

Dr Teresa Del Bianco, London Metropolitan University

Through Their Eyes: Empowering Neurodivergent Perspectives with Eye-Tracking

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1 Phase 1: Participatory Insights
★ Interviews with neurodivergent children (6-12 years).
● UK, Italy, and China.
● MOSAIC methods (visual tools, crafts) to understand children's experiences with eye-tracking.
● Priorities, challenges, and adaptations.

2 Phase 2: Expert Translation & Development
★ Synthesizing feedback with experts
● Design adaptive, user-friendly eye-tracking setup
● Selecting meaningful to represent neurodivergent social attention.

3 Phase 3: Study Protocol & Future Research
★ Co-developing a new research protocol based on participatory findings.
● Preparing grant application

Real-world impact:
● Future research
● Education
● Assistive technology development.

Dr. Teresa Del Bianco (Grant Awardee)

The multi-disciplinary team consists of:

Dr. Teresa Del Bianco (London Metropolitan University), Dr. Yanbo Hu (London Metropolitan University), Dr. Georgia Lockwood Estrin (University of East London), Dr. Rianne Haartsen (Birkbeck, University College London), Dr. Rachel O'Connor (St Michael's House), Dr. Juan Kou (Sichuan University), Professor Paola Venuti, Dr. Arianna Bentenuto (University of Trento), Professor Liz Pellicano (University College London).

Our project rethinks eye-tracking research by incorporating the perspectives of neurodivergent children and their families. Traditional eye-tracking paradigms often reflect neurotypical assumptions, limiting their ability to authentically capture the experiences of neurodivergent individuals. This study takes a participatory approach, involving autistic children and caregivers in shaping how eye-tracking is used—ensuring that the technology reflects their priorities and ways of engaging with the world.

The project combines interviews with parents and interactive eye-tracking exploration sessions with children, using creative tools like drawing and role-playing to understand how children perceive and interact with eye-tracking technology. The findings will inform

more inclusive experimental designs, helping to advance research in social attention, learning, and accessibility.