

Is the method for assessing Additional Learning Needs effective for both genders?

Abstract

This proposed research project will explore the effects on current practice when assessing children with suspected Additional Learning Needs and whether it assesses both genders equally. Additional learning needs is a legally recognised definition for a child who has a learning, physical or sensory need which can affect their ability to learn and achieve the age-appropriate milestones (Dewis, Wales, 2023). The Additional Learning Needs System (Welsh Government, 2020) supports children and young people aged 0 to 25 in Wales and aims to support children overcome barriers and achieve their full potential through a unified and integrated framework to be used by settings and local authorities to put the learner at the heart of everything that happens and take a person-centred approach to support children. Autism Spectrum Disorder (ASD) is ever growing group of neurodevelopment disorders in children and young people. ASD was previously considered a primarily male diagnosis, although new research suggests the current method used to diagnose is male based and results in several females either being misdiagnosed or not being diagnosed until later life. The purpose of this research is to highlight the need for change to include a female perspective, this will be achieved through a triangulation of methods including quantitative and qualitative data through questionnaires to practitioners, observing children in settings and interviews with Consultant Psychiatrists. Further work needs to be done to conclude what is meant by the concept of a 'diverse assessment' and to support practitioners to implement in their settings.

Literature Review

It is expected in Wales that high quality and adapted teaching within early years settings are the building blocks in developing individual learners and supporting their needs. According to European Commission (2019) support should be provided for all children, regardless of whether they have an identified statement from professionals or practitioners recognising they require support in an area to allow them to learn and develop the same as everyone else in the setting. Although, during the eighteenth-century children with additional learning needs were widely unaccepted in society and parents carried shame or guilt when looking for support for their children (Wall, 2006). Educational acts have moved forward since then and have created guidance to support the diagnosis and identification of additional learning needs within children (Parliament UK, no date). The concept of student success relies on a culture that optimises learning and development opportunities for each student. However, this can be a challenge given that education has never seen such a diverse

student cohort, there are increasing number of students with disabilities, additional learning needs and some with hidden or undiagnosed learning needs which can affect their experiences (O'Neill, 2021).

The Autism spectrum is described as a neurodevelopmental condition that can have effect on the brain and central nervous system development and functions in a way that is atypical to the majority of people (Nasen, 2016). The Autism spectrum refers to multiple people with a range of common characteristics which relates to their ability to communicate, make sense of the world, and interact with others around them. Children are usually diagnosed with autism spectrum disorder before the age of 3 years as these behaviours such as social interaction and abilities, repetitive or highly focused interests in activities or actions which are typically displayed in early development (Nasen, 2016). These are described as the three primary areas of difficulties by Wing and Gould (1979).

Autism spectrum disorder affects children's ability to communicate and their social interactions as well as their emotional capacity in situations (American Psychiatric Association, 2013). According to Brodzeller et al. (2017) children with autism spectrum disorder need a vast number of coping mechanisms and support in their learning and development to promote social skills, these can include now and next cards, social stories, adjusting sensory stimuli such as noise, light, scent and sensory and working in partnership with parents and specialist such as speech and language therapists, as well as structure and an organised time table with regular routine to help them focus and know what to expect each day. Early years practitioners should consider the needs of each child and their strengths and weaknesses and adapt these into plans to provide support through structured activities to develop them further which can be embedded in daily routines and expectations of the setting (Reagan, 2012).

Autism spectrum disorder is a fast- growing group of neurodevelopment disorders in childhood state McIntyre and Zemantic (2016). Current statistics for the United Kingdom according to National Autistic Society (2019) suggest that there are approximately 700,00 people with autism spectrum, with a ratio of diagnose of males to females at 3:1. There are various theories that might explain why more males get an autism diagnosis.

Mandy et al. (2012) suggests that young girls with autism spectrum disorder may be hiding in plain sight as girls as they typically better at masking their challenges and are likely to have fewer displaying symptoms than boys. Research by Begeer et al. (2012) suggests that although this can be positive it can equally be negative. Young girls with milder forms autism are typically diagnosed later than boys, which means a delayed diagnosis so girls are going without support which is very much needed, and some may not be diagnosed at all. Bolte (2011) and Mandy et al (2012) suggest in their

research boys with autism spectrum disorder are found to show more challenging behaviour issues, such as aggressive behaviour, reduced prosocial behaviour, hyperactivity and repetitive or restricted behaviour and interests. This can cause a more noticeable disturbance at settings and at home. However, girls with autism spectrum disorder show more internal disturbances such as, anxiety, depression and emotional issues and are more passive in behaviour as opposed to acting out. Leading to under reporting by teachers of girls suggest the national autistic society (2019).

Methodological Considerations

Mukherji and Albon (2015) suggest having a sample which is carefully selected, when conducting a research project as a sample of participants is far more manageable to collect data from than it would be from the entire population. A sample is a group of people taking part which represents the larger population to carry out the research method and develop results to be viewed to gain a general understanding of the wider population.

The proposed research method will gather evidence from quantitative and qualitative data. Gray (2009) notes that mixed method approach is new way to examine a research area, as previous research have been reluctant to combine quantitative and qualitative methods. However, Denscombe (2010) suggests there is a growing consensus that treating these approaches as incompatible is not helpful or reliable. Using a mixed method approach allows the researcher to see results from different perspectives to confirm or challenge the findings from one method use to another (Bell 2005).

The proposed research will invite a range of professionals from early years settings, mainstream schools both primary and secondary and one additional needs school including teachers, teaching assistant, parents, and children to complete questionnaires, focus group interviews and observations. Professionals from Neurological Development Disorder Team and Children and Adult Mental Health Service will be invited to participate to gather all evidence. Data will be collected and reviewed through a series of different methods to give a wide understanding. Having a clear plan is necessary to succeed when carrying out research (Robert-Holmes, 2018). This sample of participants was chosen to gain knowledge from different scenarios and professionals/parents that deal with children being assessed for autism spectrum disorders, this varied sample will provide experiences and answers from different perspectives and stages of diagnosis as well as observations of children to witness the different behaviours in boy's vs girls and the parents and teachers' perspective of this.

One method of gathering data will be questionnaires. The questionnaires will contain a brief explanation on how to complete the questionnaire and how to return it once completed. A

combination of open and closed questions will be used. The objective of the questionnaire is an initial survey and gain an overview of knowledge from practice and professionals' own experiences with diagnosing girls with ASD along with accompanying behaviours that they led them to refer/provide additional support. Siraji-Blatchford (2008) and Denscome (2010) suggest there are many advantages to this method as it allows participants to give answers anonymously, data from a range of settings, backgrounds and experiences can be collected and presented in a quantified view to review. There is a disadvantage to questionnaires as they ask closed questions and do not allow scope to give emotive answers or individual experiences. Online questionnaires are sometimes unreliable as you do not know who is completing them and whether they are given genuine answers from real experiences, as it is anonymous there is no way to identify who is completing them to ensure the right target audience is met. There is also the issue of finding someone to complete them, sometimes people will not fill out a questionnaire as it takes time, but there are the ethical questions or providing bribes upon completion of the questionnaire as some people might hastily fill out the form to gain the 'reward' and these could corrupt the data. Robert-Holmes, (2018) states questionnaires should be used in conjunction with another method type such as interviews, participants will be given the option to give contact details when completing the questionnaire if they are happy to discuss further their experiences.

The next method to collect data will be focus group interviews, as a one-to-one interview can be intimidating and too formal to gain data. Participants will be asked to attend in groups of 6. The researcher will use pre-determined questions for each group, this will ensure that the data collected is the same from each group and allows for analysis of data to be effective (Bell, 2005). Collecting data around individual experiences will provide qualitative data as it is open ended, and some will differ to others. Milner et al. (2019) previously conducted focus groups as part of research into female experiences with ASD. Walker and Solvason (2014) suggest that an advantage of conducting interviews is that they are adaptable and can give the researcher more of an insight into the participants experiences. Researchers can use supplementary questions to draw out points of interest. A disadvantage of focus group interviews is that it is very time consuming for the researcher to create notes, this can be resolved by voice recording and then a transcript being created but the researcher must adhere to current data protection law as GDPR suggests (UKRI, no date).

The child's routine and feelings should be considered to optimise the best observation outcome if the child is upset or distracted this could obscure the results and they could disengage in the activity compared to if it were carried out on a day where they are feeling content and willing to participate. Kumar (2019) states another limitation could be bias from the observer. This could happen when the observer has an understanding of the research aims and has their own opinions, aims or

expectations that could influence what they record or observe throughout the study. To overcome this the researcher should attend several times before commencing observations so that they become a familiar person and the participants would behave in a more natural way supported by Cherry (2019).

After assessing results from collecting data from both qualitative and quantitative data, it is apparent that when this mixed method approach is used it shows that qualitative data is needed. Qualitative data gains knowledge and explanations with communicating through open-ended questions and emphasizing on specific phrases and words, however quantitative research would be collecting numerical data to then analyse. Coe et al. (2021) states that there are limitations to a researcher using observations, such as children's body language and interaction could potentially be missed during observations, ideally there should be at least 2 observers, one to take notes and another to fully immerse themselves into the observation so that nothing is missed.

The Hawthorne effect can also affect results of the proposed research. This is when participants in research may change how they behave due to the knowledge of being watched and observed. This means the research results and data may be unintendedly affected (Newby, 2014).

Another limitation is the Halo effect, the halo effect is a when the researcher can become bias towards a participant which could influence the results, for example this could be when handing out questionnaires and wanting to include an Educational Psychiatrist and believing they are very knowledgeable and impact the evaluations of that person's role (Nicholau, Mellinas and Martin Fuentes 2020).

An example of qualitative research strategy is triangulation, this is used to test the how valid the data collect is with varied sources (Coe et al. 2021). Using several methods of data collection in research to develop an understanding of the proposed research is referred to as triangulation. Using questionnaires, focus group interviews and observations this guarantees that triangulation is used to help reduce research bias that can occur from just using one research method, it also supports the validity of the proposed research.

Several other researchers have recorded some benefits to children who feel included with an additional learning need, such as meaningful peer relationships and further developing their cognitive and communicational skills and development (Nahmias et al 2014). Children that are not in an inclusive environment tend to interact with adults rather than peers (Goodman and Williams 2007). Children without additional needs also benefit from an inclusive environment and develop

skills such as increased emotional capacity, caring for those around them and understanding of diversity in their lives (Odom et al. 2011).

Ethical Considerations Conclusion

Miller (2012) suggests ethics in research are the internal moral knowledge that helps an individual decide how to conduct their research and methods which are considered ethically appropriate. For this reason, the methods should be carried out without causing harm or offence to participants, many universities' use moral principles to shape the regulations for their researchers to comply with (Miller 2012).

Bertram et al. (2016) states that researchers should be considerate of the risk as well as likelihood to inflict harm to young children throughout the research and observations and ensure they provide interventions which can prevent causing further harm if arises, to protect both the child and them. Educational researchers should consider that participants should feel like they are treated fairly, with respect and dignity as well as free from judgement (Bera, 2018).

Prior to research beginning, the researcher should consider the ethics of the proposed research and it is vital they inform all participants have a clear understanding of the proposed research, how and why they are involved and what will the research be used for throughout the research as well as after it has concluded (Robert-Holmes, 2018). Informed consent must be collected from adults and although parents can give consent on behalf of their child, researchers should obtain verbal assent to participate, this can be completed informally at the beginning of observations. Children have the right to withdraw from the observation at any time.

Once all participants of the sample have been chosen then consent forms will be issued to gain their approval to be observed/interviewed/complete questionnaires. A meeting with the setting, parents and professionals involved in the sample might also be arranged to discuss in detail the plan for the research, what that would entail and how the data will be used after the research has concluded. This will also allow to gain an insight into the samples questions, reasoning for agreeing to be part of the sample and which research method they are happy to comply with this meeting also allows participants and the researcher to discuss how they give consent and any ethical concerns in line with the BERA guidelines (2018). BERA (2018) states that the difference between consent and assent is adults over the age of eighteen can give consent as they understand the principles of it and can give permission for something to happen or take part, whereas assent is the expression of agreement via shrug, nod verbally agreeing normally given by a child or young person under the age of eighteen who might not have capability to understand how to give consent.

The child should be provided with information from the researcher on the level of the child's capability of knowledge to gain assent (Palaiologou, 2012). Participants should be made aware that they can withdraw from the research at any time, even if they have already consented to be involved, as it is a right they possess. National Society for the Prevention of Cruelty to Children (NSPCC, 2020) recommend that information sheets are provided to the those participating, and the information sheet should outline the plan for the research project and what they are required to do shows that the researcher is completely honest and open with them about the research. The proposed research will provide an information sheet that will consists of all plans for the research being conducted to avoid deceitfulness or misinforming those participating about what they are agreeing to take part in and what is expected of them.

This will be clearly shown on the information sheet provided and throughout the research project the researcher will be providing all those involved that they have the can withdraw and stop participating at any time throughout the research project. The researcher should ensure all are happy to continue with participating each time the research is beginning whether that be observations, questionnaire, or focused interviews. Doing this means that the researcher will know if an individual does want to withdraw and has given them plenty of opportunities to express this, this can lead to better results as all participants are involved because they want to be. After the information sheets are provided to the participants and they have been informed verbally of all intentions and requirements to participate, it should be noted participants should not feel pressurised into taking part and they are doing so of their own accord (BERA, 2018). The main principle of ethics research is voluntary informed consent. The purpose being is that those taking part can freely enter the research and possess full knowledge of what it entails for them and what they are signing up to before agreeing to take part (BERA, 2018). Throughout the research, the young children, being observed, will be reminded continuously of who the researcher is, why they are there and what they are doing as well as being given the option that they can decide to not take part if they do not want too. A participant can use dissent to refuse participation in the research, this is typically a child as it is verbal after prior given consent (Walker and Solvason, 2014). The young children will be provided with this opportunity to withdraw at different points during the research project. It is necessary that the rights of the child are the focus throughout the research in accordance with The United Nations Convention on the Rights of the Child (UNCRC) to ensure the child's well-being is being promoted and safe guarded (UNICEF, 2021).

The UNCRC states in Article 3 children should be the focus of any action that can affect their well-being (UNICEF, 2021). In regard to the research, this means that it is in the child's best interest that they are the main focus and adequate risk assessments and preventions should be put in place to

reduce the risk of harm or inflicting stress or upset onto the child (BERA, 2018). Excluding children from research can implicate ethical issues, or not taking their own and families views into the planning of the research project can affect the data, as well as not promoting the UNCRC Article 12 (UNICEF, 2021). This states that each child has the right to voice their opinions in situations that can affect them. To effectively practice these children's rights, throughout the proposed research the researcher should make sure that the child is centre focus to all decisions that are made and that their views will be actively listened too and considered as suggested by Christensen and James (2017). Christensen and James (2017) also suggest that sometimes children cannot feel pressured, although they are usually keen to help others. Furthermore, the child/ children should be made aware routinely of why the researcher is there and if the child decides they no longer wish to continue to take part, then it can stop straight away and at any time, they decide that. Another ethical factor to consider in research is confidentiality and anonymity of participants and how to protect and store the data.

Conclusion

In conclusion autism spectrum disorder is the fastest growing neurological disorder in early childhood. Through the evaluation and analysis of the current literature available it has been possible to highlight that females have a unique experience compared to males and has indicated the need for the ASD assessment tool to be re-evaluated to include the traits that are experienced from both genders. A mixed method approach of both quantitative and qualitative data through questionnaires, focus group interviews and observations to ensure a triangulation of results. The hope for this research is to produce guidance for practitioners and parents, so that early detection, diagnosis, and intervention implemented for all children that require support.

References

American Psychiatric Association (2013) *What is autism spectrum disorder?* Available at: <https://www.psychiatry.org/patients-families/autism/what-is-autism-spectrum-disorder> (Accessed: 05 May 2023).

Begeer, S. et al. (2012) *'Sex differences in the timing of identification among children and adults with autism spectrum disorders.* Available at: https://www.researchgate.net/publication/257576320_Sex_Differences_in_the_Timing_of_Identification_Among_Children_and_Adults_with_Autism_Spectrum_Disorders (Accessed: 05 May 2023).

Bell, J. (2005) *'Doing your research project: A guide for first-time researchers in education and social science'*. Available at:

https://www.researchgate.net/publication/44840319_Doing_Your_Research_Project_A_Guide_for_First-Time_Researchers_in_Education_and_Social_Science (Accessed: 13 May 2023).

BERA. (2018) *Ethical Guidelines for Educational Research*. Available at: file:///C:/Users/ERA-Ethical-Guidelines-for-EducationalResearch_4thEdn_2018%20(1).pdf (Accessed: 19 May 2023).

Bertram, T. et al. (2016) '*EECERA ethical code for early childhood researchers*', *European Early Childhood Education Research Journal*, Available at: <https://www.tandfonline.com/doi/abs/10.1080/1350293X.2016.1120533> (Accessed: 19 May 2023).

Bolte, S. (2011) '*Psych biosocial interventions for autism*'. Available at: <https://pubmed.ncbi.nlm.nih.gov/21523442/> (Accessed: 05 May 2023).

Brodzeller, et al. (2017) '*Interventions and Adaptations for Children with Autism Spectrum Disorder in Inclusive Early Childhood Settings*'. Available at: <https://link.springer.com/article/10.1007/s10643-017-0859-5?shared-article-renderer> (Accessed: 05 May 2023)

Cherry, K. (2018) *Naturalistic Observations in Psychology*. Available at: <https://www.verywellmind.com/what-is-naturalistic-observation-2795391> (Accessed: 17 May 2023).

Christensen, P. and James, A. (2017) *Research with children: perspectives and practices*. 3rd Ed. London: Routledge.

Coe, R. et al. (2021) *Research methods and methodologies in education*. 3rd Ed. London: Sage

Denscombe, M. (2010) *The Good Research Guide: For Small Scale Social Research Projects*. 4th Ed. Buckingham: Open University Press.

Dewis, Wales, (2023), *Additional Learning Needs*, Available at: <https://www.dewis.wales/additional-learning-needs-cyp> (Accessed 25 April 2023).

European Commission (2019) *Special Education Needs Provision within Mainstream Education*. Available at: https://eacea.ec.europa.eu/national-policies/eurydice/content/special-education-needs-provision-within-mainstream-education-80_en (Accessed 02 May 2023).

Gray, D.E. (2009) *Doing Research in the Real World*. 2nd Ed. London: SAGE.

Goodman, G., and Williams, C.M. (2007) '*Interventions for increasing the academic engagement of students with autism spectrum disorders in inclusive classroom*'. Available at: <https://www.semanticscholar.org/paper/Interventions-for-Increasing-the-Academic-of-with-Goodman-Williams/eaab3810d3552d28086a5a41c4ec729c01e702f8?p2df> (Accessed: 17 May 2023).

Kumar, R. (2019) *Research methodology: a step-by-step guide for beginners*. 5th Ed. London: Sage.

Mandy, W. et al. (2012) *Sex differences in autism spectrum disorder: Evidence from a large sample of children and adolescents*. Available at: <https://pubmed.ncbi.nlm.nih.gov/21947663/> (Accessed: 05 May 2023).

McIntyre, L.L. and Zemantic, P.K. (2016) 'Examining Services Young Children with Autism Spectrum Disorder: Parent Satisfaction and Predictors of Service Utilization'. Available at: <https://pubmed.ncbi.nlm.nih.gov/29056847/> (Accessed 05 May 2023).

Milner, V. et al. (2019) *A Qualitative Exploration of the Female Experience of Autism Spectrum Disorder (ASD)*. Available at: https://www.researchgate.net/publication/331259774_A_Qualitative_Exploration_of_the_Female_Experience_of_Autism_Spectrum_Disorder_ASD (Accessed: 13 May 2023).

Miller, T. (2012) *Ethics in qualitative research*. 2 Nd Ed. London: Sage.

Mukherji, P. and Albon, D. (2015) *Research Methods in Early Childhood: An Introductory Guide*. 2 Ed. London: Sage Publications.

Nasen (2016) *Girls and Autism: Flying Under the Radar*, Staffordshire.

Nahmias, A. et al. (2014) 'Comparing cognitive outcomes among children with autism spectrum disorders receiving community-based early intervention in one of three placements'. Available at: <https://journals.sagepub.com/doi/10.1177/1362361312467865> (Accessed: 17 May 2023).

National Autistic Society (2019) Autism facts and history. Available at: <https://www.autism.org.uk/about/what-is/myths-facts-stats.aspx> (Accessed: 05 May 2023).

Newby, P. (2014) *Research Methods for Education*. 2nd Ed London: Routledge.

Nicolau, J.L. and Mellinas, J.P. and Martin-Fuentes, E. (2020) 'The halo effect: A longitudinal approach', Available at: <https://www.sciencedirect.com/science/article/abs/pii/S0160738320300827> (Accessed: 17 May 2023).

NSPCC. (2020) *NSPCC Research Ethics Committee: Guidance for applicants*. Available at: <file:///NSPCC%202020%20research-ethicscommittee-guidance-applicants%202020.pdf> (Accessed: 19 May 2023).

Odom, et al. (2011) '*Inclusion for young children with disabilities: A quarter century of. Research perspectives.*' Available at: <https://journals.sagepub.com/doi/abs/10.1177/1053815111430094> (Accessed: 17 May 2023).

O'Neill, G (2021), *Diversifying assessment methods: Barriers, benefit, and enablers* Available at: <https://www.tandfonline.com/doi/full/10.1080/14703297.2021.1880462> (Accessed 09 May 2023).

Palaiologou, I. (2012) *Ethical practice in early childhood*. London: Sage.

Parliament UK (No date) *1870 Education Act: Going to School*. Available at: <https://www.parliament.uk/about/living-heritage/transformingsociety/livinglearning/school/overview/1870educationact/> (Accessed 02 May 2023).

Reagan, N. (2012) 'Effective Inclusion of Students with Autism Spectrum Disorders'. Available at: https://fisherpub.sjfc.edu/education_ETD_masters/276/ (Accessed: 05 May 2023).

Roberts-Holmes, G. (2018) *Doing Your Early Years Research Project: A step by step guide*. London: SAGE.

Siraji- Blatchford, I. (2008) '*Towards the transformation of practice education: The effective provision of pre-school education*'. Available at: https://www.researchgate.net/publication/43982078_Towards_the_Transformation_of_Practice_in_Early_Childhood_Education_The_Effective_Provision_of_Pre-school_Education_EPPE_project (Accessed: 13 May 2023).

UKRI (No date) *GDPR and Research: An Overview for Researchers*. Available at: <https://www.ukri.org/files/about/policy/ukri-gdpr-faqs-pdf/> (Accessed: 13 May 2023).

UNICEF. (2021) *The United Nations Convention on the Rights of the Child*. Available at: https://www.unicef.org.uk/wpcontent/uploads/2010/05/UNCRC_united_nations_convention_on_the_rights_of_the_child.pdf (Accessed 19 May 2023).

Walker, R. and Solvason, C. (2014) *Success with your Early Years Research Project*. London: SAGE.

Wall, K. (2006) *Special Needs and Early Years*. 2nd Ed. London: SAGE

Welsh Government, (2020). *The additional learning needs transformation programme: frequently asked questions*, Available at: <https://www.gov.wales/additional-learning-needs-transformation-programme-frequently-asked-questions-html> (Accessed 25 April 2023).