic vulnerability, IQ

- **Contextual predisposing factors:**

over-protective parenting style, inappropriate early educational placements

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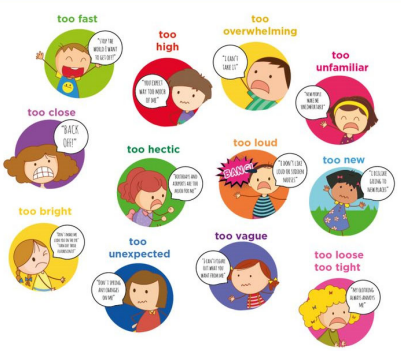
Common ASD-specific triggers

- Change in routine
- Misperceptions/misunderstandings
- Sensory sensitivities



- As well as more typical triggers

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Common ASD maintaining factors

- **Personal:** continuing cycles of emotional dysregulation, intrinsic cognitive processing style (ToM, poor global processing, rigidity), dysfunctional coping strategies
- **Contextual:** inadvertent parental/systemic reinforcement of behaviour, inconsistent or overinvolved parenting, high family stress
- **Social:** inappropriate educational placement, social isolation and peer rejection

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Protective factors

- **Personal:** easy temperament, absence of challenging behaviour, good verbal reasoning skills, insight, motivated to change, cognitive flexibility, openness to new ideas

- **Contextual:** supportive school environment, good home-school communication, supportive family environment, calm consistent parenting style, high parental self-efficacy and self-esteem, good understanding of ASD, friendships

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Underlying beliefs may not always be obvious or fit into a model

Situation	Typical underlying beliefs	Atypical underlying beliefs
Fear of detentions	fear of negative evaluation	Detentions involve litter duty ..germs…'I'll get ill if I have a detention''
Fear of separation	fear of something bad happening to self or parent	"I wont know what to say"
Elaborate OCD rituals	Prevention of harm	to get rid of the smell of school (no harm beliefs, just sensory sensitivity)

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Future directions for research

- Development of ASD-specific assessment tools
- Use objective measures of anxiety, such as physiological arousal (GSR, heart rate) and attentional bias to validate diagnosis
- More longitudinal research
- Further research on psychological processing and the relationship to anxiety
- Neuroanatomy and neurobiology

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