INSAR 2019 – Conference Day 3

Hi everyone, Tim here. I've been in Montreal last week at the International Society of Autism Researchers (INSAR) annual conference. This conference brings autism researchers from around the world together to discuss and share the leading research into the autism spectrum.

Highlights from Day 3:

Transitioning into adulthood

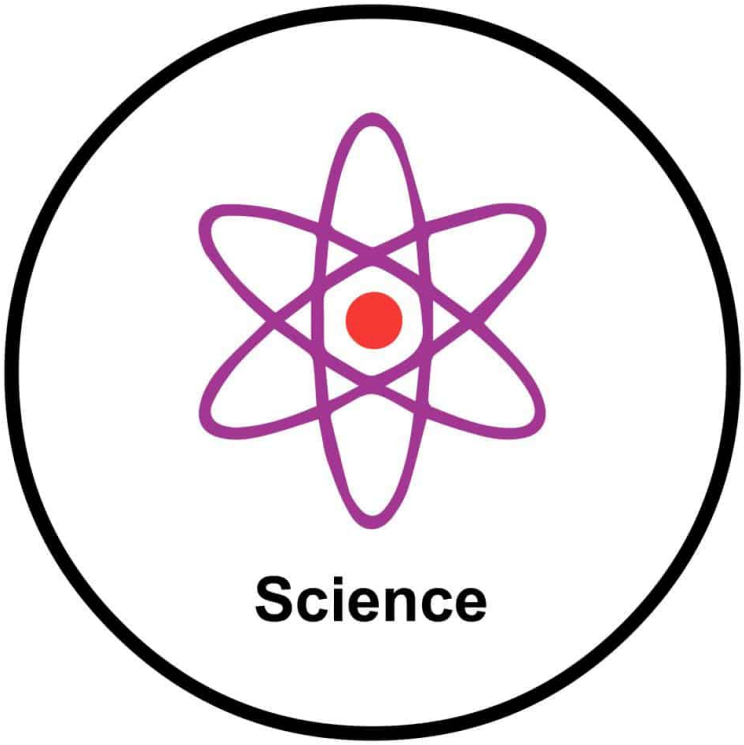
Are healthcare providers ready to transition ASD teens to adulthood:

Lisa Croen discussed research into clinical providers in California and their ability to support teens transitioning into adulthood.

Sex differences in health outcomes:

Julie Taylor discussed sex differences in ASD health outcomes, particularly in transition time points.

You can read more of Julie's research here.



So much Science and Research over the last 3 days!

Take home message:

Services are often underfunded in supporting ASD teens transitioning to adulthood, and this group is often underserved. Ongoing research is required to provide input to governments and service providers on best practice for transitioning teens.

Also while at INSAR I have discovered so many other great resources, which we have listed below.

- Bostons Children's Hospital
  - Wonderful stories on going into hospital and what to expect for those who need some preparation. We will be adding this to our resource page for Hospital and Emergency!
- Molehill Mountain
  - This was a new discovery for Look Hear from INSAR, we are yet to test it our selves but it looks awesome!
- Boston Medical Centre

        - This Centre has bucket loads of resources available, and are well thought out and visually pleasing. Also has information helpful for siblings too!
    - Autism CRC
        - This is an Australian website that has loads of links to Universities throughout Australia and NZ, as well as lots of programs and resources available (we have done the Secret Agent Society Training and would recommend!!)

Happy Days! We hope you enjoyed our reflections on the INSAR Conference 2019!!

INSAR Conference 2019 – Day 2

Hi everyone, Tim here. I've been in Montreal last week at the International Society of Autism Researchers (INSAR) annual conference. This conference brings autism researchers from

around the world together to discuss and share the leading research into the autism spectrum.

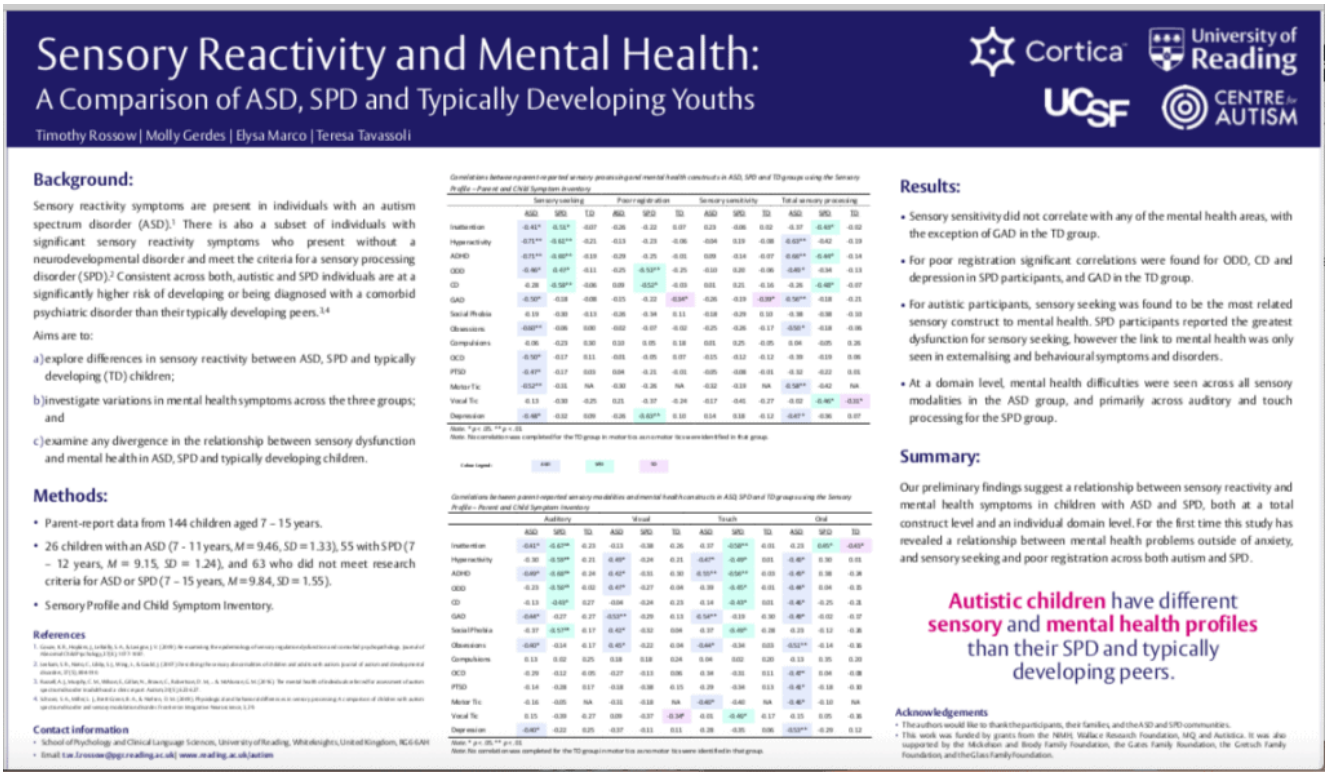
Highlights from Day 2:

Multimodal Measurement of Sensory Processing

Measuring sensory reactivity reliably:

Teresa Tavassoli discussed the difficulties in accurately measuring sensory reactivity in autistic individuals.

I am part of Teresa's team and you can find out more information here.



Sensory Reactivity and Mental Health:
A Comparison of ASD, SPD and Typically Developing Youths

Timothy Rossow | Molly Gerdes | Elysa Marco | Teresa Tavassoli

Cortica · University of Reading · UCSF · Centre for Autism

Background:

Sensory reactivity symptoms are present in individuals with an autism spectrum disorder (ASD).[1] There is also a subset of individuals with significant sensory reactivity symptoms who present without a neurodevelopmental disorder and meet the criteria for a sensory processing disorder (SPD).[2] Consistent across both, autistic and SPD individuals are at a significantly higher risk of developing or being diagnosed with a comorbid psychiatric disorder than their typically developing peers.[3,4]

Aims are to:

a) explore differences in sensory reactivity between ASD, SPD and typically developing (TD) children;

b) investigate variations in mental health symptoms across the three groups; and

c) examine any divergence in the relationship between sensory dysfunction and mental health in ASD, SPD and typically developing children.

Methods:

- Parent-report data from 144 children aged 7 – 15 years.
- 26 children with an ASD (7 - 11 years, $M = 9.46$, $SD = 1.33$), 55 with SPD (7 – 12 years, $M = 9.15$, $SD = 1.24$), and 63 who did not meet research criteria for ASD or SPD (7 – 15 years, $M = 9.84$, $SD = 1.55$).
- Sensory Profile and Child Symptom Inventory.

References

Contact information

- School of Psychology and Clinical Language Sciences, University of Reading, Whiteknights, United Kingdom, RG6 6AH
- Email t.w.rossow@pgr.reading.ac.uk | www.reading.ac.uk/autism

Results:

- Sensory sensitivity did not correlate with any of the mental health areas, with the exception of GAD in the TD group.
- For poor registration significant correlations were found for ODD, CD and depression in SPD participants, and GAD in the TD group.
- For autistic participants, sensory seeking was found to be the most related sensory construct to mental health. SPD participants reported the greatest dysfunction for sensory seeking, however the link to mental health was only seen in externalising and behavioural symptoms and disorders.
- At a domain level, mental health difficulties were seen across all sensory modalities in the ASD group, and primarily across auditory and touch processing for the SPD group.

Summary:

Our preliminary findings suggest a relationship between sensory reactivity and mental health symptoms in children with ASD and SPD, both at a total construct level and an individual domain level. For the first time this study has revealed a relationship between mental health problems outside of anxiety, and sensory seeking and poor registration across both autism and SPD.

Autistic children have different sensory and mental health profiles than their SPD and typically developing peers.

Acknowledgements

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This is my poster! You can find a downloadable version here.

Lessons from psychophysical studies of somatic sensation in autism:

Carissa Cascio spoke about psychophysics, and in particular

how tactile perception relates to ASD traits.

You can find our more about Carissa’s research here.

Neural habituation of sensory stimuli:

Shula Green described sensory over-responsivity and functional neuroimaging. She discussed differences in neural connectivity to touch and sound processing, particularly over time.

Relating abnormal tactile processing and cortical dysfunction in children with ASD:

Nick Puts continued the discussion on cortical differences in tactile processing in ASD individuals.

Take home message from these sessions:

The assessment of sensory reactivity in autistic individuals requires a multimodal approach that takes into consideration both questionnaire and observational methods. This should include measurement of perception (internal state) and not just reaction (external reaction).

Psychiatric Comorbidities

Adverse childhood experiences:

This talk by Amy Barrett highlighted the large percentage of ASD children who have adverse childhood experiences, including trauma, and how this is often overlooked in research and in clinical settings.

You can find out more about Amy’s research here.

ASD and suicidal behaviours:

Paul Lipkin advised on his research on suicide behaviours in children and adolescents with autism and their access to medication and interventions. In particular, he looked at exploring factors contributing to suicidal behaviours.

Emotion dysregulation as a risk factor for suicide:

Caitlin Conner outlined her research and showed that increases in emotional dysregulation are correlated with higher reported suicidal ideation.

You can find out more here.

Depressed mood and interpretation of neuroscience data:

Katie Gotham spoke about how depressed mood in autism may obscure our interpretation of neuroscience research data. Analysing mood, anxiety and attention may help interpret research findings more accurately.

Group CBT for ASD and anxiety:

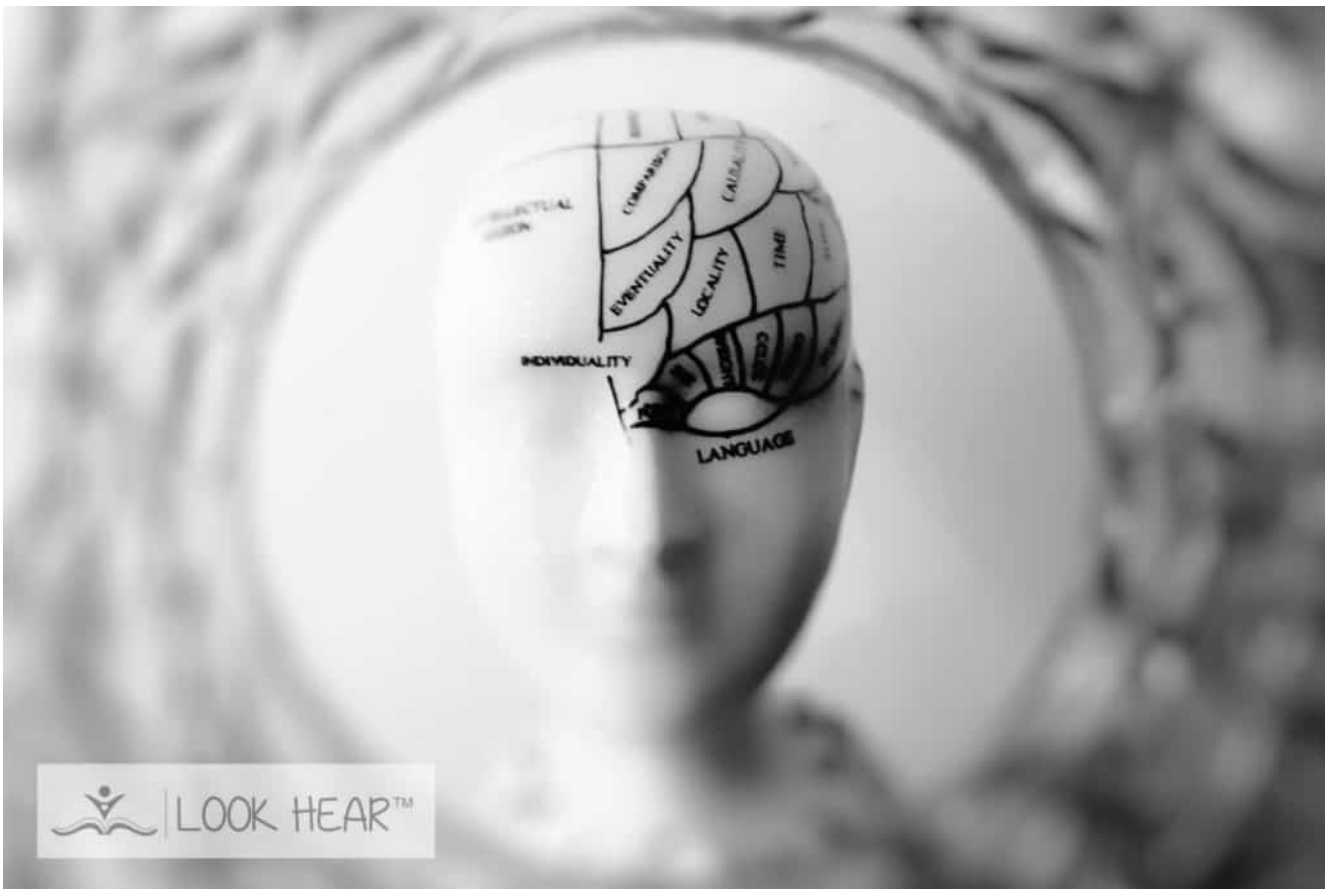
Audrey Blakeley-Smith presented on findings of a trial of group CBT for anxiety in a group of ASD teens with anxiety and intellectual disability.

Executive functioning:

Laura Anthony discussed an online executive functioning intervention – Unstuck. This online program allows for a self-paced, parent led intervention with tips and support.

Take home message:

Whilst research is making strides towards understanding psychopathology in autism, and in particular defining specific vulnerability profiles, there is still a lot to explore. Children with autism are also more likely to mask disorders like anxiety, or not be picked up by standard measures of psychopathology.



If you would like more information or resources, check out our pages on Mental Health or our HUGE Resource Library.

INSAR Conference 2019 – Day 1

Tim shares his reflections and information on the most up to date Autism research fresh from the INSAR Conference 2019!!