Durham University
Centre for Neurodiversity and Development

CONFERENCE PROGRAMME

NDAS2026

The Calman Learning Centre, Durham University, South Road, Durham, DH1 3LE

30TH June 2026

Schedule

	KW Lecture Theatre 2nd Floor Rm 203	RC Lecture Theatre 2nd Floor Rm 202
Registration 8.30am-9.00am (on the third floor of the Calman Learning Centre)		
Welcome Talk in the RC Lecture Theatre (2nd floor) 9.00-9.10am		
	Session Chair - Prof Jo van Herwegen	Session Chair - Prof Mary Hanley
09.15-09.35	O1 Luciana Lisboa White Autistic, not lonely: a creative and participatory exploration of autistic young people's experiences of loneliness	O2 Roisin Perry Understanding academic achievement in autistic adolescents
09.35-09.55	O3 Isabella Metcalfe Co-producing and pilot testing adapted Cognitive Behavioural Therapy materials for young people with Developmental Language Disorder (DLD)	O4 Chloe Fielding Neurodivergent Pupils' Experiences of School Distress and Attendance Difficulties: A Mixed-Methods Study
09.55-10.15	O5 George Watts Different Autistic People, Shared Spaces: Experiences of Community and Connection	O6 Kyleigh Melville A mixed-methods exploration of school staffs' experiences of using multi-sensory environments with neurodivergent students
10.15-10.35	O7 Zoe Collier "This seems like a neurotypical issue" exploring autistic perspectives on victim-blaming in sexual violence.	O8 Emmie Fisher Learning From Parents of Neurodivergent Children: Pathways for Change in School Anxiety and Distress Within Resistant Systems
	10.35-11:05 Coffee (third floor)	
	Session Chair - Prof Gaia Scerif	Session Chair - Prof Sinead Rhodes
11.05-11.25	O9	O10

	Zahra Siddiqui Observing Mathematics Learning Environments for Neurodivergent Children: Classroom Experiences, Cognitive Profiles, and Support	Gemma Herbert Rethinking SEND Inclusion: Autistic Pupils' Calls for Understanding, Belonging and Affirmation
11.25-12.45	O11 Charlotte Bocchetta Dyadic sensorimotor behaviours of young typically developing children and children with Down syndrome: Object dominance and motor handling	O12 Becky McGinney A space for listening differently: Creative approaches to gathering the perspectives of autistic young people on school quality improvement
12.45-12.05	O13 Katherine Maw Mental visual imagery and face recognition problems are daily challenges for many people with probable developmental coordination disorder.	O14 Vu Thuy Ann Dao Identifying early motor and cognitive predictors of later educational and executive function outcomes in children with Down Syndrome
12.05-12.25	O15 Kate Gwilliam A cross-sectional examination of sleep in infants with Williams Syndrome	O16 Miranda Eodanable Exploring FASD with educational professionals: implications for professional learning and disability education
12.25-13.15 Lunch and Poster Session 1 (third floor)		
13.15-14.00 EARLY CAREER KEYNOTE KW Lecture Theatre **Megan Cutts** **'The Importance of Youth Voice in Research: Exploring the Educational Experiences and Wellbeing of Young People with Special Educational Needs and Disabilities (SEND)'** (chaired by Prof Debbie Riby)		
	Session Chair - Prof Nikki Botting	Session Chair - Prof Emily Farran
14.00-14.20	O17	O18

	Elisa Back Exploring the Impact of a Sensory Room for Supporting Neurodivergent Students in Higher Education	Jo van Herwegen Effective Components for Improving Educational Outcomes for Students with SEND: Evidence from targeted interventions and machine learning
14.20-14.40	O19 Isabelle Dale Barriers experienced by university students with Attention Deficit Hyperactivity Disorder (ADHD): an analysis through life stories	O20 Stella Xu Individual Differences and Mathematical Profiles in Williams syndrome and Down syndrome
14.40-15.00	O21 Lauren McGuiness "His sibling doesn't really understand why he is in his own world": Sibling relationship quality, child-level predictors, and family wellbeing in minimally verbal children	O22 Dean D'Souza Explaining the Comprehension–Production Vocabulary Gap in Williams Syndrome
15.00-15.20	O23 Karri Gillespie-Smith Exploring Feeding and Eating Disorders in Autistic adults with Intellectual Disabilities: A photovoice study	O24 Mahmoud Elsherif The Nature of Phonological Impairments in Dyslexia and Stuttering: Evidence from Phonemic, Semantic, and Design Fluency Tasks
15.20-16.00 Coffee and Poster Session 2 (third floor)		
16.00-16.50 ESTABLISHED KEYNOTE KW Lecture Theatre **Professor Emily Farran** '**Research priorities of the communities of people with Down Syndrome, Fragile X Syndrome and Williams Syndrome'** (chaired by Prof Debbie Riby)		
16.50-17.00 closing remarks (KW lecture theatre)		

Poster Session 1

	Room	Board	Presenter	Poster Title
P1	A	1	Alanna Shand	Using strengths to engage in compensation: A content analysis of autistic adults' experiences
P2	A	2	Alejandra Mitzi Castellón-Flores	Rhythm Processing Across Neurodevelopment: A Mental-Age Matched Study of Down Syndrome
P3	A	3	Alex Chapman	"I become hyperfocused on the music and almost live in it": A qualitative analysis of neurodivergent musicians' auditory processing experiences in everyday life and live music settings.
P4	A	4	Andrew Yu	Does the temporal structure of parent speech shape visual attention in young children with Down syndrome?
P5	A	5	Anthi Georgiadou	What are the Musical Instrument Practices and Preferences of Adult People with ADHD and what Challenges do they face While Practising the Musical Instrument of their Choice?
P6	A	6	Arcelia Cheung	Improving Mathematical Skills in Children with Down Syndrome and Williams Syndrome: A Feasibility Study of Symbolic and Non-symbolic Skills Intervention Programmes
P7	A	7	Arfaa Riaz	Measuring education participation and performance in children with intellectual disability: A systematic review and meta-analysis
P8	A	8	Benjamin Costello	Increasing the Uptake and Quality of Annual Health Checks for Young People with a Learning Disability
P9	A	9	Betsy Holmes	Understanding how individuals with learning disabilities experience friendship and social connection
P10	A	10	Bryony Aspinall	Exploring the neurocognitive mechanisms of state hyperfocus in subclinical neurodevelopmental populations
P11	A	11	Carrie McCabe	Experiences of Premenstrual Syndrome and Premenstrual Dysphoric Disorder in Autistic and Allistic Females: A Mixed-Methods Approach
P12	A	12	Cátia M. Oliveira	Finding words: Validating AI tools for real-world speech
P13	A	13	Cheyenne Contreras	Executive Functions and Traits of Autism and ADHD in Preschool Age Children with Tuberous Sclerosis Complex
P14	A	14	Chloe (Pei-Hsin) Huang	Anthropologists of Our Own Lives: Autistic Identity and Masking in Cultural Transition
P15	A	15	Christiana Orphanou	Exploring Eating Behaviours and Nutrition-Related Care Experiences in Neurodivergent Adults: A Mixed-Methods Study
P16	A	16	Dale Metcalfe	The feasibility of a chair yoga intervention to improve mental health and wellbeing for adults with learning disability: A pilot study

P17	A	17	Dandan Wu	Trait Expression of Autism and ADHD interact to Modulate Response Inhibition
P18	B	1	Elle Pemberton	A qualitative exploration of the intersection between autism and sexual minority identities
P19	B	2	Eloise Funnell	The Influence of Mainstream Secondary School Environment on the Emotional Well-being and Learning of Autistic and/or ADHD Students: A Systematic Review and Evidence Synthesis
P20	B	3	Monique Botha	Narrative Framing Drives Moral Distance from Autistic People: A Qualitative Study on the Effect of Dehumanizing Rhetoric in Autism Research and Research Media Reporting
P21	B	4	Emily McCormack	The Relative Contribution of Autistic and ADHD Traits to Internalising Problems
P22	B	5	Emily Meachon	Using Mobile EEG in Neurodevelopmental Research: Practical Insights and Lessons Learned
P23	B	6	Emma Casey	Automation of early motor assessments for infants with epilepsy syndromes using machine learning approaches: A feasibility study
P24	B	7	Emma Gowen	Evidencing the need for routine sensory motor assessment and support for autistic adults
P25	B	8	Emma Hayashibara	Improving assessment and recognition of depression in neurodivergent young adults: A qualitative study
P26	B	9	Gemma Longmuir	The Influence of Sex Hormones on ADHD Symptoms Across the Menstrual Cycle
P27	B	10	Giulia D'Avino	The Durham Infant Tiredness Questionnaire (DITQ): a novel measure for capturing tiredness in infancy.
P28	B	11	Grace McCabe	Cross-syndrome comparisons of the online experiences of children and young people
P29	B	12	Grace Williams	Eating disorder treatment and service experiences of gender diverse and neurodivergent adults
P30	B	13	Hana D'Souza	Nonlinear developmental changes in infants’ exposure to faces during naturalistic playtime: Insights from head-mounted cameras and automated face detection
P31	B	14	Helen Kara	Working Towards A Definition Of Neurodivergent-Affirming Space
P32	B	15	Imogen van Jaarsveldt	Parent's perspectives on self-regulation in children with Williams syndrome
P33	B	16	Isabella Metcalfe	Co-producing and pilot testing adapted Cognitive Behavioural Therapy materials for young people with Developmental Language Disorder (DLD).
P34	B	17	James Smith-Spark	Neurodiversity traits as predictors of eyewitness memory performance
P35	B	18	Jay Jones	The impact of sleep on children's executive functioning: A systematic review and meta-analysis.

Poster Session 2

	Room	Board	Presenter	Poster Title
P36	A	1	Jennifer Hamilton	Study design for investigating sensory neurodiversity and the development of mental health indices in mothers/birthing parents and infants.
P37	A	2	Jennifer Sanders	“Not to have neuro-normative standards” - How Autistic individuals experience sexual interest, education and relationships
P38	A	3	Jiajie Li	Neurocognitive Mechanisms of Mathematical Cognition in Individuals with Williams Syndrome and Down Syndrome: a pre-registration
P39	A	4	Jo Saul	Association between autism traits or diagnoses in the family and child characteristics in a transdiagnostic sample of minimally verbal children
P40	A	5	Jo Van Herwegen	Examining Mathematical and Cognitive Variability in Dyscalculia: Cross-Sectional Evidence from Children and Young People.
P41	A	6	Joanna Kubiak	Examining the influence of ADHD and autism-related traits on the early consolidation of new declarative memories
P42	A	7	Katharine Slade	Improving shared decision-making around psychotropic medication use by patients with learning disabilities: developing an evidence-based communication training intervention
P43	A	8	Kiran Kaur	Assessing the feasibility of the i-KNOW (identifying and knowing about behaviour) preventive intervention programme for individuals at risk for Behaviours that Challenge.
P44	A	9	Lauren Godfrey	Bridging Lived Experience and Research: Reframing Women’s ADHD & AuDHD Through an Interdisciplinary Neurodiversity Lens
P45	A	10	Lena Biermann	Deconstructing the ideal academic: understanding the gendered experiences of neurodivergent researchers to shape more inclusive research practices
P46	A	11	Lucy Bryson-Davies	The Development of Deception Detection and its association with Mentalizing in Autistic and Non-Autistic People.
P47	A	12	Fair Metcalfe	How recruits with diagnosed dyslexia and/or displaying dyslexia indicators think and feel about themselves
P48	A	13	Milani Pathmanathan	Investigating Theory of Mind Compensatory Strategies in Autism
P49	A	14	Monique Botha	"Independent Self-Care, Community, Comfort, and Purpose: A Participatory Q-Method Study of Autistic Wellbeing,
P50	A	15	Nikki Botting	Caregiver views of communication barriers within Child and Adolescent Mental Health Services: Children with and without Speech, Language and Communication Needs (SLCN)

P51	B	1	Olivia Robb	Prioritising School-Based Support for Developmental Coordination Disorder (DCD): A Delphi Survey Approach to Identifying Key Targets for Intervention
P52	B	2	Piyali Bhattacharya	Anxiety and Depression Symptomatology and Psychological Independence in Autism - A Comparative Cross-Cultural Analysis
P53	B	3	Sarah Griffiths	Consideration of developmental language disorders in trials of cognitive behavioural therapy for anxiety and depression in youth: A systematic review of selection criteria, sample characterisation and moderation analyses.
P54	B	4	Shipei Wang	Relationships between Mothers' Psychological Distress, Adolescents' Executive Functions, and Emotional Symptoms in Adolescents with ADHD
P55	B	5	Shiying Chen	A qualitative exploration of masking experiences of autistic adolescents across different contexts
P56	B	6	Stella Gkegka	Epistemic Injustice and Autistic Students' Voices: A Critical Reflection on Designing a School-Based Physical Activity Programme with Autistic Children
P57	B	7	Swane Parchment	Exploring Perspectives of Black Neurodiverse Adults: Insights on Diagnosis, Support and Intervention
P58	B	8	Theo Riseborough	Do Motor Constraints Shape Everyday Object Interactions in Young Children with Down Syndrome?
P59	B	9	Valeria Khudiakova	Autism Recognition and Diagnosis in Gender-Diverse and Minority Ethnic Adults: Perspectives from NHS Autism and Complex Emotional Needs Services
P60	B	10	Verinder Poonain	Psychometric properties of executive function assessments among people with intellectual disability: a systematic review and meta-analysis
P61	B	11	Vu Thuy Ann Dao	Linking early profiles to interventions and educational outcomes
P62	B	12	Yujia Zhang	Autism and ADHD Co-occurrence (AuDHD) in Adults: A Systematic Review of Prevalence, Outcomes, and Lived Experience
P63	B	13	Zoe Starkie	Exploring the experience of having a sibling with learning disabilities.
P64	B	14	Aamina khan	Quality of life in genetic syndromes associated with intellectual disabilities
P65	B	15	Candace Donovan	The Sensory Optimization and Autonomic Reactions (SOAR) Project
P66	B	16	Eloise Funnell	My Brain, Emotions and Me: Co-Producing a Neurodivergent-Friendly EEG Research Environment with Autistic and/or ADHD Youth Researchers
P67	B	17	Judith Lowes	This condition impacts every aspect of my life: Experiences of living with developmental prosopagnosia

Keynote Speaker - Early Career Keynote

The Importance of Youth Voice in Research: Exploring the Educational Experiences and Wellbeing of Young People with Special Educational Needs and Disabilities (SEND)

Dr Megan Cutts
(Manchester University)

Biography:

Megan Cutts is a PhD Researcher and Research Associate for #BeeWell at The University of Manchester. #BeeWell is a youth-centred programme that works in partnership with young people, secondary schools and local partners across Greater Manchester, Hampshire, Isle of Wight, Portsmouth and Southampton to understand and improve young people's wellbeing. Megan's work focuses on the wellbeing and educational experiences of young people with Special Educational Needs and Disabilities (SEND), with a particular interest in inclusion within mainstream secondary schools. She has a BSc (Hons) in Psychology and an MSc Child Development from the University of Keele. Her PhD research explores how everyday school experiences shape wellbeing, foregrounding young people's perspectives.

Abstract:

Despite increasing recognition of the importance of youth voice, the voices of young people with SEND remain underrepresented in research informing inclusive policy and practice. Centring young people's perspectives is essential for understanding how school environments shape wellbeing and for ensuring that research priorities are guided by the experiences that matter most to young people themselves.

This presentation draws on two complementary studies exploring the wellbeing and educational experiences of young people with SEND. The first is a systematic literature review synthesising existing qualitative research on the experiences of mainstream secondary education from the perspective of young people with SEND, focusing on how educational experiences shape wellbeing. The findings highlighted the central role of peer relationships and social contexts, particularly experiences of bullying and discrimination, social support, participation in social situations and social communication challenges, as prominent influences on wellbeing. Building on these insights, the second study is a secondary data analysis of the #BeeWell dataset, examining differences in social experiences between young people with and without SEND, and how these experiences impact subsequent wellbeing.

Together, these studies provide insight into aspects of school life that matter most for young people's wellbeing and form the basis of practical, evidence-informed recommendations for inclusive educational policy and practice.

Keynote Speaker - Established Career Keynote

Research priorities of the communities of people with Down Syndrome, Fragile X Syndrome and Williams Syndrome

Emily Farran
(University of Surrey)

Biography:

Emily Farran is Professor of Cognitive Development, at the University of Surrey, UK, where she directs the Cognition, Genes & Developmental Variability Lab. Emily completed her PhD at the University of Bristol in 2001 and has since worked at the University of Reading, UCL and the University of Surrey. The broad aim of her research is to characterise typical and atypical development of cognitive functions within the context of the developing brain. She has recently been awarded the 2024 Impact and Engagement award by the British Psychological Society and the Robert Blumberg Distinguished Lecture in Cognitive Science 2022.

Abstract:

There are approximately 1.5 million people in the UK with a learning disability. These individuals and their communities should have a role in shaping the research that impacts them. To meet that need, we completed the “Shape Research, Change Lives” project. We compared the UK research landscape to the research priorities for individuals with Down syndrome (DS), Fragile X syndrome (FXS), and Williams syndrome (WS). Key findings were that £26 million was spent on research on DS, FXS and/or WS between 2013 and 2022 in the UK, representing <1% of UK funders’ portfolios. Most research was on basic science (brain, body and cognition), with the least research funding being spent on lifespan issues, societal issues, and research infrastructure. We consulted with the DS, FXS and WS communities on their research priorities via online focus groups and surveys. We found that DS, FXS, and WS communities were dissatisfied with the current research portfolio. Survey responses and thematic analysis of focus groups indicated that: they weighted research that will affect their everyday lives equally important to basic science; that research should be accessible to all; and that research should be informed by people with lived experience.

The Shape Research, Change Lives project was awarded the Tom Oppé Distinguished Lecture Award to Emily Farran from the Society for the Study of Behavioural Phenotypes (SSBP, as well as the Rare Disease Research UK Early Career Researcher Public and Patient Impact and Engagement (PPIE) award to Laura Cristescu. As a team, we continue to raise awareness of the research priorities of the communities, and are starting to address these in our own studies. I will end the presentation by introducing our ongoing work.

ABSTRACTS - ORAL PRESENTATIONS

1

Autistic, not lonely: a creative and participatory exploration of autistic young people's experiences of loneliness

Luciana Lisboa White*, Stephanie Petty, Emma Tecwyn

Loneliness is traditionally defined as a negative feeling characterised by an absence of quality and meaningful social relationships. This conceptualisation is based on neurotypical understandings of loneliness, where connection is limited to social relationships or friendships. Findings from our systematic review showed that loneliness has rarely been defined by autistic young people. In addition, assessment tools of loneliness that have consistently been used for assessing the experiences of loneliness for autistic young people have been based on concepts of loneliness that do not include autistic views. These investigations assume that loneliness is experienced similarly by autistic and non-autistic people, reinforcing a historical trend of defining autism based on social deficits. Our project used creative and flexible methods of participation to create a reviewed conceptualisation of loneliness that includes autistic perspectives, parting with neurotypical frameworks. The descriptions offered by autistic young people expanded the conceptualisation of loneliness by going beyond social and emotional domains. They introduced lesser-studied facets of loneliness including existential, experiential and positive loneliness. Equipped with this new understanding of loneliness, we developed items for a loneliness scale for autistic young people in collaboration with the autistic community: ELSA (Experiences of loneliness – Scale for autistic young people) can be used as a tool for therapists, parents, teachers and adults supporting autistic young people to better understand their experiences of loneliness focusing on quality of life. With a strong participatory ethos, the project contributes personal voice to literature in line with the neurodiversity paradigm.

O2

Understanding academic achievement in autistic adolescents

Roisin Perry*, Tolmie, A., Dumontheil, I., Thomas, M. S. C., & The SCAMP Team

Educational performance is highly varied amongst autistic students and there is evidence that many autistic students underperform relative to their ability level (Keen et al., 2016). However, little is known about what factors promote better or worse academic outcomes in this group particularly during adolescence when low attainment has significant consequences for life outcomes. Using data from a longitudinal cohort study of secondary school students from London (Study of Cognition, Adolescents and Mobile Phones; https://www.scampstudy.org/) linked with educational records, this study will seek to identify key correlates of attainment in maths, English and science amongst autistic adolescents in mainstream education (n = 41, 17% female, 43% white). The analyses will focus on the relative contribution of demographic factors, cognitive skills, internalising and externalising symptoms, and health behaviours to attainment. We will also create multiple matched samples of non-autistic students, using a variety of matching methods, to test whether the same factors are relevant in identifying risk for low academic performance in autistic adolescents and their peers. The group comparison analyses will highlight that the challenges of matching in neurodevelopmental research persist even under optimal conditions. The findings from this research will provide an important starting point for understanding risk factors for underachievement in autistic adolescents.

O3

Co-producing and pilot testing adapted Cognitive Behavioural Therapy materials for young people with Developmental Language Disorder (DLD)

Isabella Metcalfe*, Sarah Griffiths, Courtenay Norbury, The DLD Young Person and Professionals Advisory Group

Background: Young people with Developmental Language Disorder (DLD) are at increased risk of mental health difficulties but often face barriers to accessing traditional talking therapies like Cognitive Behavioural Therapy, due to complex language and reliance on written content. Coproduction offers a way to create more accessible interventions by involving those with lived experience alongside practitioners. Yet, co-production with young people with DLD remains rare. Aim: To explore how co-production methodologies could be shaped to include young people with DLD, in the context of adapting and testing psychoeducational videos for anxiety and depression.
Methods: The project team included four adolescents with DLD, their parents, six Educational Mental Health Practitioners and three academic researchers. A five-stage process involved recruiting team members, identifying therapy adaptations, selecting key psychoeducational concepts, developing scripts and videos, and reflection. Ten adapted psychoeducational videos were produced. These were then pilot tested with groups of adults and primary school students, where understanding and recall was compared with unadapted videos.
Results: The adapted videos incorporated slowed pacing, simplified vocabulary and concrete examples. Team members reported that the process felt inclusive and flexible, and that the final materials were more meaningful. Pilot data showed that the adapted videos were rated as easier to understand and led to greater recall of key points than the unadapted videos. This effect was larger for children.
Conclusions: With appropriate adaptations, co-production with young people with DLD and practitioners is both feasible and valuable. The process resulted in more accessible therapeutic materials that improved comprehension.

O4

Neurodivergent Pupils' Experiences of School Distress and Attendance Difficulties: A Mixed-Methods Study

Chloe Fielding*, Debbie Riby, Mary Hanley

Increasing numbers of children and young people (CYP) are experiencing attendance difficulties in the UK, especially since the COVID-19 pandemic. Evidence suggests that a crucial reason underpinning attendance difficulties is school distress, defined as when CYP cannot attend school due to their high levels of emotional distress and anxiety. Of the CYP experiencing school distress and attendance difficulties, neurodivergent CYP are disproportionately represented. Research has predominantly centralised the opinions of adults, such as parents. Therefore, this mixed-methods study aims to centralise the lived experiences of 139 CYP (aged 11-17), via an online survey. Parents (N=212) completed demographics, the Anxiety Scale for Children-Autism Spectrum Condition, the Sensory Processing Three Dimension Scale, and the Extreme Demand Avoidance Questionnaire. CYP answered a bespoke School Experiences Survey, which involved rating statements about school and answering six qualitative questions about challenges at school, their feelings about attendance difficulties, and possible solutions. The most strongly rated statements in the School Experiences Survey indicated that CYP experience anxiety (mean=4.75/5), emotional distress (mean=4.59/5), and poorer mental health (mean=4.51/5) when attending school. Qualitative analyses suggested that CYP experienced many emotions about their attendance difficulties, such as worrying about consequences but feeling safer at home. CYP suggested that having fewer pupils in schools, better

relationships with staff, and changes to the curriculum would improve their experiences. Overall, this study highlights the mismatch between the school environment and the needs of neurodivergent pupils, and changes that could be made to improve inclusivity.

O5
Different Autistic People, Shared Spaces: Experiences of Community and Connection

George Watts*

Autistic community spaces are important for wellbeing and quality of life, yet research on this topic rarely includes autistic people with higher support needs. This study sought to address this gap by creating a social group accessible to a diverse group of autistic people, then exploring their experiences. Recruitment targeted autistic people with higher support needs for diverse representation. Eight autistic adults participated in 6 social group sessions. Social Network Analysis (SNA) captured connections between participants at two time points. Semi-structured interviews using adapted methods including Talking Mats explored participants' experiences of the group, autistic community spaces more broadly, social dynamics, and factors affecting inclusion. Results will present SNA visualisations of social connections alongside qualitative findings from framework analysis. Preliminary analysis suggests participants valued being in autistic spaces, describing positive experiences in contrast to non-autistic spaces, with experiences shaped by practical considerations, social contexts, and different support needs. However, significant barriers emerged in both recruiting and meaningfully including autistic people with higher support needs in interviews, limiting insights from this population. These findings highlight both the value autistic people place on community spaces and persistent challenges in including autistic people with higher support needs in research. The study reveals barriers preventing researchers from meaningfully engaging with this population, informing our subsequent study examining barriers to autistic community spaces from a broader perspective. This work contributes to conversations about inclusive research practices and whose voices are centred in neurodevelopmental research.

O6
A mixed-methods exploration of school staffs' experiences of using multi-sensory environments with neurodivergent students

Kyleigh Marie Kai-Li Melville*, Dr Karri Gillespie-Smith, Dr Catherine Manning and Dr Katie Cebula

Multi-sensory environments (MSEs) are widely used in schools to support neurodivergent students, but little is known about how staff use them, why they are used, or students' involvement in decision-making around their use. Exploring staff experiences with MSEs can identify common practices and areas of support. We investigated: whether purposes of MSE use vary across school provision and staff groups; whether there are significant differences in duration of MSE use between staff groups; how staff confidence, self-efficacy, time since qualification and training level impact duration of MSE use; and the extent to which student consultation on MSE design and use is taking place. The study incorporated guidance from a Lived Experience Advisory Group (LEAG) and used a mixed-methods online survey with a sample of 57 UK-based school staff (NTeaching = 28, NSupport = 21, NTherapy = 8). Data were analysed using non-parametric tests, Content Analysis, and LEAG discussions. School staff most resonated with using MSEs to support behaviour and emotional wellbeing; special school staff particularly endorsed using MSEs to support building relationships and rapport. No significant differences in self-efficacy and confidence in MSE use were found between staff groups and school provision, irrespective of years qualified in the role and training level. Staff in mainstream and special schools faced similar challenges and expressed training needs on using the MSE and items inside for the benefit of speaking and nonspeaking students. Findings are informing the methodology and design of a subsequent study exploring pupil voice in MSE design and use.

O7

"This seems like a neurotypical issue" exploring autistic perspectives on victim-blaming in sexual violence.

Zoe Collier*, Amy Pearson, Monique Botha, William Webster

Autistic people face disproportionately high rates of sexual violence, with recent estimates indicating a 40%-70% prevalence, and are 2-3 times more likely than nonautistic people (Brown-Lavoie, Viecili, & Weiss, 2014; Dike et al., 2022; Gibbs et al., 2021). Victim-survivors are also subjected to secondary victimisation in the form of victim-blaming and disbelief, which shifts responsibility onto them by invalidating and doubting their actions and trustworthiness, discouraging them from speaking about their experience or seeking help (Kennedy & Prock, 2018). Victim-blaming is shaped by societal norms of patriarchal gender expectations as captured in Taylor's (2020) Blame of Women Subjected to Violence and Abuse scale (BOWSVA). However, limited attention has been paid to exploring victim-blaming towards autistic victimsurvivors. Autistic people are often infantilised in research and viewed as being both socially and emotionally immature, which makes us “innately vulnerable” to abuse (Brown-Lavoie et al., 2014; Milton, 2012; Kapp et al., 2013). Our research aimed at understanding autistic people's perspectives of victim-blaming in sexual violence. 67 participants completed a gender-neutral version of the BOWSVA and were asked to reflect on why people might hold victim-blaming beliefs demonstrated in the scale. Qualitative data was analysed using a grounded theory approach, which indicated that victim-blaming perspectives comprised three categories: dimensions of agency, epistemic credibility, and cognitive dissonance of moral separation and the internalisation of societal norms. Our findings highlight limitations of the BOWSVA scale and suitability for autistic participants, as scenarios were often repetitive and required additional context to be fully understood.

O8

Learning From Parents of Neurodivergent Children: Pathways for Change in School Anxiety and Distress Within Resistant Systems

Emmie Fisher*, Keren MacLennan, Jacqui Rodgers, Effy Tzemou, Sinead Mullally

Within England’s education system, Neurodivergent students disproportionately experience anxiety, non-attendance, and legal battles for appropriate provision. Research identifies a neuro-normative system in which Neurodivergence is positioned as deficit and relies on reactive identification and support. Amid systemic resistance to change, we examined how families exercise agency to reduce school anxiety. Findings are drawn from an ongoing longitudinal mixed-methods study. Parents and carers of 189 Neurodivergent children with school anxiety completed questionnaires between 2022-2024 assessing distress, anxiety, attendance, and support. Quantitative analyses examined change over time and compared trajectories between families who remained within schooling (n=86) and those who left (n=103). Reflexive thematic analysis examined how and why families navigated neuro-normative constraints to protect children. We constructed five themes. Parents advised making children’s suffering visible and credible within neuro-normative systems, often through escalating evidence. Parents emphasised epistemic self-protection, resisting institutional blame and constructing non-neuro-normative understandings of distress to reduce shame and target advocacy. Families engaged in schooling advised harm minimisation through compromise, while families who left advised refusing endurance when it intensified harm and challenging deficit-based authority. When systems could not change, hope shifted from reform to healing and non-conformity, often via home education or alternative provision, despite substantial emotional and financial costs. Parents act as epistemic agents undertaking sustained work to protect their children within resistant systems. Resistance and withdrawal function as ethical acts of care, revealing that current institutional responses to school anxiety rely heavily on unpaid parental labour and reproduce inequality by displacing responsibility from institutions to families.

O9

Observing Mathematics Learning Environments for Neurodivergent Children: Classroom Experiences, Cognitive Profiles, and Support

Zahra Siddiqui*, Jennifer C Bullen, Gillian Hughes, Katie Costello, Emily K Farran, Jo Van Herwegen, Gaia Scerif

Primary mathematics lessons are foundational for developing early numeracy skills, yet little is known about how neurodivergent children experience these lessons or how classroom environments align with their cognitive strengths and challenges. The MathMIND project examines early mathematical development in children with genetic conditions identified before formal schooling, and aims to 1) identify key characteristics of mathematical learning experiences for these children and 2) explore how these experiences vary within and between genetic conditions. Participants were UK children aged 4–9 with Down syndrome (DS), Williams syndrome (WS), or Fragile X syndrome (FXS). We observed 85 children (43 DS, 35 WS, 7 FXS) during their usual mathematics lesson, and used a structured minute-by-minute observation schedule to capture interaction partners, mathematical content, and instructional delivery. Whole-sample descriptives are reported while between-group analyses are ongoing. Lesson duration ranged from 5 to 72 minutes, with similar averages for DS (M = 25.72, SD = 14.52) and WS (M = 25.69, SD = 14.35), and FXS (M = 28.71, SD = 26.27). WS and DS children spent substantial lesson time interacting with teaching assistants (56.46% and 42.02%, respectively). FXS children spent most time interacting with the classroom teacher. Most instructional time involved hands-on activities, with emphasis on counting and number identification. While early mathematics learning environments for children at risk of numeracy difficulties remain under-researched, these preliminary findings highlight patterns in adult support and a focus on foundational number skills. Ongoing analyses will examine links between classroom characteristics and individual cognitive differences.

O10

Rethinking SEND Inclusion: Autistic Pupils' Calls for Understanding, Belonging and Affirmation

Gemma Herbert*, Professor Debbie Riby, Professor Mary Hanley

This participatory study examines how autistic adolescents conceptualise inclusion within mainstream secondary schools in the United Kingdom. Situated within ongoing reforms to Special Educational Needs and Disabilities (SEND) provision, which are advancing without a consensus regarding the definition of inclusion, the research foregrounds autistic pupils as co-researchers rather than passive subjects. Nine autistic adolescents co-designed the study in which twenty autistic pupils aged 11-17 years were interviewed using creative and accessible methods. Data were analysed using reflexive thematic analysis informed by a critical realist framework. Three interconnected themes were identified. First, participants emphasised the importance of whole school understanding of autism which is currently shaped by misunderstanding and stereotypes. Second, autistic adolescents described the importance of affirming autism as an integral and valued aspect of identity, resisting deficit-based narratives which create stigma and fear. Third, pupils highlighted the structural exclusion produced by school environments primarily designed for neurotypical learners, underscoring the importance of belonging. Collectively these findings demonstrate that autistic pupils conceptualise inclusion not as assimilation or remediation, but as belonging, understanding and affirmation of difference. Despite policy commitments to inclusive education, deficit-based constructions of autism remain embedded within mainstream schooling. The study argues for a shift towards neurodiversity informed, codesigned approaches that centre autistic voices in educational policy and practice and calls for schools to move from remediation to recognition, fostering school environments in which difference is anticipated, respected, and valued.

O11

Dyadic sensorimotor behaviours of young typically developing children and children with Down syndrome: Object dominance and motor handling

Charlotte Bocchetta*, Craig D J Thompson, Catalina Suarez-Rivera, Chen Yu, Hana D'Souza

Young children learn about the world by interacting with objects. Through holding and manipulating objects, they create moments when a single object dominates their visual scene. These object-dominant events support attention, recognition, and early language skills, and are often self-generated. While such experiences occur naturally for typically developing (TD) children, children with Down syndrome (DS) may experience them differently due to early motor challenges. This study examined how motor abilities and parent involvement shape object-dominant experiences in young children with DS. Fifteen TD toddlers (17-27 months) and 15 young children with DS (36-58 months), matched on developmental ability, participated in parent-child tabletop play with novel objects. Both children and parents wore head-mounted eye-trackers capturing their first-person visual scenes. Object handling and gaze were annotated, and a custom-trained model estimated object sizes within children's visual scenes. Object-dominant events were defined as sustained moments when a single object was large and visually dominant. Overall, children with DS and TD children experienced object-dominant events at similar frequencies and durations. However, dominant objects appeared larger in the visual scenes for children with DS. Children with DS also handled objects less often than TD children, whereas their parents handled objects more. Importantly, when objects were at their largest in view, children's attention and handling did not differ between groups. These findings suggest that ability-matched children with and without DS show differing patterns of visual object dominance and handling behaviours. These differences may shape how children with DS interact with and experience the world around them.

O12

A space for listening differently: Creative approaches to gathering the perspectives of autistic young people on school quality improvement

Becky (Rebecca) McGinney*, Dr Zoè Robertson, Dr Joseph Long, Dr Katie Cebula.

Aims: The Autism Practice Framework (APF) is a quality enhancement framework developed by an autism specialist third-sector organisation and successfully utilised in its social care services. The presumption of mainstream schooling and the reported needs of the pupil population support the development and delivery of high-quality autism-specific education practice in Scotland. The aim of this study was to explore how the APF might be adapted for educational settings, from the perspective of mainstream secondary autistic pupils (n=10) and recent mainstream autistic school leavers (n=8). The study gathered their views regarding their school experiences, aspects of school/teaching they consider important for a school quality assessment and enhancement programme, and the applicability of the existing APF within education.

Methods: A qualitative, multimodal approach was adopted. A range of methods were offered, including photovoice/photo elicitation, verbal response both written and spoken, creative methods, sorting activities and walk n talk. The young people took part in 3-6 recorded sessions.

Findings: Preliminary findings will be reported. The young people shared a diverse range of schools experiences, with school environments and differences in autistic experience to be particularly important aspects for school quality enhancement. Amendments to the APF were also suggested.

Conclusion: Study findings will be integrated with staff views to create an 'APF: Education' which will be piloted. The ultimate aim is to contribute to improving educational experiences for autistic pupils by facilitating cross-sector collaboration between social care and education to support the translation of autism knowledge and understanding into day-to-day practice in mainstream schools.

O13

Mental visual imagery and face recognition problems are daily challenges for many people with probable developmental coordination disorder

Katherine Maw*, Beattie, G., & Burns, E. J

Developmental Coordination Disorder (DCD) is a lifelong neurodevelopmental condition affecting movement and coordination. Although prior research has identified specific motor imagery challenges among individuals with DCD, less is known about their general day-to-day mental visual imagery abilities and face recognition skills. Investigating aphantasia (lack of mental visual imagery) in this population may provide insights into these cognitive challenges and inform improve efficacy of educational, physical and mental health interventions. Adults with probable DCD (pDCD) self-reported lifelong coordination difficulties and met validated screening cut-offs (ADC & AACQ). Aphantasia was assessed using the Vividness of Visual Imagery Questionnaire (VVIQ). Among 56 individuals with pDCD, 20% reported co-occurring aphantasia (compared with 2-6% prevalence in the general population). A second study (pDCD n=32, controls n=37) examined face perception and recognition ability using tasks such as the Famous Faces Test (FFT). Here, 56% of individuals with pDCD met criteria for prosopagnosia (contrasting with 1-6% in the general population). Results highlight significant difficulties with both face perception and familiar face memory. Both aphantasia and prosopagnosia were more prevalent in pDCD than the general population. We therefore advocate for greater awareness of these co-occurring conditions within the DCD community. In particular, professionals supporting people with DCD should be aware of possible facial recognition difficulties. Additionally, any OT approaches, educational techniques and CBT treatments that involve mental visual imagery may be unsuitable for people with pDCD and co-occurring aphantasia.

O14

Identifying early motor and cognitive predictors of later educational and executive function outcomes in children with Down Syndrome

Vu Thuy Ann Dao*, Jo Van Herwegen, Michael Thomas

Children with Down Syndrome (DS) exhibit distinct cognitive profiles characterised by challenges in language, verbal memory and non-verbal abilities, which affect their educational outcomes. In alignment of the neuroconstructivist framework (Karmiloff-Smith et al., 2012), it is crucial to understand developmental trajectories across multiple levels of genetic, neurological, behavioural, cognitive and environmental influences. This is particularly key in neurodevelopmental conditions, as difficulties observed in childhood can be traced back to early infancy, emphasising the need for longitudinal research. This study utilises longitudinal, secondary data from the London Down Syndrome Consortium (LonDowns) Infant Stream. In 2013, participants were recruited via support groups, participant databases and National Health Service Trust sites. The final sample comprised of 74 children at Time 1 (T1), when participants were between 7 months and 64 months old, and undertook cognitive and motor assessments that measured their fine motor, gross motor, visual reception, receptive language and expressive language. Six years later (T2), participants were followed up at primary school age, to complete a series of cognitive assessments that assessed reading and mathematical abilities, alongside cognitive abilities such as inhibition control and cognitive flexibility. Non-parametric correlations were examined as preliminary analyses between early motor and cognitive predictors and later educational outcomes (reading, math) and executive function (inhibition control and cognitive flexibility). All early cognitive and motor abilities at T1 were highly intercorrelated. Early visual reception was positively associated with later reading and math measures, while early language skills showed positive associations with later reading and numeracy outcomes. In the main regression analyses, early fine motor skills, receptive language, and expressive language were significant predictors of whole word reading. For single letter recognition, fine motor skills and expressive language were significant predictors. No other significant predictors were observed. These findings indicate that early fine motor and language abilities are particularly

important for later reading development in children with DS, whereas early gross motor and visual reception abilities appear less predictive in this cohort. Interventions targeting fine motor or early language skills may support literacy development and educational progress

O15

A cross-sectional examination of sleep in infants with Williams Syndrome

Kate Gwilliam*, Anna Joyce, Jo Van Herwegen

Background - Children with Williams Syndrome (WS) experience poorer sleep quality relative to Typically Developing (TD) children. Yet, few studies have addressed sleep in very young individuals with WS, none focus on infancy. This study provides a cross-sectional examination of sleep duration and quality in infants with WS, relative to TD, and how differences may be associated with parent-reported sleep problems.

Methods - Parents of 34 children (17 WS, 17 TD), aged 11 to 19 months, completed a sleep diary for their child, a background medical questionnaire and the Brief Infant Screening Questionnaire (BISQ). Infants also wore an actigraph device for one week to measure their sleep quantity and quality.

Results – Infants with WS had later bedtimes, slept for shorter durations than TD infants and were reported by parents to have poorer sleep quality, although this was not reflected in actigraphy data. Parent-reported sleep problems were common across the entire sample, and although more frequently reported in infants with WS, this was not statistically significant. Furthermore, problematic sleep may be viewed differently by parents of infants with WS, relative to TD, with long periods of nightwaking a key feature of problematic sleep in WS.

Conclusions – These results provide objective and subjective evidence that sleep difficulties are present in WS as early as infancy. This allows for development of targeted behavioural sleep interventions which, if used at an early age, may provide the best opportunity to avoid unhelpful sleep practices becoming embedded, contributing to later sleep difficulties for children with WS.

O16

Exploring FASD with educational professionals: implications for professional learning and disability education

Miranda Eodanable*, Sinead Rhodes and Katie Cebula

Background: UK educational professional knowledge of FASD is limited, which has implications for practice and support for pupils with FASD. Despite the importance of adolescence for development and identity formation, little research has explored the intersection of adolescence, FASD as a neurodevelopmental condition and disability, and educational practice. Research aim was to explore professionals' understanding of FASD, educational supports and their role in disability identity formation. Method: Online focus groups were conducted with 12 secondary (mainstream or specialist) school professionals in Scotland, who had worked with pupils with FASD. A novel research design (Hayes et al. 2024) was adapted for this study, utilising a structure of three phases (orientation, elicitation, free recall) with a semi-structured focus group guide. Orientation and elicitation materials included a FASD Hub Scotland animation, and vignettes. A study advisory group provided consultation on the design, materials and recruitment. Data were analysed using reflexive thematic analysis. Results: Preliminary findings indicate educational professionals felt unclear about FASD prevalence, the profile of FASD in their pupil population and FASD informed interventions. Stigma of FASD was perceived to be experienced by young people with FASD and their parents. However, all professionals noted that the understanding of neurodevelopmental diagnoses and access to supports was valuable for adolescents, parents and schools. Professional hesitation emerged around the disclosure and advocacy of FASD, and disability education with adolescents. Conclusion: Supporting education professionals' reflective practice, FASD learning and open dialogue with adolescents with FASD are key areas for supporting positive educational journeys for pupils.

O17

Exploring the Impact of a Sensory Room for Supporting Neurodivergent Students in Higher Education

Elisa Back*, Marie-Claire McGregor, Bliss Jayme, and Katharine Clifford

Neurodivergent students can encounter higher education environments that intensify sensory overload and anxiety. A sensory room at Kingston University was codesigned with autistic students to support sensory differences, emotion regulation, wellbeing, and academic engagement. This study evaluated the impact of this sensory space designed for neurodivergent students. Twelve autistic and/or ADHD students participated (aged 19-38), completing the Adolescent/Adult Sensory Profile, the Student Wellbeing Process Questionnaire, a custom sensory room survey, and qualitative semi-structured interviews about their experience of using the sensory room. Interview questions related to initial impressions and general experience, sensory preferences and accessibility, emotional and sensory regulation, impact on learning and social interactions, suggestions for improvement, overall perception and future use. Quantitative data indicated elevated scores for sensory sensitivity and sensory avoiding profiles, suggesting increased susceptibility to overstimulation. Participants rated the room highly for accessibility and environmental control, particularly valuing features such as dimmed lighting, quiet zones, weighted blankets, and fidget tools. Thematic analysis of interviews identified four overarching themes: facilitating emotional wellbeing; effective learning space, supporting sensory differences and positive view/outlook on university life. Participants reported improvements in calmness, concentration, and willingness to engage academically and socially. Findings suggest that sensory-supportive spaces can help neurodivergent students feel more independent, included, and supported in their wellbeing and participation in university life. As a result, this can lead to improved academic engagement, reduced anxiety, and increased retention of neurodivergent students. This encourages an inclusive university culture that recognises sensory differences and promotes equitable access to learning and support.

O18

Effective Components for Improving Educational Outcomes for Students with SEND: Evidence from targeted interventions and machine learning

Jo Van Herwegen*, Michael S. C. Thomas, Julie Dockrell, Rebecca Gordon, Dominic Wyse, Hiruni D. Aluthgamage, Samara Banno

Students with Special Educational Needs and Disabilities (SEND) consistently experience poorer educational outcomes than their non-SEND peers, and many rely on targeted interventions for additional support. The recent MetaSENse systematic review and meta-analysis synthesised global experimental evidence (2000–2023) and reported that targeted interventions yield, on average, five months of additional progress. However, notable gaps remain between SEND groups and between the interventions tested in research and those commonly used in schools. To better align research and practice, this study examined the instructional components embedded within effective interventions to identify strategies most likely to improve outcomes for students with SEND. All high- and moderate-quality MetaSENse studies (n = 517) were coded for the presence of 18 instructional components informed by high-leverage practices in special education and the EEF pedagogical taxonomy. Component frequency analyses, effect-size comparisons, and machine-learning (ML) models (random forest and decision-tree classifiers) were used to explore both individual component effects and interactions, capitalising on ML's capacity to model complex, non-linear relationships. Interventions included an average of 6.72 components, but the number of components was unrelated to effect size. Rewards were consistently associated with lower effects, whereas Explicit Teaching showed positive associations across several domains. Communication benefitted mathematics and writing but negatively predicted general attainment. ML models outperformed logistic regression (~65% vs ~53% accuracy) and identified Explicit Teaching and

Feedback as the most reliable predictors of success, with domain-specific patterns for reading and mathematics. Findings highlight that context is important as components interact with each other, but that explicit teaching and feedback are key. These insights provide practitioners, school leaders, and programme developers with clearer guidance for designing and selecting high-quality interventions for learners with SEND.

O19

Barriers experienced by university students with Attention Deficit Hyperactivity Disorder (ADHD): an analysis through life stories

Isabelle Dale*

Attention Deficit Hyperactivity Disorder (ADHD) is a neurodevelopmental condition that poses significant challenges for students in higher education, yet their lived experiences remain underexplored. This study aims to examine the barriers experienced by current university students with ADHD from across different disciplines through an in-depth analysis of their life stories. A qualitative research design is adopted, employing a life history approach to capture participants' educational trajectories and personal experiences over time. Data is collected through semi-structured, in-depth interviews of 60 to 90 minutes with individuals formally diagnosed with ADHD. The interviews explore academic, personal challenges as well as coping strategies. We analyze the data using thematic analysis to identify recurring patterns and key barriers, including limited access to academic accommodations, lack of institutional awareness, stigma, and difficulties related to attention regulation, time management, and emotional control. The findings aim to provide a nuanced understanding of how current university students with ADHD navigate higher education and their transitions beyond university. As a result, we expect to find underlying difficulties that are not recognised by the current diagnostic criteria for ADHD but are nevertheless significant and require further adaptations in a university environment. By foregrounding participants' voices, this study seeks to inform more inclusive higher education policies, teaching practices, and student support services that recognize and respond to neurodiversity.

O20

Individual Differences and Mathematical Profiles in Williams syndrome and Down syndrome

Stella Xu*, Michael S.C. Thomas, Jo Van Herwegen

Individuals with Williams Syndrome (WS) and Down Syndrome (DS) are frequently compared due to their similar levels of learning disability and uneven cognitive profiles. While past studies have identified mathematics as a weakness in both conditions, mathematics is a complex componential subject (e.g., counting, procedural knowledge, number sense, arithmetic) and thus, there is a lot of variability in the strengths and weaknesses for each of these components within each condition. This study aims to examine 1) the individual differences within these component skills, 2) what the profiles of these components look like in WS and DS, and 3) whether profiles are characteristic of each syndrome or alternatively represent transdiagnostic groupings. In total, 86 participants aged 5-18 years were recruited, with 43 participants in each group. Data collection involved a battery of cognitive and math measurements. Data were analysed using profile plots and latent profile analyses. For both conditions, three ability groups emerged. Low ability groups showed relative strengths in number familiarity and mathematical language. Middle ability groups demonstrated these same strengths alongside relative weaknesses in ordinality (for children with DS) or dot comparison (for children with WS). High ability groups in both syndromes were characterised by relative weaknesses in dot comparison. When genetic the condition wasn't predefined, latent profile analysis identified overlapping groups including both children with WS and DS. The implications of this study extend to moving away from diagnostic labels and focusing on meeting individual needs to address specific areas in mathematical development.

O21

"His sibling doesn't really understand why he is in his own world": Sibling relationship quality, child-level predictors, and family wellbeing in minimally verbal children

Lauren McGuinness*, Danielle Matthews, Supipi Munaweera, Jo Saul

Background: Sibling relationships provide social interaction, emotional support, and learning opportunities for children with neurodevelopmental conditions, but may be strained by interactional or behavioural differences. For minimally verbal (MV) children – a heterogeneous group with limited spoken language – these relationships are shaped by complex communication needs. This study explored sibling relationship quality, child-level predictors, and associations with family wellbeing. We hypothesized that stronger communicative skills would predict higher sibling relationship quality, and in turn, greater family wellbeing.

Method: As part of a longitudinal study, caregivers of 193 MV children aged 4-12-years were invited to complete an adapted Sibling Relationship Questionnaire (1985) with verbally mediated items removed. Those providing sibling information (n=115) also contributed qualitative data via two open-ended survey questions. Family wellbeing was assessed via the Autism Family Experience Questionnaire (2018). Child-level predictors included non-social autism symptoms, adaptive skills, and parent-reported and naturalistic measures of communicative abilities. Analyses controlled for demographics, comorbidities, developmental regression, and sibling diagnoses.

Results: Pre-registered linear regressions indicated that MV child communicative competence predicted sibling relationship quality ($B=1.276$, $p=.005$, adjusted $r^2=.241$), which in turn explained unique variance in family wellbeing ($B=1.606$, $p<.001$, adjusted $r^2=.0933$). Thematic analysis identified four themes: challenges of parenting multiple children, variability in sibling relationships, contextual and developmental influences, and broader family impacts.

Conclusions: Sibling relationship quality in MV children is shaped in part by communicative skills and is associated with family wellbeing. Caregiver insights highlight relationship complexity, emphasizing the need for family-centred research and practice that considers both MV children and their siblings.

O22

Explaining the Comprehension–Production Vocabulary Gap in Williams Syndrome

Dean D'Souza*, Hana D'Souza, Julien Mayor, Ángel Eugenio Tovar

The comprehension–production vocabulary gap is a hallmark of language development, yet anecdotal evidence suggests this asymmetry may be reduced in children with Williams syndrome (WS). We used empirical data to characterise the gap and computational modelling to investigate the origins of this distinctive linguistic profile, focusing on children aged 7 months to 6 years. Using parental reports (Communicative Development Inventories), we compared children with WS (n=67) to typically developing children (n=1210) and cross-syndrome groups with Down syndrome (n=27) and fragile X syndrome (n=15). Results show that children with WS follow a unique trajectory: alongside general delay, they exhibit a significantly reduced comprehension–production gap not observed in other groups. To elucidate underlying mechanisms, we implemented a biologically-inspired neural network (a self-organising map) to model early word learning and visual–auditory representations. The model demonstrates that WS-like vocabulary patterns can arise from selective visual processing difficulties, yielding exemplar-based rather than prototype-based object representations. These visual constraints, consistent with known visuospatial difficulties in WS, may contribute to the atypical lexical relationship, while broader processing constraints account for general delay. Overall, this study provides a mechanistic account of vocabulary development in WS, highlighting the role of visual constraints in shaping lexical outcomes. More broadly, it underscores the need to conceptualise language development as an interaction between sensory input and cognitive subsystems, explaining why the comprehension–production gap is not a uniform feature of language acquisition.

O23

Exploring Feeding and Eating Disorders in Autistic adults with Intellectual Disabilities: A photovoice study

Kyle Buchan and Karri Gillespie-Smith*

Introduction: Research shows that Autistic individuals are twice as likely to experience eating disorders compared to neurotypical peers (Sedgwick et al, 2021) however little is known about the experience of feeding and/or eating disorders in Autistic individuals with Intellectual Disabilities. The current study aims to explore the eating experiences in Autistic people with intellectual disabilities. Methods: Autistic young men with Intellectual Disabilities (n = 6; range of mild-profound severity; Pica diagnosis n = 3) took part in a photovoice study exploring their eating behaviours and experiences. Images were taken or provided to represent their experience of eating and narratives/utterances from the support workers and the participants were recorded. Results: Data collection is ongoing so results may change. Initial themes detected to date include – a) Emotion regulation of Food; b) Eating behaviours that fluctuate vs remain constant; c) Sensory aspects; d) Eating out; e) Food as reward, f) socialising. See Figure 1a-f. Discussion: Despite Autistic people with Intellectual Disabilities being diagnosed/labelled with feeding issues, pica or selective eating there seems to be different mechanisms that drive these behaviours. More research is needed to better understand what causes eating and feeding issues in this under-represented community to improve support.

O24

The Nature of Phonological Impairments in Dyslexia and Stuttering: Evidence from Phonemic, Semantic, and Design Fluency Tasks

Mahmoud Elsherif*, Jamie Smith-Spark

The executive function of verbal fluency requires the ability to generate items according to specific rules. In dyslexia and stuttering, the production of words belonging to a certain semantic category (semantic fluency) tends to be unimpaired, whereas the generation of items that require a certain (phonemic fluency) is impaired. However, verbal fluency has usually been studied in both dyslexia, and to a lesser extent in stuttering, based on overall words produced. In this online study, 62 dyslexic adults, 62 adults who stutter [AWS], and 62 neurotypical adults completed typed versions of verbal and mouse-drawn design fluency tasks. Design fluency was included to assess whether impairments were driven by general executive control or specific phonological deficits. Using hierarchical regression, we observed, that dyslexia and stuttering predicted lower correct output for phonemic fluency but did not predict scores on the semantic or design fluency tasks. At a finer-grained level, dyslexia predicted a smaller number of switches between subcategories on the phonemic fluency task only, whereas stuttering only predicted the size of phonemically-related clusters of items. Overall, these results indicate that the executive fluency impairment found in dyslexia is related to accessing phonological representations, whereas adults who stutter have an impairment in terms of the phonological representation. These findings suggest that despite similar phonological impairments, the phonological mechanisms in dyslexia and stuttering are distinct, necessitating specialized clinical interventions.

ABSTRACTS - POSTER PRESENTATIONS

1

Using strengths to engage in compensation: A content analysis of autistic adults' experiences

Alanna J. Shand*, Dr Sarah L. Grant, Dr Lucy A. Livingston, & Prof. Rosa A Hoekstra

Some autistic adults engage in compensation; the use of active strategies to appear neurotypical and/or manage autistic differences and difficulties. Research investigating how autistic people compensate is limited; however, a possible mechanism may be through engaging their psychological strengths (e.g., in memory). Compensatory strategies that draw on individuals' strengths may be less cognitively demanding, increasing the likelihood of success. The present study aimed to (i) explore autistic adults' experiences of leveraging psychological strengths during compensation and (ii) generate lists of compensation-related strengths and compensatory strategies otherwise not captured in existing measures. A cross-sectional online survey was conducted to collect qualitative data. Participants (N=127) were English-speaking adults aged 18 years and over (M age= 39.18 years, SD= 12.85) who either had an autism diagnosis (n= 86) or self-identified as autistic (n= 31). Participants identified as women (n= 76), men (n= 39), or at least one gender minority (n= 12). Manifest content analysis was performed, resulting in the development of two domains that distinguished between compensation-related strengths and compensatory strategies. The domain of compensation-related strengths contained three subcategories: (i) cognitive and learning, (ii) personality and character, and (iii) social and relational. The domain of compensatory strategies encompassed two subcategories: (i) executive function-related and (ii) sensory-related. The findings revealed a range of strengths that may be leveraged during compensatory strategy use, informing our understanding of the mechanisms underpinning compensation. This research also highlights the variety of strengths endorsed by autistic adults, suggesting that strengths-based interventions may benefit from being highly individualised.

P2

Rhythm Processing Across Neurodevelopment: A Mental-Age Matched Study of Down Syndrome

Alejandra Mitzi Castellón-Flores*; M. Florencia Assaneo; Armando Quetzalcóatl Angulo-Chavira; Natalia Arias-Trejo

Rhythm processing has been proposed as a core neurocognitive mechanism supporting language acquisition by facilitating syllabic segmentation and the temporal coordination of auditory attention (Goswami, 2011; Kotz & Schmidt-Kassow, 2015; Dogonasheva et al., 2024). The present study examined rhythm discrimination abilities across neurodevelopment by comparing typically developing children with individuals with Down syndrome matched on mental age. Eighty monolingual Spanish-speaking typically developing children (36 months old) and eighty monolingual Spanish-speaking individuals with Down syndrome (chronological age range: 6–23 years; mean mental age = 3.25 years) participated. All participants completed a rhythm discrimination task adapted from Gordon et al. (2015), in which they listened to pairs of melodic sequences and judged whether the sequences shared the same rhythmic pattern. Typically developing children showed reliable above-chance discrimination of rhythmic structures. In contrast, individuals with Down syndrome showed reduced sensitivity in the simple rhythm condition and negative sensitivity in the complex condition, indicating difficulty distinguishing between same and different rhythmic patterns. Linguistic and cognitive abilities were assessed using selected subtests of the WPPSI-III, including receptive and expressive vocabulary and visuospatial tasks. In both groups, rhythm discrimination performance was positively associated with expressive vocabulary and visuospatial abilities. Together, these findings suggest that rhythm sensitivity is differentially expressed across neurodevelopment even when mental age is matched and may reflect shared but developmentally

constrained mechanisms linking temporal processing, language production, and visuospatial planning. These results highlight rhythm processing as a relevant dimension for understanding individual differences in neurodevelopment.

P3

"I become hyperfocused on the music and almost live in it": A qualitative analysis of neurodivergent musicians' auditory processing experiences in everyday life and live music settings.

Alex Chapman*, Peter Sparkes, Jane Ginsborg, Pamela Heaton

It is estimated that 1 in 5 people are neurodivergent. However, the Musicians' Union Census suggests that there is an even higher percentage of neurodivergent people working in music. Musicians who identify as neurodivergent may report that they experience autism, ADHD, dyslexia, dyspraxia, or Tourette's. These frequently co-occur within individuals and are associated with alterations in sensory, perceptual and cognitive experience that impact on everyday life. To date, few studies have investigated the experiences of neurodivergent musicians. The aim of this presentation is to provide a qualitative analysis of neurodivergent musicians' auditory processing experiences in everyday life and live music settings. A sample of neurodivergent musicians will have completed a mixed methods exploratory survey that closes in March 2026. The survey focuses on auditory processing experiences, motivations and engagement, and reasonable adjustments in live music settings. Question types include open-ended text boxes and closed-ended responses including singular and multiple choice, and Likert scales. Completion methods range from online to voice-recordings and interviews, and a pilot study was previously conducted to ensure accessibility was prioritised. This will be the first large-scale study into neurodivergent musicians' auditory processing experiences when working in environments such as live music venues. The focus of the analysis presented in this talk will be on the participant's beliefs about their neurodivergent identities and auditory processing experiences in everyday life and live music settings, with emphasis on the similarities and differences between the two settings in addition to co-occurring neurodivergent identities.

P4

Does the temporal structure of parent speech shape visual attention in young children with Down syndrome?

Andrew Yu*, Cátia M. Oliveira, Catalina Suarez-Rivera, Chen Yu, & Hana D'Souza

In parent-child interactions, parent speech can guide and shape a child's visual attention, influencing what the child notices and engages with in the moment. Multiple studies of typically developing children show that object labels are often repeated within narrow temporal windows rather than uniformly spaced, and, crucially, objects whose names appear in more bursty clusters are more likely to be attended to by toddlers. However, it remains an open question whether such effects may also be observed in neurodivergent development. In the present study, we use a dataset collected from 15 young children with Down syndrome (DS; M = 47 months, SD = 7.9) and their parents. The dyads were asked to play with a set of toys while head-mounted eye-tracking was used to record their behaviors. We compare parent speech and child gaze data from those dyads with the data collected from 15 ability-matched typically developing (TD) children (M = 21.2 months, SD = 2.9) and their parents, to address the following questions: (1) Does parent speech to children with DS exhibit a bursty temporal structure, similar to speech directed to TD children?; if yes (2) Do children with DS show increased visual attention to target objects following bursty parent labeling?; and, finally, if yes, (3) Do the effects of bursty parent speech on child attention differ between TD children and children with DS? The results from this research will provide insights into challenges and opportunities for children with DS to learn from everyday interactions.

P5

What are the Musical Instrument Practices and Preferences of Adult People with ADHD and what Challenges do they face While Practising the Musical Instrument of their Choice?

Anthi Georgiadou*

While it has been well established that Attention Deficit/Hyperactivity Disorder (ADHD) has a negative impact on music perception and processing, including time- and duration-related information and beat perception, there haven't been many attempts to address these challenges through the design of accessible digital musical instruments. To this end, the present project aims to create an accessible digital musical instrument tailored for adults with ADHD. The primary objectives of this research are: (1) To analyse the challenges/barriers adults with ADHD face while practising musical instruments and their musical instrument practices and preferences, (2) to design an accessible digital musical instrument that caters to the unique needs and preferences of adults with ADHD, aiming to enhance cognitive, motor, and spatial skills and (3) to evaluate the potential of the digital instrument in improving focus, relaxation, and creative engagement in adults with ADHD. A series of mixed-methods experiments will be conducted to (1) identify the challenges adults with ADHD face in musical practice, (2) explore what the musical instrument practices and preferences of adults with ADHD are, (3) construct a digital musical instrument based on the needs, practices and preferences of adults with ADHD and (4) evaluate this digital interface. The expected outcome of the present project is a customizable digital musical instrument that is specifically designed for adults with ADHD. This project holds significance for accessible digital musical instrument design to inform the development of more accessible and ADHD-friendly musical instruments and software, promoting greater participation and creativity among neurodivergent individuals.

P6

Improving Mathematical Skills in Children with Down Syndrome and Williams Syndrome: A Feasibility Study of Symbolic and Non-symbolic Skills Intervention Programmes

Arcelia N. S. Cheung*, Michael S. C. Thomas, Victoria Simms, & Jo Van Herwegen

Background: Individuals with Down syndrome (DS) or Williams syndrome (WS) experience persistent mathematical difficulties that may affect independence and quality of life. While individuals with DS show relative strengths in non-verbal but weaknesses in verbal skills, and vice versa for WS, the roles of symbolic and non-symbolic skills in their mathematical development remain unclear, and few targeted interventions exist. We hypothesise that children with DS and WS will improve in mathematical skills following a symbolic or non-symbolic skills intervention, and both interventions will show high practicality and acceptability, with 80% or above retention rates.

Method: As part of a broader research protocol, thirty children with DS or WS aged 5-11 years will be recruited across the UK and randomly assigned to either a symbolic or nonsymbolic skills intervention. Interventions will be delivered by parents or teaching assistants over five weeks. Children's general cognitive abilities will be assessed at baseline, and mathematical outcomes, including overall mathematical achievement, symbolic and nonsymbolic skills, and mathematical language, will be assessed at four time points.

Results: Data collection is ongoing but statistical analyses on which children improve following the interventions and to what extent these interventions improve mathematical skills will be reported. Yet, qualitative feedback from parents and teaching assistants suggests that both interventions are practical and acceptable in real-world settings.

Conclusion: Incorporating structured activities targeting symbolic and non-symbolic skills into everyday life may strengthen mathematical foundations in children with DS or WS. A larger study will further examine effectiveness and individual differences influencing outcomes.

P7

Measuring education participation and performance in children with intellectual disability: A systematic review and meta-analysis

Arfaa Riaz*, Hayley Crawford, Caroline Richards & Rory T. Devine

Children with intellectual disability (ID) often present with diverse and complex learning profiles, including a large variety of unique cognitive, social, emotional and physical needs (SEND Code of Practice, Department of Education, 2015). Difficulties in these areas impact educational attainment and learning, meaning traditional assessments used in mainstream school settings and educational research, such as statutory exams, may not capture the nuanced and often non-linear patterns of development shown by children with special educational needs. The aim of this meta-analysis is to establish the psychometric properties of existing measures of educational participation and performance in children and young people with ID. We will search Ovid PsycINFO, Web of Science, EBSCO and ProQuest for English-language papers published from database creation up to early 2026 with use of education, ID and child keywords. We will apply quality weighting to papers and estimate the overall reliability, validity and feasibility of each measure. Results will describe the type of measurement instruments identified to capture educational participation and performance, and their psychometric properties. By identifying measures that exhibit good reliability and validity, as well as areas of functioning that are being assessed via these methods, this will provide guidance on the best available measures for measuring educational participation and performance.

P8

Increasing the Uptake and Quality of Annual Health Checks for Young People with a Learning Disability

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Background Children and young people (CYP) aged 14–17 years with a learning disability face significant health inequalities, including lower life expectancy and higher rates of unmet health needs. Although annual health checks (AHCs) are effective at improving the healthcare of people with a learning disability, uptake in this age group remains suboptimal. In 2024–25, almost 30% of eligible CYP did not receive an AHC. This NIHRfunded study aims to understand and address the reasons behind low uptake and how quality of AHCs can be improved in this population.

Methodology A two-phase, mixed-methods research project is underway. Phase 1 involves three work packages: (1) case studies, interviews and focus groups with professional stakeholders, and analysis of national General Practice data; (2) interviews and surveys with family carers and Talking Mats sessions with CYP; and (3) synthesis of findings to co-design an intervention with a stakeholder PPI Design Group. Phase 2 will assess the feasibility and acceptability of the co-designed intervention across 15-20 primary care networks using qualitative interviews and quantitative data monitoring.

Results Phase 1 is underway and results will inform the development of the intervention. We will present the study protocol and preliminary findings from the survey of family carers, qualitative interviews, and/or analysis of electronic health record data.

Conclusion This study will generate critical insights into barriers and enablers to AHC uptake in CYP with a learning disability and develop a scalable, co-produced intervention to increase uptake and quality of AHCs and address national health inequality.

P9

Understanding how individuals with learning disabilities experience friendship and social connection

Betsy Holmes*, Dale Metcalfe

Friendship is a central factor to wellbeing and positive mental health both in the wider population and particularly for people with learning disabilities. Previous studies have indicated that individuals with learning disabilities feel that friendships are key to their identities and happiness however it is also far more common for individuals with learning disabilities to experience social isolation (Brown et al., 2024; Abbott & McConkey, 2006). This study explored people with learning disabilities' experiences of, and their opinions about, friendships. The discussions also covered what they would feel would be helpful for them to create and maintain friendships. This was done through semi-structured individual interviews and focus groups, at these sessions participants produced 'friendship maps' and 'card sorts,' and recordings of these conversations were made for later transcription. At the time of writing the study is ongoing, with data collection finishing by the end of January; 24 participants are expected to take part, thanks to the support of a local charity. Thematic analysis is beginning imminently on the resulting data. The ultimate goal of this analysis is to understand how people with a learning disability conceptualise friendship and to inform the development of practical tools for projects and community workers, to make friendship-making more accessible for everyone. The findings from this project intends to inform professional practice to address practical barriers, ultimately making individuals with learning disabilities more comfortable and confident when forming friendships.

P10

Exploring the neurocognitive mechanisms of state hyperfocus in subclinical neurodevelopmental populations

Bryony Aspinall*, Jo Greer, Jason Rajsic, Colin Hamilton

Hyperfocus describes an intense state of sustained concentration on a task, stimulus, or object, accompanied by diminished awareness of self, time, and surroundings. It is frequently discussed alongside ADHD and, to a lesser extent, autism- both of which involve heterogeneous impairments in executive functioning (EF), attentional control, and reward sensitivity (RS). Our prior findings showed that neurodevelopmental traits (ND) and poorer EF significantly predicted trait hyperfocus, with ADHD traits as the strongest predictor. Though RS showed limited predictive value, dopaminergic differences may still be implicated. While these findings identified key predictors of trait hyperfocus in subclinical populations, the neurocognitive mechanisms underlying state hyperfocus remain unknown. Therefore, the following study aims to explore the neural correlates of state hyperfocus using EEG during a gamified task with a concurrent implicit auditory oddball paradigm. We will examine neural responses to task-irrelevant sounds across multiple ERP components (e.g., N2, P3) and explore if these patterns differ based on ND traits and executive–attentional abilities. Resting-state EEG, behavioural performance, and trait measures will assess baseline neural activity, task engagement, and individual differences. We hypothesise that hyperfocus is associated with attenuated neural responses to irrelevant auditory stimuli. Exploratory analyses will examine whether ND traits and dopamine markers relate to these neural patterns. Findings will add to our understanding of the neurocognitive mechanisms of state hyperfocus in subclinical populations.

P11

Experiences of Premenstrual Syndrome and Premenstrual Dysphoric Disorder in Autistic and Allistic Females: A Mixed-Methods Approach

Carrie McCabe*

Evidence suggests that autistic females may experience heightened sensitivity to hormonal fluctuations, yet the menstrual cycle experiences of this population remain underexplored. This mixed-methods study investigated the premenstrual experiences of 31 autistic (formally diagnosed (n = 10) and self-identified (n = 21) and 34 allistic females in the UK. Autistic participants reported significantly greater premenstrual symptom (PMS) severity and frequency and met the DSM-5 criteria for premenstrual dysphoric disorder (PMDD) at significantly higher rates than allistic participants (54.8% vs. 11.4%). However, group differences in moderate-to-severe PMS were not observed once PMDD cases were excluded. Key analyses using AQ-based recategorisation showed a similar overall pattern among individuals with high autistic traits (AQ >32). Reflexive Thematic Analysis of autistic participants' qualitative responses identified four overarching themes concerning premenstrual and broader menstrual experiences: 1) cyclical psychological and emotional challenges (including the amplification of autistic traits); 2) suicidality, self-harm, and destructive behaviour; 3) severe dysmenorrhea, menorrhagia and exacerbation of co-occurring health conditions; and 4) functional impact across various life domains. These findings underscore the critical need for autism-informed menstrual healthcare, improved diagnostic recognition of both PMDD and autism, and tailored support in clinical practice to address the unique needs of this high-risk population.

P12

Finding words: Validating AI tools for real-world speech

Catia M. Oliveira*, Sofia Hryniv, Alejandra Mitzi Castellón-Flores, & Hana D'Souza

Vocabulary abilities in early childhood are strong predictors of later reading skills and overall academic achievement. Crucially, vocabulary acquisition occurs in interactive social contexts, with infants often relying on these interactions to reduce ambiguity. Despite their importance, naturalistic interactions remain underexplored largely due to the time and resources required for manual annotation. Recent speech-to-text models - such as Whisper which automatically converts speech to text - offer promise for automatically identifying specific words in audio recordings (a process known as keyword spotting), but their performance has yet to be formally validated on naturalistic datasets. The data used in this project was taken from the TinyExplorer study examining parent-child interactions in 41 parent-child dyads aged 4-60 months (~33 hours of audio). This study comprised two groups: 17 children with Down syndrome (14-60 months) and 24 typically developing children (4-30 months), matched on ability level. WhisperX adequately detected the 18 CDI nouns (recall = .70). However, we only evaluated the WhisperX utterances whose timestamps aligned with those in the manual annotation. In contrast, OpenWakeWord did not successfully detect the keywords, possibly due to its training on synthetic speech (recall = .01). These results suggest that while WhisperX shows potential for word detection, it still misses a substantial number of keywords. Conversely, OpenWakeWord does not reliably identify the keywords of interest. Overall, the results indicate that WhisperX offers a promising foundation for future development in automatic keyword detection.

P13

Executive Functions and Traits of Autism and ADHD in Preschool Age Children with Tuberous Sclerosis Complex

C. N. Contreras*, J. Van Herwegen, N. N. Lindsay, J. Koziel, E. Loth, E. Jones, M. H. Johnson, P. Bolton, T. Charman and C. Tye

Background: Executive functions (EF) are neurocognitive processes supporting goal-oriented behaviors, characterized as working memory (WM), shifting, and inhibition. EF profiles diverge around age 3 in children with elevated traits of autism and ADHD. Tuberous sclerosis complex (TSC) is a rare genetic condition associated with elevated traits of autism and ADHD, yet EF remains understudied in early childhood.

Methods: Children with TSC (n=39) and TD age-matched children (n=32) completed assessments in the Early Development in Tuberous Sclerosis (EDiTS) Study at preschool (3-5 years). EFs were calculated using parent-report (BRIEF-P), behavioral, and touchscreen tablet measures. Traits of autism and ADHD were calculated using SRS composite and CBCL 1.5-5 ADHD subscale. Group comparisons were conducted and regression analyses will examine associations between EF domains and traits of autism and ADHD.

Results: Children with TSC showed significantly elevated traits of autism (p=.001) and ADHD (p=.005) compared to TD children. WM abilities were significantly lower in children with TSC for BRIEF-P ($p < .001$), behavioral (p=.019), and tablet (p=.001). Shifting was lower in children with TSC for BRIEF-P (p=.025) and the tablet task (p=.003), but not the behavioral task (p=.167). Inhibition was significantly lower in children with TSC for BRIEF-P (p=.021) and the tablet task ($p<.001$) but not the behavioral task (p=.086). Full analyses will be presented at the meeting.

Implications: Preschoolers with TSC demonstrate widespread EF difficulties across a range of measures, and significantly elevated traits of autism and ADHD. These findings highlight the importance of early EF assessment to inform bespoke interventions.

P14

Anthropologists of Our Own Lives: Autistic Identity and Masking in Cultural Transition

Chloe (Pei-Hsin) Huang*, Amy Pearson, Monique Botha

Background: There is little understanding of how autistic identity is renegotiated through movement across cultural systems regardless growing numbers of autistic individuals live and work internationally.

Method: We conducted semi-structured interviews (written or spoken) with 10 autistic adults (mean age = 32.2 years) who had lived in at least one foreign country for six months or longer. We asked them questions about their experience living abroad and how it affected their identity and masking in different cultural contexts. We inductively analysed the data using reflexive thematic analysis within a contextualist epistemological framework.

Results: We developed three themes. Theme 1) Who's entitled to be autistic, showed that entitlement to an autistic identity was culturally mediated rather than universal, which often shaped by institutional power, diagnostic practices, and locally dominant moral frameworks. Theme 2) 'You know. I'm something of an anthropologist myself', emphasised on heightened observation and culturally specific masking strategies that participants engaged in whilst navigating between cultures. Masking was not considered as always negative however functioned as a context-dependent and adaptive form of self-regulation. Theme 3) 'Be kind to yourself. It's gonna be difficult' showed that cultural transition was experienced as both demanding and potentially transformative when taking care of with self-compassion and preparation. Relational safety (e.g., developing friendships, volunteering) was identified as a key resource for sustaining well-being and identity coherence.

Conclusions: Our findings suggest that both autistic identity and masking should be understood with cultural sensitivity. We also recognise that migration experiences can be both reassuring and traumatic to autistic individuals.

P15

Exploring Eating Behaviours and Nutrition-Related Care Experiences in Neurodivergent Adults: A Mixed-Methods Study

Christiana Orphanou*, Dr Hilda Mulrooney

Background: Eating-related differences are reported in autism and AttentionDeficit/Hyperactivity Disorder (ADHD), but adult evidence-especially for co-occurring presentations and outside eating-disorder (ED) services-remains limited. We examined multidomain everyday eating experiences and neurodivergent adults' experiences of nutrition-related advice.

Methods: Exploratory cross-sectional mixed-methods study. Adults aged 18–45 (n=101) completed a self-report questionnaire assessing sensory eating experiences, routines/flexibility, everyday eating management, and interoceptive–emotional awareness, plus screening measures of autistic and ADHD traits. Group comparisons were conducted between neurotypical adults (n=46), ADHD-only adults (n=24), and autistic adults with or without ADHD (n=28). Dimensional analyses tested trait associations; hierarchical regression adjusted for contextual factors (mental-health diagnosis, ED history, medication). Neurodivergent participants with prior nutrition-related care (n=32) provided open-ended responses analysed using reflexive thematic analysis.

Results: Outcomes differed across groups ($p<0.001$). Autistic adults with or without ADHD reported greater sensory eating differences than both comparison groups; other domains showed graded differences, with ADHD-only adults typically intermediate. Trait analyses converged: autistic traits were most strongly associated with sensory eating experiences ($r=0.58$, $p<0.001$) and ADHD traits with eating management ($r=0.47$, $p<0.001$). Trait measures explained additional variance in overall eating-related differences beyond contextual factors ($\Delta R^2=0.22$, $p<0.001$); autistic traits remained an independent predictor ($\beta=0.445$, $p=0.001$). Qualitative findings indicated standard advice was often poorly aligned with neurodivergent needs, highlighting feasible adaptations (sensory accommodation, gradual pacing, implementation scaffolds, accessible non-moralising communication).

Conclusions: Neurodivergent adults show multi-domain eating-related differences, with autistic traits exerting the most consistent association with overall severity, supporting tailored neurodivergent-affirming nutrition care beyond ED settings.

P16

The feasibility of a chair yoga intervention to improve mental health and wellbeing for adults with learning disability: A pilot study

Dale Metcalfe*, Alice Gibson-Fisher, Toni J Southern, Chris Jackson

Background Yoga has been shown to have physical benefits for people with learning disability. Presently, unlike other populations, it is under-researched whether there are mental health and wellbeing benefits. This study acts as a pilot for more conclusive research in this area.

Method The study comprised three stages; first, focus groups to understand how classes should be run. In the second stage, 10 adults with learning disability attended chair yoga classes for 6 weeks completing quantitative questionnaires. Lastly, a focus group to discuss the classes.

Findings Researchers developed a better understanding of what accessibility means in a yoga context and developed a protocol based on this. There are many feasibility outcomes around practical considerations for larger scale research in the future. The underpowered nature of this study led to uncompelling quantitative findings, though an improvement in one anxiety measure was seen; the limitations of this are discussed. The focus groups highlighted that the atmosphere of the environment the yoga took place in was important and that people wished to continue with yoga. Other benefits of yoga were discussed and could be explored further in future research.

Conclusions The findings indicate that yoga is an acceptable and accessible form of intervention, and this research provides a grounding for larger scale work. The findings, both quantitative and qualitative, indicate there may be some benefits for people with learning disability's mental health. How these findings can be applied to future research is discussed.

P17

Trait Expression of Autism and ADHD interact to Modulate Response Inhibition

Dandan Wu*, Dr Carmel Mevorach, Dr Andrew Surtees, Dr Nicola K Gale

Autism and attention-deficit/hyperactivity disorder (ADHD) traits frequently co-occur, yet their combined influence on behaviour remains unclear. In the present study, we investigated the independent contribution of autistic and ADHD trait expression as well as their interaction on response inhibition, which is often linked with both ADHD and autism. In a non-clinical adult sample (N = 94; Age = 18–32), participants completed a Go/No-Go task indexing action restraint (percentage of No-Go commission errors) while self-report measures of ADHD traits (ASRS) and autistic traits (AQ) were collected. Trait scores were standardised and entered into a generalised linear model predicting commission errors; interaction effects were probed using the JohnsonNeyman technique. The overall model was significant, and while neither ADHD traits nor autistic traits showed a reliable independent association with performance, the AQ * ASRS interaction significantly predicted commission errors. Johnson–Neyman analyses indicated that ADHD traits were positively associated with commission errors primarily at lower levels of autistic traits (ZAQ ≤ −0.84 SD), whereas autistic traits were associated with lower commission errors at higher ADHD trait levels (ZASRS ≥ 0.76 SD). These findings provide evidence for an interactive (rather than purely additive) trait model in which autistic traits may partially attenuate ADHD-related response inhibition on action restraint, highlighting the value of dimensional approaches in adult samples for understanding the co-occurrence of ADHD and autism.

P18

A qualitative exploration of the intersection between autism and sexual minority identities

*Elle Pemberton, Professor Elizabeth Milne, Professor John Fox

Autistic individuals tend to report higher rates of sexual minority (SM) status, typically defined as identifying as gay, lesbian, bisexual, asexual, or other identities. However, current qualitative research exploring the lived experiences of autistic SMs is limited by small and homogenous samples. Given the disparities faced by SM autistic people, including increased rates of discrimination due to holding multiple minority identities, the co-creation of research by autistic SMs is an ethical imperative. Greater understanding of the experiences of autistic SMs could contribute awareness of the specific challenges they face and inform future research accordingly. This research therefore used semi-structured interviews with 14 autistic SMs to provide an in-depth exploration of their intersectional identities, facilitated by the shared lived experience of the lead researcher. Specifically, this research aims to explore how autistic SMs: (1) experience the intersection between their autistic and SM identities, (2) consider their autistic identity to contribute to their SM identity (or not), (3) narrate their experiences of flirting, sexuality and relationships, and (4) experience challenges relating to their co-occurring minority identities. The data is currently being analysed using the six phases of reflexive thematic analysis. Preliminary analysis suggests that the themes will cover: (1) the intersection between autistic traits and sexual identification, (2) resisting the influence of social norms on sexual orientation, (3) autistic experiences on the asexual spectrum, (4) flirting, sex and relationships: the impact of being doubly marginalised, and (5) the challenges of being autistic within the LGBTQIA+ community.

P19

The Influence of Mainstream Secondary School Environment on the Emotional Well-being and Learning of Autistic and/or ADHD Students: A Systematic Review and Evidence Synthesis

Eloise Funnell*, Steve Lukito, Ginni Agarwal, Yu Tzu Chen, Susie Chandler, Matthew Hollocks, Georgia Pavlopoulou and Edmund Sonuga-Barke on behalf of the RE-STAR Team

Introduction: A positive school experience is crucial for students' emotional well-being and learning, especially those who are autistic and/or with attention-deficit/hyperactivity disorder (ADHD). However, the environmental factors (e.g., interpersonal, sensory, or school policy) leading to these outcomes for neurodivergent students are not always clear. We synthesised evidence on environmental factors linked to well-being and learning to guide researchers and practitioners on this topic.

Methods: We performed a literature search in Ovid® Embase, MEDLINE, Global Health, and APA PsycINFO (January 2000 – June 2024) for English-language publications containing self- or parent/teacher-reports of mainstream secondary school environment in relation to well-being and learning of autistic and/or ADHD students. Quantitative and qualitative evidence were included and separately analysed. Findings of qualitative studies were thematically analysed.

Results: We identified 51 studies (36 qualitative, 13 quantitative, 2 mixed methods) involving 2633 autistic and/or ADHD students and 517 adults (parents/carers/school staff). Environmental factors influencing well-being and learning comprised four common themes: (1) 'Recognising Own Strengths'; (2) 'Relationships with Others'; (3) 'Sensory Experiences'; and (4) 'School Policy/Culture'. Subthemes revealed distinct thematic nuances related to well-being and learning. For instance, while peers and school culture primarily influenced neurodivergent students' sense of belonging and well-being, teachers were central in building academic confidence, modelling inclusiveness, and fostering engagement towards learning.

Conclusions: The findings highlight the nuanced ways mainstream secondary school environments could shape emotional well-being and learning, offering tangible targets for supporting autistic and/or ADHD students in this context. These findings will be integrated with the quantitative results through narrative synthesis.

P20

Narrative Framing Drives Moral Distance from Autistic People: A Qualitative Study on the Effect of Dehumanizing Rhetoric in Autism Research and Research Media Reporting

Monique Botha*; Chenoa Rutledge; Taylor Burns; Amy Pearson

Background: Scientific and media portrayals of autism shape public understanding and reinforce social hierarchies, often positioning autistic people as objects of intervention rather than agents. Dehumanization operates through trait-based framings that deny agency or warmth; infra-humanization that denies complex emotions; and evolutionary metaphors implying inferiority. These narratives enable moral distancing and legitimize exclusion.

Objectives: To examine how dehumanizing versus humanizing portrayals of autism influence how neurotypical adults position autistic people in relation to themselves.

Methods: Neurotypical adults from the US and UK participated in four vignette-based experiments (Ns = 150, 150, 145, 130). Participants read research- or media-derived vignettes written in dehumanizing or humanizing styles, describing an unnamed social group. In Studies 3 and 4, open-text responses to similarity and difference prompts (1,100+ responses) were analysed using reflexive thematic analysis. Findings reported here draw on this thematic dataset.

Results: Dehumanizing portrayals prompted defensive self-distancing, with participants emphasizing rationality and control to reaffirm their humanity. Research-based dehumanizing framings elicited hostile moralized responses. Humanizing portrayals increased empathy but often retained paternalism, affirming worth while limiting agency and competence. Emotional denial was variably challenged or reproduced; media-based humanization elicited emotional mirroring yet sustained "us–them" boundaries. Explicit evolutionary framings were criticized, but subtler assumptions of

inferiority persisted. A minority reframed difference as relational mismatch rather than deficit, reflecting moral rehumanization.
Conclusions: Framing determines whether autistic people are positioned within a shared moral community. Dehumanization reinforces hierarchy and distance, while humanization fosters empathy but leaves residue. Reflexive rehumanization highlights pathways toward ethical and inclusive narratives.

P21
The Relative Contribution of Autistic and ADHD Traits to Internalising Problems

Emily McCormack*

Internalising problems refer to a dimension of psychopathology whereby distress is directed inwards, commonly manifesting as anxiety, depression and stress. Internalising problems are prevalent amongst neurodevelopmental conditions and associated with reduced quality of life, lower productivity, and increased mortality risk. Yet the unique contributions of autistic and ADHD traits remain under-researched. Using the Comprehensive Autistic Trait Inventory (CATI), ADHD Self-Report Scale (ASRS), and Depression Anxiety Stress Scales (DASS-21), this study aimed to quantify the relative contributions of autistic and ADHD traits to internalising problems. To capture the full variation of neurodevelopmental traits, 243 adults from the general population participated. It was hypothesised that both autistic and ADHD traits would be positively associated with internalising problems, with ADHD traits emerging as the stronger predictor. Regression, dominance and Bayesian analyses indicated that both autistic and ADHD traits predict internalising problems. However, autistic traits were found to be the stronger predictor of anxiety and depression, whilst ADHD traits most strongly predicted stress. This contrasts with existing research suggesting ADHD traits have the greatest bearing. However, this study used different measures and proposes that measures focusing on cognition may have overlooked the physical manifestations of internalising in individuals with higher autistic traits. Importantly, these findings indicate that individuals high in autistic traits may experience overlooked vulnerability to internalising problems. By demonstrating that both trait profiles confer elevated risk, with distinct patterns of vulnerability, these findings highlight targets for intervention and support, irrespective of diagnostic status; important given acknowledged barriers to accessing diagnosis.

P22
Using Mobile EEG in Neurodevelopmental Research: Practical Insights and Lessons Learned

Emily Meachon*

Electroencephalography (EEG) has long enabled the recording of temporally sensitive cortical brain activity highly relevant to neurodevelopmental research. With new advancements, traditional motion-sensitive EEG systems are now can now record neurophysiological data during movement with wireless signal transmission. This provides opportunities for novel investigations of motor and cognitive development still largely unchartered in research on neurodevelopmental conditions. This can be particularly beneficial for increasing inclusivity in research, such as inclusion of more participants with difficulties sitting still and/or motor coordination difficulties for which traditional EEG systems are minimally equipped. Therefore, this presentation will overview the methodological application, practical insights, and strengths and weakness of implementing mobile EEG in neurodevelopmental research. Examples will be drawn from a series of dual-task studies combining walking with various executive functioning tasks with simultaneous mobile EEG recordings. These studies include over N = 150 children and adults with and without various neurodevelopmental conditions, such as ADHD and Developmental Coordination Disorder (DCD). Broadly, mobile EEG was highly applicable to the dual-task walking paradigm and beneficial for participant groups, though several unique challenges and differences in recording or pre-processing can be learned and applied in future in neurodevelopmental research. Major themes include (1) the recording experience and

quality in various age groups and populations, (2) realistic and applicable cognitive-motor experimental designs, and (3) unique aspects of pre-processing and analysis with mobile EEG data.

P23

Automation of early motor assessments for infants with epilepsy syndromes using machine learning approaches: A feasibility study

Emma Casey*, Michael Absoud, Nicholas Cummins, Ben Moore, Sameer Zuberi, Emily Jones, Tony Charman and Charlotte Tye

Early motor impairments in infants often precede the emergence of neurodevelopmental conditions such as autism and ADHD, however current gold-standard methods for monitoring changes in infant motor development are labour-intensive and costly. This work aims to assess the feasibility of using machine learning (ML) approaches to automate standardised assessments of early motor development in infants with early-onset epilepsy, a condition which is associated with a high prevalence of neurodevelopmental conditions. Parent-child interaction video data are obtained from two prospective longitudinal studies of infant development, the Brain development in Early Epilepsy (BEE) and Early Development in Tuberous Sclerosis (EDiTS) studies (n~=60). Behaviours of interest are based on the Mullen Scales of Early Learning and Vineland Adaptive Behaviour ScaleIII standardised assessments, and input from a lived experience advisory group. A novel coding framework will be developed iteratively by a team of coders following best practice guidance for behavioural coding of video data. Videos are coded in EUDICO Linguistic Annotator (ELAN) by three independent coders, and interrater reliability (IRR) of each code calculated to identify those which are suitable for ML automation. Existing ML algorithms will be tested on behavioural codes with a high IRR to assess feasibility of automation. The coding framework, IRR results and preliminary ML results will be presented at NDAS 2026. Findings from this study will be used to inform the development, training and testing of an ML algorithm for the measurement of early motor milestones in infants, to inform early screening.

P24

Evidencing the need for routine sensory motor assessment and support for autistic adults

Emma Gowen*, Fair. G, Hague.H, Eden. M, Hanks.G, Baimbridge.P, Poliakoff. E

Sensory motor difficulties, such as difficulties carrying out physical movements, occur in the majority of autistic people. They can cause significant problems with day-to-day tasks, often leading to anxiety, depression and reduced quality of life. Despite this impact, autistic adults without Learning Disabilities do not receive routine assessment and support for their sensory motor difficulties. This study investigated the need for routine sensory motor assessment for autistic people without Learning Disabilities and what kinds of assessment and support would be of help. Autistic adults, recruited from an autism diagnostic service received the Evaluation in Ayres Sensory Integration (EASI) sensory motor assessment by a trained Occupational Therapist (OT) and were provided with a report outlining the findings and support requirements. Acceptability, feasibility and proof of concept data were collected through closed and open-ended survey questions. Results to date indicate that all participants had at least 1 subtest outside normal limits and required further support (e.g. referral to physiotherapist, continued OT management). The EASI was generally acceptable to participants but was tiring and needed to be split across 2x2 hour sessions. Report writing took ~6 hours of OT time. Participants described using the report for disability allowance applications and helping family members to understand their sensory motor difficulties. In summary, the findings highlight the need for sensory motor assessments for autistic adults without Learning Disabilities and that the EASI assessment provides a comprehensive and acceptable assessment. However, there are challenges around the assessment duration, particularly given current pressures on OT services.

P25

Improving assessment and recognition of depression in neurodivergent young adults: A qualitative study

Emma Hayashibara*, Kate Cooper, Chiara Caserini, Nicoletta Adamo, Laura Havers, Georgina Hosang, Giorgia Michelini

Neurodivergent people experience high rates of depression, yet they also face significant barriers to timely diagnosis. This diagnostic disadvantage may reflect that existing depression screening tools do not adequately capture depressive symptoms in neurodivergent people. Limited research exploring depression in neurodivergent people from different racial/ethnic backgrounds further highlights the need to consider intersecting identities. The present qualitative study of people with lived and professional experience aimed to explore how the Patient Health Questionnaire (PHQ-9), a commonly used depression questionnaire, can better reflect the experiences of neurodivergent young adults from a wide range of racial/ethnic backgrounds. Semi-structured interviews and focus groups were conducted with neurodivergent young adults aged 18-25 (N=15) with clinical or self-diagnoses of any DSM5 neurodevelopmental conditions (except intellectual disability), parents/carers (N=8), and mental health professionals (N=8). Reflexive thematic analysis and content analysis indicated several problems with the PHQ-9. Many PHQ-9 items were considered “normal” for neurodivergent people (e.g., “difficulty concentrating”), indicating a need for an individual “baseline” and change-focused ratings. Participants also raised concerns about the vagueness of the rating scale (e.g., “several days”), item phrasing, and the need for alternative formats and prompts to improve accessibility and recall. The need to account for emotional fluctuation and masking was emphasised. Missing signs of depression were also identified, including intensified neurodivergent characteristics and social withdrawal. By triangulating perspectives across groups, these findings highlight varied presentations of depression and the need to improve depression assessment tools to support better recognition of depression in neurodivergent young adults.

P26

The Influence of Sex Hormones on ADHD Symptoms Across the Menstrual Cycle

Gemma Longmuir*

Attention Deficit/Hyperactivity Disorder (ADHD) is increasingly diagnosed in women during adulthood. Emerging evidence suggests sex differences in ADHD presentation and that hormonal variations may contribute to distinct characteristics of ADHD in females. This study examined the relationship between sex hormones and ADHD symptoms in regularly cycling women (N = 12, M_age = 36.7, SD = 6.7) at different stages of diagnosis. Participants provided saliva samples to measure estradiol (E2) and progesterone (P4) and completed an adapted version of the Conners Adult ADHD Rating Scale (CAARS) daily for 32 consecutive days. Symptoms were measure across the sub-scales: inattention/memory problems, hyperactivity/restlessness, and impulsivity/emotional lability. Using a single-factor repeated measures design, hormonal and ADHD data was analysed across the mid-luteal, early follicular, and late follicular phases of the menstrual cycle. Results indicated a significant negative relationship between E2 levels and ADHD across all subscales: as E2 decreased, ADHD symptoms were more pronounced. No significant relationship was found between P4 and ADHD characteristics. Cycle phase analysis yielded mixed results, consistent with methodological variations in how cycle phases are coded across menstrual research. These findings suggest that fluctuating estradiol levels may contribute to variability in ADHD presentation. Given that estradiol is a primary female sex hormone, the influence of oestrogen may help explain why ADHD presents differently in women and why it is frequently under-recognised or diagnosed later in life. Considering hormonal context may therefore be important for improving understanding and recognition of adult female ADHD in research and clinical settings.

P27

The Durham Infant Tiredness Questionnaire (DITQ): a novel measure for capturing tiredness in infancy.

Giulia D'Avino*, Lucy Edgar, Marko Nardini and Samuel Forbes

Tiredness is a common experience for adults and infants. Adults have ways of managing redness by drinking coffee and regula ng their sleep. However, children, especially infants, cannot use the same management techniques. This can be especially true for children with neurodevelopmental disorders (NDDs) who suffer from sleep problems. Yet no research has inves gated the effects of redness; partly because no measure existed to capture it, un l now. A total of 200 caregivers of infants aged between 0-30 months took part. The ques onnaire examines sleeping pa erns, including naps, and redness directly. We also present a Likert scale of crankiness behaviours to further capture redness. We score the ques onnaire in three sec ons, crea ng three scores from the ques onnaire: sleep, naps and redness. To validate the ques onnaire and its scoring we conducted an exploratory factor analysis which revealed a three factor solu on – redness, naps and sleep. We then created factor scores which we correlated with our scoring sec ons. These correla ons revealed significant strong posi ve correla ons between the factors and their respec ve scoring sec on. We also inves gated the internal consistency of the factors and the scoring sec ons and found strong internal consistency for both. Here, we present a novel and validated ques onnaire to capture redness in infancy. It is clear that overlooking redness in development has restricted research. We are excited to share our ques onnaire in the hopes that more research is conducted on redness. We believe this is par cularly important for neurodevelopmental research, where insights into redness could greatly benefit those with NDDs.

P28

Cross-syndrome comparisons of the online experiences of children and young people

Grace McCabe*

Previous work demonstrates that young people with Williams syndrome experience more social vulnerability online than their neurotypical peers; despite having more restricted access to risky online activities. This study explores specificity of these difficulties to Williams syndrome relative to other conditions, and examines the roles played by digital ableism, socialbehavioural differences, mental health, intellectual disability, and parental independence in the creation of online social vulnerability. Young people with Williams syndrome are expected to be uniquely vulnerable online, based on identified differences in the offline experiences of vulnerability between different syndrome groups. However, it is expected that many young people from other groups will also have had negative online experiences due to shared risk factors for online vulnerability. The study uses a bespoke questionnaire, asking parents of young people aged 9-25 years (with Williams syndrome, Down syndrome, ADHD and autism) about their children's online behaviours and experiences, and the rules their young people had for using the internet. Results of this study will be available at conference and presented using descriptive statistics, and oneway analysis of variance and Kruskal-Wallis tests to examine between-group differences where appropriate. Results will also contain qualitative data from free-response questions. This study serves to provide more information about the causes and experiences of online social vulnerability for children and young people with Williams syndrome to identify targets for future intervention efforts.

P29

Eating disorder treatment and service experiences of gender diverse and neurodivergent adults

Grace Williams*, Max Keith, Kate Cooper, Catherine R. G Jones, Kai S Thomas

Rationale Eating disorders (EDs) disproportionately affect trans and gender diverse (TGD) people, autistic people, and people with ADHD. TGD and neurodivergent individuals with EDs present with more severe symptoms and more complex, intersecting needs during treatment than cisgender allistic people. Research has not examined how gender diversity, autism, and ADHD shape treatment experiences **Hypotheses** The study aimed to compare ED treatment and service experiences and perceived treatment ratings between TGD and cisgender adults, and to examine associations with neurodivergence. **Methods** 558 people completed a mixed-methods online survey, of whom 188 TGD and 170 cisgender participants accessed ED treatment and services. Participants reported which treatments and services they had accessed and rated their overall treatment experience and perceived benefit to recovery on two 7-point Likert scales. **Results** Our analyses are ongoing. Ordinal logistic regression will examine the independent and combined contributions of gender diversity and neurodivergence (autism, ADHD) to participants' ratings of treatment. We will also examine whether access to specific services differs between TGD and cisgender participants. **Implications of the Research** This is the first study to quantitatively investigate perceptions of and access to ED treatment in UK TGD adults. The findings could have implications for ED care provided by ED services by improving understanding of current treatment experiences in TGD and neurodivergent adults, how these compare to cisgender and allistic adults, and how this informs treatment ratings. Results will be shared with clinicians and community members to inform ED treatment adaptations for TGD adults and guide future research priorities.

P30

Nonlinear developmental changes in infants' exposure to faces during naturalistic playtime: Insights from head-mounted cameras and automated face detection

Teodor Nikolov & Hana D'Souza*

Infants' exposure to faces provides crucial input for early development. This study leverages innovations in wearable head-mounted cameras (headcams; specifically, TinyExplorer gear) and automated face detection (RetinaFace) to characterise infants' everyday visual exposure to faces during playtime in the home environment. Using a cross-sectional developmental trajectory design, we collected egocentric headcam data from 29 infants across the first three years of life (2–30 months). The dataset comprised 1,891 minutes of video (over 5.5 million frames). We examined developmental trajectories in face availability, spatial distribution, size, and size variability. We observed distinct nonlinear changes in face exposure across three visual scene regions (bottom/middle/top). In early infancy, faces were most common in the middle, with a steep decline around 8 months and a modest increase after the first year. In the top region, face presence increased markedly during the second year. The bottom region consistently showed low face presence. These findings suggest that infants' exposure to faces is not only age-dependent but also region-specific, reflecting dynamic reorganisation of everyday visual input. Additionally, face size variability was greater in younger infants, consistent with caregiver-driven interactions. We interpret these findings in the context of emerging motor milestones. By focusing on a constrained activity (playtime), this study demonstrates how nuanced developmental patterns can be detected using shorter recordings than in previous studies— improving scalability and inclusivity of naturalistic research. These results offer new insights into early face exposure and support the value of integrating ecological methods with automated analysis to advance developmental theory.

P31

Working Towards A Definition Of Neurodivergent-Affirming Space

Helen Kara*, George Watts, Kate Fox

The aim of our research is to co-produce a definition of neurodivergent-affirming space (NDAS). NDAS is a term which has increasingly been used in recent years, with under 20,000 relevant searches on Google in 2022, under 40,000 in 2023, and over 110,000 in 2024. Yet there is no clear definition of NDAS. Three neurodivergent researchers – George Watts, Kate Fox and Helen Kara – were awarded funding from the Independent Social Research Foundation to carry out this research. We are working with neurodivergent participants online and in person in February and March. In these sessions we are using a range of creative techniques to generate data about NDAS. These techniques include prompted and unprompted writing, story stems, drawing, artefact elicitation, poetic inquiry and collage. During the sessions we are involving participants in the first part of our analytic process by asking them to reflect on, prioritise, and refine emerging themes. And we plan to share a working draft of the definition with participants for feedback before it is finalised. We expect to reach a proposed definition of NDAS in May. NDAS2026 would be our first opportunity to present this definition to, and receive feedback from, the wider community. Our ultimate aim is for the definition we co-produce to inform the work of institutions such as universities, businesses, and governments that are interested in supporting their neurodivergent students, customers, clients and constituents.

P32

Parent's perspectives on self-regulation in children with Williams syndrome

Imogen van Jaarsveldt*, Melanie Porter and Chris Jarrold

There is a growing body of research emphasising the critical role of self-regulation in navigating social, emotional, and academic challenges. Previous research has reported that children with Williams syndrome experience difficulties in self-regulation across a broad range of areas, but particularly in social and emotional contexts. Therefore, understanding the daily experiences of these skills in children with Williams syndrome is essential. However, because the previous research aims to understand self-regulation through experimental tasks and standardised questionnaires, there remains relatively little qualitative research on this topic with parents of children with Williams syndrome. This international study aims to explore the lived experiences of parents regarding selfregulation in children with Williams syndrome across the United Kingdom and Australia. There are six semi-structured online interviews being conducted with parents to gather indepth, qualitative data. These interviews will be analysed under a critical realist framework using Interpretative Phenomenological Analysis (IPA) to identify key experiential themes. Available results will be discussed in the presentation. In addition to expanding our understanding of how parents perceive their child’s selfregulation, this study will highlight the management strategies parents employ, explore the current support systems available, and identify specific areas where parents feel change is necessary. Ultimately, the parent’s lived experiences will provide guidelines for further research and interventions.

P33

Co-producing and pilot testing adapted Cognitive Behavioural Therapy materials for young people with Developmental Language Disorder (DLD).

Isabella Metcalfe*, Sarah Griffiths, Courtenay Norbury, The DLD Young Person and Professionals Advisory Group

Background: Young people with Developmental Language Disorder (DLD) are at increased risk of mental health difficulties but often face barriers to accessing traditional talking therapies like Cognitive Behavioural Therapy, due to complex language and reliance on written content. Coproduction offers a way to create more accessible interventions by involving those with lived experience alongside practitioners. Yet, co-production with young people with DLD remains rare. **Aim**: To explore how co-production methodologies could be shaped to include young people with DLD, in the context of adapting and testing psychoeducational videos for anxiety and depression. **Methods**: The project team included four adolescents with DLD, their parents, six Educational Mental Health Practitioners and three academic researchers. A five-stage process involved recruiting team members, identifying therapy adaptations, selecting key psychoeducational concepts, developing scripts and videos, and reflection. Ten adapted psychoeducational videos were produced. These were then pilot tested with groups of adults and primary school students, where understanding and recall was compared with unadapted videos. **Results**: The adapted videos incorporated slowed pacing, simplified vocabulary and concrete examples. Team members reported that the process felt inclusive and flexible, and that the final materials were more meaningful. Pilot data showed that the adapted videos were rated as easier to understand and led to greater recall of key points than the unadapted videos. This effect was larger for children. **Conclusions**: With appropriate adaptations, co-production with young people with DLD and practitioners is both feasible and valuable. The process resulted in more accessible therapeutic materials that improved comprehension.

P34

Neurodiversity traits as predictors of eyewitness memory performance

Ditte Barnoth, Hayley Cullen, and James Smith-Spark*

Neurodevelopmental conditions have effects on memory in adulthood. Despite the implications of such difficulties for the criminal justice system, their influence on eyewitness memory is currently underexplored. In the current pre-registered online study, 373 participants (mean age = 23 years, SD = 7, 295 female, 72 male, 6 non-binary) completed published self-report symptomatology questionnaires about adult dyslexia, attention deficit hyperactivity disorder (ADHD), and developmental coordination disorder (DCD). After these questionnaires, the participants watched a video of a simulated non-violent crime event. They then answered open-ended questions about the contents of the video and rated the degree of confidence that they had in each of their responses. The data were analysed using hierarchical regression analysis, with age and gender entered in Block 1 and neurodiversity traits in Block 2. For eyewitness memory performance, adding neurodiversity traits in Block 2 did not significantly improve the regression models (for correct, incorrect, and "Don't know" responses), although dyslexia traits were a significant negative predictor of correct recall in the final model for correct responses. For memory confidence, however, the addition of neurodiversity traits in Block 2 significantly improved the hierarchical regression model in accounting for overall confidence in the participants' answers. Higher dyslexia and ADHD traits were associated with lower confidence scores, while higher DCD traits were related to higher confidence scores. These findings have important implications for the understanding of how neurodiversity traits can influence memory and memory confidence in real-world contexts and how eyewitness neurodiversity needs to be supported during crime investigations.

P35

The impact of sleep on children's executive functioning: A systematic review and meta-analysis.

Jay Jones*, Lauren Shelley, Andrew Bagshaw, Rory T. Devine, Caroline Richards

Children's executive functioning (EF) skills are purportedly impacted by poor sleep. This is reported in typically developing (TD) children and children with neurodevelopmental conditions (NDCs), but critically, sleep and EF are operationalised differently across individual studies. This meta-analysis will identify reported associations between sleep and EF in children and assess the direction and magnitude of such effects. This meta-analysis was pre-registered (https://www.crd.york.ac.uk/PROSPERO/view/CRD420251230788) and conducted per PRISMA guidelines. Records reporting an association between sleep and task-based EFs in TD children or children with an NDC were extracted. Where data allow, we will investigate whether the relationship between sleep and EF differs between TD children and children with NDCs, with stratification by condition (e.g., autism, neurogenetic syndrome) where feasible. We will also examine the specificity of the links between sleep parameters (e.g., sleep duration) and particular EF domains, and whether methodological differences (e.g., study quality) moderate these relationships. Abstract screening was completed for 9101 records, of which 473 were retained for full-text review. Full-text screening and preliminary analyses are underway, in line with the pre-registration. This meta-analysis is the first to explore how the relationship between sleep and task-based EF differs amongst children with NDCs and TD children. This will enhance our understanding of the relationship between sleep and daytime outcome in children and delineate the importance of sleep support for children experiencing poor sleep. This is particularly pertinent for children with NDCs, where heightened rates of sleep disorders are reported, and where sleep support may be valuable for modifying daytime outcome.

P36

Study design for investigating sensory neurodiversity and the development of mental health indices in mothers/birthing parents and infants.

Jen Hamilton*, Dr Andy Bremner, Dr Jelena Jankovic, Dr Giles Berrisford, Dr Cathy Coombes, Clare Hooper

Research shows that the transmission of sensory characteristics is likely to be both genetic and environmental. There is potential for both members of the maternal infant dyad to influence each other's sensory functioning. There likely exists a complex set of directional relationships involving sensory processing and mental health. There is potential for valuable findings enabling a better understanding of the intersection of perinatal mental health with neurodiversity in mothers/birthing parents (MBPs) and infants. This study design seeks to investigate neurodiversity in MBPs and infants with a specific focus on mental health outcomes. A particular emphasis is on understanding how differences in the sensory profiles of MBPs and infants develop, and how these relate to mental health. Sensory co-variation between MBP and infant will be investigated, whilst taking into consideration the phenotypic variance in sensory differences and the possible reasons for these differences such as genetics, physical and social environments, as well as mental health. All MBPs will complete validated self-report measures for both sensory processing and mental health, for themselves and their infant over two timepoints. A quantitative research methodology will be used involving statistical analysis. The study will strive for person-centred ethics and the promotion of neurodivergent enablement, helping to further epistemic justice by engaging in participatory research through the involvement of experts by experience at key stages of the research, advising on research design, and dissemination of findings.

P37

"Not to have neuro-normative standards" - How Autistic individuals experience sexual interest, education and relationships

Jennifer Sanders*

Relationship rates among Autistic individuals ranges from 20-50%, which are lower than neurotypical rates. Whilst asexuality is common in the Autistic community, communication and understanding social rules have frequently been reported as barriers to initiating a relationship for Autistic individuals. Autistic individuals are less likely to learn about sex through mainstream sex education or their parents, instead relying on less formal sources such as the internet or TV. Autistic individuals are also less likely to learn from their peers. This study explored how Autistic individuals experience sexual interest, education and relationships. Interpretative Phenomenological Analysis explored first-person accounts through semi-structured interviews with eight Autistic individuals from USA and Europe. Four Group Experiential Themes were identified: learning, education and early influences; sociosexual communication and behaviour; developing sense of self; experience of sex. A spectrum of sexual experiences and identities were reflected, and the complexity of navigating concepts such as flirting and consent illuminated across the GETs. Unsurprisingly, being Autistic was a central feature and appeared in themes and subthemes relating to learning, identity, communication and behaviour. The heteronormativity of autism shone through, with convergences and divergences in participants sensitivities, childhood and diagnosis, peer learning and relationship experiences. There was a collective voice that autism was not understood and that mainstream sex education was not accessible or reflective of their lived sexual experiences. Links to previous research, theory and implications of the findings are discussed.

P38

Neurocognitive Mechanisms of Mathematical Cognition in Individuals with Williams Syndrome and Down Syndrome: a pre-registration

Jiajie Li*, Jo Van Herwegen, Mojtaba Soltanlou

Introduction: Comparing mathematical cognition in WS and DS reveals how contrasting cognitive profiles give rise to distinct learning difficulties. Mathematical development in these groups is overall delayed, with uneven profiles. WS is characterised by deficits in non-symbolic skills, whereas DS is associated with impairments in symbolic skills (Van Herwegen et al., 2020). Despite growing behavioural research on these groups, there is substantial heterogeneity in how these strengths and weaknesses manifest across individuals. Neuroimaging will characterise distinct neural mechanisms within these groups and test whether these neural profiles predict how individuals benefit from syndrome-specific interventions, and enable personalised support for mathematical learning. **Research aims**: This pre-registration aims to investigate the neurocognitive mechanisms of mathematical processing in individuals with WS and DS across childhood and adulthood, distinguishing developmental delay from atypical trajectories. Two studies (one in adults; one in children) will use functional near-infrared spectroscopy —a child-friendly, movement-tolerant neuroimaging technique (Soltanlou et al., 2018)—to characterise brain activation during mathematical tasks. We will investigate whether brain activation patterns differ between the WS, DS, and Typically Developing (TD) groups, whether they differ between adults and children, and whether individual differences in mathematics-related activation within domain-specific regions predict mathematical achievement. **Materials and method**s: Following sample size calculations, each study will recruit 35 participants per group (WS, DS, chronological age- and mental age-matched TD, 4 groups). Children will be aged 8–18, and adults 18–40, to reach the target sample size. Behavioural measures will be standardised, including mathematics attainment, general intelligence, and executive functions. During fNIRS recordings of the frontal-parietal networks, participants will complete dot and digit comparisons and a phonological task.

Data analysis plan: After standard preprocessing, channel-wise GLMs will estimate HbO/HbR task contrasts; primary inference will use a prior ROI-averaged contrasts in linear mixed-effects models of Group × Cohort × Contrast × RO (FDRcorrected), with channel-wise analyses as sensitivity checks. **Impact**: This pre-registration will provide the first neuroimaging evidence on mathematical processing in WS and DS. Integrating neural and behavioural data may clarify whether mathematical delays in WS and DS reflect domain-general limitations or domain-specific deficits, guiding syndrome-specific educational interventions and personalised support strategies.

P39

Association between autism traits or diagnoses in the family and child characteristics in a transdiagnostic sample of minimally verbal children

Jo Saul*, Lauren McGuinness, Danielle Matthews

Background: Minimally verbal (MV) children have persistent and severe difficulties with spoken language but show wide variation in communication abilities. They are also predominantly, though not exclusively, diagnosed with autism. While neurodevelopmental conditions are partly heritable, little is known about family neurodevelopmental risk profiles in MV children. This study examined whether family genetic risk factors – maternal autism traits and neurodevelopmental diagnoses in first-degree relatives – are associated with MV children's autism traits and communication skills. **Methods**: A transdiagnostic sample of MV children was recruited (n=193; mean age 8;7; 85% autism). Parents reported confirmed or suspected neurodevelopmental diagnoses in first-degree relatives, generating a categorical proxy for genetic load (simplex vs multiplex families). Mothers completed the Broad Autism Phenotype Questionnaire (BAPQ); fathers and nonbiological mothers were excluded (n=132). Child autism traits were assessed using the Autism Symptom Dimension Questionnaire. Communication abilities were indexed from parent reports and naturalistic language samples. Pre-registered analyses included unadjusted and adjusted models with relevant covariates. **Results**: Thirty percent of mothers exceeded the BAPQ threshold, and 64% of children came from multiplex families. Both family genetic risk factors individually predicted child autism traits. However, multiplex status did not explain variance beyond maternal BAPQ scores ($F=5.911(1, 99)$, $p=.004$, Adjusted $r2=.089$). No associations were found between family risk factors and child communication abilities.

Conclusions: Findings indicate that family genetic risk factors predict autism features, but not communication ability, in MV children. Future research should examine associations with other child characteristics, such as receptive language or ADHD profiles.

P40

Examining Mathematical and Cognitive Variability in Dyscalculia: Cross-Sectional Evidence from Children and Young People.

Jo Van Herwegen*, Elisabeth Herbert, Helen Williams, and Laura Outhwaite

Evidence suggests 3–7% of the population may be affected by dyscalculia and maths learning difficulties (MLD/D). However, MLD/D remain under identified and under researched relative to other neurodevelopmental conditions. Recent SASC guidance (2025) highlights a domain specific deficit in sense of number as the core deficit in dyscalculia, while acknowledging substantial heterogeneity across domain general cognitive abilities, including language, executive function, and non-verbal reasoning. However, few studies have examined detailed mathematical and cognitive profiles across primary and secondary pupils with a formal diagnosis of dyscalculia. This study aimed to describe: (1) mathematical and cognitive profiles of children and young people, (CYP) with dyscalculia; (2) variability within and across age groups; and (3) implications for assessment and educational practice. The study formed part of a Higher Education Innovation Fund (HEIF) project conducted with the Dyscalculia Network. Thirty-nine primary and secondary pupils completed a

comprehensive battery of standardised cognitive and mathematical assessments. Across primary and secondary school age groups, pupils showed consistently severe mathematical difficulties. However, domain-general cognitive profiles were highly variable. Data analysis is ongoing and will examine individual profiles to better understand limitations of single construct diagnostic approaches, relative to transdiagnostic approaches. Results reinforce SASC recommendations emphasising comprehensive assessment that integrates number skills with broader cognitive domains. Implications include need for early, tailored interventions aligned to specific cognitive–mathematical profiles; and cautious interpretation of diagnostic criteria that rely on narrow models. Limitations include modest sample sizes and cross-sectional design. Future research should examine longitudinal changes to understand how cognitive–mathematical profiles evolve across lifespans.

P41

Examining the influence of ADHD and autism-related traits on the early consolidation of new declarative memories

Joanna Kubiak*, Joanna Greer, Kristofor McCarty & Michael Craig

Memory consolidation is the hippocampal-driven process crucial for stabilising new memories, with strengths and weakness in declarative memory varying across differing neurodiverse populations. Traits associated with autism and ADHD lie on a continua within the general population regardless of formal diagnosis, yet the effects of these individual differences on memory consolidation of long-term memory remain under-researched. In addition to autistic and ADHD traits, differences in attentional control (AC), executive functioning (EF), and sensory processing sensitivity may shape how memories are stabilised following learning, particularly under varying post-encoding conditions. Our questionnaire-based study (N > 4,800) identified three distinct neurodivergent profiles: (i) higher autistic traits with stronger attentional control, (ii) higher ADHD traits with executive functioning difficulties, and (iii) comparatively low levels across all traits. These profiles differed markedly in self-reported everyday memory, with the higher autistic-trait profile reporting the fewest difficulties and the higher ADHD-trait profile the most, highlighting meaningful variability in memory-related functioning beyond diagnostic categories. The present work will examine whether these profile-level differences are reflected in objective memory performance in younger and older adults. Participants complete a withinsubjects experimental paradigm manipulating post-encoding state (wakeful rest vs. attentionally demanding task engagement) with memory for non-words assessed via immediate and delayed recognition. Preliminary findings suggest comparable benefits of rest vs. high attentional demands on memory consolidation. Data collection is ongoing and further analysis will determine the extent to which these neurodivergent trait profiles predict consolidation performance across post-encoding contexts, supporting a more inclusive, dimensional account of memory in neurodiverse populations.

P42

Improving shared decision-making around psychotropic medication use by patients with learning disabilities: developing an evidence-based communication training intervention

Dr Jessica La, Dr Katharine Slade*, Prof. Charles Antaki, Dr Angela Hassiotis, Prof. Shula Ramon, Dr Rory Sheehan, Dr Deborah Chinn.

Rationale: Shared decision-making (SDM) is the cornerstone of patient-centred clinical practice, meaning patient's perspectives contribute as much to treatment decisions as those of clinicians. The NHS STOMP campaign states that people with learning disabilities and their carers should be involved in shared decision-making around mental health medications. However, evidence suggests that clinicians sometimes struggle to meet the communication needs of this group to engage them in SDM. **Aim**: The Talking About My Medicines (TAMM) project aims to discover how psychiatrists, patients and their caregivers decide together about the management of mental health medication, to identify good practice as well as practices which inhibit SDM. Furthermore, TAMM aims to co-design communication intervention prototypes for clinicians to support SDM.

Methods: 30 consultations between clinicians and people with learning disabilities, supported by carers, were video recorded and analysed using Conversation Analysis. A detailed process of co-production was undertaken. Consultations with three separate codesign groups of people with learning disabilities, carers and clinicians took place to review the data, discuss findings, and consider what is important in SDM. **Results**: Clinicians as well as patients sometimes had a vague understanding of SDM. Understanding of the patient's history, building good communication and environmental factors were considered at least as important than the "official" SDM framework, which emphasises options listing and discussing pros and cons of those options. The findings suggest a gap between NHS guidelines and existing practice. **Research application**: Members of co-designs groups made suggestions for prototype training interventions for clinicians.

P43

Assessing the feasibility of the i-KNOW (identifying and knowing about behaviour) preventive intervention programme for individuals at risk for Behaviours that Challenge.

Lauren Walters, Kiran Kaur*, Caitlin Williams, Laura Groves, Denise Bain, Chris Oliver, Debbie Allen, Vivian Cooper, Louise Daniel, Joanna Garstang, Chris Jones, Joseph P. McCleery, Ashley Liew, John Rose, Doug Simkiss & Caroline Richards

Introduction: Behaviors that challenge (BtC) are common in children with developmental delay and are associated with negative outcomes for children and their families. Therefore early identification of people at risk of BtC and delivering preventative interventions is important. **Method**: A repeated measures design (pre- and post-intervention) was used. Caregivers of children (aged 1-7 years) with confirmed or suspected neurodevelopmental conditions were assessed for eligibility using a risk algorithm and stratified into i-KNOW intervention workshops (risk of high severity BtC, n=50) or remote learning (risk of moderate severity BtC, n=13). Pre- and postintervention questionnaires and semi-structured interviews were used to evaluate the feasibility and acceptability of the intervention. **Results**: Of the 845 carers sent recruitment information, 165 expressed interest. Of those recruited, 58% took part in the intervention. Although the analysis was not powered to reach statistical significance, small to large effect sizes were observed across several intervention outcomes such as reduced caregiver anxiety, increased parental beliefs related to the causes of BtC (mental health, pain, reinforcement), and increased verbal and nonverbal receptive communication skills. Thematic analysis of parental reflections on the intervention identified three main themes: need for community, need for accessibility, and need for early intervention for children with specific developmental profiles. **Discussion**: Findings indicate that the iKNOW intervention is feasible, but retention through the pathway will need to be refined. These findings will inform the experimental design and clinical outcome measures for a fully powered clinical effectiveness trial of the i-KNOW assessment and intervention programme in community practice.

P44

Bridging Lived Experience and Research: Reframing Women's ADHD & AuDHD Through an Interdisciplinary Neurodiversity Lens

Lauren Godfrey*

Women with ADHD and AuDHD remain significantly underrepresented in neurodevelopmental research, resulting in persistent gaps in understanding their developmental trajectories, diagnostic pathways, and lived experiences across the lifespan. This presentation brings together scientific evidence, practitioner perspectives, and lived-experience insights to explore how gendered masking, trauma, socialised coping mechanisms and healthcare bias shape the identification, support, and wellbeing of neurodivergent women. Drawing on interdisciplinary literature across psychology, psychiatry, and social neuroscience, as well as qualitative data from large-scale community engagement through ADHD Girls, this talk highlights emerging patterns in late identification, internalised presentations, and the compounding effects of hormonal change on

mental health and functioning. The session outlines implications for researchers seeking to develop more inclusive methodologies, including the value of participatory and coproduced research models with neurodivergent communities. It also presents practice-relevant insights for educators, clinicians and organisational leaders supporting neurodivergent women in academic, clinical and workplace environments. By integrating scientific evidence with lived experience, this presentation aims to expand the current neurodevelopmental framework applied to ADHD and autism in women and propose directions for future research that better capture intersectional, developmental and environmental influences. The talk will be relevant to researchers, practitioners and students interested in advancing a more holistic and contextualised understanding of neurodiversity within academic and applied settings.

P45

Deconstructing the ideal academic: understanding the gendered experiences of neurodivergent researchers to shape more inclusive research practices

Lena Biermann*

Meaningful change toward a more equitable experience of neurodivergent people working in higher education remains lacking; from published studies to university practices, a focus remains on performance metrics, and insufficient attention is paid to systemic barriers or pressures to confirm to the image of an "ideal academic". An image that depicts, and in many cases intersects with, ideals that women, trans and non-binary academics have struggled to match for decades. This research explores the intersectionality of neurodivergence and gender in research teams within UK academia. It aims to understand how being neurodivergent influences the experiences of research team members (RTMs) regarding team dynamics, examines the role of disclosure and to what extend intersecting identities shape neurodivergent researcher's experiences at work. About 20 semi-structured interviews with neurodivergent RTMs from across the UK of approx. 60mins each were conducted to capture their lived experiences of working in academic research teams. The interviews were subject to a thematic analysis. By using the frameworks of neurotypical hegemony, hegemonic masculinities and the social-relational model of disability, this research challenges long-held assumptions and ingrained norms around that shape academia and teamwork. Initial findings suggest neurodivergent RTMs' experiences are impacted by hegemonic ways of thinking, working, and interacting, and an idealised view on teamwork disregards the difficulties faced by those non-conforming to conventional expectations of what 'effective' teamwork looks like. This research highlights how academic structures and team dynamics perpetuate inequalities for neurodivergent RTMs, and provides a foundation for informing greater inclusivity of academic research environments.

P46

The Development of Deception Detection and its association with Mentalizing in Autistic and Non-Autistic People.

Lucy Bryson-Davies*, Sarah J. White, Galina Veshchugina, Claire Tempest, Ishita Chowdhury, and Katherine Ellis.

Rationale: Deception is intentionally causing another to believe a falsehood. Poor deception detection (DD) in autistic people may contribute to heightened victimisation risk. It remains unclear when DD abilities diverge developmentally between autistic and non-autistic individuals, and which social cognitive mechanisms underpin these differences. **Aims**: To 1) compare DD accuracy between autistic and non-autistic children, 2) characterise DD development from childhood to adulthood, and 3) investigate DD and mentalizing association across development. **Methods**: To date, 30 neurotypical children (5-11 years) completed lie detection and mentalizing tasks. Data will be combined with previously collected data selected from 590 non-autistic and 147 autistic adolescents and adults (11-30 years). 10 nonautistic and 40 autistic children will be additionally recruited. **Preliminary Results**: Non-autistic children showed higher DD accuracy for

transparent than non-transparent liars (p=.005). Combined with adolescent and adult data, a significant age x transparency interaction emerged (p<.001); DD accuracy increased with age for transparent liars only. Mentalizing was not associated with DD accuracy in children, nor adolescents and adults. Autistic children are predicted to show poorer DD accuracy than non-autistic peers for transparent liars, with a reduced age-related increase. **Conclusions/implications**: Non-autistic children show the dissociation between transparent and non-transparent accuracy observed in adolescents and adults, indicating the task is suitable for this age group. Identifying divergence in DD trajectories is critical for determining when support is required to reduce the risk of victimisation. Cognitive processes other than mentalizing may underpin the differences in DD accuracy observed between autistic and non-autistic people.

P47

How recruits with diagnosed dyslexia and/or displaying dyslexia indicators think and feel about themselves

Fair Metcalfe*

Rationale: At the Infantry Training Centre (ITC) Catterick, a significant number of recruits self-identity with dyslexia or exhibit dyslexic traits during screening. Medhurst (2020) identified a negative correlation between dyslexia traits and self-esteem, while Hamilton Clark (2024) suggests that symptoms are often exacerbated by challenging environments. Building on research by Beattie et al. (2023) regarding psychological characteristics at ITC Catterick, this study investigates how targeted interventions influence self-concept (how they think about their abilities) and self-esteem (how they feel about their worth) to improve resilience and training success among recruits with diagnosed dyslexia and/or displaying dyslexia indicators. **Method**: This longitudinal study employs a quasi-experimental design. In addition to standard support, a four-session programme is implemented for recruits with diagnosed dyslexia and/or displaying dyslexia indicators, following the Army's 'Crawl, Walk, Run' model and grounded in Self-Regulated Learning (SRL). The 'Crawl' phase establishes metacognitive strategies, the 'Walk' phase incorporates lived experience role models, and the 'Run' phase emphasises self-advocacy. Changes are measured at three intervals using the Rosenberg Self-Esteem Scale (RSES) and the Self-Concept Questionnaire (SCQ). **Results & Implications**: Preliminary findings indicate an inflated initial baseline in self-perception, which subsequently undergoes a significant downward response shift as the "expectational shock" of theoretical training reveals previously unrecognised cognitive demands. The study evaluates whether proactive intervention can stabilise this decline. Key implications for the Ministry of Defence (MoD) include the potential to reduce attrition by managing this transition more effectively and by ensuring that recruits with diagnosed dyslexia and/or who display dyslexia indicators develop the self-regulated strategies necessary for long-term operational success and combat readiness.

P48

Investigating Theory of Mind Compensatory Strategies in Autism

Milani Pathmanathan*, Dr Elisa Back

Previous research suggests that autistic adults often use compensatory strategies, but the use of these strategies has not been investigated in the context of Theory of Mind (ToM). Some effortful strategies do not aid in interpreting others' thoughts and feelings, so understanding effective, less effortful compensation is crucial. This study aimed to investigate the use of "deep" (e.g., logic or past experiences) and "shallow" (e.g., mimicking others) compensation strategies during a mentalising task. It was hypothesised that autistic adults would report more strategies than neurotypical adults and that both the number and type of strategies (shallow or deep) used would impact ToM performance. An IQ-matched sample of 28 autistic and 38 NT adults participated. They completed the Strange Stories Film Task (SSFT) online, viewing 15 clips of everyday social situations, and answering questions that assessed their mentalising abilities. They also reported on general, everyday use of strategies and those specifically used during the task. Autistic adults reported significantly more general strategies than NT adults. However, they did not differ in the number of task strategies. Neither number of strategies nor type of general or task strategy (shallow or deep) was associated with higher SSFT scores for both groups. These findings suggest that while autistic individuals actively employ numerous conscious strategies to navigate social situations, these efforts did not translate to improved performance on the SSFT. Therefore, the quality, flexibility, and level of automaticity of compensation strategies may need to be further investigated.

P49

"Independent Self-Care, Community, Comfort, and Purpose: A Participatory Q-Method Study of Autistic Wellbeing

Monique Botha*; Sarah Dantas, Stasa Morgan-Appel, Charlie Mackenzie-Nash, Rachel Birch, Catherine J Crompton

Background: Autistic wellbeing research has largely been shaped by non-autistic definitions of a “good life,” often misaligned with autistic values and lived experience. To change this, Striving to Transform Autism Research Together in Scotland (STARTS) is a participatory network established in 2022 to re-centre autistic voices. This study aimed to develop empirically derived models of autistic wellbeing centred on autistic people. **Objectives**: To use Q-methodology to examine subjective understandings of autistic wellbeing while preserving nuance and heterogeneity. **Methods**: Autistic co-researchers and academics collaboratively developed a 32-item Q-set across four online sessions. Forty autistic adults living in the UK completed an online Q-sort. Principal components extraction was used, with factor retention guided by eigenvalues (>2) and scree plot inspection. Four factors were retained following varimax rotation. **Results**: Wellbeing was understood as relational and context-dependent rather than a fixed individual trait in all factors, each factor emphasized different perspectives. (1) Independent Self-Care under Societal Strain, emphasising solitude, hobbies, and coping with systemic prejudice; (2) Community and Pragmatism, foregrounding family support, close relationships, and practical knowledge; (3) Comfort, Introspection, and Stability, prioritising sensory safety, routines, and restorative environments; and (4) Purpose and Advocacy, centring autonomy, recognition, and structured pathways to meaningful goals. **Conclusions**: Autistic wellbeing is plural, situated, and irreducible to singular metrics or imported frameworks. The importance of sensory safety, supportive relationships, identity affirmation, autonomy, and the constraining role of structural barriers cannot be ignored. This empirically derived typology extends participatory qualitative and quantitative work offering for autistic-defined outcomes, service design, and policy.

P50

Caregiver views of communication barriers within Child and Adolescent Mental Health Services: Children with and without Speech, Language and Communication Needs (SLCN)

Nicola Botting*; Jessica Botting; Sue Livermore

Background: Communication is a key component in successful talking therapies. Furthermore, the association between Speech, Language and Communication Needs (SLCN) and mental-health problems is well-established and we might expect this group to have increased difficulties accessing services. Despite this, research into potential communication barriers within Child and Adolescent Mental Health Services (CAMHS) is lacking, both generally and for SLCN children specifically. **Aim**: This study explored the views of caregivers of children with and without SLCN to identify perceived barriers to accessing CAMHS. Key factors were considered: caregivers' understanding of the language used by CAMHS; communication strategies used by professionals; and caregiver views of children's mental health outcomes after accessing CAMHS. **Methods**: An online caregiver survey was used to collect views. The survey was completed by 61 caregivers of children who had been referred to CAMHS, for reasons other than communication, 32 of whom cared for a child with SLCN. Results: Caregivers generally understood the language used with them by CAMHS, although a minority reported difficulties. They were less positive about communication adjustments, discharge processes, and outcomes after accessing CAMHS. Caregivers of children with SLCN were more likely to report that their child's mental health was poorer after CAMHS. No other differences were found between the SLCN/non-SLCN groups with communication presenting some barriers across both. **Conclusions**: All children accessing CAMHS would benefit from increased communication adjustments in order to achieve the most effective intervention.

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Prioritising School-Based Support for Developmental Coordination Disorder (DCD): A Delphi Survey Approach to Identifying Key Targets for Intervention

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Background Developmental Coordination Disorder, or dyspraxia, is a neurodevelopmental condition marked by significant motor coordination difficulties that affect daily functioning. Affecting 5-6% of school-aged children, DCD's impact extends across cognitive, socioemotional, language, health, and education domains. Despite interventions being available, unclear priorities contribute to fragmented support in schools. **Aims** This study aimed to identify and prioritise key targets for school-based interventions, addressing the question: What should be the priority targets for school-based interventions to support children with DCD? **Sample (s)** Two stakeholder groups participated: multidisciplinary professionals (educational psychologists, occupational therapists, and teachers) and adults with lived experience of DCD. **Methods** A two-round Delphi survey, a gathered expert opinion and built consensus on intervention targets. Consensus was determined using a predefined dual-threshold rule. Free text comments were analysed via reflexive thematic analysis. **Results** Seven targets reached consensus in Round 1, with educator awareness being the most strongly endorsed target (90%). Respondents also reached consensus on fine and gross motor skills, speech production, language comprehension, visuospatial and motor planning, and problem-solving. Round 2 yielded no new consensus and revealed persistent differences: adults with DCD rated planning, self-advocacy, self-esteem, emotional regulation, anxiety, social skills, and participation as more important than multidisciplinary professionals. Qualitative comments highlighted shame and low self-esteem as debilitating. **Conclusions** The strong consensus on the need for improved educator awareness highlights a systemic barrier to early support. Discrepancies between lived experience and professional views, reveal the invisibility of DCD's broader impacts. Findings may guide schools in delivering personalised, multidisciplinary support.

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Anxiety and Depression Symptomatology and Psychological Independence in Autism - A Comparative Cross-Cultural Analysis

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Background: Co-occurring mental health conditions are highly prevalent in autistic people, with anxiety and depression among the most prevalent. These conditions, often more than core autism characteristics, can profoundly affect overall independence and well-being. While links between mental health and independence are documented in neurotypical adults, these patterns remain underexplored in autistic populations across cultural contexts. **Objectives**: This study examined the relationship between mental health symptoms of anxiety and depression and psychological independence among autistic adults across six countries: Brazil, India, Japan, Turkey, UK and US, using a cross-cultural comparative design. Drawing on transdiagnostic models of mental health, it was hypothesised that higher levels of anxiety and depression would be associated with lower psychological independence, and that these patterns might differ across cultural contexts. **Methods**: A total of 294 autistic adult participants completed an online survey assessing independence, anxiety, and depression, along with demographic information. Assessments included the Autism Quotient screening tool, Depression Anxiety Stress Scales, and a visual analogue scale of independence. Analyses employed multiple linear regression and mixed=-effects models to account for unequal sample sizes and examined both overall and country-specific patterns. **Results**: As this is a work in progress, data collection is ongoing. Preliminary findings showed that depressive symptoms were consistently associated with lower psychological independence, whereas anxiety showed weaker and domain-specific associations. Formal tests of moderation by country were not significant; however, descriptive trends suggested variability, with stronger depression-independence links in Brazil compared to the USA. **Conclusions**: These findings contribute to understanding how mental health impacts psychological independence in autistic adults and highlight the importance of considering sociocultural context in research and intervention design. Future longitudinal and intersectional research with larger samples is needed to clarify cross-cultural variability.

P53

Consideration of developmental language disorders in trials of cognitive behavioural therapy for anxiety and depression in youth: A systematic review of selection criteria, sample characterisation and moderation analyses.

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Background: Cognitive behavioural therapy (CBT) is a first-line treatment for anxiety and depression in young people. Language disorders are common in this population, yet the impact of verbal ability on CBT treatment response or drop-out has received little research attention. **Methods**: This systematic review (PROSPERO registration: CDR42025620120) considered randomised controlled trials (RCTs) of CBT or CBT-based interventions in youth (mean age <18 years) with DSM or ICD anxiety or depressive disorders. Studies had to report anxiety, depression, or treatment adherence/drop-out as an outcome and include a measure of verbal ability or language-based eligibility criteria. We searched EMBASE, MEDLINE, PsycINFO, and CINAHL on 9th January 2025. Two reviewers independently assessed risk of bias using the Cochrane RoB 2 tool. Results were synthesised narratively. **Results**: Sixty-three studies met inclusion criteria. **Selection criteria**: Sixty studies excluded participants based on poor verbal ability. **Sample characterisation**: Eleven studies used verbal ability measures to describe participants. **Treatment response and drop-out**: Only one primary RCT and four secondary analyses examined verbal ability as a moderator. Findings were mixed, and overall evidence quality was variable. **Conclusions**: Many trials of standard CBT for young people with anxiety or depression systematically exclude individuals with lower verbal ability using vague criteria, and verbal ability is rarely reported.

Consequently, high-quality evidence on the impact of verbal ability on treatment response or drop-out is lacking. Further research is needed to determine whether standard or adapted CBT is effective for young people with lower verbal ability.

P54

Relationships between Mothers' Psychological Distress, Adolescents' Executive Functions, and Emotional Symptoms in Adolescents with ADHD

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This longitudinal study examined whether mothers' psychological distress during their child's middle childhood (age 7) predicts emotional symptoms in early adolescence (age 14) in adolescents with ADHD. It further investigated whether children's executive functions (EF; working memory, decision-making) at age 11 mediate this association. Analysis of three waves of data from the UK Millennium Cohort Study (MCS) revealed that children with ADHD showed greater emotional symptoms at ages 7 and 14 and poorer working memory and decision-making at age 11 than their neurotypical peers. In adolescents with ADHD, multiple linear regression showed that mothers' distress did not predict adolescents' working memory and decision-making at age 11, and these EF domains did not predict their emotional symptoms at age 14. There was no evidence that EFs played a mediating role in the association between mothers' psychological distress and adolescents' emotional symptoms in ADHD. In contrast, working memory and decision-making quality partially mediated the link between mothers' psychological distress and adolescent emotional symptoms in neurotypical adolescents. These findings suggest that EF difficulties in children with ADHD emerge early in development, rather than representing a later consequence of parental distress. This study emphasises the need to support caregiver mental health and child EFs from early developmental stages, and to further investigate mechanisms underlying emotional symptoms in children and adolescents with ADHD.

P55

A qualitative exploration of masking experiences of autistic adolescents across different contexts

Shiying Chen*

Autistic adolescents are more likely to experience social stigma and bullying, and many engage in masking as a form of stigma management. Existing research shows that whilst masking may bring short-term benefits (e.g., establishing friendships, avoiding social stigma), it may also lead to long-term mental health costs (e.g., depression, anxiety and burnout). However, the voices of autistic adolescents are often underrepresented in the literature, and the role of different social contexts in shaping masking is overlooked. This qualitative study will explore personal, contextualised masking experiences across educational, home, and social situations among autistic adolescents. Drawing on participants' narratives and creative expression, this study will highlight young people's perspectives and reflections on how they navigate various social interactions in everyday life. Fifteen autistic young people (aged 13-24) will take part in semi-structured interviews using an inclusive and flexible format, and will be invited to create artwork depicting an environment where they can be themselves. Reflexive thematic analysis will provide in-depth insights into how diverse environmental factors shape autistic adolescents' masking and identify underlying factors that may support authentic self-expression. The goal of this study is to amplify autistic young people's voices and reveal their genuine feeling and needs. The findings will inform educators, families, and other stakeholders to create supportive environments where autistic young people feel safe being themselves.

P56

Epistemic Injustice and Autistic Students' Voices: A Critical Reflection on Designing a School-Based Physical Activity Programme with Autistic Children

Stella Gkegka*

According to the UNCRC Article 12, children have the right to express their views freely in all matters affecting them, and for their views to be given due weight. Drawing on a rights-based approach, this research involved autistic students in decision making shaping their Physical Education (PE) experiences. Employing Lundy's model of children's participation as a conceptual framework, a range of methods were employed, including observations, walking interviews, and LEGO® building, to create meaningful opportunities for autistic children to share their views and shape their school-based physical activity experiences. Autistic students (n = 34), aged 7–13 years, from three mainstream primary schools in Scotland shared their PE experiences and made decisions about the activities they wished to engage in. Their teachers and Support for Learning Workers (n = 12) participated in semi-structured interviews to reflect on the challenges and opportunities autistic students experience in PE and the implications of involving their voices in decision-making processes shaping their learning journey. While all students shared their lived experiences through their preferred ways of communication, these experiences were not always heard by all adults. (Mis)understandings and assumptions about autistic children and their capacity as knowers together with limited insight into the lived experiences of autistic individuals shaped what the teachers could hear. The findings suggest that epistemic injustice can silence autistic students' voices, and highlight the need for strategies to address testimonial and hermeneutic injustice in the school context, to support the realisation of all children's participation rights.

P57

Exploring Perspectives of Black Neurodiverse Adults: Insights on Diagnosis, Support and Intervention

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Recent research indicates a rising prevalence in autism and ADHD diagnoses in children and adults. However, people from underserved communities typically present late and there are missed opportunities for early diagnosis, resulting in missed opportunities for early intervention. The aim of this study is to explore the social and cultural factors that facilitate or hinder diagnosis, support and intervention for neurodivergence in Black communities, particularly focusing on how these factors influence late or missed diagnosis. Furthermore, this study will examine how neurodiverse individuals (those living with autism, ADHD and both autism and ADHD) and families from Black communities can be better supported in seeking diagnosis and accessing necessary support and resources.

Fifteen semi-structured qualitative interviews are being conducted with neurodiverse Black adults to gain insights into the perception and lived experience while seeking diagnosis, accessing support and navigating life with neurodiversity. Data will be analysed using Reflexive Thematic Analysis to identify key themes.

This research is vital for understanding how Black neurodiverse adults, can access an early diagnosis and receive timely support to enhance their wellbeing, mental health, and quality of life. This study will provide insight into the effectiveness of referral pathways and provide recommendations about how to facilitate earlier and more efficient screening processes during childhood and adulthood. Importantly, this research could lead to changing the ways in which Black neurodiverse adults are supported.

P58

Do Motor Constraints Shape Everyday Object Interactions in Young Children with Down Syndrome?

Theo Riseborough*, Craig D J Thompson, Charlotte Bocchetta, & Hana D'Souza

Object exploration has a critical role in social, cognitive, and language development, and is strongly shaped by the child's motor ability. Young children with Down syndrome (DS) usually experience delays in motor development, impacting on how much they interact with objects. Lab-based studies have shown that children with DS handle objects less than typically developing (TD) children and that their parents handle objects more. However, how these motor differences shape object interaction patterns in everyday home environments has yet to be investigated. This study examines how the proportion of play spent handling objects by both young children and their social partners differs between TD children (N=28, Age range=220 months) and children with DS (N=23, Age range=5–40 months), and how these patterns change with the development of new motor skills. Using head-mounted cameras, children's visual and manual experiences were captured during everyday play at home. Object handling was quantified using a custom-trained machine learning model. We predict that during early development in both groups, social partners will handle objects more during play, and that this will decrease as children develop new motor skills and handle objects more themselves. Across development, we expect children with DS to handle objects less than TD children, and that the proportion of object handling from social partners may persist or decline at a slower rate. This study aims to highlight how motor constraints can influence everyday experiences through object interactions, and to demonstrate the value of naturalistic research methods in helping understand developmental differences.

P59

Autism Recognition and Diagnosis in Gender-Diverse and Minority Ethnic Adults: Perspectives from NHS Autism and Complex Emotional Needs Services

Valeria Khudiakova*, Jacqueline Sin, Shani Khetia, Kirsten Barnicot

Rationale An autism diagnosis can provide self-understanding and access to supports. Genderdiverse and minority ethnic adults face compounding barriers to accessing diagnosis. As clinicians act as both gatekeepers and facilitators of diagnosis and service access, including in marginalised groups, it is important to understand their perspectives. We focus on clinicians working in NHS adult autism and 'Complex Emotional Needs' (CEN) services, given that autism is often missed in adults accessing CEN services. **Methods** We conducted semi-structured interviews with 15 NHS clinicians working in autism and CEN services and analysed them using reflexive thematic analysis. HRA approval was granted on 03/06/2025 (IRAS 349880, REC 25/ES/0033). **Results** Analysis is in progress. Themes emerging so far include: *Discrepancies Between Training and Practice*: lack of training in relation to gender diversity and minority ethnic identities resulting in clinicians having to 'learn on the job'; existing training not being sufficiently relevant or effective in addressing systemic inequities. *Managing Uncertainty*: gender diversity challenged clinicians' assumptions about sex/gender and autism and exposed the limitations of diagnostic criteria; political pressures created uncertainty; overlap between autism and CEN complicated recognition. *Interactions between Individuals and Systems*: difficulties establishing trust with gender-diverse and minority ethnic adults, though seen as justifiable; an autism diagnosis does not always result in appropriate understanding within services. **Implications** This study highlights key gaps in training and implementation, as well as clinician attitudes. Understanding barriers to diagnosis in marginalised communities can lead to greater awareness of non-stereotypical presentations of autism and the development of affirming supports.

P60

Psychometric properties of executive function assessments among people with intellectual disability: a systematic review and meta-analysis

Verinder Kaur Poonian, Dr. Hayley Crawford, Associate Professor Rory T. Devine and Professor Caroline Richards

Background In the United Kingdom, there are an estimated 1.5 million people with an Intellectual disability (ID), (The Office for National Statistics, 2021). This population is routinely excluded from psychological research, as it is estimated that 74.6% of the I.D population is excluded from clinical trials (McDonald et al., 2022). One plausible reason for this exclusion is the lack of feasible, valid and reliable cognitive measures that are appropriate for people with ID (Reynolds et al., 2013). **Methods** A systematic review and meta-analysis have been designed and pre-registered to meet the objectives. Electronic databases such as Medline, PsycINFO, Web of Science, Scopus, PubMed and Embase will be searched up to February 2026, combining terms for Intellectual Disability and Executive function. Initial searches returned 35,000 studies. The psychometric properties of the measures will be explored, with a focus on the reliability, validity and responsiveness. Moderator analyses will be used to determine if the observed effects differ according to age, cultural context and the level of ID. **Results** The results will identify the most used executive function measures and psychometric properties of these in people with ID. The measures are expected to exhibit poor reliability, validity and responsiveness. Moderation analyses will demonstrate poor sensitivity for variables such age, level of I.D and culture. **Implications** The anticipated results highlighting current limitations, can aid in the development of new executive function measures for the ID population.

P61

Linking early profiles to interventions and educational outcomes

Vu Thuy Ann Dao*, Prof. Jo Van Herwegen, Prof. Michael Thomas, Dr. Elizabeth Halstead

Children with Down Syndrome (DS) show distinct developmental profiles, with early challenges in language, motor, and cognitive abilities. As a result, many children with DS receive a range of educational and therapeutic interventions throughout early childhood. Yet there is limited research describing the types of interventions accessed, how they are delivered, and the ways in which support is combined over time. Understanding how early interventions are implemented is important, as support provided during early development may shape later educational outcomes. Using longitudinal secondary data, this study examines the types of interventions accessed by children with DS and investigates the impact on later educational outcomes. The sample comprised of 74 children assessed at Time 1 who completed standardised measures of fine and gross motor skills, visual reception, receptive language, and expressive language. Six years later (Time 2), children were followed up at primary school age and completed assessments of reading and mathematics. Information on interventions was collected, capturing the interventions children were receiving at that time. Interventions were coded for the type of domain they related to (reading, maths, socioemotional wellbeing, general attainment etc.), the type of interventions (e.g. targeted, nontargeted, whole school intervention or access to processional), alongside the frequency and duration of the intervention received so far. It is expected that intervention usage will be highly variable. Exploratory moderation analyses will examine whether intervention exposure strengthens associations between early cognitive abilities and later educational outcomes. This study provides critical insight into real-world intervention use in DS and informs future work evaluating how early support may optimise educational development.

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Autism and ADHD Co-occurrence (AuDHD) in Adults: A Systematic Review of Prevalence, Outcomes, and Lived Experience

Yujia Zhang*

Although autism and ADHD frequently co-occur, research on co-occurring autism and ADHD (AuDHD) remains limited, inconsistent, and heavily dominated by child samples. Adult presentations are poorly understood, despite increasing recognition that many individuals are not identified until adulthood. Existing evidence is fragmented across small clinical samples, heterogeneous diagnostic criteria, and inconsistent outcome measures. There is currently no systematic synthesis focusing specially on adults with AuDHD. Understanding AuDHD in adulthood is clinically and socially important because cooccurrence may be associated with distinct cognitive profiles, elevated mental health difficulties, greater functional impairment, and unique support needs compared with autism-only or ADHD-only groups. In addition, qualitative studies suggest that lived experiences of AuDHD differ from single-condition pathways, yet this evidence has never been integrated. By systematically reviewing prevalence estimates, adult outcomes, and lived experiences, this review will address a significant gap in the literature. The findings will inform future longitudinal studies, clinical assessment practices, and service provision, and provide a foundation for further research on adult neurodivergence, including your doctoral work using population cohort data.

P63

Exploring the experience of having a sibling with learning disabilities.

Zoe Starkie*

Rationale: When a family member has learning disabilities, the whole family can be affected. Whilst some individuals with learning disabilities will live independently, many are supported by family members throughout their lives. As parents age, siblings often take over caregiving responsibilities. However, research on family experiences generally focuses on parents, with siblings currently underrepresented. **Research Aim**: To investigate the experience of adults who have a sibling with learning disabilities. **Methods**: Qualitative methods were utilised to facilitate an in-depth exploration of sibling experiences. Eight, individual, semi-structured interviews, composed of open questions, were conducted with adult siblings. Additionally, 54 adult siblings completed an online survey which included free-text responses. Interview transcripts and survey responses were thematically analysed. **Findings**: Themes emerging from the interview and survey qualitative data overlapped in the following ways: • Sibling relationships are varied and evolving, shaping siblings' lives. • Challenges experienced can be linked to support arrangements and family pressure. • Experiences are influenced by family contextual factors. Siblings' lives can be shaped by having a sibling with learning disabilities. Many view their experiences positively despite encountering challenges. Interview and survey findings both indicated that access to support and family dynamics can impact experiences. Interview findings also highlighted the importance of geographical and historical context when considering sibling experiences, yet these did not feature in the survey findings. **Implications**: Sibling experiences can be influences by contextual factors. Further research across a more diverse sample could explore how geographical context can influence experiences, particularly regarding access to services.

P64

Quality of life in genetic syndromes associated with intellectual disabilities

Aamina Khan*, Hayley Crawford, Rory Devine, Caroline Richards

Rationale Individuals with intellectual disability (ID) experience neurodevelopmental differences that affect cognitive abilities and adaptive functioning, which can significantly impact quality of life (QoL). Although ID affects approximately 1.74% of the global population (Nair et al., 2022), there is limited research examining QoL, particularly among individuals with genetic syndromes associated with ID. There seems to be an increasing amount of research in the ID population but not in genetic syndromes associated with ID despite ID being associated with many genetic syndromes (Waite et al., 2014). This highlights the need for research in the population as previous research in the field has focused solely on those with idiopathic or heterogenous causes of ID and not QoL.
Hypotheses This review aims to systematically examine the definitions used to define QoL, how QoL has been measured, and identify the factors and predictors of QoL within this population.
Methods A systematic review is currently being conducted in accordance with PRISMA guidelines. Databases Medline, PsycINFO, Embase and Scopus are being used to identify studies examining QoL in individuals with genetic syndromes associated with ID. Data extraction will focus on definitions of QoL, measurement approaches, and factors associated with QoL outcomes.
Results The review will address the following aims: (1) synthesising how QoL is defined within the literature, (2) collating the measures used to assess QoL, (3) identifying factors associated with QoL in this population, and (4) examining whether these associations are consistent across syndromes or syndrome specific. Results will directly reflect these aims.
Implications This review will highlight the gaps in the literature, improve understanding of QoL in individuals with genetic syndromes associated with ID, and inform future research which could lead to intervention development aimed at improving outcomes for this population.

P65

The Sensory Optimization and Autonomic Reactions (SOAR) Project

Candace Donovan*

Regulation can be defined as the ongoing, dynamic, and adaptive modulation of internal states and/or externally observable behaviour, mediated by interactions between the central and peripheral nervous systems. Despite its foundational role in developmental science, limited research has examined how an infant's physiological and attentional state at time t influences subsequent information sampling at time t+1. This study investigates how variations in arousal and attention shape infants' engagement with visual stimuli. Infants are presented with video stimuli across three formats: (1) dual screens displaying opposing concepts (e.g., urban vs. nature), (2) a single screen varying in visual saliency, and (3) immersive panoramic video. Physiological and neurological measures are collected to characterise arousal and attentional responses. Data fro N = 60 infants are being gathered longitudinally at 12, 16, and 20 months of age. Analyses test the hypothesis that distinct physiological patterns accompany visual engagement and disengagement. Specifically, we examine how arousal changes as infants orient toward, sustain attention on, and withdraw from stimuli. Establishing reliable methods for quantifying sensory regulation in infancy has important translational implications. A stronger measurement framework may inform the development of targeted interventions for children who experience difficulties in managing sensory input and regulating behavioural responses.

P66

My Brain, Emotions and Me: Co-Producing a Neurodivergent-Friendly EEG Research Environment with Autistic and/or ADHD Youth Researchers

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Introduction: We conducted a novel basic experimental study utilising participatory methods as part of the wider RE-STAR (Regulating Emotions – Strengthening Adolescent Resilience) programme. Here, we report our preliminary findings of young people's experiences and electroencephalographical (EEG) data collected in a neurodiverse-friendly research environment, co-designed by members of the RE-STAR youth researcher panel (Y-RP) and academic researchers. **Methods**: We co-produced a neurodivergent-friendly protocol for EEG data collection with 68 young people (Autism = 23; ADHD = 22; Neurotypical = 23), including a preparatory online introduction (i.e., introduction to the research team and explanation of session activities), adapted communication methods (e.g., schedule, communication cards), and sensory accommodations (e.g., dimmed lights, fidgets, pre-study tactile engagement with EEG cap). Participants' experiences were explored via semi-structured interviewing and analysed using thematic analysis. **Results**: Preliminary findings show participants enjoyed the adaptations co-developed with the Y-RP. Key to positive research experience was maximising young people's feelings of control and reducing uncertainty during sessions, e.g., bringing own fidgets/toys, EEG cap exploration. Adaptations may have improved data quality, e.g., all attendees successfully completed the EEG session. Some adaptations were considered more impactful than others, e.g., participants rarely used communication cards when offered. Participants viewed co-production methods positively; the involvement of neurodivergent researchers was linked to themes of representation and inclusivity. **Conclusions**: Co-production has enriched neuroscience research within RE-STAR and was experienced positively by both neurotypical and neurodivergent participants. Further exploration of themes will be conducted, alongside EEG data analysis.

P67

This condition impacts every aspect of my life: Experiences of living with developmental prosopagnosia

Judith Lowes*, Lesley M McGregor, Bradley Duchaine, Peter J.B. Hancock, Anna K. Bobak

This mixed methods study examined experiences of living with developmental prosopagnosia (DP) a lifelong neurodevelopmental condition that severely affects the ability to recognise faces despite otherwise normal vision, IQ and memory. Twenty-nine individuals with DP completed an online survey describing and quantifying their experiences of living with poor face recognition. Strikingly, 35% reported being unable to reliably recognise their immediate family members and 55% reported being unable to recognise their three closest friends out of context highlighting that DP commonly affects the recognition of highly familiar faces with whom individuals have close emotional relationships. Around two thirds of participants (65.5%) reported they could recognise fewer than 10 familiar faces (mode = none), far below typical abilities. Thematic framework analysis highlighted how low public, professional, and employer awareness of developmental prosopagnosia presented challenges across multiple domains including seeking diagnosis, social and family relationships and workplaces. Driven largely by concerns about negative evaluation by others, most participants employed a range of highly effortful, though error prone, strategies to disguise and compensate for their face recognition difficulties. Participants' highest priorities for future research were improved awareness of DP and interventions to improve their face recognition ability.

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