REACH

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working together effectively

- Adopting a More Holistic View of Inclusion
- The Role Of The Occupational Therapist For Primary School Children: Consideration Of Collaborative Practices
  With Primary School Teachers
- Standardised Testing among Children learning English as an Additional Language (EAL) in Ireland: Normative and Exclusionary Practices
- The Use of a Functional Behavioural Assessment and Positive Behaviour Support to Address Behaviours of Concern

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Contents

Editorial

It is a great honour to write this inaugural editorial as the newly appointed Editor of the REACH *Journal of Inclusive Education in Ireland*. At the outset, I want to acknowledge, praise and express sincerest gratitude for the tremendous work and dedication of our previous Editor, and to personally thank her for trusting me to lead this wonderful publication. Dr Anna Logan has nurtured the journal for over two decades, and I know that I will never fill her shoes but hope to humbly continue with her work and the work of our fantastic Editorial board. Anna is thankfully staying on the board so we will not lose her expertise and specialised knowledge, and on behalf of the board, I want to thank her for everything that she has done for us as a team, for the journal and for being the best mentor for us all. REACH continues to be a source of both empirical and conceptual research for educators and those with an interest in inclusion across the continuum, from early childhood to further and higher education, and a resource that is accessible and reflective of both national and international trends, policy, and practices.

Volume 37 reflects the research in inclusive education across special and intercultural contexts. It is fitting that Rose invites us to ruminate upon the concept of inclusion and the premise of an 'inclusive attitude' and what that means in an ever-changing educational landscape. He asks us to reflect upon the progress and the obstacles that challenge inclusion since the publication of the Salamanca statement in 1994. He highlights how inclusive education has been subjected to much scrutiny through research and debate, resulting in vast literature examining all aspects of the issue and the same can be said of Volume 37. Collins and Colum examine inclusion through the collaborative lens of having an occupational therapist on site as a strategy for inclusion in schools and draw on the necessity of having a partnership approach with teachers for effective inclusive practices. Teahan considers Functional Behavioural Assessment (FBA) as a construct of Positive Behaviour Support and how the implementation of FBA helps to identify and reframe behaviours to aid with transitioning and emotional regulation of an autistic child.

Examining inclusion through an intercultural lens, Fitzsimons, Mc Daid, and Share investigate standardised testing of children learning English as an Additional Language (EAL). Drawing on data from five cohorts of EAL children as they progressed through a junior and senior primary school in Ireland, they explore

the importance of implications for educational professionals and policy makers including that these tests may be inappropriate for EAL children and that the interpretation and reporting of results needs to be qualified.

Considering Rose's holistic approach to the promotion of equity and inclusion, it prompts mention of three of Ireland's new developments in inclusive education over the past few months. We have welcomed the publication of **Circular 0064/2024** and accompanying guidelines that replace circulars 0013/2017 and 0014/2017. The Department of Education also published "Understanding **Behaviours of Concern** and Responding to Crisis Situations: Guidelines for Schools in Supporting Students." The National Council of Special Education launched **NCSE Relate**, a new resource for schools. The focus of Relate is on a regulation-first approach to reframing behaviour to support student engagement and participation. These three examples begin to acknowledge what Rose, in this volume, refers to as a concerted effort among key stakeholders to promote inclusion in our schools.

DR MIRIAM COLUM
Editor

CONTENTS

REACH: Journal of Inclusive Education in Ireland, Vol. 37.1 (2024), 4-13

Adopting a More Holistic View of Inclusion

The Salamanca Statement and Framework for Action on Special Educational Needs (UNESCO 1994), is widely seen as the most influential document in the promotion of inclusive education. It has become apparent that many interpretations of inclusion have been made, these being influenced by historical, cultural and socio-economic factors. With the intention of creating greater equity and ensuring education for many children who had previously been denied access to schools, the Salamanca initiative and subsequent international agreements have achieved notable successes. However, for some young people from a range of marginalised groups, engagement with the education system remains elusive. The current international socio-economic climate has resulted in many challenges to the inclusion agenda. With different support services all competing for limited resources, it is imperative that a more holistic approach whereby a greater focus upon collaboration across services and provision to inclusion is achieved.

Keywords: inclusion; resourcing; international agreements; policy

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INTRODUCTION

Thirty years after the publication of the Salamanca Statement and Framework for Action on Special Educational Needs (UNESCO 1994), it may be timely to consider both the progress made towards an equitable approach to education, and to review the obstacles that continue to challenge inclusion. A useful starting point for such an analysis is the proclamation made early within the Salamanca document which reads as follows:

We believe and proclaim that

- every child has a fundamental right to education, and must be given the opportunity to achieve and maintain an acceptable level of learning,

- every child has unique characteristics, interests, abilities and learning needs,
- education systems should be designed, and educational programmes implemented to take into account the wide diversity of these characteristics and needs,
- those with special educational needs must have access to regular schools which should accommodate them within a child-centred pedagogy capable of meeting these needs,
- regular schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all; moreover, they provide an effective education to the majority of children and improve the efficiency and ultimately the cost-effectiveness of the entire education system.

It would be difficult to challenge the laudable intentions of this statement, which at the time brought hope to many and a renewed vigour from policy makers, teachers, researchers and parents who had long campaigned for the rights of all children to have access to appropriate education alongside their peers (Ainscow., Slee, and Best 2019).

PROGRESS MADE

On the 25th anniversary of the Salamanca Statement, Ainscow, Slee and Best (2019) reported evidence that the administration in many countries had made significant efforts to adopt a more inclusive approach to educational policy and practice. Furthermore, subsequent agreements and reports, including the United Nations Convention on the Rights of Persons with Disabilities (United Nations 2006), The Incheon Declaration (UNESCO 2015) and the UNESCO Guide for Ensuring Inclusion and Equity in Education (2017) had endorsed many of the Salamanca principles.

It was never anticipated that all countries would make progress towards inclusive schooling at the same rate. In 1994, access to education for children with disabilities and other marginalised groups varied across nations. Some of the world's economically advantaged countries had made special educational needs provision for several years, while other less prosperous nations were facing difficulties in providing for all its learners (Forlin 2013; Srivastava, de Boer, and Pijl 2013). Not least among the challenges presented, were those related to the interpretation of what inclusion means (Peters 2007; Rose, Doveston, Rajanahally

and Jament 2014; Göransson and Nilholm 2014). Haug (2016) suggests that at its most fundamental level inclusive education defines the right to of all students to receive an education. Others, (Stangvik 2013; Done and Andrews 2019) emphasise the selective nature of inclusion, whereby policy makers have established criteria that mean that participation in schools alongside their peers becomes less accessible for students with complex needs. Some (Ainscow *et.al.* 2011) have emphasised that the issue of placement limits the way in which we should define inclusion, and that we should rather be considering how we remove those obstacles that limit learning opportunities in all schools. Such differences inevitably influence the levels of expectations placed upon schools. It is therefore to be anticipated that international reviews of inclusive education would reveal considerable differences in approaches adopted and progress made (Smyth *et.al.* 2014; Halder and Argyropoulos 2019).

Over the past 30 years, the development of inclusive education has been subjected to much scrutiny through research and debate, resulting in a vast literature examining all aspects of the issue. While much of the writing generated has originated from the world's most prosperous nations, there has been a growth in research demonstrating the commitment of economically developing countries to providing more equitable approaches to education (Werning *et.al* 2016; Mendoza and Heymann 2022). Much of this published work has enabled a greater understanding of the obstacles that remain in place, and the challenges that persist in efforts to develop inclusive schools. Examples from this literature also demonstrate the importance of avoiding an imperialistic view of inclusion, whereby attempts are made to impose the approaches developed in wealthier countries upon those in less favourable circumstances. It is certainly the case that the sharing of international research and cross-cultural debates about inclusion can be beneficial, but this can only be so while understanding and respecting influential cultural and socio-economic factors (Rose 2016: Stepaniuk, 2018). While it is certain that some of the world's most disadvantaged countries have benefited from understanding the ways in which inclusion has developed elsewhere, I would suggest that there is much to be learned from the research conducted internationally.

PROGRESS STALLED

Providing access to schools for all learners demands a holistic approach to development. The notion that the provision of more school places will ensure greater inclusion is both naïve and potentially divisive. Lewin and Akyeampong (2009) suggest that access to education is central for national development and

prosperity. However, they argue that guaranteeing the quality of education provided must be a major condition for inclusive schooling to succeed. Placing a child in a classroom is no guarantee of success. Alongside school provision must come appropriate levels of resourcing and the assurance of a professional workforce that has a good understanding of the needs of all learners. The findings from research demonstrate the importance of developing positive attitudes, pedagogical skills, and understanding of individual needs in teachers, for inclusive education to succeed (Crispel, and Kasperski, 2019; Ní Bhroin, and King. 2019). Where there is an established tradition of initial teacher training and professional development for teachers, such as may be seen in Ireland, the USA or much of Western Europe, a focus upon inclusion has been maintained, and seen as important in enabling the needs of a diverse population to be addressed. Elsewhere, there remains a need to challenge deficit models of disability and stereotypical beliefs about gender caste, class and race through teacher training (Taneja-Johansson., Singal, and Samson.2021; Dignath., Rimm-Kaufman, and van Ewijk. 2022).

Much has been written about the need to challenge medico-deficit models of disability (Donoghue 2003; Haegele, and Hodge 2016), yet the notion that services should be provided to address the problems of individuals persists (Kirby 2017; Moriña, and Carnerero 2020). Segregated provision, such as has been seen in the UK is predicated on the belief that some students have deficit characteristics that are likely to inhibit their ability to be taught effectively in mainstream schools. Undoubtedly teachers who choose to teach in these specialist provisions are generally motivated and committed to their students, but this remains a deficit model that often separates them from their peers (Stephens and Fish 2010). The transition to greater educational inclusion necessitates a gradual move away from such segregated provision. This process was always going to prove challenging, and as Ainscow (2020) argues, it requires a commitment to ensure that teachers in neighbourhood mainstream schools have the confidence to support the participation and learning of an increasingly diverse range of learners.

Much has already been done to assist schools in their efforts to address the needs of a more diverse population. Increased opportunities for professional development (Tristani, and Bassett-Gunter 2019; Holmqvist, and Lelinge 2020), promoting effective models of leadership for inclusion (DeMatthews *et.al*. 2020; Lambrecht *et.al*. 2020) and specific pedagogical approaches such as peer tutoring (Toulia, Strogilos and Avramidis 2023) or collaborative learning (Albalat, Lago Martínez and García 2022), have made contributions to the development of inclusive classrooms. Despite the progress made, the route towards inclusive schooling has not been an easy one, and major obstacles still remain to be addressed.

TAKING A MORE HOLISTIC VIEW

Teachers and other professionals working in schools have undoubtedly taken the lead in promoting inclusion, but I would suggest that progress has largely stalled because of the narrow view that has been taken when addressing issues of diversity. Perhaps it would be timely to examine those factors that continue to present obstacles in our efforts to achieve greater equity in schooling. In so doing we may begin by considering the economic constraints under which schools are currently working. Many countries in recent years have undergone periods of economic challenge and austerity that can in part be related to the Covid-19 pandemic. Government financial resources have experienced pressure and have been focused upon maintenance rather than development of provision. Where this has happened, we have seen a restriction of resources that has inevitably placed pressure upon schools and their ability to address a broadening of needs. In some instances, financial constraints have impacted the ability of schools to support the professional development of staff, with the consequent limiting of those new pedagogical skills that may be needed to teach a more diverse population.

In many countries there is disparity between the provision made in private and government schools (Opoku *et.al.* 2020). In India for example, the resourcing of private schools, generally attended by children from wealthier families is significantly better than that in government schools (Kingdon 2020). Similarly, families living in urban areas are more likely to have access to quality educational, health and social facilities than those in remote or rural areas (Feruza., Madina, and Dilbar 2020; Rose *et.al* 2021).

Perhaps the greatest challenge to inclusion is the inordinate focus on special educational needs and disability, which is only one of many inter-related factors that result in exclusion. Issues of poverty, race, gender, caste and class impact significantly upon access to schools and are the source of discrimination in many societies (Adugna *et.al*. 2020; Love and Beneke, 2021, Psaki *et.al.* 2022). While schools are of necessity focused upon the education of all children, the need to tackle the causes of discrimination and exclusion is evident, and school leaders and policy makers can ill afford to ignore these issues.

A more holistic approach to the promotion of equity and inclusion, one that considers the educational, social and health needs of students, requires that professionals across all caring services should work more closely together to confront exclusionary factors that persist in our societies. While the primary function of schools must continue to be the education of all learners, the goal of increased

inclusion will only be achieved through a concerted effort with professional colleagues, families and support groups to challenge the discrimination that limits the life chances of those who are forced to the margins of our communities. Austerity policies and a restrictive view of what constitutes successful learning have shifted the balance of debate around inclusion. If inclusion is to become a reality, we can no longer work in small factions under the headings of education, health, social services or support groups, with each competing for resources, but must combine our efforts and cement partnerships that will enable us to work together to achieve a common goal.

REFERENCES

Adugna, M.B., Nabbouh, F., Shehata, S. & Ghahari, S. (2020). Barriers and facilitators to healthcare access for children with disabilities in low and middle income sub-Saharan African countries: a scoping review. *BMC Health Services Research* 20 (15). https://doi.org/10.1186/s12913-019-4822-6

Ainscow, M., Dyson, A., Goldrick, S, & West, M. (2011). *Developing Equitable Education Systems.* Abingdon: Routledge

Ainscow, M., Slee, R, & Best, M. (2019). Editorial: the Salamanca Statement: 25 years on. *International Journal of Inclusive Education*, 23 (7–8), 671–676.

Ainscow, M. (2020). Promoting inclusion and equity in education: lessons from international experiences. *Nordic Journal of Studies in Educational Policy,* 6 (1), 7–16.

Albalat, S. T., Lago Martínez, J. R., & García, O. M. (2022). The inclusion of students who are most vulnerable to exclusion via cooperative learning. A longitudinal case-study. *European Journal of Special Needs Education,* 38 (1), 48–62.

Crispel, O, & Kasperski, R. (2019). The impact of teacher training in special education on the implementation of inclusion in mainstream classrooms. *International Journal of Inclusive Education,* 25(9), 1079–1090.

DeMatthews, D., Billingsley, B., McLeskey, J. and Sharma, U. (2020). "Principal leadership for students with disabilities in effective inclusive schools", *Journal of Educational Administration,* 58 (5), 539-554

Dignath, C., Rimm-Kaufman, S., & van Ewijk, R. (2022). Teachers' Beliefs About Inclusive Education and Insights on What Contributes to Those Beliefs: A Meta-analytical Study. *Educational Psychology Review* 34, 2609–2660.

Done, E. J., & Andrews, M. J. (2019). How inclusion became exclusion: policy, teachers and inclusive education. *Journal of Education Policy*, 35 (4), 447–464.

Donoghue, C. (2003). Challenging the authority of the medical definition of disability: An analysis of the resistance to the social constructionist paradigm. *Disability and Society*, 18 (2), 199–208.

Feruza, T., Madina, M, & Dilbar, Y. (2020). The essence of inclusive education in developed countries. *European Journal of Research and Reflection in Educational Sciences* 8 (1), 54 - 57

Forlin, C. (2013). Changing Paradigms and Future Directions for Implementing Inclusive Education in Developing Countries. *Asian Journal of Inclusive Education.* 1 (2), 19-31

Göransson, K., & Nilholm, C. (2014). Conceptual diversities and empirical shortcomings – a critical analysis of research on inclusive education. *European Journal of Special Needs Education,* 29 (3), 265–280.

Haegele, J. A., & Hodge, S. (2016). Disability Discourse: Overview and Critiques of the Medical and Social Models. *Quest,* 68 (2), 193–206.

Halder, S, & Argyropoulos, V. (2019). *Inclusion, Equity and Access for Individuals with Disabilities: Insights from Educators Across the World.* Singapore: Palgrave Macmillan

Haug, P. (2016). Understanding inclusive education: ideals and reality. *Scandinavian Journal of Disability Research*, 19 (3), 206–217.

Holmqvist, M., & Lelinge, B. (2020). Teachers' collaborative professional development for inclusive education. *European Journal of Special Needs Education*, 36 (5), 819–833.

Kingdon, G. G. (2020). The Private Schooling Phenomenon in India: A Review. *The Journal of Development Studies,* 56 (10), 1795–1817.

Kirby, M. (2017). Implicit Assumptions in Special Education Policy: Promoting Full Inclusion for Students with Learning Disabilities. *Child Youth Care Forum* 46, 175–191.

Lambrecht, J., Lenkeit, J., Hartmann, A., Ehlert, A., Knigge, M., & Spörer, N. (2020). The effect of school leadership on implementing inclusive education: how transformational and instructional leadership practices affect individualised education planning. *International Journal of Inclusive Education*, 26 (9), 943–957.

Lewin, K. M, & Akyeampong, K. (2009). Education in sub□Saharan Africa: researching access, transitions and equity. *Comparative Education*, 45 (2), 143–150.

Love, H, & Beneke, M. (2021). Pursuing Justice-Driven Inclusive Education Research: Disability Critical Race Theory (DisCrit) in Early Childhood. *Topics in Early Childhood Special Education.* 41 (1), 31 - 44

Mendoza, M, & Heymann, J. (2022). Implementation of Inclusive Education: A Systematic Review of Studies of Inclusive Education Interventions in Low- and Lower-Middle-Income Countries. *International Journal of Disability, Development and Education,* 71 (3), 299–316.

Moriña, A, & Carnerero, F. (2020). Conceptions of Disability at Education: A Systematic Review. *International Journal of Disability, Development and Education*, 69 (3), 1032–1046.

Ní Bhroin, Ó, & King, F. (2019). Teacher education for inclusive education: a framework for developing collaboration for the inclusion of students with support plans. *European Journal of Teacher Education,* 43 (1), 38–63.

Opoku, M., Cuskelly, M., Rayner, C., & Pedersen, S. (2020). The Impact of Teacher Attributes on Intentions to Practice Inclusive Education in Secondary Schools in Ghana. International *Journal of Disability, Development and Education,* 69 (2), 382–398.

Peters, S. J. (2007). "Education for All?": A Historical Analysis of International Inclusive Education Policy and Individuals with Disabilities. *Journal of Disability Policy Studies,* 18 (2), 98-108.

Psaki, S., Haberland, N., Mensch, B., Woyczynski, L, & Chuang, E. (2022). Policies and interventions to remove gender-related barriers to girls' school participation and learning in low- and middle-income countries: A systematic review of the evidence. *Campbell Systematic Reviews*. 18 (1) https://doi.org/10.1002/cl2.1207

Rose, R., Doveston, M., Rajanahally, J, & Jament, J. (2014). What is effective inclusion? Interpreting and evaluating a western concept in an Indian context. In C, Forlin, & T. Loreman. (Eds.) *Measuring Inclusive Education.* Bingley: Emerald.

Rose, R. (2016). Learning from Each Other: Respecting Cultural Differences in an International Research Agenda. *Revista Brasileira de Educação Especial (Brazilian Journal of Special Education)* 22, (2), 167-174.

Rose, R., Narayan, J., Matam, S, & Reddy Sambram, P. (2021). A Comparison of Provision and Access to Inclusive Education for Children with Disabilities in a Metropolitan City and a Rural District in Telangana State, India. *Educational Sciences* 11 (3) doi.org/10.3390/ educsci11030111

Smyth, F., Shevlin, M., Buchner, T., Biewer, G., Flynn, P., Latimier, C., Siska, J.,Toboso-Martin, M. ,Rodríguez Díaz, S, & Ferreira, M. A. V. (2014). Inclusive education in progress: policy evolution in four European countries. *European Journal of Special Needs Education*, 29 (4), 433–445

Srivastava, M., de Boer, A., & Pijl, S. J. (2013). Inclusive education in developing countries: a closer look at its implementation in the last 10 years. *Educational Review*, 67 (2), 179–195.

Stangvik, G. (2013). Progressive special education in the neoliberal context. European Journal of Special Needs Education, 29(1), 91–104

Stepaniuk, I. (2018). Inclusive education in Eastern European countries: a current state and future directions. *International Journal of Inclusive Education*, *23* (3), 328–352

Stephens, T.L. and Fish, W.W., 2010. Motivational factors toward pursuing a career in special education. *Education,* 130 (4) 581-594.

Taneja-Johansson, S., Singal, N., & Samson, M. (2021). Education of Children with Disabilities in Rural Indian Government Schools: A Long Road to Inclusion. *International Journal of Disability, Development and Education*, 70 (5), 735–750

Toulia, A., Strogilos, V., & Avramidis, E. (2021). Peer tutoring as a means to inclusion: a collaborative action research project. *Educational Action Research,* 31 (2), 213–229.

Tristani, L, & Bassett-Gunter, R. (2019). Making the grade: teacher training for inclusive education: A systematic review. *JORSEN, Journal of Research in Special Educational Needs.* 20 (3) 246 - 264

UNESCO (1994). *The Salamanca Statement and Framework for Action on Special Educational Needs*. Paris: United Nations Educational Scientific and Cultural Organisation

United Nations. (2006). *United Nations Convention on the Rights of Persons with Disabilities.* New York: United Nations.

UNESCO (2015). *SDG4-Education 2030, Incheon Declaration (ID) and*

Framework for Action. For the Implementation of Sustainable Development Goal 4 Paris: United Nations Educational Scientific and Cultural Organisation

UNESCO. (2017). *A Guide for Ensuring Inclusion and Equity in Education*. Paris: United Nations Educational Scientific and Cultural Organisation.

Werning, R., Artiles, A. J., Engelbrecht, P., Hummel, M., Caballeros, M., & Rothe, A. (2016). *Keeping the promise? Contextualizing inclusive education in developing countries*. Bad Heilbrunn: Verlag Julius Klinkhardt

REACH: Journal of Inclusive Education in Ireland, Vol. 37.1 (2024), 14-26.

The Role Of The Occupational Therapist For Primary School Children: Consideration Of Collaborative Practices With Primary School Teachers

This article examines the role of the Occupational Therapist (OT) for children with special educational needs (SEN) in primary schools, with an emphasis on the importance of collaborative practice between the OT and primary school teachers to enhance inclusion. Adopting a qualitative approach, data were gathered from eight teachers using semi-structured interviews. The findings reveal that there is some understanding of the role of the OT despite lack of education and training on the role, and on collaborative practices. Furthermore, many challenges such as poor communication, long waiting lists, inadequate funding, inconsistent reporting, and a lack of knowledge on using specific equipment exists when it comes to the provision of OT on site in schools. Finally, participants' aspirations for collaboration can be seen in a broader desire to get involved with work that promotes inclusion and recommend deeper communication, education, and training and in-school provision.

Keywords: inclusion, occupational therapy, collaboration, primary school teachers

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INTRODUCTION

Occupational Therapy (OT) services for children with special educational needs (SEN) centre on progressing both academic and non-academic skills comprising

play, leisure, social participation, and activities of daily living, all of which are necessary in helping children thrive in their role as a pupil and in their occupation of education (O'Brien and Miller-Kuhaneck, 2020). Essentially, the OT operates as a facilitator for the learning and retention of new skills through a strengths-based approach that nurtures a process of identifying outcomes that are most valued to the child and facilitates their inclusion in education. Despite the need for school-aged children to access OT services, OT provision in Ireland is not always school-based (Clifford O'Brien and Miller-Kuhaneck, 2020). Rather, paediatric OT provision is generally delivered through a nationwide network of primary and community care services that are clinic-based. Such clinic-based approaches hinder a child-led insight into the occupational needs of the child in their own learning environment. Moreover, the opportunity for OT-teacher collaborative practice is impacted. This article considers the importance of a collaborative OT-teacher approach as a framework for effective and efficient provision to enhance inclusion in the classroom.

LITERATURE REVIEW

Current paediatric OT provision in Ireland

A medical model of referral continues to dominate the terrain of OT support for children with SEN in Ireland (Lynch et al., 2021) with clinic-based support mainly offered that does not commonly include educators or classroom staff as part of a team, the latter mostly receiving follow-up information from the clinic. Literature suggests that having OT intervention in a clinic impedes generalisation of skills to the child's learning environment (McCartney, 1999; Babulal et al, 2016) as interventions are most successful when implemented in the child's natural environment versus a clinic environment (Benson, 2013; Bucey and Provident, 2018; Clifford O'Brien and Miller-Kuhaneck, 2020). This further underlines the importance of in-school OT provision for children as advocated by the School Inclusion Model Project (Gardiner, 2023; NCSE, 2019), in collaboration with school staff.

Collaboration between education and OT services

Primary school teachers in Ireland are active agents in a distributed model of leadership for inclusive practices (Colum and Mac Ruairc, 2023) having a key role in the inclusion of all children in the classroom setting, including access to relevant therapies (DES, 2017; DE, 2020). This model is predicated on collaboration between the school community and national organisations, one such example is between the education and health sectors (HSE, 2009; HSE 2016). In terms of SEN,

collaborative practices, in all its forms, is imperative for social inclusion (Colum and Mac Intyre 2019; Layachi et al. 2023) as well as for children presenting with behaviours of concern (Colum, 2020), as a multi-disciplinary approach means that key stakeholders, including the child, have input into preferred outcomes. One such collaborative approach was the pilot "In-School and Early Years Therapy Support Demonstration Project" that combined both education and therapy support, building upon experiences and expertise across a range of disciplines. The project was implemented in the school year of 2018 to 2019 across 75 schools and 75 early years' settings. It has since continued as part of a wider pilot of a School Inclusion Model into the 2021 school year (Lynch et al., 2021).

Benefits of Collaborative Practice through School-Based OT: "In-School and Early Years Therapy Support Demonstration Project"

Results of this pilot project revealed positive experiences from participating pupils and parents valuing the avoidance of long waiting lists and removal of children from school to attend appointments. Similarly, teachers reported positives such as being able to integrate the OT activities into class work leading to more effectual differentiation, which in turn, promotes a culture of inclusion. Furthermore, teachers felt that they were able to more accurately address the children's needs given the direct input from therapists who in turn viewed the collaborative practice as a strength of school-based practice. This is reflected in both international (Bayona et al., 2006) and Irish (Patton et al. 2015) studies though some challenges remain.

School-based Occupational Therapy Challenges for OTs

Ireland still experiences challenges for OT access, with statistics from the HSE demonstrating that 15,941 children aged between 0-17 were waiting for first-time assessment for occupational therapy (Phelan, 2023). Another challenge in Ireland is a lack of government funding and a difficulty in recruiting therapists (The Association of Occupational Therapists of Ireland (AOTI) 2021; Lynch et al., 2021). In schools, challenges comprise a poor understanding of OT interventions, limitations of time onsite and inability of educational staff in fulfilling recommended OT strategies (Patton et al., 2015; Rens and Joosten, 2014). In some instances, there is a perception of the OT as one that offers solutions to 'fix' a child's difficulties (Cahill and Reyna, 2013). On the other hand, OTs reported challenges such as a lack of training for school-based practices (O'Donoghue et al, 2021). Essentially, there is evidence that OTs require continual education on school practice within the Irish context and a more specific clarification of their role while on site (Lynch et al., 2021: O'Donoghue et al. 2021; Patton et al., 2015; Rens and Joosten, 2014).

METHODOLOGY

The research question underpinning this study is: 'What are primary school teachers' perceptions of school-based occupational therapy in facilitating the inclusion of children with additional needs in primary schools?'. Data were collected via 35 - 40-minute semi-structured interviews with eight teachers, purposively selected, who collaborate with OTs as part of a multi-disciplinary approach for children with SEN. This purposive sample allowed for their knowledge and expertise on the subject (Palinkas et al, 2015) and could best advise the researcher about the topic being explored (Creswell, 2013). Semi-structured interviews were deemed most suitable as they gather robust assumptions, values, and beliefs (Cohen et al., 2018) and allows for openness of responses (Rubin and Rubin, 2012). Ethical approval was sought and approved from the ethics board in the third level institution associated with the research. Plain language statements and letters of consent were distributed to the teachers and reminders of confidentiality and anonymity and the right to withdraw at any stage was stated. The researcher was conscious of any bias and took steps to ensure reflexivity such as checking in to make sure that there would be no bias and accepting each answer as given. The interviews were recorded digitally and were transcribed verbatim by the researcher. All names and details were anonymised, and pseudonyms were used. To ensure confidentiality, the data were stored on a password-protected personal laptop, which was only accessible to the researcher.

Data analysis

Braun and Clarke's (2006; 2021) six-step approach was used for thematic analysis.

Table one: Six stages of thematic analysis (Braun and Clarke 2021)

Phase		Description of the Process
1	Data familiarisation	All data was transcribed verbatim, was read through and initial ideas were noted.
2	Generating initial codes	Preliminary codes were identified in a systematic way relating to the data.
3	Searching for themes	Codes were grouped into potential themes. Data relevant to each emerging theme was gathered.
4	Reviewing themes	Themes were reviewed and refined.
5	Defining and naming themes	Data was read through and analysed to create a narrative to address the research question. Definitive terms for each theme were produced.
6	Producing the report	Following analysis and synthesising the data, a final report was created.

Limitations
The small data set does not allow for a wide variety of perspectives, nor is it reflective of every single primary school teacher in the Republic of Ireland, therefore results are not generalisable.

FINDINGS

Findings are categorised under three broad headings: (1) Understanding the role of the OT; (2) challenges for in-school OT provision and (3) teacher recommendations.

Understanding the role of the O.T.:
All participants (n=8) felt that the role of the OT was to support "children to enhance their fine and gross motor skills as well as sensory development so that they can participate in their everyday activities both at home and here in school" (Emily). Furthermore, there was knowledge that the OT supports children with "poor muscular control and the basic day-to-day things such as eating, going to the bathroom, buttoning up coats, managing belongings, social skills" (Rachel) and for "supporting children with sensory processing difficulties and the processes required for the participation in the everyday school activities" (Sharon). The OT was seen as an advisor "on what type of equipment is specifically suited to a child, and where to get it and that sort of stuff." (Rachel) and assist with "using equipment safely" (Niamh). Their presence was seen "a holistic support" (Mary), helping "with practical stuff we could be doing in the classroom with a child, improve their developmental levels and their ability to self-regulate" (Conor), and not just focusing "on the child's academic goals but also play in the class and yard and self-care skills like taking on or off coats, washing hands" with "the goal of reducing barriers for the child" (Ciara). Adrian summed up his understanding of the role of the OT as an

> "*equality of provision, and then levelling the playing fields for all children. So, if you look at a group of students through an OT lens it would be seeing how we can give them all the fairest chance. And how can we adapt our learning environment to create the most successful situation for each child*".

Most participants (n=5) revealed they had no prior knowledge or understanding of the role of the OT prior to their professional collaboration with OTs in their respective schools. Emily explained that she "always knew the importance of motor skill development or sensory regulation, but I didn't realise there was a person specifically to help with that". What became apparent from the data was that all the participants (n=8) learnt of the role of the OT through professional

interactions, from family information provided to the school and from their own research. All participants (n=8) felt that they had little or no input on the role of OT in their initial teacher education programmes or didn't "recall […] information on other professionals that can support children like OTs being discussed" (Adrian) and felt that "if you want to learn more about OT it is up to you to do your own research or find available training" (Niamh). There was added concern that "there is little to no training concerning collaborative practice with OTs which is a pity because you can learn so much from their outlook" (Sharon) while Adrian stressed receiving no "formal training or professional development in this area". This was a concern for all of the participants (n=8) as there were reports of "a high prevalence of children requiring OT or who are already in the process of being referred" (Conor), while Mary highlighted that "most years I had at least one child in my class who was receiving OT". Niamh pointed out that "there's an increase in children being referred to OT but unfortunately so many are spending years on long waiting lists". With children on waiting lists, participants felt that they could not intervene as they didn't have the skills or knowledge to assist.

Despite the prevalence of primary aged children requiring OT, the data disclosed that schools face some common challenges around OT provision in schools.

Challenges to OT provision

Some participants (n=3) found a lack of consistency in the delivery of reporting mechanisms from OTs that they worked with. Emily was vocal in her frustration at an ad hoc approach to reporting, stating, "I received an OT report for one child in the class, but I got the same report for another child despite the children have completely different needs. I just felt it was a copy and paste job". Other negative interactions elucidated in this study was little or no consistent communication with OTs, long waiting lists and the poor availability of the OT. At times, participants found a lack of direct interaction with the child and/or teacher frustrating, and some participants (n=2) felt that they got information second hand and carrying out activities was left up to them with little or no guidance. While equipment was seen as an essential component of OT services, Niamh described the additional pressure associated with the physical use of equipment prescribed by the OT for a child and a fear "that I may not be using the prescribed OT equipment properly.". There was an added pressure of "carrying out all the interventions and achieving the goals set out by the OT while also carrying out your teaching duties" (Conor) as well as trying to integrate the OT activities into the curriculum (Emily). Similarly, it was felt that parents added to this pressure and because they "have either waited years on a waiting list to see an OT or are paying a lot of money for private OT… The parents want to know that the OT recommendations

are carried out in school" (Adrian). What became apparent from the data was a commitment of all participants in supporting the children in their classes and although these added pressures were highlighted, there was no animosity towards the OT activities. While there was full support and a belief in the necessity of OT activities to support children with SEN, poor access to OT services was an additional challenge. Sharon explained that:

> *"a lot of children with mild or moderate additional needs are missing out on direct OT interaction … I understand that the child with more complex needs need direct OT intervention, but it is difficult for children that are not getting interventions that are specific to the child and their interests."*

Conor commented on the lack of support for some children: "I would refer a child to OT, but that child would then move on to another class and not gotten the support for that year".

Following these challenges, the participants had some recommendations for a more consistent and equitable approach to OT services.

TEACHER RECOMMENDATIONS:

The three most popular recommendations from the participants around how to improve OT services in school were: (1) improved communication between OTs and teachers, (2) education and training on OT-Teacher collaborative practice and (3) in-school access to OT services.

Improved OT-Teacher communication:

All participants (n=8) called on improved communication with OTs as the current practice was dominated by poor interactions. Niamh, having received a report on a child in her class, wanted "to be more informed on how to carry out these interventions… and who can I get advice from on these?". It was a case of being left in limbo, having a report but no guidance on how to engage in certain exercises with the children. The participants suggested many ways to improve communication comprising consistent and regular online or face-to-face meetings with an emphasis on "child-centred communication" (Emily) as crucial in supporting a child with SEN. This practice provided opportunities to set goals thus enhancing pupil outcomes and Rachel described a positive experience how:

> *"meetings were held with the OT and attended by me, the parent, the SET, and the principal…We reviewed old targets and new ones. We had*

individual responsibilities and support from the OT in helping the child to achieve their targets."

Education and training

The majority of participants (n=5) reflected on the lack of information and training available around working with OTs and suggested that "teacher training colleges could definitely provide an insight into OT" (Mary). There was also dissatisfaction towards a lack of existing supports in place for pupils awaiting OT assessments and a lack of specific education and training on how teachers can support children through OT. Despite this, participants took proactive steps to mitigate against a lack of education and training. Emily explained that she had "reframed [her] thinking with how I teach and think" and took it upon herself to "figure things out". There was a call for professional development for teachers on working with OTs to become "confident and comfortable" in creating inclusive classroom environments (Sharon). Peer-to-peer learning was suggested to develop knowledge on working with the OT:

"If a teacher worked with a child with a specific need, they would then share their learning from external professionals such as OTs with the others in the school community. That way it is not just one teacher with all the knowledge on how to cater for a specific condition or need" (Sharon).

In-school access to OT services

Reflecting on a previous employment, Rachel lauded the provision of an in-school multi-disciplinary team where continuous access meant greater pupil progression. The team set targets and if they experienced any difficulties, they "could link in with the OT if we required further guidance". Similarly, having an in-school system, keeps everyone on the same page and having "files mean the new teacher knows why the previous teacher referred the child to OT or offer an insight into the child's progress with OT" (Adrian).

DISCUSSION

The research in this study has highlighted the importance of collaboration between the OT and the teacher (O'Donoghue et al, 2021) to support children in their inclusion in education yet this is not without some difficulties. Participant narratives demonstrated that understanding the role of the OT came mainly from the practice of working with OTs. There was some dissatisfaction from the lack of input for student teachers from Initial Teacher education (ITE) institutes, congruent with research that suggests that teachers, particularly newly qualified

teachers (NQTs), need more general input on SEN (Hick et al, 2019; O'Reilly and Colum, 2021). This was further exacerbated by the fact that all participants had children requiring support in their classrooms, with some on long waiting lists and, as teachers, participants felt somewhat redundant in what they could do for the children as they lacked specific knowledge. However, in line with the literature, this did not deter participants from acknowledging the positive impact of OT input for better outcomes (O'Donoghue, 2021) resulting in positive attitudes towards OT-Teacher collaborative practice (Bayona et al., 2006; Bazyk and Case-Smith, 2010; Lynch et al., 2021).

Echoing findings from international research into the experiences of teacher / OT collaboration (Benson et al, 2016; Echsel, 2019; Missiuna and Pollock, 2012), the propensity of some OTs to rush through work was evident in some participants' experiences with 'copy and paste' jobs a source of annoyance. Such experiences were particularly problematic given the reliance on the OT but a word of caution is warranted here as this is not reflective of the profession nor of all OTs, and all participants' narratives also speak to the critical role of the OT. The continuous challenges such as inadequate funding, long waiting lists, lack of input, poor communication, and a lack of knowledge on using specific equipment sheds more light on the systemic difficulties for inclusion. Furthermore, a lack of education and training around collaborative practice with OTs can contribute to undesirable outcomes for both the child and teacher (O'Donoghue, 2021; Echsel et al, 2019; and Missiuna et al., 2012). Participants' sense of commitment to the inclusion of children in their class is driven by the need of improved communication between OTs and teachers, education, and training on OT-Teacher collaborative practice and in school access to OT services. These recommendations are mirrored in the research (Benson et al, 2016; Lynch et al., 2021; Patton et al, 2015) and reinforce the sense of duty of both parties to collaborative practices for improved inclusive outcomes for children with SEN.

CONCLUSION

This article has examined the important role of the OT for primary school children with an emphasis on the collaboration between the OT and the teacher. The role of the OT centres on the learning and retention of new skills through a child-led, strengths-based approach that nurtures a process of identifying outcomes that are most valued to the child as well as being a support and collaborative advisor for the school community. This is turn is a necessary piece of the jigsaw for beneficial inclusive practices for children struggling with OT difficulties. To effectively

enhance the collaboration process formed by OT-education professionals with conflicting philosophies of service provision and for whom services are constructed differently, an evident need for more education and training exists. The current research has also highlighted that there is a requirement for operative collaboration for inclusion and mirroring the work of Gardiner (2023), calls on the relevant bodies to provide the necessary funding, guidance, and professional development to move forward with initiatives such as the school inclusion model to further embed inclusion in our schools.

REFERENCES

Babulal, G.M., Foster, E.R. and Wolf, T.J., (2016) Facilitating transfer of skills and strategies in occupational therapy practice: Practical application of transfer principles. *Asian journal of occupational therapy*, *11*(1), pp.19-25.

Bayona, C. L., McDougall, J., Tucker, M. A., Nichols, M., and Mandich, A. (2006) School-Based Occupational Therapy for Children with Fine Motor Difficulties: Evaluating Functional Outcomes and Fidelity of Services. *Physical & Occupational Therapy in Pediatrics*, *26*(3), 89–110. https://doi.org/10.1080/J006v26n03_07

Bazyk, S., and Case-Smith, J. (2010) "School-based Occupational Therapy." In Occupational Therapy for Children, 6th ed., edited by J. Case-Smith and J. C. O'Brien, 713–743. St. Louis, MO: Elsevier Mosby.

Benson, J., Szucs, K., and Mejasic, J. (2016) Teachers' perceptions of the role of occupational therapist in schools. *Journal Of Occupational Therapy, Schools, & Early Intervention*, *9*(3), 290-301. https://doi.org/10.1080/19411243.2016.1183158

Benson, J. (2013) School-Based Occupational Therapy Practice: Perceptions and Realities of Current Practice and the Role of Occupation. *Journal Of Occupational Therapy, Schools, & Early Intervention*, *6*(2), 165-178. https://doi.org/10.1080/19411243.2013.811348

Braun, V., and Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101. https://doi.org/10.1191/1478088706qp063oa

Braun, V., and Clarke, V. (2021) *Thematic Analysis: A Practical Guide* (1st ed.). SAGE Publications Ltd.

Bucey, J. and Provident, I. (2018) Strengthening school-based occupational therapy through peer mentoring. *Journal of Occupational Therapy, Schools & Early Intervention*. 11(1) 87-105.

Cahill, S., and Lopez-Reyna, N. (2013) Expanding School-Based Problem-Solving Teams to Include Occupational Therapists. *Journal Of Occupational Therapy, Schools, & Early Intervention*, *6*(4), 314-325. doi: 10.1080/19411243.2013.860763

Clifford O'Brien, J., and Miller-Kuhaneck, H. (2020) *Case-Smith's occupational therapy for children and adolescents* (8th ed.). Elsevier.

Cohen, L., Manion, L., and Morrison, K. (2018) *Research methods in education* (8th ed.). London: Routledge.

Colum, M., and McIntyre, K. (2019) Exploring Social Inclusion as a Factor for the Academic Achievement of Students Presenting with Special Educational Needs (SEN) in Schools: A Literature Review. *REACH: Journal of inclusive Education in Ireland*, *32*(1), 21-32.

Colum, M. (2020) The Inclusion of Learners with Moderate General Learning Disabilities and Challenging Behaviours in School and Class Activities in Special Schools. *REACH: Journal of Inclusive Education in Ireland*, *33*(2), 83–100. Retrieved from https://www.reachjournal.ie/index.php/reach/article/view/2.

Colum, M. and MacRuaric, G. (2023) *No-one knows where we fit in really:* The role of the Special Educational needs Co-ordinator (SENCO) in primary school settings in Ireland – the case for a distributed model of inclusion. *Irish Educational Studies*. 42(4) 543-560.

Creswell, J. W. (2013) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). London: SAGE Publications.

Department of Education and Skills. (2017) *Guidelines for Primary Schools Supporting Pupils with Special Educational Needs in Mainstream Schools* (pp. 6-13). Dublin 2: Department of Education and Skills. Retrieved from http://www.sess.ie/sites/default/files/inline-files/Guidelines-for-Primary-Schools-Supporting-Pupils-with-Special-Educational-Needs-in-Mainstream-Schools.pdf

Department of Education. (2020) *More information about teaching in Ireland*. Dublin: Department of Education.

Echsel, A., Price, L., Josephsson, S., and Schulze, C. (2019) "Together on the

Way": Occupational Therapy in Mainstream Education—A Narrative Study of Emerging Practice in Switzerland. *Occupational Therapy International*. 1-10. doi: 10.1155/2019/7464607.

Gardiner, C., (2023) Is the 'school inclusion model' a pathway to inclusion in Irish schools?. *REACH: Journal of Inclusive Education in Ireland*. *36*(1) 61 -76.

Health Service Executive (HSE). (2009) *Report of the National Reference Group on Multidisciplinary Disability Services for Children aged 5-18* (pp. 48-50). Dublin: Health Service Executive. Retrieved from https://www.hse.ie/eng/services/publications/disability/report%20of%20the%20national%20reference%20group%20on%20multidisciplinary%20disability%20services%20for%20children%20aged%205-18.pdf

Health Service Executive (HSE). (2016) *Framework for Improving Quality.* Dublin: Health Service Executive. Retrieved from https://www.hse.ie/eng/about/who/nqpsd/patient-safety-programme/the-quality-improvement-collaborative-participant-handbook.pdf

Hick, P., Matziari, A., Mintz, J., Ó Murchú, F., Cahill, K., Hall, K., Curtin, C. and Solomon, Y., (2019) *Initial teacher education for inclusion: Final report to the National Council for Special Education.* Trim, NCSE. https://ncse.ie/wp-content/uploads/2020/01/04611_NCSE-Initial-Teacher-Education-RR27.pdf (accessed November 11th 2023)

Layachi, A., Douglas, G. and Reraki, M., (2023) Drama-based intervention to support social inclusion: evaluation of an approach to include students with ADHD in Algeria. *Educational Psychology in Practice*, 17 (1) pp.1-23.

Lynch, H., Ring, E., Boyle, B., Moore, A., O'Toole, C., O'Sullivan, L., Brophy, T., Frizelle, P., Horgan, D. and O'Sullivan, D., (2021) *Evaluation of In-School and Early Years Therapy Support Demonstration Project*. Research Report No. 28. Meath: National Council for Special Education, pp.14-149.

McCartney, E., (1999) Barriers to collaboration: an analysis of systemic barriers to collaboration between teachers and speech and language therapists. *International Journal of Language & Communication Disorders*, 34(4), pp.431-440.

Missiuna, C. A., Pollock, N. A., Levac, D. E., Campbell, W. N., Whalen, S. D. S., Bennett, S. M., Hecimovich, C. A., Gaines, B. R., Cairney, J., and Russell, D. J. (2012) Partnering for Change: An Innovative School-Based Occupational Therapy Service Delivery Model for Children. Canadian Journal of Occupational Therapy, 79, 41-50. doi: 10.2182/cjot.2012.79.1.6

National Council for Special Education, (2019) *Policy Advice on Special Schools and Classes: An Inclusive Education for an Inclusive Society.* Trim: NCSE

O'Brien, J. and Miller-Kuhaneck, H., (2020) *Case-Smith's occupational therapy for children and adolescents*. 8th ed. Missouri: Elsevier, pp.327-331.

O'Donoghue, C., O'Leary, J., and Lynch, H. (2021) Occupational Therapy Services in School-Based Practice: A Pediatric Occupational Therapy Perspective from Ireland. *Occupational Therapy International*, *2021*, 1-11. https://doi.org/10.1155/2021/6636478.

O'Reilly, E. and Colum, M. (2021) Newly Qualified Teachers and Inclusion in Higher Education: Policy, Practice and Preparation. *Journal of Higher Education Policy and Leadership Studies*. 2 (1) 64-78.

Palinkas, L.A., Horwitz, S.M., Green, C.A., Wisdom, J.P., Duan, N. and Hoagwood, K., (2015) Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and policy in mental health and mental health services research*, *42*, pp.533-544.

Patton, S., Hutton, E., and MacCobb, S. (2015) Curriculum differentiation for handwriting and occupational therapy/teacher partnership: collaboration or conflict? *Irish Educational Studies*, *34*(2), 107–124. https://doi.org/10.1080/03323315.2015.1032994

Phelan. C. (2023) *More than 100,000 children waiting for first-time primary care assessments*. Irish Examiner article. Retrieved from: https://www.irishexaminer.com/news/arid-41196130.html

Rens, L. and Joosten, A., (2014) Investigating the experiences in a school-based occupational therapy program to inform community-based paediatric occupational therapy practice. *Australian Occupational Therapy Journal*, *61*(3), pp.148-158.

Rubin, H. J., and Rubin, I. S. (2012) *Qualitative interviewing: The art of hearing data.* Thousand Oaks: SAGE Publications.

The Association of Occupational Therapists of Ireland (AOTI) (2021) News | *PRESS RELEASE: Minister for Health Must Urgently Address Growing Waiting Lists for Occupational Therapy Services* https://www.aoti.ie/news/PRESS-RELEASE:-Minister-for-Health-must-urgently-address-growing-waiting-lists-for-Occupational-Therapy-services (accessed December 1st, 2023)

REACH: Journal of Inclusive Education in Ireland, Vol. 37.1 (2024), 27-43.

Standardised Testing among Children learning English as an Additional Language (EAL) in Ireland: Normative and Exclusionary Practices

Standardised testing has become an increasingly prominent feature in education policy. In Ireland, standardised tests in literacy and numeracy are compulsory for all pupils, with few exceptions, in second, fourth and sixth classes and results of the tests are employed in increasingly powerful ways by the Department of Education. In addition to deleterious effects such as narrowing the curriculum and teaching to the test, there is an increasing body of literature concerned with the impact of standardised tests on pupils. This is particularly acute for children from minoritised ethnic backgrounds and those learning English as an Additional Language. This critical quantitative inquiry examined the standardised testing of five cohorts of children learning English as an Additional Language (EAL) as they progressed through a junior and senior primary school in Ireland. Data are drawn from standardised tests scores of literacy, numeracy, verbal and non-verbal intelligence. Findings include that the performance of the EAL children was lower on all tests of verbal intelligence compared to the non-EAL groups. This difference remained consistent as they progressed from junior to senior primary school. No pattern of difference was identifiable between the groups on 'non-verbal' reasoning tests. These findings have important implications for educational professionals and policy makers including that these tests may be inappropriate for EAL children and that the interpretation and reporting of results needs to be qualified.

Keywords Standardised Testing, English as an Additional Language, Educational Equity, Linguistic Diversity, Achievement Gap

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INTRODUCTION

Reflective of broader Irish society, the linguistic and ethnic profile of learners in Irish classrooms is becoming increasingly diverse (Ní Dhuinn & Keane, 2023). Such developments present schools with many opportunities, in addition to the more well-documented challenges (Devine, 2011). Teaching is an increasingly complex profession, demanding a command across a range of instructional and pastoral roles. Within this increased complexity, assessment is one of the key competencies expected of teachers (Murchan & Shiel, 2017). In 2011, as part of a range of measures designed to improve and monitor standards in Irish primary schools, the Irish government introduced mandatory standardised testing, taking place annually in 2nd, 4th and 6th class. Children with a score below a STen of four on standardised tests of literacy and numeracy are identified as children who "may require some degree of additional teaching support" (DE, 2024). In line with this policy directive, most schools use data from standardised tests to identify children in need of additional support (O'Leary et al., 2019).

Considerations of the role of standardised testing in the scholastic lives of minoritised children features strongly in the literature (MacRuairc, 2009; Nayir et al., 2019). Difficulties generating valid and reliable assessment information on linguistically diverse student populations is one of the primary obstacles to these students achieving to their full potential (Menken 2008). Underperformance on standardised tests can have direct consequences for learners of English as an Additional Language (EAL), as shown by Darmody, McGinnity and Russell (2022). Furthermore, researchers in the field of language acquisition and testing,

such as De Angelis (2014), have raised concerns about the use of "monolingual norms with bilinguals and second-language learners" (p.15).

Research suggests that monolingual standardised assessments are inappropriate for use with bi- and multilingual children due to issues such as content bias, linguistic bias, and the disproportionately small representation of these children in normative samples (De Angelis, 2021; Shohamy, 2022). A focus on test results and numerical data from testing alone is therefore viewed as an oversimplification of the testing experience that can lead educators and teachers away from pedagogical discourse regarding alternative interpretations resulting in misrepresentation and misrecognition of bi- and multilingual children's abilities (De Angelis, 2014). The issues arising from these observations are myriad and include the over identification (and under-identification) of EAL children as those in need of additional support (Cummins, 2001; Kearns, 2011).

The project upon which this paper is based examined the standardised testing of five EAL and non-EAL cohorts as they progressed through a junior and senior primary school in Fingal County, Dublin, Ireland. Data are drawn from standardised tests scores of literacy, Mary Immaculate College Reading Attainment Tests (MICRA-T; Wall and Burke, 1987), numeracy, Standardised Irish Graded Mathematics Attainment Tests (SIGMA-T; Wall and Burke, 1991) verbal intelligence (Non Reading Intelligence Test (NRIT) (Young, 1989), re-standardised and re-named as the *New*-Non Reading Intelligence Test ((N)NRIT) (Young & McCarthy, 2012)) and non-verbal reasoning tests (GL Assessment, 2017). Findings include that the performance of EAL groups was lower on all tests of verbal intelligence compared to the non-EAL groups. This difference remained consistent as they progressed from junior to senior primary school. No pattern of difference was identifiable between the groups on 'non-verbal' reasoning tests. This paper explores the implications of these results for education staff and highlights areas for further research.

Standardised Testing in Irish Primary Schools

While there is substantial variation in relation to the purpose, design, implementation and use of results, the term standardised test usually refers to tests that are externally designed and that aim to create conditions, scoring procedures and interpretations of scores that are consistent across schools (Morris, 2011). Standardised tests in literacy and numeracy were made compulsory in Irish primary schools in 2007. When initially introduced in 2007, the results of standardised tests were used for purposes associated with the identification of children with additional educational needs and to assist in communication with parents (NCCA, 2007). Since then,

however, education policy developments have ensured an increasingly enhanced profile for standardised tests in Irish schools (O' Leary et al., 2019). In 2011, the National Literacy and Numeracy Strategy (DES, 2011a) expanded this original role through reforms designed to raise standards in Irish primary schools. In 2017, the DES further expanded the role of standardised tests with the assertion that data from standardised testing provide a broad and objective basis by which to measure differences between schools in levels of overall relative student achievement (DES, 2017). Data from standardised tests now inform decisions on the allocation of Special Education Teaching (SET) resources.

Education policy in Ireland recommends that children who have significant special educational needs, such as those with mild or transient educational needs including those associated with speech and language difficulties, social or emotional problems, or co-ordination or attention control difficulties should be considered for additional teaching support, as well as, students who have specific learning disabilities, and those in need of support due to having EAL (DES, 2017, p.16). As outlined above, children with a score below a STen of four on a standardised test of literacy or numeracy may also require some degree of additional teaching support with those scoring a STen of one or two (below the tenth percentile) identified as in need of intensive support.

The underlying assumption of using standardised tests to identify children in need of support is that test results will determine where students stand relative to others, and that this information will be used to improve student outcomes in the interests of inclusion and equity in education (Douglas et al., 2016). If the information gathered for this purpose is not used to identify inequalities, to target interventions, and to monitor the effectiveness of the interventions to ensure the elimination of inequalities, then the validity of using tests for this purpose may be challenged (Douglas et al, 2016). Many researchers have identified the disaggregation of data as a key factor in ensuring inclusion and equity in education. Without disaggregated data, inequalities between social groups are often obscured, thereby creating an illusion of equity for children from traditionally marginalised groups (Au and Knoester, 2017; Bradbury, 2019; Creagh, 2014; Demie, 2018).

Standardised Testing and Children Learning English as an Additional Language

Children learning EAL are recognised as "at risk" of underperformance on standardised tests. Negative consequences include these learners being labelled as 'low achievers' or a 'low-ability student'. These labels can lead to internalisation of low expectations and the development of poorer self-image as learners (Alford,

2014). Furthermore, this can lead to loss of motivation for, and interest in, education (Nusche, 2009), which risks becoming a self-fulfilling prophesy.

Theories in relation to second language acquisition suggest that it can take up to 10 years for Minority Language (ML) children to acquire the levels of language proficiency necessary for them to have equal opportunity for success on a standardised test in the dominant language (Collier and Thomas, 1989; Cummins, 2001). Part of the explanation for this is that they are catching up with a moving target as their non-EAL peers progressively increase their literacy skills (Lou, 2020). Academic language proficiency is defined as including "knowledge of less frequent vocabulary" in the language of instruction, as well as the "ability to interpret and produce increasingly complex written and oral language" (Cummins, 2001, p. 66). As students advance through the grades, their proficiency in academic language correspondingly increases. Students "encounter more low frequency words" "complex syntax" and "abstract expressions that are virtually unheard of in everyday conversation" (Cummins, 2001, p. 66). ML children may be perceived to have, and 'appear' to have, good conversational skills but they may not have the academic language proficiency required for verbal IQ tests or tests that require complex manipulation of language in cognitively demanding situations such as those presented by the testing situation. In misunderstanding conversational fluency as a valid index of overall linguistic proficiency, teachers run the risk of attributing a lower score to a 'learning disability' or 'deficiencies' in the child themselves or, conversely, poor academic performance may be attributed to lack of proficiency in the language of instruction resulting in a failure to recognise a learning difficulty (Zhang, Katsiyannis, Ju & Roberts, 2014). While very little work has been undertaken in this area in Ireland, Cuba and Tefera (2024) argue that this is "one of the most complex and systemic challenges" facing public schools in the United States of America (USA) (p. 29).

Based on these criticisms of the implications of standardised testing on self-identity of EAL children and associated impact of identification of need, the study upon which this paper is based sought to answer the following two research questions:

1. Are there statistically significant differences between the performances of EAL and the Non-EAL groups on standardised tests?

2. Is there evidence to suggest that the EAL groups were disadvantaged by their levels of academic language proficiency in the tests?

METHODOLOGY

This study was a Critical Quantitative Inquiry (Stage & Wells, 2014) into the comparative performance of EAL and Non-EAL children on standardised tests in one Irish primary school to ascertain any statistically significant differences between the performances of both groups of children on those tests. The study involved the collation, organisation and statistical analysis of large amounts of raw data in the form of standardised test results. As such, a quantitative approach was required in the study. However, the intention of this study was not merely to give a statistical account of the performance of each group of children on the tests but to make a critical inquiry into the comparative performance of the groups with the intention of examining the issue of equality within the assessment regime. This research was, therefore, deeply rooted in critical educational research, the aim of which is to challenge discrimination if it is shown to exist from an examination of the data. As a research paradigm, Critical Quantitative Inquiry focuses on equity concerns that can be highlighted through analysis of large data sets and by examining differences by, for example, language, ethnicity, class, and gender (Stage & Wells, 2014.). Procedural ethical issues included the solicitation of permission to proceed with the study from the Principals of both Junior and Senior Schools. Data protection issues were addressed by redacting the names and personal details of all children in the sample before entering them into the Excel file.

Site and Sample

The site for this study was a connected junior primary and senior primary school who share a campus in the electoral area of Fingal County in Dublin, Ireland. Children attend the Junior School for the first four years of formal schooling and then transfer to the Senior School for the remaining four years. Results of standardised tests in 2nd class are passed to the Senior School to inform decisions around 'regrouping' or 'splitting' of classes to form new 'mixed ability' classes. Almost sixteen percent of the population of Fingal County self-identify as migrant or minority ethnic (CSO, 2017). This statistic was reflected in the schools' populations at the time of the study.

The study involved the statistical examination of the standard test scores of five cohorts of children (N= 130-161) as they progressed through the school, from 1st to 6th class, on standardised tests of literacy, numeracy, verbal and non-verbal intelligence (N= 9079), see Table 1. Empty cells indicate data were unavailable for the particular occasion upon which that test was administered.

Table 1: Sample sizes (n) by cohort, EAL status and test.

Cohort	GRP.	1st NRIT	2nd NRIT	NVRT	Lit 1st	Lit 2nd	Lit 3rd	Lit 4th	Lit 5th	Lit 6th	Num1st	Num2nd	Num3rd	Num4th	Num5th	Num6th
2006	EAL	n=(57)	n=(57)	n=(57)	n=(56)	n=(46)	____	n=(56)	n=(55)	n=(56)	n=(59)	n=(46)	____	n=(57)	n=(55)	n=(56)
	Non-EAL	n=(91)	n=(90)	n=(88)	n=(91)	n=(82)	____	n=(82)	n=(91)	n=(91)	n=(89)	n=(82)	____	n=(88)	n=(93)	n=(91)
2007	EAL	n=(53)	n=(59)	n=(59)	n=(53)	n=(54)	n=(59)	n=(56)	n=(56)	n=(54)	n=(53)	n=(54)	n=(56)	n=(56)	n=(56)	n=(54)
	Non-EAL	n=(102)	n=(106)	n=(106)	n=(101)	n=(102)	n=(106)	n=(100)	n=(101)	n=(105)	n=(104)	n=(101)	n=(99)	n=(99)	n=(102)	n=(104)
2008	EAL	n=(51)	n=(49)	n=(49)	n=(52)	n=(51)	n=(49)	n=(51)	n=(57)	n=(54)	n=(50)	n=(51)	n=(49)	n=(47)	n=(50)	n=(54)
	Non-EAL	n=(108)	n=(113)	n=(112)	n=(107)	n=(107)	n=(102)	n=(102)	n=(101)	n=(103)	n=(105)	n=(108)	n=(101)	n=(101)	n=(102)	n=(102)
2009	EAL	n=(43)	n=(38)	n=(37)	n=(42)	n=(42)	n=(33)	n=(33)	n=(33)	____	n=(43)	n=(46)	n=(33)	n=(33)	n=(33)	____
	Non-EAL	n=(94)	n=(95)	n=(95)	n=(90)	n=(91)	n=(92)	n=(95)	n=(95)	____	n=(98)	n=(91)	n=(92)	n=(95)	n=(95)	____
2010	EAL	n=(42)	n=(35)	n=(36)	n=(42)	n=(39)	n=(35)	n=(34)	____	____	n=(43)	n=(39)	n=(35)	n=(35)	____	____
	Non-EAL	n=(93)	n=(102)	n=(115)	n=(96)	n=(102)	n=(104)	n=(101)	____	____	n=(95)	n=(103)	n=(103)	n=(102)	____	____

Each cohort was divided into two groups, EAL and Non-EAL. The EAL groups consisted of those children who were identified by their parents at the time of their enrolment in the school as children who spoke a language other than English at home as a first language and who were provided with access to English language support during their first four years at school (N = 24 - 53). Length of time of EAL support varied among the EAL groups from one to four years and was determined variously by Department of Education and Science (DES) language support policies, proficiency levels in English as measured on The Primary School Assessment Kit (PSAK) (NCCA 2006), and length of attendance in the school. The Non-EAL groups consisted of children who spoke English as a first language and included all children who enrolled in the Senior School after third class (N = 82 - 115).

Each EAL group, in each cohort of the sample, refers to the same children initially identified as EAL candidates in the Junior School. No new EAL children were included in these EAL groups once they left the Junior School. This was to ensure that the EAL children, initially identified as children who were in need of EAL support, were fully tracked throughout their school years from enrolment in the Junior School up until they left the Senior School in sixth class. Potential variables such as socio-economic status and ethnicity were not consistently available throughout the duration of the study so are not considered.

The data were the test results of the sample, described in the research as the 2006, 2007, 2008, 2009 and 2010 Cohorts, according to the year of enrolment in Junior Infants, on standardised tests of verbal intelligence, (NRIT, Young, 1989; NNRIT, Young and McCarthy, 2012); standardised tests of non-verbal reasoning, (NVRT, GL Assessment, 2017), standardised tests in literacy (Micra-T), and standardised tests in numeracy (Sigma-T). The NRIT and NNRIT are referred to collectively as the (N)NRIT in this paper. The data extend from those collected in May 2009, at 1st class with the 2006 Cohort, to May 2016. At this cut-off point, data were unavailable for 6th class for the 2009 Cohort and for 5th and 6th class for the 2010 Cohort.

Data Analysis

Raw data, in the form of individual scores, were input to an Excel spreadsheet and were then imported into SPSS. Individual scores were aggregated and using the T-test (Group Statistics) to generate descriptive statistics (N, Mean, Standard Deviation and Standard Error Mean) and the T-test (Independent Samples Test) to generate inferential statistics (values of t, the degrees of freedom (df), and the associated statistical significance (Sig. [2-tailed]), the performances on the standardised tests of the groups were compared for difference (t). This paper presents an analysis of the data from the verbal intelligence tests (Non Reading Intelligence Test (NRIT) (Young, 1989), re-standardised and re-named as the New-Non Reading Intelligence Test ((N)NRIT) (Young & McCarthy, 2012)), non-verbal reasoning tests (NVRT) and literacy tests (Micra-T).

FINDINGS

(New) Non-Reading Intelligence Test

The t-test for independent samples indicated that the mean scores of the EAL groups on the (N)NRIT were statistically significantly lower nine times out of the ten occasions examined than the mean scores of the non-EAL groups. These data are presented in Figures 1 and 2, with the relevant mean scores for each cohort included. Figure 1 presents the data from the first occasion of testing, in 1st class, while Figure 2 presents the data from the second occasion of testing, in 5th class for cohort 1, in 4th class for cohort 2 and in 3rd class for cohorts 3,4 and 5.

Figure 1: Comparisions of mean scores of EAL & Non-EAL groups on (N) NRIT, Occasion 1 in 1st class.

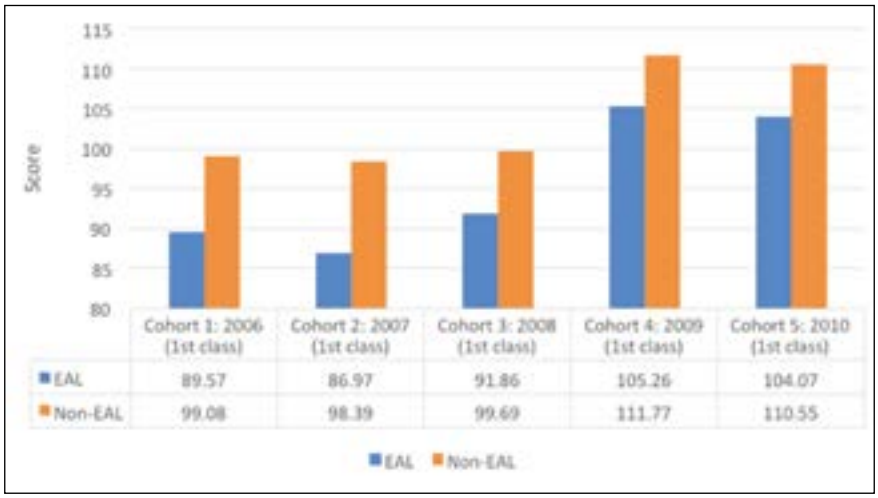
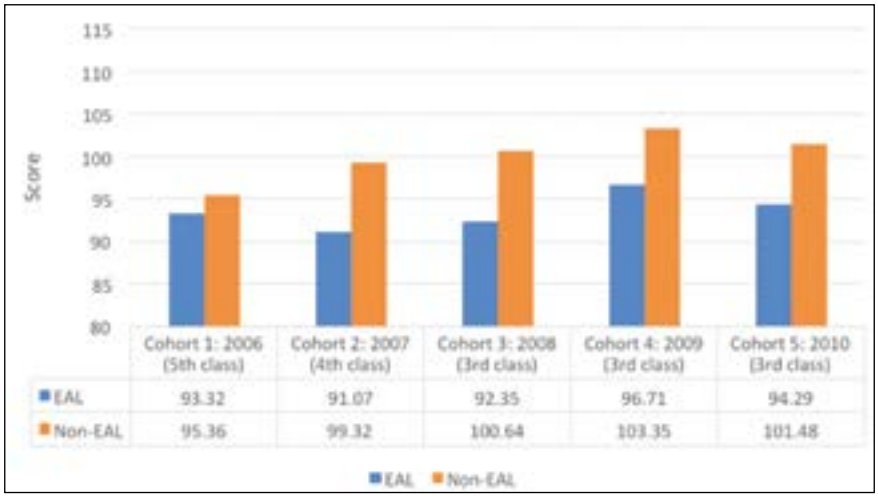


Figure 2: Comparision of Mean scores of EAL & Non-EAL groups on (N) NRIT Occasion 2 in 5th, 4th or 3rd class.



The achievement gap between the groups also remained consistent on the (N) NRIT as the groups progressed through the school. The consistent nature of the achievement gap between EAL and Non-EAL groups on this test of intelligence can be viewed in Table 2 below.

Table 2: Mean EAL and Non-EAL Scores on (N)NRIT, NVRT, Literacy & Numeracy

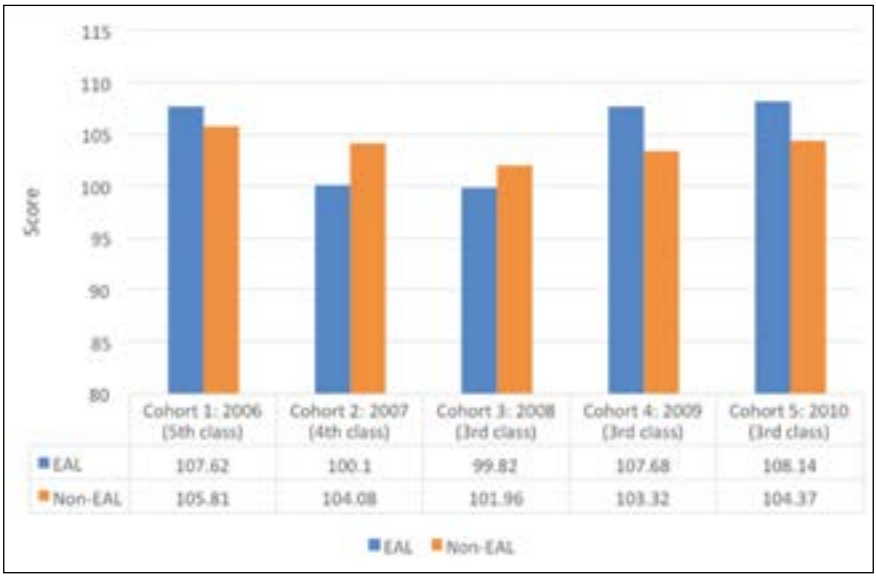
COHORT	GRP.	NRIT 1	NRIT 2	NVRT	LIT 1	LIT 2	LIT 3	LIT 4	LIT 5	LIT 6	MATH 1	MATH 2	MATH 3	MATH 4	MATH 5	MATH 6
2006	EAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—	[illegible]	[illegible]	[illegible]
	NON-EAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—	[illegible]	[illegible]	[illegible]
2007	EAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	NON-EAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2008	EAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	NON-EAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2009	EAL	[illegible]	[illegible]	107.68	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—
	NON-EAL	[illegible]	[illegible]	103.32	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—
2010	EAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—	—	[illegible]	[illegible]	[illegible]	[illegible]	—	—
	NON-EAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—	—	[illegible]	[illegible]	[illegible]	[illegible]	—	—

Note: Statistically Significantly Lower Mean Scores for EAL groups on (N)NRIT Highlighted in Red

Non-Verbal Reasoning Test

In terms of the NVRT, there was no significant difference between the mean scores of the EAL and the Non-EAL group on four of the five occasions. As shown in Figure 3 below, there was only one occasion where there was a statistically significant difference. This occurred with the 2009 cohort when the mean score of the EAL group ($M = 107.68$, $SD = 10.84$) was statistically significantly higher ($t(130) = 2.07$, $p = .041$) than the mean score of the Non-EAL group ($M = 103.32$, SD 10.90).

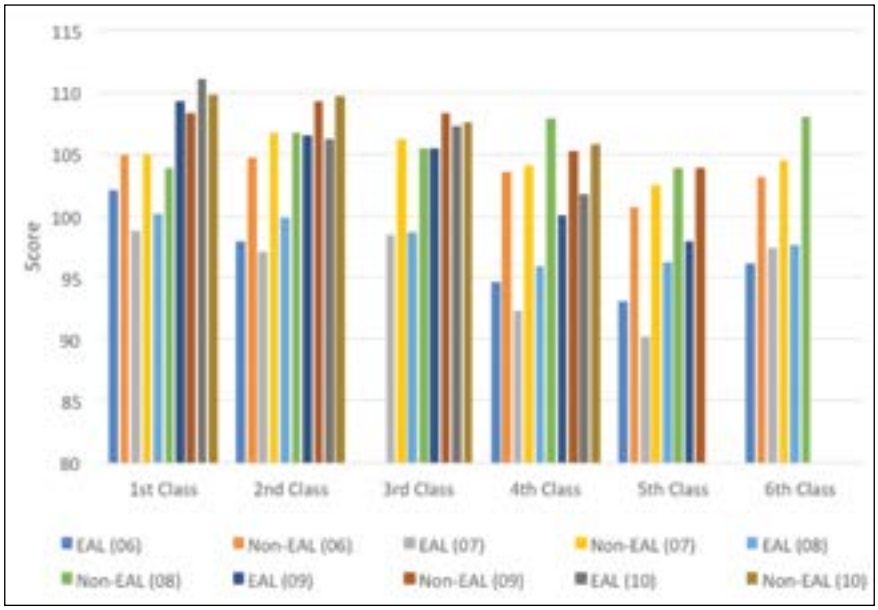
Figure 3: Comparisons of Mean Scores of EAL & Non-EAL groups on NVRT



Literacy Tests

The analysis of the Literacy Test data revealed that there was a significant difference between the test groups. The EAL groups scored statistically significantly lower on 16 of 26 occasions, and lower on seven other occasions. The achievement gap in literacy remains significant in 2006, 2007 and 2008 Cohorts as they progress from 1st to 6th class. In 2009 and 2010 Cohorts, the gap grows steadily from 2nd class onwards. This becomes significant in 5th class in 2009 Cohort.

Figure 4: Comparison of mean EAL scores and Non-EAL scores on reading tests from 1st to 6th class for all cohorts



DISCUSSION

This study examined the comparative performance of five cohorts of EAL and non-EAL children on a range of standardised tests on ten different occasions as they progressed through primary school in Ireland. Though limited to this single-site, the findings provide statistically significant results that demonstrate the underperformance of EAL children on the (N)NRIT. Two clear findings were identified in support of this. The first was that EAL groups of children performed statistically significantly lower on nine of the ten occasions and lower on the 10th occasion examined. The second was that the achievement gap between the EAL and the Non-EAL groups remained consistent on the (N)NRIT as the groups progressed through the school. The persistent nature of this achievement gap was clearly identifiable in the 2007, 2008, 2009 and 2010 cohorts. The extent of the gap remains quite similar from when they were initially tested in 1st class to when they were subsequently tested in 3rd or 4th class.

The persistent nature of this achievement gap can be explained by the fact that Non-EAL children are not 'standing still' while waiting for EAL children to catch

up (Lou, 2020). On one occasion, in this study, a narrowing of the gap between the two groups was observed. This was when the (N)NRIT was carried out for the second time in 5th class, with the 2006 cohort. By 5th class, the EAL children had been learning English for six years and one explanation for the narrowing of the gap could be that the language proficiency levels of the EAL group were approaching grade norms after six years (see Table 2). The EAL mean on this occasion (M= 93.32) however, does not compare favourably with any of the other Non-EAL mean scores in the study, indicating that they still had a considerable distance to go in order to 'catch up' with the overall average Non-EAL performance, even after six years learning English.

It could be suggested that the reason for consistently significant underperformance by the EAL groups on the (N)NRIT was simply because the EAL groups were of lower academic ability. Evidence from the NVRT results examined in this study can be used to refute any explanation for these differences on the basis of lower academic ability among the EAL groups. There were no statistically significant differences between the EAL and the Non-EAL groups on four out of the five occasions on which the results of the NVRT were examined. On the one occasion where there was a statistically significant difference between the groups, the EAL group scored statistically significantly higher than the Non-EAL group. On the other four occasions that the NVRT was examined, each group scored higher/lower on two occasions each, with no evidence of statistically significant difference. In contrast to the (N)NRIT, no pattern of difference was identifiable between the groups on this 'non-verbal' reasoning test (see Figure 3). Given the resounding evidence on the impact of test scores on the educational trajectories for many children learning EAL, including the issue of "disproportionate representation" in SEN, these findings are deeply troubling.

IMPLICATIONS

This study highlights the recurring underperformance of EAL children in an Irish primary school on standardised tests of verbal intelligence when compared to their non-EAL peers. School leaders, teachers, psychologists and other para-educational professionals, parents and care-givers, and children themselves, should be made aware that these tests may be inappropriate for EAL children and that the interpretation and reporting of results needs to be qualified. In recognition of the profound influence that assessment can have on the motivation and self-esteem of pupils, educators of EAL children must be sophisticated in their understanding of the ad-

ministration, interpretation and communication of test results to children, their families and other education professionals. A comprehensive understanding of the nature of second language acquisition would help to ensure that the abilities and achievements of children learning EAL are recognised and represented accurately and appropriately. This would help to limit the "disproportionate representation" (Zhang et al., 2014) of children learning EAL in SEN.

At school level, teachers should be enabled to make professional and ethical decisions in relation to the suitability of tests for particular groups of children in light of this analysis, and to interpret, record and report results informed by such analysis. Availability of targeted CPD in this area would be of benefit to all professionals involved. Inclusion of more detailed information on the language profile of each child being tested would ensure that the child's future teachers and others who may have access to these records are aware of the context in which the tests were undertaken. This would support a more sophisticated interpretation of these results, as professionals are supported to interpret the results in light of the language profile of the students involved.

It is also evident that this area requires considerable increased attention from the research community in Ireland. In addition to an analysis of the impact of language on test scores and subsequent funnelling into SEN, further research work might also take an intersectional approach so that the impact of multidimensional identities within the population learning EAL are considered. This work might also take into consideration the voices of the children and families most affected by these decisions.

REFERENCES

Alford, J. (2014) 'Well, hang on, they're actually better than that!': Disrupting dominant discourses of deficit about English language learners in senior high school English. *English Teaching: Practice and Critique*, 13(3), pp.71-88.

Au, W. & Knoester, M. (2017) Standardized testing & school segregation: like tinder for fire? *Race, Ethnicity and Education*, 20(1), pp.1-14.

Bradbury, A. (2019) A critical race theory framework for education policy analysis: the case of bilingual learners and assessment policy in England. *Race Ethnicity and Education,* 23(2), pp.241–260.

Collier, V.P. & Thomas, W.P. (1989) How quickly can immigrants become proficient in school English? *Journal of Educational Issues of Language Minority Students*, 5, pp.26-38.

Creagh, S. (2014) National standardised testing and the diluting of English as a second language (ESL) in Australia. *English Teaching: Practice and Critique*, 13(1), pp.24-38.

Central Statistics Office (CSO) (2017) Census 2016 Profile 7 - Migration and Diversity. Available at: https://www.cso.ie/en/csolatestnews/presspages/2017/census2016profile7-migrationanddiversity/ [Accessed 15 September 2021].

Cummins, J. (2001) *Negotiating Identities: Education for Empowerment in a Diverse Society*. Los Angeles, CA: California Association for Bilingual Education.

Darmody, M., McGinnity, F. & Russell, H. (2022) *Children of migrants in Ireland: How are the faring?* ESRI Research Series Number 134. Dublin: ESRI.

De Angelis, G. (2014) A multilingual approach to analysing standardized test results: Immigrant primary school children and the role of languages spoken in a bi-/multilingual community. *Intercultural Education*, 25(1), pp.14-28. DOI: 10.1080/14675986.2014.883167.

De Angelis, G. (2021) *Multilingual Testing and Assessment*. Bristol, UK: Multilingual Matters.

Demie, F. (2018) English language proficiency and attainment of EAL (English as Second Language) pupils in England. *Journal of Multilingual and Multicultural Development*, 39(7), pp.641-653.

Department of Education (2024) *Circular 0002/2024. The Special Education Teacher (SET) allocation model and the calculation of the SET allocation for each school from the 2024/25 school year until further notice*. Available at: https://assets.gov.ie/282686/7944731c-b15e-4a98-b76a-b06d899e4789.pdf [Accessed 9 June 2024]

Department of Education and Science (2011a) *Circular 0056/2011. Initial Steps in the Implementation of the National Literacy and Numeracy Strategy*. Available at: https://www.gov.ie/pdf/?file=https://assets.gov.ie/13643/037a8791893f466fa4bf439c47f6d8fa.pdf [Accessed 12 March 2024].

Department of Education and Science (2017) *Circular 0013/2017. Special Education Teaching Allocation*. Available at: https://assets.gov.ie/24551/df12d-276f9b14b5a9d79b7b59e4b0278.pdf [Accessed 12 March 2020].

Devine, D. (2011) *Immigration and Schooling in the Republic of Ireland - Making a Difference?*. Manchester: Manchester University Press.

Douglas, G., McLinden, M., Robertson, C., Travers, J. & Smith, E. (2016) Including pupils with special educational needs and disability in national assessment: Comparison of three country case studies through an inclusive assessment framework. *International Journal of Disability, Development and Education*, 63(1), pp.98-121.

GL Assessment (2017) *Non-Verbal Reasoning Test (NVRT)*. Available at: https://www.gl-assessment.co.uk/products/non-verbal-reasoning-test-nvrt/ [Accessed 9 February 2020].

Kearns, L.L. (2011) High-stakes standardised testing and marginalized youth: An examination of the impact on those who fail. *Canadian Journal of Education*, 34(2), pp. 112-130.

Lou, Y. (2020) Teaching disciplinary literacy to adolescent English language learners: Vocabulary development and reading within the disciplines. *TESL Canada Journal*, 37(1), pp. 63-75.

Mac Ruairc, G. (2009) 'Dip, dip, sky blue, who's it? NOT YOU': Children's experiences of standardised testing: a socio-cultural analysis. *Irish Educational Studies*, 28(1), pp.47-66.

Menken, K. (2008) *English Learners Left Behind: Standardized Testing as Language Policy*. Clevedon: Multilingual Matters.

Morris, A. (2011) *Student standardised testing: Current practices in OECD countries and a literature review*. OECD Education Working Papers No. 65. OECD.

Murchan, D. & Shiel, G. (2017) *Understanding and Applying Assessment in Education*. London: SAGE Publications Ltd.

National Council for Curriculum and Assessment (NCCA) (2007) *Assessment in the Primary School Curriculum. Guidelines for Schools*. Dublin: NCCA.

National Council for Curriculum and Assessment (NCCA) (2006) *The Primary School Assessment Kit*. Dublin: NCCA.

Nayir, F., Brown, M., McNamara, G., Nortvedt, G., Burns, D., O'Hara, J. & Skedsmo, G. (2019) Assessment challenges and practices with and for migrant background students – Cases from Europe. *Eurasian Journal of Educational Research*, 79, pp.1-13.

Ní Dhuinn, M. & Keane, E. (2023) 'But you don't look Irish': identity constructions of minority ethnic students as 'non-Irish' and deficient learners at school in Ireland. *International Studies in Sociology of Education*, 32(4), pp.826-855.

Nusche, D. (2009) 'What Works in Migrant Education?' A Review of Evidence and Policy Options. *OECD Education Working Papers, No. 22*. OECD Publishing. Available at: http://dx.doi.org/10.1787/227131784531.

O' Leary, M., Lysaght, Z., Nic Craith, D. & Scully, D. (2019) *Standardised Testing in English Reading and Mathematics in the Irish Primary School: A Survey of Irish Primary Teachers*. Dublin: Dublin City University, Centre for Assessment Research Policy and Practice in Education and Irish National Teachers' Organisation.

Shohamy, E. (2022) Critical language testing, multilingualism and social justice. *TESOL Quarterly*, 56(4). DOI: 10.1002/tesq.3185.

Stage, F.K. & Wells, R.S. (2014) Critical quantitative inquiry in context. *New Directions for Institutional Research*, 159. DOI: 10.1002/ir.20041.

Wall, E. & Burke, K. (1987) *MICRA-T Test Manual*. Dublin: C.J. Fallon.

Wall, E. & Burke, K. (1991) *SIGMA-T Test Manual*. Dublin: C.J. Fallon.

Young, D. (1989) *Non-Reading Intelligence Test (NRIT)*. London: Hodder & Stoughton.

Young, D. & McCarthy, C. (2012) *New Non-Reading Intelligence Test (NNRIT)*. London: Hodder Education.

Zhang, D., Katsiyannis, A., Ju, S. & Roberts, E. (2014) Minority representation in special education: 5-year trends. *Journal of Child and Family Studies*, 23, pp.118-127.

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The Use of a Functional Behavioural Assessment and Positive Behaviour Support to Address Behaviours of Concern

Behaviour of concern can typically occur when the social, academic, or environmental requirements placed on an individual outweigh the skills they have to respond in an adaptive manner. Positive Behaviour Support (PBS) is a decision-making process based on individualised assessment data drawn from a Functional Behavioural Assessment (FBA). This approach is based on understanding behaviour from a multitude of perspectives and viewing behaviours of concern as a form of communication. The current article outlines the use of an FBA and the implementation of a PBS Plan with the parents of a 5-year-old autistic boy named Rory*, of whom was displaying behaviours of concern, namely hitting and biting. The FBA process identified the predominant functions of these behaviours which were access to preferred tangibles and escape from non-preferred activities. Additionally, the FBA process identified the aspects of Rory's autism diagnosis which may have been impacting the behaviours such as his difficulty with transitioning and emotional regulation, along with the possibility of social masking throughout the school day. A PBS Plan was devised to review how the environment could be altered in order to meet Rory's needs and promote positive behaviour.

Keywords: *positive behaviour support, functional behaviour assessment, autism, behaviours of concern.*

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BACKGROUND

Behaviours of Concern and Autism

Over time, the terminology 'behaviours of concern' has replaced 'challenging behaviours' as the latter language places blame and stigmatisation on individuals who engage in such behaviours and implies that the behaviour is inherent within the person (Government of Ireland, 2022; Jorgensen et al., 2023). Alternatively, the term 'behaviours of concern' identifies that there is a safety risk or a wellbeing concern for both the individual engaging in the behaviour as well as those around them (Government of Ireland, 2022; Javaid et al., 2020). Prevalence rates demonstrate that between 5-15% of individuals with additional needs present with behaviours of concern in educational, health or social care services (NICE, 2015). These can range from minor incidents to high levels of dysregulated behaviour which can impact an individual's social opportunities in addition to their emotional wellbeing and academic development (Government of Ireland, 2022).

Autistic individuals may display behaviours of concern due to factors such as communication and sensory processing needs, heightened levels of anxiety, difficulty coping with change and uncertainty of what is coming next (Government of Ireland 2022; NICE; 2015; Farmer & Aman, 2011). In particular, autistic individuals can find 'transitioning' to be immensely stressful; this is the process of moving from task to task or from one place to another. Transitions can occur daily such as leaving the home environment to go to the school setting or can present when more significant life changes occur such as moving house (NCSE, 2020). Transitions, particularly unplanned changes, may result in significant emotional distress leading to behaviours of concern (Middletown Centre for Autism, 2024). Additionally, research identifies that members of the autistic community may employ strategies to cope within their everyday social world, known as social 'camouflaging' (Cook et al., 2021). This can involve individuals masking their autistic characteristics or implementing compensatory strategies to assimilate or 'fit-in' with their peers (Hull et al., 2021; McQuaid et al., 2021). Aligning with this, it is reported that autistic individuals can be bombarded with social, sensory, and academic demands all day and may suppress the anxiety it causes them. Consequently, this can result in what is referred to as 'After School Restraint Collapse', whereby autistic children and adolescents may be reported to release their emotions using externalising behaviours, such as shouting or hitting out when they return to a safe space; often the home environment (Middletown Centre for Autism, 2021).

It is well documented that autistic people have difficulties with executive functioning, particularly in relation to cognitive flexibility and planning (Costecu

et al., 2023; Han et al., 2013). Previous research has identified links between such executive functioning difficulties and the implementation of emotional regulation strategies, whereby autistic children and adolescents can use less adaptive emotional regulation strategies, making them more vulnerable to augmented levels of stress (Jahromi et al., 2019; Mazefsky et al., 2014).

Maslow's (1943) Hierarchy of Needs is a psychological theory proposing that human needs are arranged by levels of necessity and individuals are motivated to fulfil their needs in a hierarchy, whereby they will attempt to satisfy basic physiological or subsistence needs first. Both autistic and allistic individuals may exhibit behaviours of concern due to unmet physiological needs for example being too hot, too cold, in pain or in need of sleep (Government of Ireland, 2022). In a similar vein, the Biopsychosocial Model identifies the multifactorial influences on behaviours of concern namely biological factors such as genetics, social factors such as family influences and psychological factors, for example, mental health influences. It can be helpful to view concerning behaviours through this lens as it promotes a holistic approach through recognition of the range of factors that may impact on behaviour and considers the interaction between such factors (Hernandez & Blazer, 2006). This model depicts a continuum of functioning on which all individuals exist, dependent on a myriad of factors. Based on this, behaviours of concern are viewed through the lens that they are functional i.e, the individual is communicating a message through their behaviour (Gore et al., 2022; Walker 2020).

Functional Behavioural Assessment

Functional Behavioural Assessment (FBA) is a problem-solving process whereby the possible causes and functions of behaviour are explored; providing a roadmap to efficacious intervention (Fahmie and Luczynski 2019; Hanley et al., 2003). FBA is an umbrella term for a variety of methods used to identify the variables that influence the occurrence of behaviours of concern. It is widely researched that the identification of the functions behind behaviour is key to devising a successful intervention plan (Hurl et al., 2016; Anderson et al., 2015; Alvarez et al., 2014) and there is strong empirical support for the success of FBA in identifying those underlying functions (Gable et al., 2014). Importantly, behaviour support practitioners have reported that when behavioural strategies are based on a sound understanding of the functions of an individual's behaviour, it aids them in protecting and upholding the human rights of the individuals they work with (Leif et al., 2023). Six main functions of behaviour have been identified in previous research: namely connection-seeking, gaining access to a tangible, gaining sensory stimulation, escaping a certain task, and escaping some form of

discomfort (Albert & Troutman 2009). Within the FBA approach, the function of behaviour is represented by a change in an independent variable i.e., an environmental condition and the effect is represented by a change in a dependent variable i.e., behaviour. According to the NICE (2015) guidelines, the assessment of behaviours of concern must follow a systematic phased approach, whereby the assessor's objective is to gain a functional understanding of the behaviour. Therefore, the assessment process is exploring what the individual is attempting to communicate through their behaviour i.e., sensory distress, dislike of an activity etc. (Government of Ireland, 2022).

The initial assessment constitutes an operational description of the behaviour, including its severity, frequency, and duration in order to identify common predictors of the behaviour (Crone et al., 2015). The FBA describes the behaviour in a measurable and observable way, depicting exactly what the specific behaviour looks like. This will be supplemented by an identification of events which predict where the behaviours are most and least likely to occur, in addition to possible functions of the behaviours.

There are a myriad of different methods used for FBA, including direct and indirect approaches. Direct methods constitute information gathered via direct observation such as Antecedent-Behaviour-Consequence (ABC charts) and scatterplots. ABC Charts can be useful in identifying setting events, which are more broad circumstances that could be increasing the likelihood of a behaviour such as sleep pattern or medical illness. ABC Charts can also identify triggers for the behaviour such as being asked to stop a preferred activity or being asked to complete a non-preferred task. Additionally, ABC charts can establish when the target behaviour does and does not occur, as well as what happens as a result of the child engaging in the behaviour of concern (Government of Ireland, 2022). Scatterplots provide information on the timing of the occurrence of target behaviours, rather than the antecedents and consequences of the behaviour. This can be useful in hypothesizing the environmental conditions that are contributing to certain behaviours and can guide further assessment procedures (Miltenberger et al., 2019; Llyod & Kennedy, 2014).

Indirect methods involve gathering information from an informant such as a parent through the use of interviews, questionnaires, and rating scales, for example, the Questions about Behavioural Function questionnaire (QUABF) (Paclawskyj, 2000) and the Functional Analysis Screening Tool (FAST) (Iwata and DeLeon 2005). Practitioners report an almost exclusive reliance on indirect assessments when conducting an FBA as they provide a consistent format, are easy administer

and time efficient (Oliver et al., 2015). However, it is important to note that evaluations of the psychometric properties of indirect assessment methods show only modest reliability and validity (Iwata et al., 2013).

Positive Behaviour Support

Positive Behaviour Support (PBS) is a values-led approach to supporting individuals through the use of evidence-based teaching and behaviour support strategies. Kincaid et al., (2016) propose an updated definition of PBS which is committed to the use of sensitive, positive approaches and eschews the use of aversive, harmful interventions. PBS is described as an ongoing process of data-based assessment and decision-making strategies that are respectful of a person's dignity and wellbeing with the aim to enhance the person's overall quality of life, consistent with the human rights model of disability (Leif et al., 2023). The abovementioned is the definition of PBS referred to in the current research. A core practice of PBS is to promote proactive strategies in order to minimise the likelihood of a behaviour of concern occurring. One such example is that of differential reinforcement of alternative behaviours (DRAs), whereby reinforcement is provided for the occurrence of a target behaviour, alternative to the behaviour of concern being reduced (Bradley, 2016). It is important that the alternative option acts as a functional replacement for the individual. For example, if a child is hitting their sibling to seek connection, explicitly teaching them a socially appropriate behaviour such as telling jokes or saying 'Hi, can we play?' is effective as it serves the same functional purpose and is a more appropriate way of seeking connection (Hill et al., 2020). Reactive strategies are also a component of PBS- these are planned responses to the presentation of identified concerning behaviours. Notably, reactive strategies can be considered punitive practices and do not aim to achieve long-term behaviour change. Moreover, reactive strategies are likely to be more effective when drawing on person-centred approaches; recognising situations and settings that may act as triggers for the individual (NICE, 2015). In relation to this, the Department of Education are currently developing guidelines for schools on the management of behaviours of concern. These guidelines are expected to place a strong emphasis on prevention and positive behavioural approaches, refute the concept of seclusion and refer to the premise that physical intervention should never be used for disciplinary purposes (Madigan, 2023).

PBS and Neurodiversity

It is necessary to note that the use of PBS has received negative feedback from those who perceive this approach to deny neurodivergent individuals' part of their identity and conform to neurotypical preferences. Criticism around PBS

generally refers to historical work in the field of Applied Behaviour Analysis; however contemporary work within the field is characterised by being person-centred and built on values of respect (Gore et al., 2022). Both the neurodiversity movement and the social model of disability propose that when autistic people face challenges in their world, these are primarily as a result of the interaction between the autistic person and their environment. For example, sensory aversions to loud noises can make it more difficult for autistic individuals to navigate a world designed for allistic people (Terroso, 2021; Belek, 2019; Chapman, 2019). The use of PBS is consistent with the abovementioned idea that behaviour is influenced by environmental factors. Accordingly, professionals implementing PBS aim to focus on eliminating environmental triggers, developing positive environmental alterations and teaching the individual functional skills in a neuroaffirmative way (Jorgenson et al., 2023; Leif et al., 2023).

METHODS

The current research explores a single-subjects case design whereby professional behaviour support was implemented with the parents of a five-year-old boy, Rory*. The family were existing users within the service due to Rory's autism diagnosis and complex needs. They requested support in response to a recent escalation in behaviours of concern. Parents gave written consent for the clinician to work with them and were informed of their right to withdraw at any stage of the process without consequence. A key principle underpinning the work was that of Family Centred Practice, whereby the family of the young person is regarded as the pivotal factor in supporting their child's development. This model empowered the family to set their own objectives and goals with the clinician (HSE, 2021; Dunst, 2002). Collaboratively, the clinician and parents aimed to identify the communicative intent behind the behaviours of concern and explore how the home environment could be altered in order to promote positive behaviour. Additionally, it was hoped that the PBS plan would include strategies to support Rory with his emotional regulation skills and help to cultivate meaningful and supportive interactions within the family dynamic.

IDENTIFICATION OF NEED

The clinician used the FAST tool with Rory's parents to operationalise his target behaviour by defining it objectively (Storey & Haymes, 2023). This tool is an indirect functional assessment method using a rating scale which provides

preliminary information around the environmental and physical factors that influence behaviour. The reliability of the FAST is considered to be moderate at best, with a general lack of predictive validity. However, given the nature of the data generated by the FAST, the low reliability and validity is unsurprising (Iwata et al., 2013). The Behaviour Problems Inventory (BPI-S) was also conducted with Rory's parents. This is an informant-based behaviour rating scale to assess behaviours of concern present for individuals with developmental differences (Mascitelli et al., 2015). The BPI-S has adequate to good internal consistency, inter-rater agreement, and test-retest reliability (Bowring et al., 2017; Mascitelli et al., 2015; Rojahn et al., 2012). This tool aided the clinician in identifying the intensity with which certain behaviours occurred, for example mild, moderate, severe; and the frequency at which they occurred, for example daily, weekly or monthly. For the current research, the clinician collaborated with parents to focus on the behaviours occurring daily with severe intensity. Based on the FAST and the BPI-S, the broad behaviours of concern were identified as physical aggression to others. Pre-cursor behaviours are any behaviour or response that occurs immediately prior to the target behaviour (Herscovitch et al., 2009). The pre-cursor to Rory's behaviours of concern were identified as growling, screaming, shaking of fists, slamming doors and cursing. The target behaviour was then defined in terms that were intended to be both observable and measurable to anyone working with Rory. The behaviour was defined in a way that if two or more adults were viewing the behaviour, they should be able to agree on whether or not they are viewing the defined behaviour (Hill et al., 2020; Moreno et al., 2017). The operationalised definition of behaviour was as follows: Any instance of hitting family members using a closed fist and biting family members using his teeth on their arm or hand, leaving temporary marks, or breaking the skin. Nonexamples of the behaviour were also discussed with parents, for example if Rory kicks his sibling or throws a toy this should not be recorded as it is not the target behaviour.

DATA COLLECTION

Antecedent-Behaviour-Consequence (ABC) Chart

As part of the data collection, Rory's parents were required to complete ABC charts. This involved parents directly observing the behaviour of concern i.e., the operationalised behaviour, and recording 1) What happened directly before the behaviour, known as the antecedent 2) Describe the behaviour itself in terms of where it happened, what it looked like, the duration etc. and 3) Describe what happened directly after the behaviour, known as the consequence (Miltenberger et al., 2019). The ABC Chart demonstrated that antecedents for Rory engaging in the

target behaviour were as follows: being asked to travel in the car, being instructed to turn off his tablet and being instructed to go into the shower. The ABC Chart demonstrated that consequences of Rory engaging in the behaviour consisted of being given the tablet for additional time, delaying the start time of showering, or avoiding tasks.

Scatterplot

One of the functions of the FBA it to gather information on situations in which the target behaviour is most and least likely to occur (Miltenberger et al., 2019). A scatterplot was identified as an appropriate option for parents to complete for a one-week duration in the home setting as part of the data collection. Scatterplots involve collecting frequency data within continuous intervals. For the current study, Rory's parents completed the scatterplot on an hourly basis, for example, if the target behaviour occurred between 9-10am, they ticked the corresponding box on the scatterplot. The baseline data showed that the target behaviour occurred twice every day between 2-3pm and 5-6pm. It was identified that both of these timeframes aligned with when Rory was required to go to the car to collect his sister from extra-curricular activities. Parents noted that behaviours lasted between 10 to 40 minutes per incident. It was shown that the behaviour occurred more frequently on Saturday and Sunday, with two occurrences between 11am-1pm. Relatedly, it was identified that on weekends, there was an increase in time spent in the car collecting his sister and this was offered as an explanation for the increase in target behaviours. The clinician and parents also found the scatterplot useful to explore times of the day that the behaviours of concern were not occurring, often referred to in therapeutic approaches as 'finding exceptions' to the issue being explored (Jordan & Turns, 2016). Exceptions to the behaviours of concern were noted when he was spending one to one time with a parent or when he was spending time alone playing with toys or on his tablets.

FINDINGS

The findings of the direct and indirect assessment methods demonstrated that the target behaviours served multiple functions, namely escape from non-preferred activities and access to preferred items.

Escape from demands and activities

As determined by assessment and data collection tools, one of the main functions of the concerning behaviour was noted as escape from non-preferred activities. Escape-maintained behaviours are known as serving a social-negative

reinforcement function and are a common maintaining variable for behaviours of concern (Geiger et al., 2010). Rory engages in target behaviours to avoid doing something that he does not peak his interest. For example, over time he has learned that when he engages in hitting and biting before shower time, this is likely to delay the starting time of his shower. This behaviour is multi-functional whereby it serves an escape purpose of delaying the non-preferred activity of showering, while also allowing him to gain access to a tangible, which is additional time on his tablet. Additionally, it was evident from the assessment methods that target behaviours often occur when accompanying his parents in the car to collect his sister from school or extra-curricular activities. ABC Charts demonstrated that Rory was usually engaging in preferred activities directly before he was expected to walk straight to the car.

Access to a tangible

The results of the assessment methods showed that one of the motivations behind Rory's behaviours is often to access a preferred tangible or activity. This means that the function of behaviour is to gain access to preferred item or participate in an enjoyable activity.

Sensory Stimulation

Analysis of the FAST Tool and qualitative findings from the parent interview identified that Rory may engage in the target behaviours because it is physically stimulating or is providing a calming or pleasing sensation for him. He may be seeking tactile and deep pressure proprioceptive input from the feeling of biting down or hitting others (Middletown Centre for Autism A, n.d).

Behaviours viewed through the context of Rory's Autism diagnosis

Throughout the FBA process, it became apparent that Rory's target behaviour should be navigated within the context of his autism diagnosis. Such factors include the following:

Difficulty with transitioning:

It was identified that Rory finds transitions from preferred activities to non-preferred activities difficult. This aligns with research demonstrating that transitioning between activities can pose difficulties for autistic individuals whereby they may resist the transition through displays of behaviour that is difficult to manage (Sterling-Turner and Jordan, 2007). This is demonstrative of his need for certainty and clarity around transitioning from one activity to the next.

Potential of Social Masking and 'After School Restraint Collapse'

It is notable that Rory's target behaviours are not observed in the school setting. It is possible that Rory is engaging in social masking throughout the day and consequently experiencing anxiety and behaviours of concern on returning home from school. This has been likened to a Coca Cola bottle exploding after it has been shaken (Middletown Centre for Autism, n.d). It is possible that Rory is bombarded with social and academic demands throughout the school day and is suppressing his emotional responses until he returns home.

Cognitive Flexibility

It is demonstrated that Rory may be having difficulty finishing one task and initiating another. This could be as a result of executive functioning difficulties which autistic individuals often struggle with. Executive functioning encompasses higher-order cognitive processes including cognitive flexibility. This is also known as 'shifting' and refers to the ability to start new tasks (Blijd-Hoogewys et al., 2014). It is possible that Rory is exhibiting struggles with cognitive flexibility which is further contributing towards his behaviours of concern. This will be factored into the intervention plan through providing Rory with predictability around what is coming next within his day and giving him set times to finish and move on from tasks.

Emotional Regulation

A diagnosis of autism is often associated with difficulties with emotional regulation, constituting amplified emotional responses and poor emotional control (Sung et al., 2022). Attaining emotional regulation is the ability to exhibit an appropriate emotional response when exposed to high arousal stimuli. Research has demonstrated that autistic individuals demonstrate a less adaptive pattern of emotional regulation strategy use (Mazefsky et al., 2013). Assessment methods showed that Rory exhibits emotional dysregulation through externalizing behaviours such as hitting, biting and verbal responses.

POSITIVE BEHAVIOUR SUPPORT PLAN

Based on assessment findings, a PBS Plan was created with Rory's parents (See Table 1**).** This addressed the functions of Rory's behaviours, in addition to autism-specific supports and strategies to support his overall wellbeing.

Table 1: Rory's PBS Plan

Positive Behaviour Support Plan			
Hypothesized Function via FBA	**Environmental Strategies (Proactive)**	**Skills Teaching**	**Direct Intervention (Reactive)**
Social Escape	**-Visual Schedule:** The creation of a visual schedule will provide certainty and predictability around the sequence of activities for the day ahead. **-Visual Timer:** Prior to non-preferred activities, use of a visual timer will act as a visual representation to show how much time is left doing a preferred activity. **-First, Then Board:** If Rory is struggling to follow demands in an attempt to escape non-preferred activities, give clear directions in a 'First-Then' format, using visuals. The 'First' picture should be a picture of the non-preferred activity such as showering or travelling in the car. The 'Then' picture should be a preferred activity such as playing outside or using a tablet. This will help to motivate him as he will know what is expected of him and will provide more structure to the tasks. **-Increase opportunities for choice:** When he is engaging in a non-preferred activity, he should be given choices in order to reduce target behaviours, gain some control over the activity and increase compliance (Geiger et al., 2010). For example, Rory might be allowed to choose the songs played in the car on the way to collect his sister.	**-Social Story:** This is a visually presented, personalized story describing social situations and behaviour expectations which has been shown to be effective for use with autistic individuals (Gray, 2021). **-Functional Communication Training:** Rory will be taught how to use a 'Break' card. If he feels he is getting emotionally dysregulated he can communicate this to his caregiver. This will provide continued access to escape, while also targeting communicative skills (Geiger et al., 2010).	**-Emotion Coaching Strategies (Siegel and Byron, 2012):** **1) Connect and Re-Direct** When struggling to regulate his emotions, caregivers should acknowledge emotions through physical touch, empathetic facial expressions, a nurturing tone of voice and non-judgmental listening. Caregivers can then redirect Rory with logical explanation and planning. Once he is in a calm and alert state, discussions around misbehaviors can occur, not during the incident. **2) Name it to Tame It** Caregivers should encourage Rory to re-tell stories of incidences where his target behaviours occurred, in order to empower him to move on and give words to his frightening experiences. If Rory is helped to name his emotion and pain, this may help to tame it. Saying something like 'I saw Dad told you to go to the car, and you began screaming and hitting him. That must have been really upsetting for you. What happened after you hit Dad? How did you feel?'

Table 1: Rory's PBS Plan (continued)

Positive Behaviour Support Plan			
Hypothesized Function via FBA	**Environmental Strategies (Proactive)**	**Skills Teaching**	**Direct Intervention (Reactive)**
			3) Paying Attention to What's Going on Inside Teachers and caregivers can educate Rory on what is happening in his body when he experiences target behaviours. Bring his attention to identifying physical sensations such as clenched fists as indicators of anger. It may be helpful to provide Rory with an outline of a cartoon body as a tool to help him identify and draw out what happens inside him when he engages in a target behaviour, i.e., heart rate increases, sweaty palms, furrowed eyebrows.

Table 1: Rory's PBS Plan (continued)

Positive Behaviour Support Plan			
Hypothesized Function via FBA	**Environmental Strategies (Proactive)**	**Skills Teaching**	**Direct Intervention (Reactive)**
Access to a Tangible	**-Schedule a transitional activity:** If time allows, an activity of moderate preference may be scheduled between highly preferred and highly non-preferred activities. For example, following his iPad time, Rory may be allowed to play with his Lego, before going for a shower.	**- Functional Communication Training:** Teach Rory specifically how to appropriately ask or signal for a tangible, such as the iPad. This way, he will be taught the skills to get what he wants without engaging in the target behaviours. **-Use of the Incredible 5-Point Scale:** This is a direct, instrumental way of teaching Rory about his emotions. Feelings are made visual and concrete. This strategy simplifies emotions by assigning them a number and a colour (Dunn Buron and Curtis, 2012). The objective of using this resource is that overtime, Rory will be taught to recognize his own emotions and strategies to monitor and regulate himself when needed. **-Interval Schedule of Reinforcement:** This means that reinforcement becomes available after a specific period of time. As Rory shows an absorbing interest in stickers, these will be used as a token. Rory will receive a sticker each evening if he has displayed appropriate behaviours and target behaviours have not occurred. Behaviour expectations will be clearly discussed with Rory. The chart will be situated at eye-level on the fridge and Rory will place the sticker on the chart himself to give him control and boost his self-esteem. If he continuously receives the sticker reinforcer every two days, he will receive a reward, such as additional time playing with his friends. Rewards will be discussed in advance. The efficacy of the system will be monitored and gradually faded every four days and every week. Extinction of schedule will occur as time goes on.	

Table 1: Rory's PBS Plan (continued)

Positive Behaviour Support Plan			
Hypothesized Function via FBA	**Environmental Strategies (Proactive)**	**Skills Teaching**	**Direct Intervention (Reactive)**
Sensory Stimulation	**-Provide replacement behaviour:** To address the potential sensory function, Rory will be provided with a chewee that he can put around his neck. Rory will be redirected to his chewee, during an incident of biting.		

RESULTS

At the time of the current write-up, several of the strategies on the PBS Plan were carried out. Following the application of partial elements of the PBS Plan for a duration of three weeks, an additional scatterplot of target behaviour occurrences was completed by parents. The data collected demonstrated a reduction in weekly target behaviours from sixteen occurrences to three incidents (See Figure 1). This coincided with parent-reported satisfaction levels in that Rory was responding extremely well to specific elements of the PBS Plan.

Figure 1- Line graph to demonstrate the comparison in occurrences of target behaviours pre and post intervention.

The prominent sources of success were explored with parents during an informal interview. It was reported that the schedule of reinforcement was a significant motivator whereby Rory took great pride in attaining his stickers every two days. They believe this to be the leading factor in the reduction of target behaviours. While this is positive in the short-term, the clinician advised that a reinforcement system should be viewed as a temporary structure used to improve behaviours. As positive behaviours increase, the objective is for the reinforcement schedule to be thinned (Alberto & Troutman, 2009). Given that transitioning to the car was a source of distress for Rory, parents reported that autism-specific strategies around this were effective. Through the use of a visual schedule, Rory was given predictability and certainty around his tasks. Parents used a 'First-Then' board to explain to him that he was allowed to have time on his tablet, followed by a trip in the car. This was supplemented with the use of a visual timer to show him a concrete visual of how much time he had remaining. Parents reported that the reduction in behaviours of concern was influenced by these environmental changes. Additionally, parents reported that Rory was eager to engage with the Incredible-5 Point Scale, which is stuck on the fridge at eye level. Parents reported that this strategy made the abstract concept of emotions more concrete for Rory as each stage of escalation was labeled with a number. Rory also used the 'What can I do?' section of the tool to self-regulate during periods of frustration, for example checking his scale and reading the individualized strategies such as 'Practice my deep breathes.' Parents noted that the use of emotion coaching strategies were particularly helpful in enabling them to be more emotionally responsive to Rory during times of frustration, while also aiding them to co-regulate during stressful times.

LIMITATIONS

While implementation of PBS strategies were generally successful, it is important to note the barriers within the current case study.

Generalisation of Skills

At times, difficulties transferring skills to separate contexts acted as a barrier in his engagement with the reinforcement schedule. Autistic individuals often have difficulty transferring skills and knowledge learned in other settings and activities, known as generalization (Roberts et al., 2022). This challenge was demonstrated through Rory responding well in the home environment, yet occasionally still hitting and biting when he was playing outside with his neighbours. His difficulties in generalizing what he had learned in the home setting resulted in him regressing

back to the original target behaviours at times. This barrier was overcome through consistent dialogue about contextualizing new skills to a variety of settings.

Parental Reluctance around fading of Reinforcement Schedule

Parents were content with the positive gains made from the interval schedule of reinforcement and therefore were more reluctant to begin the fading process. Fading involves a gradual increase in the number of appropriate responses required for reinforcement (Alberto & Troutman, 2009). Parents expressed concern that the thinning of Rory's schedule would increase the target behaviours again. It was explained that this would be a gradual fading process, completed in a systematic manner to avoid ratio strain. This occurs if a schedule of reinforcement is thinned too quickly, the individual may stop responding. For example, if Rory initially received one sticker per one positive behaviour and this was then reduced to one sticker per five positive behaviours, it is likely he would show strained behaviour through non- engagement and consequently, behaviours of concern may increase again (Cook & Lattal, 2019). A discussion was held around intrinsic versus extrinsic motivators and that; while the progress made was successful, it is important to equip Rory with the lifelong skills to intrinsically motivate himself.

IMPLICATIONS FOR PRACTICE

It is reported that having a socially valid approach to behavioural assessment ensures the individual and their families benefit from the supports in meaningful ways (Alverez et al., 2014). While the current study provided social validity in that the assessment process supports created were individualised to parents' perspectives and goals around the behaviours of concern; Rory was not directly involved in this process. In line with the United Nations Conventions of the Rights of the Child, there is a universal recognition that children should be seen as competent to express their opinions and views about their own engagement with psychology services and assessment of their needs. It is asserted that children should be given opportunities to contribute their perspectives and have a role to play in decisions made about them (Larkins et al., 2020; Natasi et al., 2020). While this was not possible within the confines of the current research, it would be valuable for future research to hear the child's voice through their direct involvement throughout the assessment process.

The current study highlights the importance of clinicians, parents and anyone working closely with the child to look beyond the behaviour that meets the eye, and instead view it as an attempt to convey a message. Rather than merely viewing

a behaviour as an issue which needs to be addressed and stopped, an FBA is helpful to identify the purpose it serves for the individual. Armed with information collected from the FBA process, Positive Behaviour Support Plans can be devised and tailored to the specific needs of the individual and to promote a constructive and empathetic response to behaviours of concern, leading to effective outcomes and meaningful lasting relationships.

**All names used in this article are pseudonyms.*

REFERENCES

Alberto, P.A., and Troutman, A.C. (2009*). Applied behavior analysis for teachers*. 8th ed. Columbus OH: Pearson Education.

Álvarez, J. P., Call, N. A., & Mevers, J. E. L. (2014). Increasing the social validity of function-based treatments for problem behavior. *Acta de investigación psicológica*, *4*(3), 1683-1700. DOI: 10.1016/S2007-4719(14)70974-3.

Anderson, C. M., Rodriguez, B. J. and Campbell, A. (2015). Functional behavior assessment in schools: Current status and future directions. *Journal of Behavioral Education* [online], *24*, 338-371. DOI 10.1007/s10864-015-9226-z [accessed 21 July 2023].

Bauminger, N., Solomon, M. and Rogers, S. J. (2010). Externalizing and internalizing behaviors in ASD. *Autism Research* [online], *3*(3), 101-112. https://doi.org/10.1002/aur.131 [accessed 10 July 2023].

Belek, B. (2019). Articulating sensory sensitivity: from bodies with autism to autistic bodies. *Medical Anthropology, 38*(1), 30–43. https://doi.org/10.1080/01459740.2018.1460750.

Blijd-Hoogewys, E. M. A., Bezemer, M. L. and Van Geert, P. L. C. (2014). Executive functioning in children with ASD: An analysis of the BRIEF. *Journal of Autism and Developmental Disorders* [online], *44*, 3089-3100. [Accessed 21 July 2023].

Bowring, D. L., Totsika, V., Hastings, R. P., Toogood, S., & Griffith, G. M. (2017). Challenging behaviours in adults with an intellectual disability: A total population study and exploration of risk indices. *British Journal of Clinical Psychology*, *56*(1), 16-32. https://doi.org/10.1111/bjc.12118.

Bradley, T. (2016). How effective is the use of differential reinforcement and token economy system in decreasing disruptive behaviours in elementary aged children with autism? [Published Thesis]. Master of Arts in Special Education, California State University.

Chapman, R. (2019). Neurodiversity and its discontents: Autism, schiz- ophrenia, and the social model. In S. Tekin & R. Bluhm (Eds.), *The Bloomsbury companion to the philosophy of psychiatry* (pp. 371–389). Bloomsbury.

Cook, J. E., & Lattal, K. A. (2019). Repeated, within-session resurgence. *Journal of the Experimental Analysis of Behavior*, *111*(1), 28-47.

Cook, J., Hull, L., Crane, L., & Mandy, W. (2021). Camouflaging in autism: A systematic review. *Clinical Psychology Review*, *89*, 102080. https://doi.org/10.1016/j.cpr.2021.102080 [Accessed 5 January 2024].

Costescu, C., Adrian, R., & Carmen, D. (2023). Executive functions and emotion regulation in children with autism spectrum disorders. *European Journal of Special Needs Education [online]*, 1-10. https://doi.org/10.1080/08856257.2023.2215010 [Accessed 5 January 2024].

Crone, D.A., Hawken, L.S. and Horner, R.H., 2015. *Building positive behavior support systems in schools: Functional behavioral assessment*. guilford Publications.

Dunn Buron, K. & Curtis, M. (2012) *The Incredible 5-Point Scale: The significantly improved and expanded: Assisting students in understanding social interactions and controlling their emotional responses*. 2nd ed. Shawnee Mission, Kansas: AAPC Publishing.

Dunst, C.J. (2002). Family centred practices: Birth through high school. *The Journal of Special Education, 36,* 141-149. DOI: 10.1002/mrdd.20176.

Fahmie, T. A., & Luczynski, K. C. (2019). Functional behavior assessment in context. *The encyclopedia of child and adolescent development*, 1-12. https://doi.org/10.1002/9781119171492.wecad077.

Farmer, C. A., & Aman, M. G. (2011). Aggressive behavior in a sample of children with autism spectrum disorders. *Research in Autism Spectrum Disorders [online]*, *5*(1), 317-323. https://doi.org/10.1016/j.rasd.2010.04.014 [Accessed 4 January 2024].

Gable, R. A., Park, K. and Scott, T. (2014). Functional behavioral assessment

and students at risk for or with emotional disabilities: Current issues and considerations. *Education and Treatment of Children* [online], 37, 111-135. [Accessed 10 July 2023].

Geiger, K. B., Carr, J. E and LeBlanc, L. A. (2010). Function-based treatments for escape-maintained problem behavior: A treatment-selection model for practicing behavior analysts. *Behavior Analysis in Practice* [online], *3*, 22-32. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3004681/ [Accessed 12 July 2023].

Gore, N. J., McGill, P., Toogood, S., Allen, D., Hughes, J. C., Baker, P., & Denne, L. D. (2013). Definition and scope for positive behavioural support. *International Journal of Positive Behavioural Support*, *3*(2), 14-23.

Gore, N. J., Sapiets, S. J., Denne, L. D., Hastings, R. P., Toogood, S., MacDonald, A. Baaker, P., Allen, D., Apansionok, M.M., Austin, D., Bowring, D.L., Bradshaw, J., Corbett, A., Cooper. V., Deveau, R., Hughes, J.C., Jones, E., Lynch, M., McGill, P., Mulhall, M., Murphy, M., Noone, S. Shankar, R. & Williams, D. (2022). Positive behavioural support in the UK: a state of the nation report. *International Journal of Positive Behavioural Support [online]*, *12*(1), i-46. ISSN 2047–0924 [Accessed 4 January 2024].

Government of Ireland (2022). *Autism Good Practice Guidance for Schools: Supporting Children and Young People* [online]. Available from: https://www.gov.ie/pdf/?file=https://assets.gov.ie/246065/ca72e39e-e657-4d3d-82ed-83e1d0122c8f.pdf#page=null [accessed 4 January 2024].

Gray, C. (2021). Social stories™. In: Grove, N., *Storytelling, Special Needs and Disabilities*, Routledge, pp. 152-158.

Hanley, G. P., Iwata, B. A., & McCord, B. E. (2003). Functional analysis of problem behavior: A review. *Journal of applied behavior analysis*, *36*(2), 147-185. https://doi.org/10.1901/jaba.2003.36-147 [Accessed 5 January 2024].

Hansen, S. N., Schendel, D. E., & Parner, E. T. (2015). Explaining the increase in the prevalence of autism spectrum disorders: the proportion attributable to changes in reporting practices. *JAMA pediatrics*, *169*(1), 56-62. doi:10.1001/jamapediatrics.2014.1893 [Accessed 4 January 2023].

Health Service Executive, (HSE) (2021). *National Guidance for Children's Disability Network Teams on Individual Family Support Plans*. Health Service Executive.

Hernandez, L.M. & Blazer, D.G. (2006). Moving beyond the nature/nurture debate. Washingon DC: National Academic Press.

Herscovitch, B., Roscoe, E. M., Libby, M. E., Bourret, J. C., & Ahearn, W. H. (2009). A procedure for identifying precursors to problem behavior. *Journal of Applied Behavior Analysis*, *42*(3), 697-702. doi: 10.1901/jaba.2009.42-697.

Hill, D. A., Mantzoros, T., & Taylor, J. C. (2020). Understanding motivating operations and the impact on the function of behavior. *Intervention in School and Clinic*, *56*(2), 119-1.

Horner, R. H., Sugai, G., Todd, A. W.and Lewis-Palmer, T. (2000). Elements of behavior support plans: A technical brief. *Exceptionality* [online], *8*(3), 205-215. https://doi.org/10.1207/S15327035EX0803_6 [Accessed 10 July 2023]. https://doi-org.libraryproxy.mic.ul.ie/10.1177/1053451220914901

Hull, L., Petrides, K. V., & Mandy, W. (2021). Cognitive predictors of self-reported camouflaging in autistic adolescents. *Autism Research*, *14*(3), 523-532. https://doi.org/10.1002/aur.2407 [Accessed 5 January 2024].

Hurl, K., Wightman, J., Haynes, S. N., & Virues-Ortega, J. (2016). Does a pre-intervention functional assessment increase interven-tion effectiveness? A meta-analysis of within-subject interruptedtime-series studies. Clinical Psychology Review,47,71–84. https://doi.org/10.1016/j.cpr.2016.05.003.

Iwata, B. A., DeLeon, I. G. and Roscoe, E. M. (2013). Reliability and validity of the functional analysis screening tool. *Journal of Applied Behavior Analysis* [online], *46*(1), 271-284. https://doi.org/10.1002/jaba.31 [Accessed 21 July 2023].

Iwata, B. A., DeLeon, I. G., & Roscoe, E. M. (2013). Reliability andvalidity of the functional analysis screening tool. Journal of Applied Behaviour Analysis,46(1), 271–284.https://doi.org/10.1002/jaba.31.

Iwata, B., & DeLeon, I. (2005). The functional analysis screening tool. Gainesville, FL: The Florida Center on Self-Injury, University of Florida.

Jahromi, L. B., Y. Chen, A. J. Dakopolos, and A. Chorneau. 2019. "Delay of Gratification in Preschoolers with and Without Autism Spectrum Disorder: Individual Differences and Links to Executive Function, Emotion Regulation, and Joint Attention." *Autism* 23 (7): 1720–1731. doi:10.1177/1362361319828678.

Javaid, A., Ghebru, S., Nawaz, J., Michael, D., Pearson, R., Rushforth, E., & Michael, G. (2020). Use of positive behaviour support plan for challenging behaviour in autism. *Progress in Neurology and Psychiatry*, *24*(4), 14-16.

Jorgensen, M., Nankervis, K., & Chan, J. (2023). 'Environments of concern': reframing challenging behaviour within a human rights approach. *International Journal of Developmental Disabilities*, *69*(1), 95-100. https://doi.org/10.1080/20473869.2022.2118513 [Accessed 4 January 2024].

Larkins, C., Lansdown, G., & Jimerson, S. R. (2020). Child participation and agency and school psychology. *International handbook on child rights and school psychology*, 259-274.

Leif, E. S., Subban, P., Sharma, U., & Fox, R. (2023). "I Look at Their Rights First": Strategies Used by Australian Behaviour Support Practitioners' to Protect and Uphold the Rights of People with Disabilities. *Advances in Neurodevelopmental Disorders*, 1-18. https://doi.org/10.1007/s41252-023-00355-0.

Lloyd, B. P. and Kennedy, C. H. (2014). Assessment and treatment of challenging behaviour for individuals with intellectual disability: A research review. *Journal of Applied Research in Intellectual Disabilities* [online], *27*(3), 187-199. https://doi.org/10.1111/jar.12089 [Accessed 5 July 2023].

Madigan, J. (2023). *Dáil Eireann Debate* [online], 18 April. Available from: https://www.oireachtas.ie/en/debates/question/2023-04-18/511/#pq-answers-511 [Accesed 6 January 2024].

Mascitelli, A. N., Rojahn, J., Nicolaides, V. C., Moore, L., Hastings, R. P. and Christian-Jones, C. (2015). The Behavior Problems Inventory - Short Form (BPI-S): reliability and factorial validity in adults with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities* [online], *28* (6), 561-71. DOI: 10.1111/jar.12152 [Accessed 28 June 2023].

Maslow, A. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396. doi:10.1037/h0054346.

Mazefsky, C. A., Herrington, J., Siegel, M., Scarpa, A., Maddox, B. B., Scahill, L. and White, S. W. (2013). The role of emotion regulation in autism spectrum disorder. *Journal of the American Academy of Child & Adolescent Psychiatry*, *52*(7), 679-688. DOI: 10.1016/j.jaac.2013.05.006 [Accessed 5 June 2023].

Mazefsky, C. A., X. Borue, T. N. Day, and N. J. Minshew. 2014. “Emotion Regulation Patterns in Adolescents with High-functioning Autism Spectrum Disorder: Comparison to Typically Developing Adolescents and Association with Psychiatric Symptoms.” *Autism Research,* 7 (3): 344–354. doi:10.1002/aur.1366.

McQuaid, G. A., Lee, N. R., & Wallace, G. L. (2022). Camouflaging in autism spectrum disorder: Examining the roles of sex, gender identity, and diagnostic timing. *Autism*, *26*(2), 552-559. https://doi.org/10.1177/13623613211042 [Accessed 5 January 2024].

Middletown Centre for Autism A (n.d). *Sensory Processing Resource: Case Study 4. Middletown Centre for Autism* [online].Available from: https://sensory-processing.middletownautism.com/casestudies/case-study-4/ [Accessed 3 June 2023].

Middletown Centre for Autism B (n.d.). *After School Restraint Collapse. Middletown Centre for Autism* [online] Available from: https://www.middletownautism.com/files/shares/Resources/Thurs_23_Sept_After_school_restraint_collapse_resource.pdf [Accessed 12 June 2023].

Middletown Centre for Autism. (2021). *After School Restraint Collapse* [online]. Available from: https://www.middletownautism.com/social-media/after-school-restraint-collapse-9-2021 [Accessed 5 January 2024].

Middletown Centre for Autism. (2024). *Coping with Change/Transitions* [online]. Available from: https://pathways-resilience.middletownautism.com/strategies/wellbeing/providing-a-sense-of-purpose/school/coping-with-change-transitions/ [Accessed 5 January 2024].

Miltenberger, R. G., Valbuena, D., & Sanchez, S. (2019). Functional assessment of challenging behavior. *Current Developmental Disorders Reports*, *6*, 202-208. https://doi.org/10.1007/s40474-019-00180-y.

Moreno, G., Wong-Lo, M., & Bullock, L. M. (2017). Investigation on the practice of the functional behavioral assessment: Survey of educators and their experiences in the field. *International Journal of Emotional Education*, *9*(1), 54-70. ISSN: 2073-7629.

Nastasi, B. K., Hart, S. N., & Naser, S. C. (Eds.). (2020). International handbook on child rights and school psychology. Springer.

National Council for Special Education (NCSE) (2020). *Transitioning for Children and Young People with Additional Needs* [online]. Available from: https://ncse.ie/wp-content/uploads/2020/05/05212-NCSE-Resource-7-Transitioning-03.pdf [Accessed 5 January 2024].

National Institute of Health and Care Excellence (NICE). (2015). *Challenging Behaviour and Learning Disabilities: Prevention and Interventions for people with learning disabilities whose behaviour challenges* [online]. NICE. https://www.nice.org.uk/guidance/ng11/chapter/Recommendations#assessment-of-behaviour-that-challenges [Accessed 25 June 2023].

Oliver, A. C., Pratt, L. A., & Normand, M. P. (2015). A survey of functional behavior assessment methods used by behavior analysts in practice. *Journal of Applied Behaviour Analysis,* 48(4), 817-829. https://doi.org/10.1002/jaba.256.

Paclawskyj, T. R., Matson, J. L., Rush, K. S., Smalls, Y., & Vollmer, T. R. (2000). Questions about behavioral function (QABF):: A behavioral checklist for functional assessment of aberrant behavior. *Research in developmental disabilities*, *21*(3), 223-229. https://doi.org/10.1016/S0891-4222(00)00036-6.

Roberts, R., Stacey, J., Jenner, S. and Maguire, E. (2022). Are Extended Reality Interventions Effective in Helping Autistic Children to Enhance Their Social Skills? A Systematic Review. *Review Journal of Autism and Developmental Disorders* [online], 1-20. https://doi.org/10.1007/s40489-022-00320-y [Accessed 4 June 2023].

Rojahn, J., Rowe, E. W., Sharber, A. C., Hastings, R., Matson, J. L., Didden, R., Kroes, D. B. H. and Dumont, E. L. M. (2012). The Behavior Problems Inventory-Short Form for individuals with intellectual disabilities: Part I: development and provisional clinical reference data, *Journal of Intellectual Disability Research* [online], 56 (5), 527-545. DOI: 10.1111/j.1365-2788.2011. 01506.x [Accessed 7 June 2023].

Siegel, D.J. & Bryson, T.P. (2012). *The Whole-Brain Child: 12 Proven Strategies to Nurture your Child's Developing Mind.* Robinson.

Smock Jordan, S., & Turns, B. (2016). Utilizing solution-focused brief therapy with families living with autism spectrum disorder. *Journal of Family Psychotherapy*, *27*(3), 155-170. http://dx.doi.org/10.1080/08975353.2016.1199766.

Sterling-Turner, H. E., and Jordan, S. S. (2007). Interventions addressing transition difficulties for individuals with autism. *Psychology in the Schools* [online], *44*(7), 681-690. https://doi.org/10.1002/pits.20257 [Accessed 4 June 2023].

Storey, K., & Haymes, L. (2023). *Case Studies in Applied Behavior Analysis for Individuals with Disabilities*. Charles C Thomas Publisher.

Sung, Y. S., Lin, C. Y., Chu, S. Y. and Lin, L. Y. (2022). Emotion Dysregulation Mediates the Relationship Between Sensory Processing and Behavior Problems in Young Children with Autism Spectrum Disorder: A Preliminary Study. *Journal of Autism and Developmental Disorders* [online], 1-11. https://doi.org/10.1007/s10803-022-05839-x [Accessed 7 June 2023].

Terroso, S. (2021). *The disabling effects of society: Approaching the education of autistic students through a social model of disability*. [Unpublished]. Education Studies Program, Yale College, New Haven Connecticut.

Walker, M. (2020). *They Really Didn't Get to See Me": Towards an Interactive Bioecological Model of Autism: Education, Understanding and Relationships*. Doctoral dissertation, University of Winchester.

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CONTENTS VOL. 37. 1 2024