Abstract Book

International Seminar on Emotional and Sensory Experiences in Children with Autism Spectrum Disorder (ASD)

Friday, 14th November 2025 | 1:45–5:30 PM (UK Time)
Online Event | Organised by Dr Hashir Aazh, Hashir International Institute

---

Contents

Welcome and Introduction

Dr Hashir Aazh
Hashir International Institute, London, UK

Biography
Dr Hashir Aazh PhD is the Director of Hashir International Specialist Clinics and Research Institute for Misophonia, Tinnitus, and Hyperacusis in Guildford. He holds degrees in Audiology and Rehabilitative Audiology and a PhD in Public Health and Policy from the London School of Hygiene and Tropical Medicine. He has trained over a thousand audiologists and psychologists and published more than 50 research papers. He has served as Managing Editor of Noise and Health, Associate Editor of the International Journal of Audiology, and Secretary of the British Society of Audiology. He is a pioneer of audiologist-delivered CBT.

Abstract
This seminar opens a vital discussion on the emotional and sensory experiences of children with autism spectrum disorder (ASD) and their implications for clinical practice. These challenges influence the work of professionals across disciplines, including audiology, occupational therapy, physical therapy, psychology, and education, where sensory and emotional regulation are central to therapy outcomes.

By bringing together leading researchers and clinicians from diverse fields, this event highlights the importance of multidisciplinary collaboration in understanding and supporting autistic children. The presentations that follow will explore how sensory sensitivities, anxiety, and emotional regulation intersect in autism, and how integrated therapeutic approaches can promote meaningful, child-centred care.

The Relationship Between Tinnitus, Hyperacusis, and Misophonia in Children with Autism Spectrum Disorder

Dr Prashanth Prabhu
All India Institute of Speech and Hearing, Mysuru, India

Biography
Dr Prashanth Prabhu is an Assistant Professor in Audiology at the All India Institute of Speech and Hearing, Mysuru. His research focuses on auditory neuropathy spectrum disorder, tinnitus, auditory processing disorders, and cochlear synaptopathy. He has published over 60 peer-reviewed papers, authored book chapters, and serves as Academic Editor for PLOS ONE and Assistant Editor for the Journal of AIISH. Dr Prabhu is also trained in audiologist-delivered cognitive behavioural therapy for tinnitus, hyperacusis, and misophonia and is a frequent speaker at national and international conferences.

Abstract
Children with autism spectrum disorder (ASD) frequently exhibit auditory hypersensitivities that manifest as decreased sound tolerance (DST). Common DST conditions include hyperacusis, defined as intolerance to everyday moderate-intensity sounds, and misophonia, characterised by strong negative emotional reactions to specific trigger sounds such as chewing or breathing. Previous research suggests that approximately 50–70% of autistic individuals experience hyperacusis, with misophonia frequently co-occurring. Tinnitus, in contrast, appears less consistently associated with DST.

This study explored the relationship between tinnitus, hyperacusis, and

misophonia in children with ASD through a cross-sectional observational design involving 120 children diagnosed with ASD. Parents completed standardised questionnaires (parent versions) developed by the Hashir Tinnitus Clinic: the Tinnitus Impact Questionnaire (TIQ), Hyperacusis Impact Questionnaire (HIQ), and Misophonia Impact Questionnaire (MIQ).

Findings revealed that elevated HIQ and MIQ scores were common, while significant tinnitus-related impact was less frequent. Only 15% of children exhibited noticeable tinnitus symptoms, compared with higher proportions for hyperacusis (52%) and misophonia (46%). Strong correlations were observed between HIQ and MIQ scores, highlighting the overlap between hyperacusis and misophonia in ASD. By contrast, TIQ scores did not correlate with HIQ or MIQ, suggesting that tinnitus-related distress is influenced more by emotional than sensory factors. These results emphasise that hyperacusis and misophonia are prominent sensory–emotional concerns in ASD, whereas tinnitus plays a comparatively minor role. Comprehensive screening for multiple auditory sensitivities is essential for holistic clinical management.

The Nexus of Sensory and Anxiety in Autism

Dr Ayelet Ben-Sasson
Department of Occupational Therapy, University of Haifa, Israel

Biography
Dr Ayelet Ben-Sasson is a leading researcher and clinician specialising in sensory processing and emotional regulation in autism. Based in the Department of Occupational Therapy at the University of Haifa, her work bridges psychology and occupational therapy to explore the sensory–emotional interface in autistic children. She has published extensively and presented internationally on the interplay between sensory processing and anxiety, advancing both theoretical and clinical understanding of these co-occurring challenges.

Abstract
The co-occurrence of anxiety and sensory over-responsivity in autistic children is far from coincidental. These challenges interact bidirectionally, reinforcing one another and contributing to escalating avoidance behaviours, both in the child and within the family system.

Addressing this dynamic requires an interdisciplinary lens that informs appropriate assessment and intervention planning. This presentation will illustrate the reciprocal relationship between sensory processing and anxiety symptoms through theoretical frameworks, empirical research findings, and real-world clinical examples.

Sensorial Issues and Psychomotor Treatment in Children with ASD in France: Papers, Research, Tools, and Methods

Dr C. Lucia Florez Pulido
Centre Médico-Psycho-Pédagogique (CMPP), Ivry-sur-Seine; Private Practice, Paris; Syndicat National d'Union des Psychomotriciens (SNUP, Scientific Council Member); Respir Formation (Trainer); Association des Praticiens du Bilan Sensori-Moteur André Bullinger (ABSM, Trainer and Member), France

Florence Bronny
Psychomotor Therapist; President, Syndicat National d'Union des

Psychomotriciens (SNUP); Respir Formation (Director); affiliated with Vertigo and Balance Research Institute (IREV, CNRS), France

Biography
Dr C. Lucia Florez Pulido is a French-certified psychomotrician and clinical researcher specialising in sensory–motor development and emotional regulation in children with ASD. She holds a doctorate in Psychopathology and Psychoanalysis from Université Paris Cité and integrates the theoretical framework of André Bullinger in her work.

Florence Bronny is a psychomotor therapist and President of the National Union of Psychomotricians (SNUP). She has extensive clinical experience in child psychiatry and leads Respir Formation, a training organisation dedicated to professional development in psychomotricity. Her work promotes inclusive health practices and collaboration with research institutions such as IREV (CNRS).

Abstract
For children with ASD, sensory and emotional behaviours are highly specific due to the underlying characteristics of neurodevelopmental disorders. Sensory issues can profoundly affect social skills, relationships, and family life. Since 1963, psychomotricity has been recognised in French health care as a therapeutic discipline aiming to re-establish synergy between motor, cognitive, and emotional functions. Psychomotor therapists are deeply involved in the treatment of children with ASD.

Evaluation and treatment projects rely on both standardised and qualitative tools such as the Échelle Psychomotrice de la Sphère Autistique (EPSA), the Sensory Profile (Dunn), and the Bilan Sensorimoteur André Bullinger®, which requires specialist training. These assessments help formulate hypotheses regarding sensory–motor impairments and their emotional implications.

Psychomotor therapy aims to interpret and integrate the child's sensory and tonico-emotional difficulties within a stable, predictable therapeutic setting. Treatment involves playful bodily activities incorporating clear instructions, symbolic play, and language development. Therapy typically progresses through three phases: imitation and work with duplicate objects, creation of role-play situations, and integration of symbolic play with motor and praxic development.

In France, psychomotor therapy is delivered as part of a multidisciplinary approach, closely integrated with family and social support. Its primary goal is to enhance body awareness, sensory integration, and emotional regulation, thereby improving relationships and overall developmental outcomes. Continued research is needed to refine assessment tools and monitor therapeutic progress effectively.

Technological Innovations in the Treatment of Sensorial Difficulties in Autism Spectrum Disorder

Dr Thomas Gargot
Associate Professor of Child and Adolescent Psychiatry, University of Tours, France

Biography
Dr Thomas Gargot is an Associate Professor of Child and Adolescent Psychiatry at the University of Tours and serves as Chair of Psychotherapy and Co-

Chair of Digital Psychiatry for the European Psychiatric Association. He holds a European PhD in Computer Science, during which he co-developed Dynamilis, an iPad app for re-educating handwriting difficulties, which won the ACAMH Best Digital Innovation Award (2024). His clinical and research work focuses on medical technologies for assessing and training sensory and motor functions in children.

Abstract
Autism spectrum disorder (ASD) is characterised by difficulties in social interaction and communication, along with restricted and repetitive behaviours. Sensory integration difficulties are prevalent, affecting between 45% and 95% of individuals with ASD. Sensorimotor contingencies are learned through perception–action loops early in development, and atypical sensorimotor processing may underlie social and communicative challenges.

Early re-education of sensorimotor skills can improve aspects of social functioning. On the proprioceptive axis, studies by Grandin and Edelson validated the efficacy of deep pressure therapy in ASD. Oto is a new compressive armchair equipped with electronically controlled inflatable cushions that record pressure level and duration, allowing the user to select their preferred settings.

On the audiovisual axis, virtual reality (VR) technologies have shown promise for habituating children to complex, real-world sensory environments. Our clinical trial assesses a CAVE device designed to expose children to ecological audiovisual stimulations in a controlled setting. These technological innovations may enhance therapeutic engagement while reducing stigma and improving accessibility.

Improving Engagement in Occupational Therapy Intervention for Children on the Autism Spectrum

Dr Jewel Crasta
Occupational Therapy Division, The Ohio State University, Columbus, USA

Biography
Dr Jewel Crasta is an Assistant Professor in the Occupational Therapy Division at The Ohio State University. Her research examines the relationship between attention and sensory processing in children and young adults on the autism spectrum, using neuroimaging and behavioural measures. She leads studies focused on improving engagement and participation in occupational therapy, integrating neuroscience and clinical practice to enhance outcomes for autistic individuals.

Abstract
This presentation discusses findings from a video-coding pilot study examining key treatment strategies used by occupational therapists when working with children on the autism spectrum in outpatient settings. The study explored how specific therapeutic approaches influenced levels of child engagement during sessions.

Results identify several strategies that enhance engagement and responsiveness, offering guidance for the design of more targeted and effective interventions in occupational therapy. The findings highlight the importance of clinician adaptability, meaningful activity selection, and relational attunement in promoting sustained therapeutic participation among autistic children.

Unravelling Listening Difficulties in Children with ASD: What's the Role of Auditory Processing Disorder (APD)?

Dr Cristina Murphy
The APD Clinic, 10 Harley Street, London, UK

Biography
Dr Cristina Murphy is a Consultant Audiologist with over 25 years of experience specialising in auditory processing disorder (APD) and clinical research. She is the Founder and Director of The APD Clinic in London and serves on the Steering Committee of the APD Special Interest Group of the British Society of Audiology. Dr Murphy is also a Visiting Lecturer at the Polytechnic Institute of Coimbra (Portugal) and Aston University (UK). Her international collaborations and publications have significantly advanced APD awareness and multidisciplinary care.

Abstract
Children with ASD often experience listening difficulties that extend beyond social communication challenges to include language, cognitive, and auditory processing factors. Comorbidities are common and interrelated, underscoring the need for comprehensive assessment.

This presentation emphasises the importance of adopting a multidisciplinary and integrative approach when investigating listening difficulties in children with ASD, including consideration of auditory processing disorder (APD) as a potential contributing factor. Such an approach enables a holistic understanding of each child's unique strengths and challenges and supports the provision of tailored interventions that promote optimal developmental outcomes.

Co-Designing Technology with Autistic Children to Support Emotion Regulation and Noise Sensitivity

Emani Hicks
Department of Informatics, University of California, Irvine, USA

Biography
Emani Hicks is a fifth-year PhD Candidate in Informatics at the University of California, Irvine. Her research spans human–computer interaction, assistive and educational technologies, and personal informatics. She designs and evaluates technologies that foster awareness, collaboration, and community-centred care for well-being. Her doctoral work focuses on assistive technologies that support people with neurodevelopmental conditions, such as autism and ADHD, particularly in managing noise sensitivity through awareness and collaborative regulation.

Abstract
Noise sensitivity can cause discomfort, distraction, and emotional distress in autistic children, particularly in environments where noise levels are unpredictable or uncontrollable. Effective regulation strategies are essential to support emotional well-being and participation in daily activities.

This presentation explores the use of assistive technology co-designed with autistic children to support emotion regulation and sensory coping. Findings from participatory design sessions and

evaluations of two assistive systems will be discussed. The results demonstrate how collaborative technological design can empower children to manage sensory challenges and highlight key considerations for the future design of systems that promote autonomy, regulation, and inclusion.