



Improving recognition of autistic young people's stress behaviours in mainstream and specialist Nottingham schools

About the Project

Autism is the fastest-growing category of Special Educational Needs and Disabilities (SEND) in Nottingham. As the number of autistic young people increases, education services are struggling to meet their needs. While Nottingham has several specialist schools for autistic young people, such as Sutherland House School, Nottingham City Council recently reported that almost all specialist provision is at full capacity. Therefore, significant numbers of autistic young people need to be educated in mainstream schools.

Including SEND pupils in mainstream schools has many potential benefits in relation to societal integration and acceptance. However, it also raises challenges for educators who need to meet the varied needs of all students. A challenge specific to autism is the distinctive way in which autistic people express their inner states and emotions. Recent research demonstrated that non-autistic people have difficulty interpreting the expressive behaviour of autistic people. This is likely to create barriers for teachers in relation to meeting the needs of their autistic students, which may be felt most acutely in mainstream settings where autistic students are still a minority.

This project will focus on autistic young people's expressive behaviour when experiencing stress and anxiety and how this manifests in contrasting school contexts (mainstream and specialist) within Nottingham. Autistic young people are known to experience higher levels of stress and anxiety than their non-autistic peers, including within school settings; stress/anxiety is known to be a precursor for behaviour that is deemed to be "challenging".

The project will establish which behaviours are associated with stress/anxiety in autistic young people, how they differ from non-autistic young people, and how education professionals interpret these behaviours. Finally, a toolkit will be co-created to share essential new knowledge with local educators about behavioural signs of stress/anxiety in young people.



About the project

This project has been co-created and is supported by researchers from Nottingham Trent University (NTU), the University of Nottingham (UoN) and partners at Sutherland House School/Autism East Midlands. The successful candidate for this project will be enrolled at the University of Nottingham.

Project Aims

The overall aims of the project are:

1. Determine which behaviours signal stress in autistic adolescents compared to non-autistic adolescents, and to understand the range and variability of these behaviours in autism, and which factors this might relate to.
2. Understand to what extent teachers, can reliably detect stress behaviours in autistic adolescents. Does this differ between educators in mainstream versus specialist schooling?
3. Based on the findings, co-create a toolkit to support teachers in identifying stress signals in autistic and non-autistic adolescents.

Supervisory Team

1. Lead Academic Supervisor: [Dr Elizabeth Sheppard \(UoN\)](#)
2. Academic Co-Supervisor: [Prof Bridget Waller \(NTU\)](#)
3. Community Supervisor: [Katie Mathews \(Sutherland House School/Autism East Midlands\)](#)

Key Details

Host University:	University of Nottingham
School / department:	School of Psychology
Start date:	01 April 2025
Financial offer:	Tuition fees covered in full (worth approx. £15k across full PhD programme). Monthly stipend based on £19,237 per annum, pro rata, tax free.
Working hours	Full-time (minimum 37.5 hrs per week)



Key Details

Working Style:

Primarily in-person at host university. Flexible working supported. Working pattern to be agreed between successful candidate and lead supervisor.

Competencies

Co(I)laboratory Core Competencies

Category	Competency	Assessed: Application (A), Interview (I)
Comprehension and evaluation	Strong understanding of the project and its subject matter.	A / I
	Analytical, researcher mindset with keen attention to detail.	A / I
	Communicate complex concepts with clarity and precision.	A / I
	Able to identify connections, patterns, gaps, and irregularities in information/data.	I
	Able to interpret data/information confidently with logic and empathy to derive meaning.	I
Social and emotional	Demonstrable experience of responding effectively changing contexts, information and demands.	A
	Ability to persevere in the face of challenges/failures and to remain constructive in developing solutions.	A
	Demonstrable passion for learning with clear drive and curiosity to undertake this specific research project.	A / I
	Willingness to immerse oneself in the research subject matter and make a contribute to new knowledge through a PhD.	A / I
	Strong desire to make a positive community impact through the research.	A / I
	Willingness to think deeply about complex concepts and engage with academic ideas and theory.	A / I
Preparedness and potential for success	Experience of working, collaborating and communicating effectively with different stakeholders.	A
	High level of self-motivation and ability to work with minimal guidance.	A / I
	Strong organisational and time-management skills with the ability to balance and prioritise multiple tasks.	A / I
	Ability to identify potential challenges and complexities and thoughtfully consider possible solutions.	A / I
	Able to identify the technical, personal, or professional skills required for a task and take action to develop these.	A / I



Competencies

Co(I)laboratory Core Competencies		
Category	Competency	Assessed: Application (A), Interview (I)
Community Context	Genuine desire to undertake community-engaged research over more traditional approaches to research.	A
	Understand the impact of and need for the inclusion of diverse experiences and points of view in research.	A / I
	Appreciation/understanding of the importance of community insight and experience in the generation of new knowledge.	A / I
	Awareness/understanding of the broader societal context related to the subject matter of the project.	A / I

Project Specific Competencies			
Essential	Assessed: Application (A), Interview (I)	Desirable	Assessed: Application (A), Interview (I)
Background or experience in psychology, psychiatry, education, or a similar field.	A / I	Understanding of computer software and analytical packages, such as R or SPSS.	A / I
Appreciation of the current context and challenges relating to autism and SEND provision.	A / I	Understanding of behavioural research methods	A / I
Ability to engage with sensitive topics with empathy and compassion.	A / I		



References for Further Reading

- Barrett, L. F., Adolphs, R., Marsella, S., Martinez, A. M., & Pollak, S. D. (2019). Emotional expressions reconsidered: Challenges to inferring emotion from human facial movements. *Psychological Science in the Public Interest*, 20(1), 1-68. <https://doi.org/10.1177/1529100619832930>
- Costley, D., Emerson, A., Ropar, D., & Sheppard, E. (2021). The anxiety caused by secondary schools for autistic adolescents: In their own words. *Education Sciences*, 11(11), 726. <https://doi.org/10.3390/educsci11110726>
- Sheppard, E., Pillai, D., Wong, G. T. L., Ropar, D., & Mitchell, P. (2016). How easy is it to read the minds of people with autism spectrum disorder?. *Journal of Autism and Developmental Disorders*, 46, 1247-1254. <https://doi.org/10.1007/s10803-015-2662-8>
- Troisi, A. (1999). Ethological research in clinical psychiatry: the study of nonverbal behavior during interviews. *Neuroscience & Biobehavioral Reviews*, 23(7), 905-913. [https://doi.org/10.1016/S0149-7634\(99\)00024-X](https://doi.org/10.1016/S0149-7634(99)00024-X)
- Waller, B. M., Whitehouse, J., & Micheletta, J. (2017). Rethinking primate facial expression: A predictive framework. *Neuroscience and Biobehavioral Reviews*, 82, 13-21. <https://doi.org/10.1016/j.neubiorev.2016.09.005>
- Whitehouse, J., Milward, S. J., Parker, M. O., Kavanagh, E., & Waller, B. M. (2022). Signal value of stress behaviour. *Evolution and Human Behavior*, 43(4), 325-333. <https://doi.org/10.1016/j.evolhumbehav.2022.04.001>

