



CENTRE FOR AUTISM
MIDDLETOWN

Employment and Employment Support



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INTRODUCTION

This is the thirty-seventh Research Bulletin produced by Middletown Centre for Autism, providing summaries of ten articles from 2018/19 to 2021.

The Bulletin commences with an interview from Majella Nugent from Middletown Centre for Autism. Majella is a Trainer / Adviser with Middletown Centre. She has experience teaching and supporting autistic children and young people in schools. Majella's experience includes preschool, mainstream primary, post-primary and special schools across Ireland. Majella also has experience teaching autistic students in further education. She organises the Centre's post-14 information days.

Please note that the views represented in this document do not necessarily reflect the views of Middletown Centre for Autism. Reviewers have, where possible, used the original language of the article, which may differ from UK and Ireland usage and the usage of a range of terminologies for autism.

INTERVIEW WITH MAJELLA NUGENT

1. In your opinion, why is there a gap in the employment of autistic people?

Employment is an important part of adulthood and a quality-of-life indicator, yet it is recognised that there is a significant gap in employment for autistic people. Data released by the Office for National Statistics in 2021 identified that only 21.7% of autistic adults are in employment despite research showing the vast majority want to work. I think there is no single reason but a combination of reasons for this.

Moving from school to employment is recognised as a significant life change and change is known to be difficult for many autistic individuals. This change means moving away from familiar people and friends and being introduced to new people and making new friends in the workplace. Processing, navigating and adapting to this change is significant and it can lead to loss of contact with familiar people which leads to isolation which impacts on the autistic person's mental health. Poor mental health such as increased anxiety is a significant factor in any person's ability to attend to work and sustain employment.

This transition also means a change to the support a young person receives (children services to adult services). It is recognised that these services need to work very closely to ensure this key transition in life is positive and successful for the autistic person but unfortunately often this is not so. Employers, as well as autistic people, may not know about the support or range of initiatives that could be supportive in the workplace for autistic people. Finding and navigating the support can be difficult for employer and employee, which is why employment support services play a central role.

Also, the needs of autistic employees – many are not understood by employers and work colleagues, causing the workplace to be a daunting experience for the autistic person resulting in them leaving employment. The employer may not know how to support the autistic person or may not know that the person has a diagnosis of autism due to the autistic employee not sharing this information or communicating the adjustments they need.

2. What are the main barriers to employment for youth with autism?

One of the main barriers is the stigma and lack of understanding about autism that impacts on employment opportunities available to autistic people.

Communication and social interaction expectation are also significant barriers starting at application and interview stage. If the autistic youth successfully passes these stages, these challenges present again in sustaining employment. Challenges and differences with communication and social interactions makes it difficult for the autistic person to understand expectation, to communicate needs to the employer and to interact with work colleagues.

Common employment processes and traditional practices to job advertising, including how jobs are described, are another barrier. Job descriptions often include as 'essential' the ability to work as part of a team and/or be an effective communicator. These are recognised difficulties for many autistic individuals. These skills are not always essential for the role advertised but because they are included in the advertisement they are likely to inhibit the autistic youth from applying for a post even if they have the job-specific skills or a willingness to give the job a go.

Many employment services and people responsible for HR in an organisation are not trained to understand or meet the unique and varying needs of autistic youth meaning they lack understanding of the strengths of the young person or do not know how to provide individualised autism-specific support, including reasonable accommodations at recruitment stage and then for ongoing sustained employment.

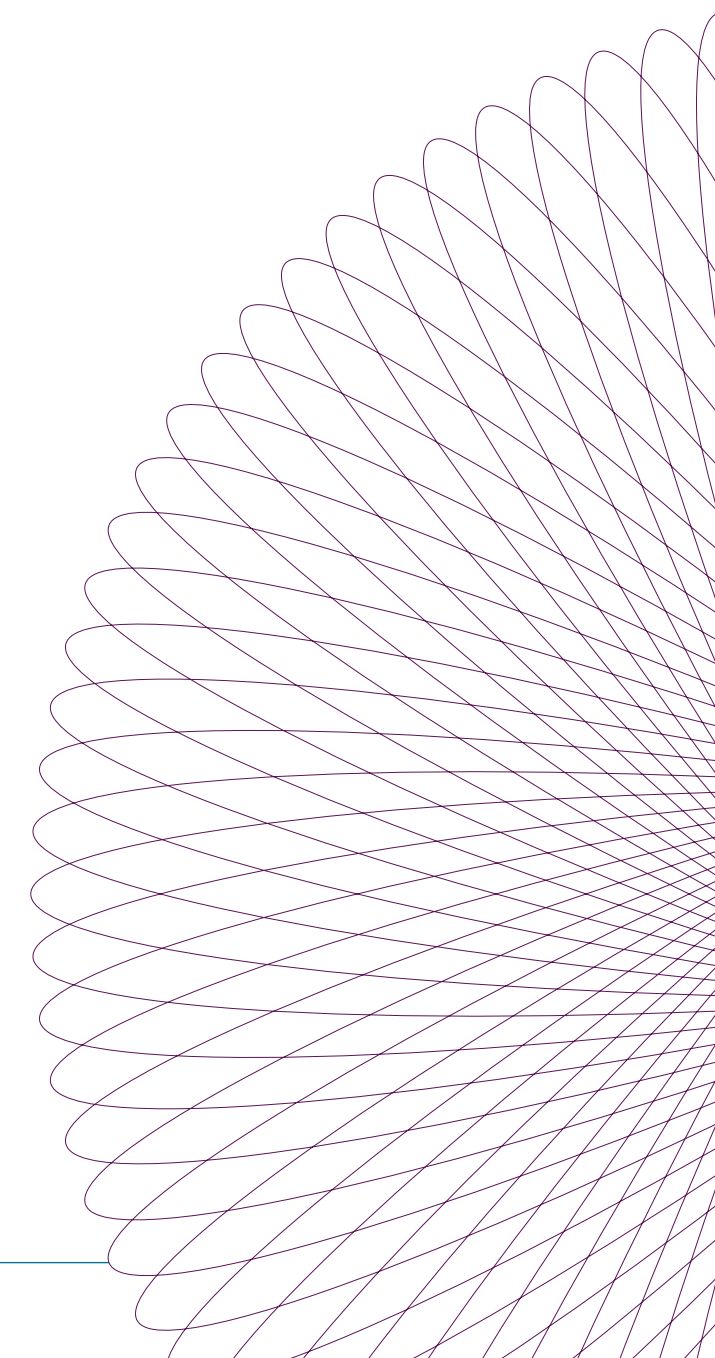
Lack of autism understanding and rigid adherence to traditional recruitment and retention processes in a changing world is another barrier to employment for autistic people. Human resource departments and workplace managers are in influential positions to implement workplace modifications, to foster inclusive workplace cultures and to change organisational policies and practices that remove barriers to work participation for autistic individuals.

Some employers have concerns over real and perceived costs and the responsibility of employing autistic youth, including accommodation costs, additional supervision needs and concerns around employee relations and productivity; thus they shy away from employing autistic youth.

3. What are the employment challenges for autistic people?

Investigating and accessing employment opportunities is a complex process that requires the jobseeker to successfully multitask and coordinate an array of skills when seeking employment. Due to challenges with executive functioning, accessing and availing of support is very important at this stage of the employment process.

Finding an opening that appeals to the autistic person can be difficult. Following this is the interview process and if successful, communicating and interacting with managers and colleagues. This is why ongoing autism support in the workplace is important – to ensure the autistic person understands the employers' expectations and to enable the autistic person to communicate their needs to management.



4. What strengths can autistic people bring to the workplace?

Autistic people possess many strengths that can be harnessed and capitalised in the workplace and help employers achieve their organisation's aims and objectives.

Some strengths autistic people are renowned for include honesty, punctuality, reliability and productivity, including high-quality work, a strong work ethic, low absenteeism, a methodical approach when completing work, visual perception, attention to detail and good memory, trustworthiness, loyalty and kindness. Other strengths may be specific such as mathematical, technical, creative, artistic or information technology skills. Another strength frequently identified by employers is the high level of motivation arising from an in-depth interest in a subject area.

An autistic employee, when appropriately supported, can bring their strengths, perspectives and intelligence to an organisation that can drive productivity and innovation.

5. How do the demands of social and communication skills impact autistic youth in the workplace?

After the young autistic person successfully secures employment, effective social and communication skills are needed daily to sustain it. Unfortunately employers often overlook the ongoing social and communication needs of their autistic employees.

These skills are needed daily for engagement with managers and colleagues: for following instructions, asking for help when a difficulty arises and interacting with co-workers. It is recognised that autistic people can find it difficult to engage

and interact socially, which may hinder progress and cause them to be excluded or not invited to participate socially. This can result in the autistic person feeling excluded, isolated, upset and very stressed, causing them to leave employment.

Having an identified supportive person in the workplace, either manager or colleague, can make a real difference. This person can mentor and support the autistic person navigate the workplace causing their social and communication confidence to grow, and perhaps over time as they become familiar with expectation the less support they will need.

6. How can sensory differences make it challenging for autistic youth to work?

Workplaces are sensory rich environments that may cause the autistic youth to experience hyper or hyposensitivities to tactile, auditory and visual stimuli, as well as unusual responses to heat and coldness in the workplace. Working in an environment where sensory needs are challenged can cause reduced productivity and work effectiveness and an increase in stress and anxiety.

Employers and work colleagues may not know about or understand sensory needs. The sensory challenge may be due to social requests from colleagues when the autistic person needs quiet time. It may be from working in a shared environment or from noise or sound. Often the challenge is exacerbated because the autistic individual is not able to control the amount of sensory stimuli they are exposed to.

This is why it is important for the workplace to have knowledge of the autistic person's sensory needs. This can be achieved through the autistic person sharing this information with their employer or the employer asking at interview or orientation stage about sensory needs and

requirements. This way reasonable adjustments can be put in place to support the autistic youth in work.

7. What skills, experiences and supports are necessary for young autistic people to acquire prior to leaving education?

There is a correlation between life or adaptive-skill functioning and greater success in the workplace; therefore teaching and incorporating these into daily living for autistic young people is important. Acquiring life skills is difficult for autistic teens because of the array of practical skills needed to carry them out as well as memory recall and executive function needed to spontaneously execute them, so educators should assess and observe the autistic student and plan to teach the skills they need but are not carrying out independently.

Knowing about themselves and how autism impacts on their daily living is also important. Usually school is a safe, secure, predictable environment with staff who are familiar to and trusted by the autistic student. Learning about self in this environment and practising asking for help and accommodations in this environment is a stepping stone to asking for accommodations in the workplace.

Making plans and accepting support to achieve these plans is another key skill. Knowing that support is available to help the autistic teen achieve their career aspirations and being able to accept support is important.

8. How can educational professionals best assess the transitional needs of young autistic adults within the workplace?

Getting to know the autistic young person is most important. Each young autistic person joining

the workplace will be different, therefore applying a generic range of approaches may not meet the unique needs of the new autistic person entering the organisation.

If a transition-support organisation or a family member is supporting the autistic person transition into work, then the workplace should liaise closely with these people to find out the young person's strengths, interests and the areas they are most likely to need support with.

9. How can schools prepare autistic teenagers for the workplace?

Research shows that it is important for schools to know the specific factors that predict positive employment outcomes for autistic youth, which include self-disclosure of autism to advocate for accommodations, needs and preferences in the workplace; developing career aspiration plans with the autistic student, problem-solving, self-evaluation and fulfilling work responsibility on time. These factors need to be targeted as the teen approaches and progresses through the transition years in school.

Schools can use their connections with colleges, employment support organisations and local employers to find out about opportunities that may be of interest to the young autistic person and to share this information with them and their parents/carers so these can be discussed and considered in the home setting.

As it can be particularly difficult for an autistic person to imagine a work situation that they have not yet experienced, schools should organise work experience supported by school staff in a range of settings, exposing the student to various jobs based on their identified area of interest.

As school starts to prepare the autistic teenager for employment it is vital that they work in partnership with parents and introduce parents to the employment support services who will support the autistic teen in bridging the transition between school and work/adult life.

10. What additional support could autistic teenagers avail of to help them prepare for employment?

Autistic teens need to travel to and from work and manage relatively independently in work. These factors can cause challenges for them, especially if using public transport is a new skill and if they received a high level of support in school.

This is why autistic youth benefit from repeating skills and activities that are new until they are familiar with them. This can be facilitated through school, home and the transition-support organisation working together to identify, plan, rehearse and practise the skills that will enable the young person to succeed in work. The skills planned and rehearsed will be unique to each young person and the work context they are entering, but they are likely to include personal hygiene and how to dress for work; social skills such as a greeting and interacting with colleagues; the practical skills needed for travelling to work on public transport, including regulation skills when the bus or train is not on time. It also includes problem-solving, including identifying those in the setting whom the young person can ask for help.

11. How can autistic youth be best accommodated in the workplace?

Employers may not automatically know what they can do or what they should do in terms of

reasonable adjustments to help autistic employees thrive in the workplace.

An important thing that employers can do is find out what support or adjustments is needed and be flexible with these until the right balance has been achieved for the new autistic employee. This can be achieved by having an up-to-date understanding of autism and asking the autistic young person, or the person who is supporting the autistic youth transition into employment, what their needs are and how these can be best accommodated in the workplace.

Providing autism awareness training for the existing workforce team can also help. Co-workers and colleagues are natural supports in the workplace; they can assist autistic employees complete work-related tasks and support the social and communication needs of new and existing autistic colleagues.

12. How can organisations benefit from employing autistic people?

Organisations can benefit in many ways from employing autistic people. As identified above, autistic people have a wide range of personal skills and talents that can be used by an organisation to drive productivity and innovation when they are supported.

In return, organisations benefit from the autistic person's diverse thinking, their high level of attention, concentration and persistence when carrying out tasks, their reliability and loyalty to the business, their technical ability and excellent memory.

Employing and supporting an autistic person shows that an organisation is committed to inclusion, equality and diversity.

EXPLORING THE CAREER MOTIVATIONS, STRENGTHS, AND CHALLENGES OF AUTISTIC AND NON-AUTISTIC UNIVERSITY STUDENTS: INSIGHTS FROM A PARTICIPATORY STUDY

BACKGROUND

Autistic graduates are less likely to be employed than graduates with other disabilities, and for those who do secure employment they are often in jobs that are below their education and skill level and are paid less than their non-autistic colleagues. Maintaining a job can also be challenging. Some barriers to successful employment include discrimination, limited understanding of autism and a lack of support to address differences in sensory processing, executive functioning, social skills and mental health. Autistic employees may have difficulties adapting to the workplace and outcomes, and employers can struggle to understand the autistic perspective.

The expectation is often for the autistic person to change and adapt, yet the focus should be on making the workplace accessible to autistic people, understanding autism and ensuring a match between the person's strengths/interests and their job.

There is a lack of research and information on how university staff can support autistic students in securing employment and how to ensure their career choices match their specific strengths and interests.

RESEARCH AIMS

The overall aim of this study was 'to help universities better support autistic students in achieving their career goals.'

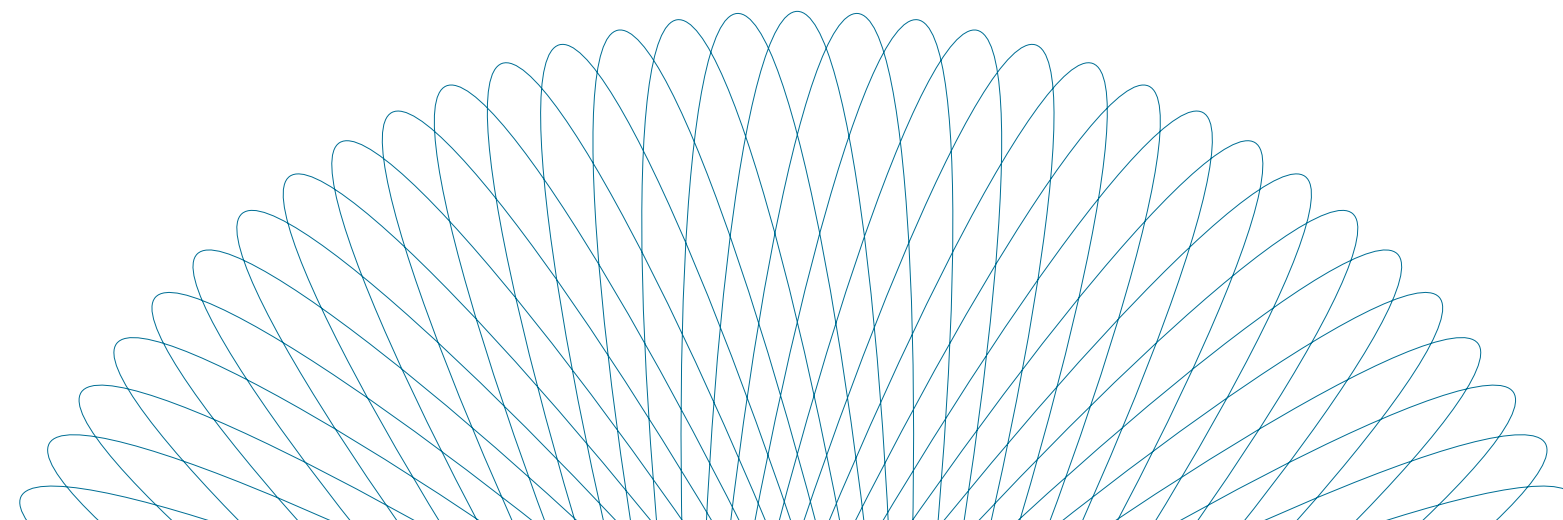
The authors set out the following hypotheses:

- Autistic students are more likely than non-autistic students to cite helping others and a passion for their interests as reasons for their career choices.
- Autistic students are more likely than non-autistic students to cite writing skills and attention to detail as skills that would help them secure their ideal job.
- Autistic students are more likely than non-autistic students to cite discrimination, focus and social skills as obstacles to employment.

RESEARCH METHODS

The research was conducted by autistic and non-autistic researchers who worked collaboratively to develop research aims and hypotheses and write the survey questions.

Participants completed online surveys. There were 92 autistic participants and 774 non-autistic participants.



All participants were asked the following questions:

1. What is your course of study/major? If you are undecided, please let us know what majors/ fields of study you are considering.
2. What type of job do you hope to get after you graduate?
3. Why is this job of interest to you?
4. What skills do you have that could help you succeed in your dream job?
5. What challenges might you face getting or keeping your dream job?

In addition, autistic participants who were recruited through snowball sampling were asked the following questions:

1. What goals do you hope university will help you achieve?
2. Has your experience in university helped you develop work-related skills?
3. What work-related skills have you developed so far in university?
4. What is the job you held for the longest time?
5. Did you receive specialised supports due to autism at your job?
6. When do you tell potential or current employers about your autism?

RESEARCH FINDINGS

The majority (76%) of autistic participants reported that they had learned employment skills at university, including personal development, academic skills, interpersonal skills and career-specific skills.

Responses to the question about disclosing diagnosis varied greatly, with some choosing not to disclose and others doing it at varying stages along the recruitment and employment process.

Autistic graduates were more likely to seek academic careers. They were less likely to seek careers in healthcare and helping others, although further analysis indicated that this was more attributable to being male than autistic.

Both autistic and non-autistic students made career choices based on intrinsic interests, and so this is not a factor that is specific to autistic people.

Autistic participants were more likely to perceive writing skills and attention to detail as important skills in obtaining employment, while non-autistic participants were more likely to cite patience as an important skill.

Autistic people were most likely to report discrimination and social challenges as obstacles to obtaining and maintaining employment, whereas non-autistic participants were more likely to report academic challenges as a difficulty in employment. Psychological difficulties were also reported by autistic participants as an obstacle in employment.

IMPLICATIONS FOR PRACTICE (by the authors)

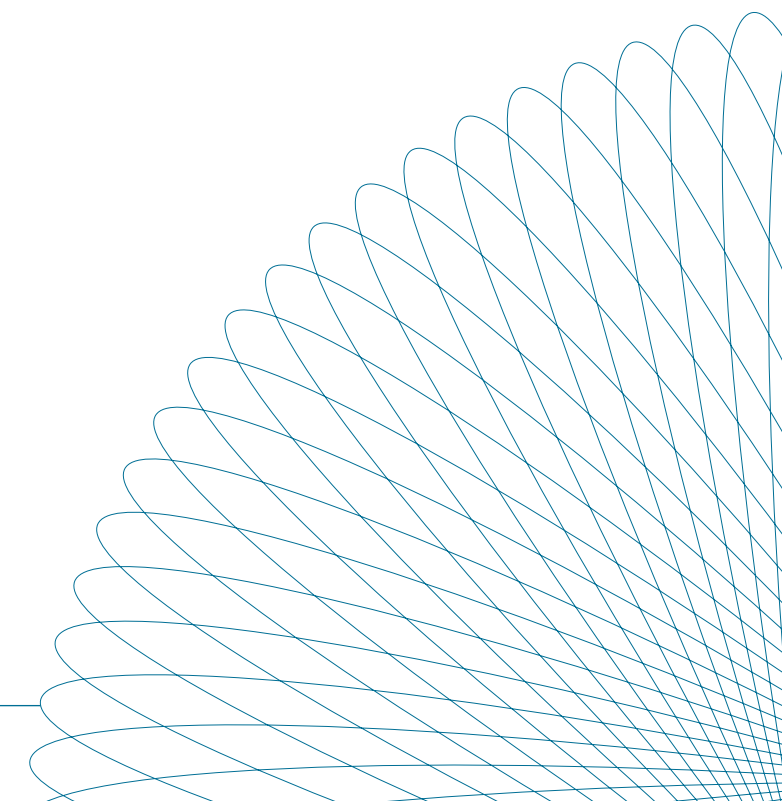
- Universities should include career-related skills in their curricula and offer more opportunity for experiential learning (e.g. internships). These skills should be taught to both autistic and non-autistic students as not all autistic students will disclose their autism.
- University staff should work in partnership with potential employers to ensure autistic students develop the skills required in the workplace.

- Autistic and non-autistic students need greater opportunities at university to explore careers and to equip them with the skills for more success in employment. This could be achieved through internships, sandwich courses, technical courses delivered by industry professionals and by giving students the opportunity to try tools and roles in the classroom.
- Universities should support all students in matching their strengths to relevant career choices.
- Role models can help people aspire to and achieve their dream jobs, and so autistic people would greatly benefit from having more autistic educators in universities.
- Universities need to make more effort to employ neurologically diverse staff, thus setting an example of inclusive employment to the wider community.
- Universities could offer training to their own staff and to the wider community in how to support autistic colleagues.
- Employers need to be educated in how to modify the workplace environment and recruitment processes (e.g. interviews) to meet the needs of autistic employees and to overcome discrimination.

- Autistic students should have the opportunity to explore a greater variety of careers while at university by meeting with industry professionals and university alumni.
- Future research on this topic should use a more divergent sample as this sample was predominantly white male. The non-autistic comparison group could be more closely matched to the autistic group. Future studies should also combine self-report methods with more objective measures.

Full Reference

Cheriyana, C., Shevchuk-Hill, S., Riccio, A., Vincent, J., Kapp, S.K., Cage, E., Dwyer, P., Kofner, B., Attwood, H. and Gillespie-Lynch, K., (2021). Exploring the career motivations, strengths, and challenges of autistic and non-autistic university students: insights from a participatory study. *Frontiers in Psychology*. 12, pp. 1–11.



IDENTIFYING SCHOOL-BASED FACTORS THAT PREDICT EMPLOYMENT OUTCOMES FOR TRANSITION-AGE YOUTH WITH AUTISM SPECTRUM DISORDER

BACKGROUND

The association between secure employment, a sense of purpose, financial independence, general success and indeed quality of life for the population is recognised, yet prior studies focusing on the autistic population show that employment rate is relatively low and if in employment, the autistic individual is likely to work fewer hours and earn a lower weekly wage. This correlates with studies showing that autistic youth frequently experience challenges when transitioning from school to employment. For the authors this exposed the need to explore school-based factors that are modifiable and could thus potentially change this trajectory and impact positively on the employment outcomes of this population.

In the United States (US) the Individuals with Disabilities Education Act (IDEA 2004) stipulates that gaining and maintaining employment is a primary goal of special education for transition-age youth.

Autistic students comprise a growing population in special education and there is ambiguity as to whether the school-based employment preparation needs of this population are being met. In the US schools endeavour to integrate academic and vocational education through developing connections, establishing links and by working with a range of service providers to develop and coordinate transition support for autistic students while pursuing academic attainment. The strain between academic and vocational demands makes it difficult to identify what school-based support needs to be prioritised to positively change employment outcomes for this population.

RESEARCH AIM

In an effort to identify school-based factors that potentially influence post-school employment outcomes for autistic youth, this study sought to answer two research questions:

- To what extent do school-based transition supports and independent variables (family background and parental participation in special education, and student factors including self-determination, daily functioning skills and academic performance) predict employment outcomes for autistic students?
- Do school-based transition supports mediate the associations between independent variables and employment outcomes of students with ASD?

RESEARCH METHODS

The authors conducted secondary analysis of data from the US's National Longitudinal Transition Study-2 (NLTS-2), a nationally representative database of the transitioning population at five Wave points between 2001 and 2009. The authors also developed a statistical model to measure the complex associations among multiple factors and employment outcomes.

The statistical model included six potential predictors identified in literature. These were school-based transition services and supports and independent variables, namely the young autistic adult's family background, parental participation in special education, self-determination, academic performance and the young autistic adult's daily functioning skills.

Data from 920 autistic students were originally retrieved from the NLTS-2, which was a representative sample of high school students accessing special education services between 2001

and 2009. After exclusion criteria was applied (namely students who did not participate in follow-up at Wave 5 (n=290) and students who had not yet left high school (n=60) at Wave 5), data from 570 autistic students were analysed. At Wave 1 the autistic students were aged 13–16 years and at Wave 5 they were aged 21–25 years.

The authors conducted Structural Equation Modeling (SEM) to develop a model of the associations between multiple factors and employment outcomes. This analysis enabled

the authors to use multiple indicators that represented potential predictors and to develop a statistical model that explained the complex relationships between predictors, mediators and dependent variables. A detailed description of the multiple steps involved in developing, evaluating and modifying the model and an assessment of model fit are presented in the study.

Predictor variables and source of data included in the final statistical model were summarised in Table 2 of the paper which is replicated below.

Latent variable	Observed variable	Data sources
Employment outcomes	Employment status	W5, youth & parent survey
	Amount paid for current job	W5, youth & parent survey
	Number of months youth has had job	W5, youth & parent survey
School-based transition supports	Vocational-related services	W2, school program survey W2, youth & parent survey
	Support for transition planning	W2, school program survey
	Work experience at high school	W2, youth & parent survey
Daily functioning skills	Tells time on a clock with hands	W1, parent survey
	Reads and understands common signs	W1, parent survey
	Counts change	W1, parent survey
	Gets to places outside the home	W1, parent survey
	Uses public transportation to get around town	W1, parent survey
Self-determination	Autonomy	W2, student assessment
	Self-realization	W2, student assessment
	Empowerment	W2, student assessment
	Self-efficacy	W2, youth survey
Academic performance	Applied problems	W2, student assessment
	Science	W2, student assessment
	Reading comprehension	W2, student assessment
	Vocabulary	W2, student assessment
	Social science	W2, student assessment
Parent participation in special education	Parents' role in transition planning	W2, parent survey
	Parents' expectations- work related	W2, parent survey
Family background	Household income	W1, parent survey
	Mother's education	W1, parent survey

RESEARCH FINDINGS

This study was the first to use SEM to examine the complex relationship between school-based transition supports, independent variables and employment outcomes for autistic students.

This research study identified amendable school-based factors that predict employment outcomes for transition-age autistic students to be:

- parental participation in education – optimising parental participation in autistic students' education, including school-based transition support, can ensure educators understand parental expectation about their child and may improve the alignment of parental perspectives and transition-support goals set by professionals.
- self-determination – the role of self-determination and employment is current, which is why there are calls for increased education on self-determination for autistic students. Self-determination in employment contexts is vast; it includes self-disclosure of autism to advocate for accommodations, needs and preferences, problem-solving, fulfilling work responsibility on time, self-evaluation and developing career plans. This analysis did not find significant associations between self-determination, school-based transition support and employment outcomes for autistic students. The authors hypothesise as to why and conclude that future research examining the association of these factors should carefully consider what options for measuring self-determination are best suited to this population.
- academic performance – future research is needed to clarify the relationship between academic instruction, academic support,

academic accommodation and post-school employment outcomes, especially for autistic students with higher daily functioning skills. The authors shared that they had no awareness of any study investigating the effects of academic supports on post-school employment outcomes for autistic students.

- daily functioning skills – these skills are critical for employment success. Even when autistic students perform well academically and have strong verbal communication skills, they can encounter difficulties with daily functioning skills that create barriers to post-school employment success, e.g. maintaining personal hygiene, travelling on public transport or driving a vehicle, financial management and budgeting.
- school-based transition supports – these were an important mediator for successful employment outcomes of autistic students, although there is a need for further research to investigate what school-based transition support is required depending on the assessed daily living skill function of each transition-aged autistic student.

In response to the second research question the study found:

- for autistic youth with lower daily functioning skills, school-based transition supports mediated the relationship between parental participation in education and employment outcomes.
- for autistic youth who have higher daily functioning skills, their level of academic performance mediated the relationship between parental participation in education and employment outcomes.

These results suggest there are different

determinants of employment outcomes for different subgroups of autistic students.

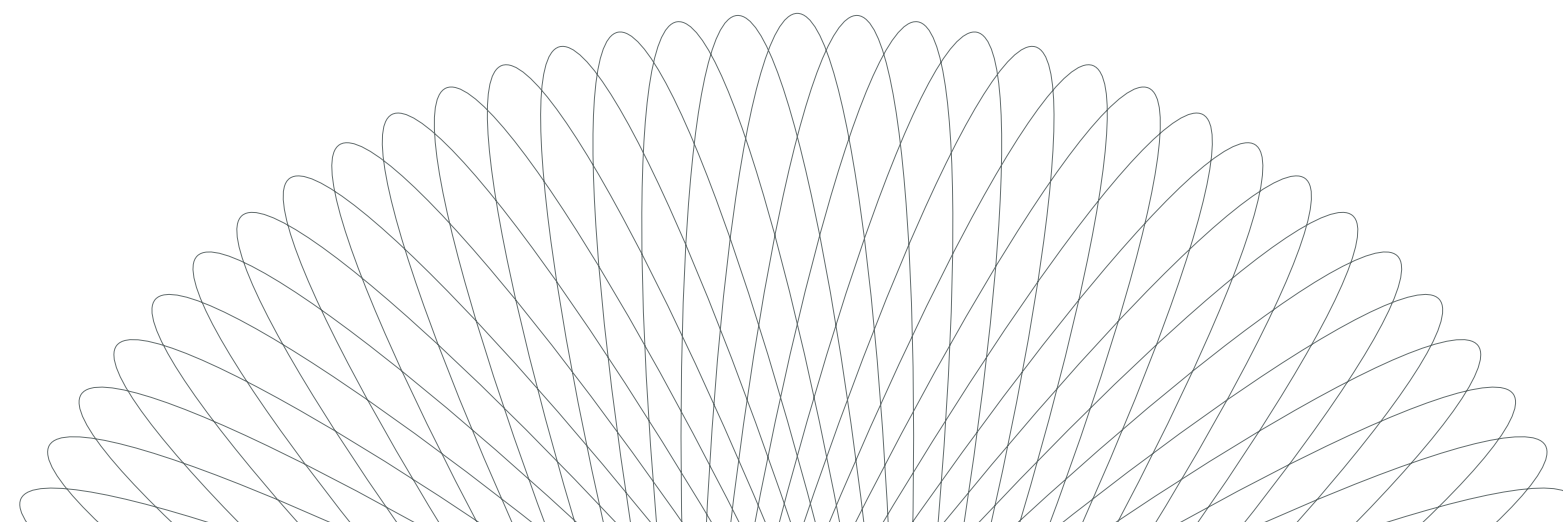
IMPLICATIONS FOR PRACTICE (by the authors)

- Optimising parent–educator collaboration in transition evaluation and planning is an important predictor of employment outcome for autistic youth.
- Schools systematically and routinely assessing transition-aged autistic students for daily functioning skills and providing or signposting support to aid the development of these skills can positively impact on post-school employment outcomes for this population.
- Daily functioning skills are a key determinant of the type of transition support autistic students may benefit from to achieve post-school employment success.
- An overemphasis on academic performance and time constraints of multiple school activities for academically capable autistic students may result in less opportunity for them to receive transition support needed to optimise their potential for post-school employment outcomes.

- Schools may be able to improve employment outcomes for autistic youth by systematically and routinely screening this cohort of students for limitations in daily functioning skills and providing support to assist in the development of these skills.
- The findings of this study add to the existing literature on factors that predict employment outcomes for transition-age autistic youth by identifying the school-based factors that can be modified and showing how the complex association of multiple factors shape an autistic student's employment outcomes post-school. This may help future researchers and professionals prioritise transition support for autistic youth.

Full Reference

Wong, J., Coster, W.J., Cohn, E.S. and Orsmond, G.I., (2021). Identifying school-based factors that predict employment outcomes for transition-age youth with autism spectrum disorder. *Journal of Autism and Developmental Disorders*. 51(1), pp. 60–74.



WORK, LIVING, AND THE PURSUIT OF HAPPINESS: VOCATIONAL AND PSYCHOSOCIAL OUTCOMES FOR YOUNG ADULTS WITH AUTISM

BACKGROUND

Understanding the life trajectories of children diagnosed with autism is important for service development for an ageing autistic population.

RESEARCH AIMS

The researchers followed a sample of 123 young adults from diagnosis or evaluation of possible autism at age 2 years or younger, through to adulthood (mean age 26 years). The study aimed to describe outcomes from across several aspects of functioning, including the vocational, residential, affective and subjective outcomes.

Specifically, the researchers wanted to find out:

- how autism diagnoses and cognitive abilities contribute to outcomes in adulthood; and
- similarities and differences between adults who received an autism diagnosis and adults who never received a diagnosis across a wide range of cognitive abilities.

RESEARCH METHODS

The 123 young adults diagnosed with autism in childhood (94%) or later (6%) were categorised into three outcome groups:

1. Autism diagnosis at some point and current $IQ \geq 70$ (Ever diagnosis Higher IQ).
2. Autism diagnosis at some point and current $IQ < 70$ (Ever diagnosis Lower IQ).
3. Individuals who never received a diagnosis (Never diagnosis).

A battery of diagnostic and psychometric instruments were administered during visits arranged with the families and the participants at their convenience at home, school, local clinics

or workplace at various time points from age 19. Independence and well-being were assessed through direct testing, questionnaires and interviews.

RESEARCH FINDINGS

Most of the young adults, regardless of group, relied on their families as sources of shelter, activities and relationships.

- 60% of the young adults with 'ever' diagnosis, regardless of IQ, have always lived with their parents.
- 80% of the 'never' diagnosis group have always lived with their parents.
- 20% of the 'ever diagnosis lower IQ' group and 10–15% of the other two groups were home during the day with no planned activities or work.
- Only 30–40% of the 'ever diagnosis higher IQ' and 'never' diagnosis groups and none of the 'ever diagnosis lower IQ' group have a friend.

Roughly a third (30%) of both the 'ever diagnosis high IQ' and 'never diagnosis' group were in full-time paid employment, whereas 70% of the 'ever diagnosis low IQ' group were out of work, spending the majority of their day at home or in a day centre.

Those in the 'ever diagnosis high IQ' group were more likely to experience greater levels of depressive symptoms and negative emotions and lower levels of positive emotions and well-being, as well as having limitations with adaptive skills.

Those in the 'ever diagnosis lower IQ' group were more likely to experience higher levels of hyperactivity and irritability.

IMPLICATIONS FOR PRACTICE (by the authors)

The authors of this study point out that many of the young people in this study were diagnosed with autism roughly 20 years ago when few families had access to the support services or early intervention available to some families now.

For professionals, this study highlights the importance of:

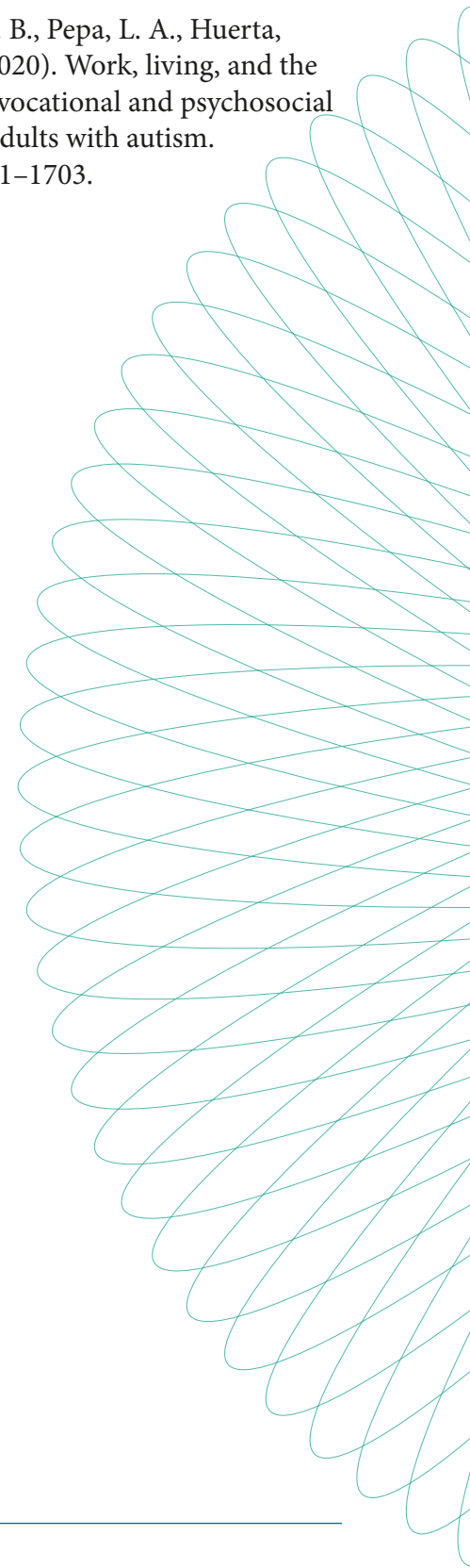
- working in partnership with families who provide lifelong support to their ageing children.
- developing realistic ways of increasing independence and social contacts for autistic persons and also those with other neurodevelopmental disorders.
- more thoughtful consideration of individual differences in cognitive abilities, not just early in childhood but throughout life, would allow young people, families and schools to develop realistic goals.

Families, young people and professionals should work together to develop goals that focus on:

- increasing independence;
- minimising depressive and negative feelings;
- increasing positive attributions;
- irritability and hyperactivity (particularly in autistic people with intellectual disabilities); and
- directly planning for support in developing adaptive skills across IQ ranges.

Full Reference

Lord, C., McCauley, J. B., Pepa, L. A., Huerta, M. and Pickles, A., (2020). Work, living, and the pursuit of happiness: vocational and psychosocial outcomes for young adults with autism. *Autism*:24(7), pp. 1691–1703.



FACTORS IMPACTING EMPLOYMENT FOR PEOPLE WITH AUTISM SPECTRUM DISORDER: A SCOPING REVIEW

BACKGROUND

Research shows that many autistic people struggle to find employment. This can impact their quality of life, mental health and ability to live independently. However, some autistic adults do thrive in these areas. Research has typically focused on the barriers that may prevent autistic people from achieving the things they want to, but little research has looked at specific strengths and abilities that autistic people may have or at environmental factors that may have an impact. A full understanding of the positive and negative factors that can impact employment for autistic people could offer a more informative and holistic approach to employment for the community.

RESEARCH AIM

By reviewing literature focused on autism and employment, researchers aimed to:

- explore measures used to evaluate employment outcomes;
- identify skills and abilities that may be linked to successful employment for autistic people;
- describe and classify existing employment programmes and interventions for autistic people; and
- summarise the reported outcomes of interventions and support programmes.

RESEARCH METHODS

Researchers searched a range of electronic databases for English-language studies that focused on 1) autistic participants, 2) the process of finding, gaining and maintaining employment, and 3) the use of employment interventions or supports. They then applied a standardised checklist to establish study

quality. They summarised high-quality studies and applied them to an adapted version of the International Classification of Functioning, Disability and Health (ICF) framework. This is a biopsychosocial model of disability, which means that a person's level of support need can change based on an interaction between their health conditions, environmental factors and personal factors. Throughout, the research team consulted a steering group of autism community members to give appropriate guidance and ensure that interpretations were accurate. Close to 2,500 studies were reviewed with 134 fully meeting the team's criteria for inclusion.

RESEARCH FINDINGS

Relatively few studies have examined the effectiveness of interventions in relation to issues impacting autistic adults. The review found that randomised control trials and quasi-experimental studies support the effectiveness of employment interventions in relation to improvements in vocational skills, executive functioning related to job performance and employment status.

Researchers found that the majority of employment studies were deficit focused, with interventions targeting traits associated with autism. While many of the interventions did see a positive change in targeted vocational skills or executive function, many participants remained unemployed.

Most interventions focused on workplace activities and participation, with a particular focus on developing communication skills. Where studies did incorporate environmental factors, for many the focus was on using them to deliver impairment-based interventions that focused on improving executive functioning skills that may, in turn, improve job performance. Support

from health professionals, co-workers, employers, government-funded services and appropriate technology were found to contribute towards understanding how a workplace may best fit an individual.

Only 14 of the 134 studies reviewed considered the abilities and strengths of participants. Only two of those considered how such strengths may be used in job matching for individuals.

Overall, researchers suggest that there is a need for studies to move away from the medical-model deficit-based approach, instead taking a holistic approach to employment intervention. They found no studies that incorporated the dynamic interaction between the individual and their environment. This sort of approach may allow researchers to consider individual strengths and barriers as well as the supportive environment that may be available to them.

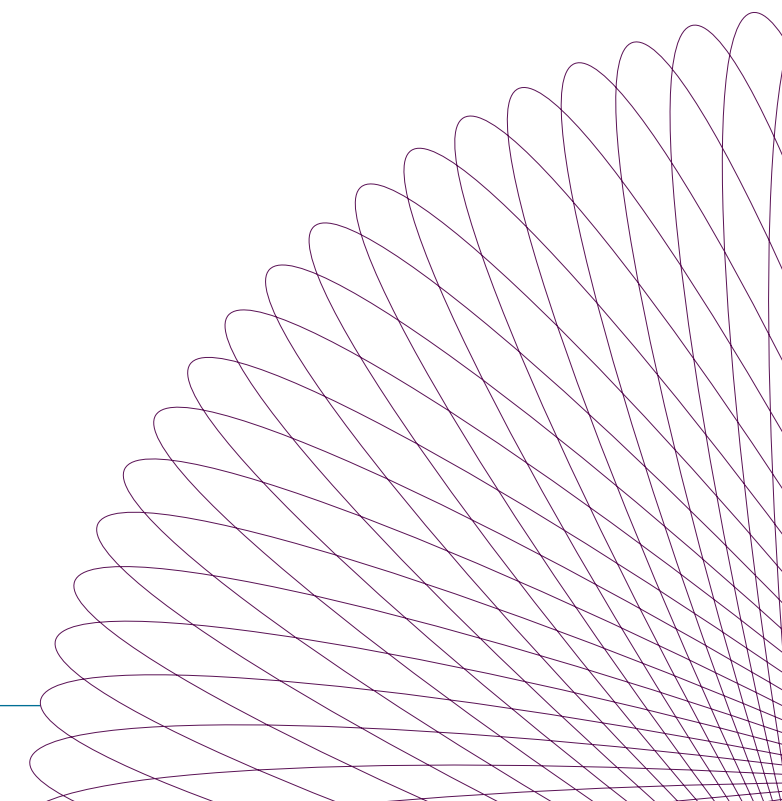
IMPLICATIONS FOR PRACTICE (by the authors)

- By using a medical-model deficit-based understanding of autism, current employment interventions are largely focused on impairment, which can lead to policies and practices that focus on individual change rather than on the environment or social organisation. A more holistic and dynamic approach would allow for policies and practices that may create more lasting change.

- While employers are often keen to be inclusive, they may implement generic changes in relation to disabled employees rather than providing accommodations that may specifically benefit autistic people. Education and training of autism for employers and service providers could have a positive impact in relation to this.
- Further organisation-wide autism training could enable co-workers and supervisors to better support their autistic colleagues, resulting in organisational change that could lead to greater inclusion and participation for all staff members.

Full Reference

Scott, M., Milbourn, B., Falkmer, M., Black, M., Bólte, S., Halladay, A., Lerner, M., Taylor, J.L. and Girdler, S., (2019). Factors impacting employment for people with autism spectrum disorder: a scoping review. *Autism*. 23(4), pp. 869–901. doi: 10.1177/1362361318787789.



TRANSITION PREPARATION ACTIVITIES AMONG FAMILIES OF YOUTH ON THE AUTISM SPECTRUM: PRELIMINARY STUDY USING REPEATED ASSESSMENTS ACROSS A SCHOOL YEAR

BACKGROUND

We know that times of transition can be challenging for autistic people, yet limited information exists about how families can best support autistic young people as they transition into adulthood. Employment rates are low and often those autistic people who are working are underemployed. One study in the US found that up to 50% of autistic adults did not participate in either education or employment during their first two years following completion of school. Despite these challenges, early adulthood often coincides with a reduction in support services, leaving parents with the primary role of providing support for their young person.

Parents often play a key role in transition planning and the activities that they share with their young people (such as chores) can predict post-school outcomes. Despite this crucial role, we know very little about how parents prepare their young people during the potentially difficult time before they transition out of school.

RESEARCH AIMS

This study aimed to examine:

- what transition-related activities parents and their children engage in during the academic year;
- if parents are satisfied with these activities; and
- how parent-reported preparedness for transition changed during the school year.

RESEARCH METHODS

Fifteen parents of adolescent autistic children took part in the study. One father and fourteen mothers were recruited. All anticipated that their child would graduate from high school.

Initial data was gathered in person at the start of the academic year. Following this, parents received biweekly surveys (16 in total) focusing on the types of transition-preparation activities they and their young person had been engaging in. This took the form of a pre-prepared list and space to provide their own answers. They also had follow-up calls with researchers to talk through their experiences. They were asked to estimate the time they were spending on transition activities and how prepared they felt for the upcoming transition.

To analyse their data, researchers used descriptive information to establish the types of activities that families were taking part in. They used multilevel modelling to estimate developing satisfaction and feelings of preparedness.

RESEARCH FINDINGS

transition-related activity, however they felt only moderate satisfaction with this activity. Parents were most satisfied when attending events with transition-related information, when receiving community-based services, when receiving transition-related information from a service provider or when their young person was participating in social activities.

In relation to feeling prepared for future transitions, those whose children received school-based services had higher reported preparedness at the beginning of the school year, but this did not change as the year progressed. Those who did not receive school-based services did experience an increase in preparedness over the year. Researchers suggest that this discrepancy may be because those whose children received school-based services did not see the level of progress that they had hoped for at the beginning of the year.

A child participating in volunteer or paid work was not related to an increase in preparedness, but a child participating in social activities was associated with a significant increase in comparison to those who did not engage in social activities. Again, it may be that those parents whose young people were already engaged in work experience did not show an increase as they already felt prepared and this remained static. The authors suggest that if parents saw their child face challenges in their paid or volunteer work, this may have meant they were less likely to show an increase in satisfaction at how prepared they felt for transition.

IMPLICATIONS FOR PRACTICE (by the authors)

As parents were found to regularly speak to their children about transitions, the authors suggest that clinicians may be able to support them to have more productive conversations on the topic.

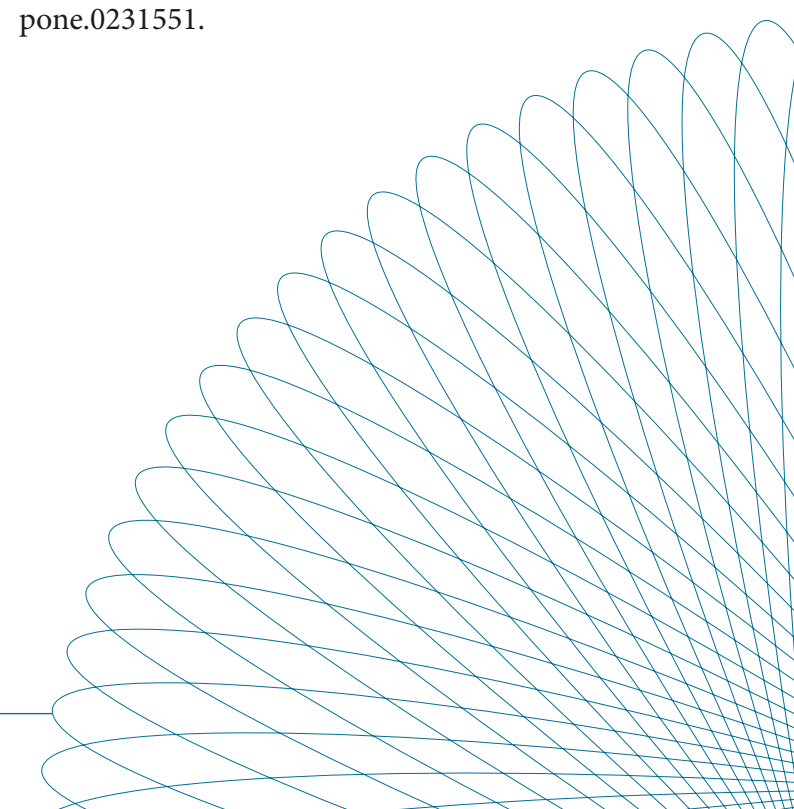
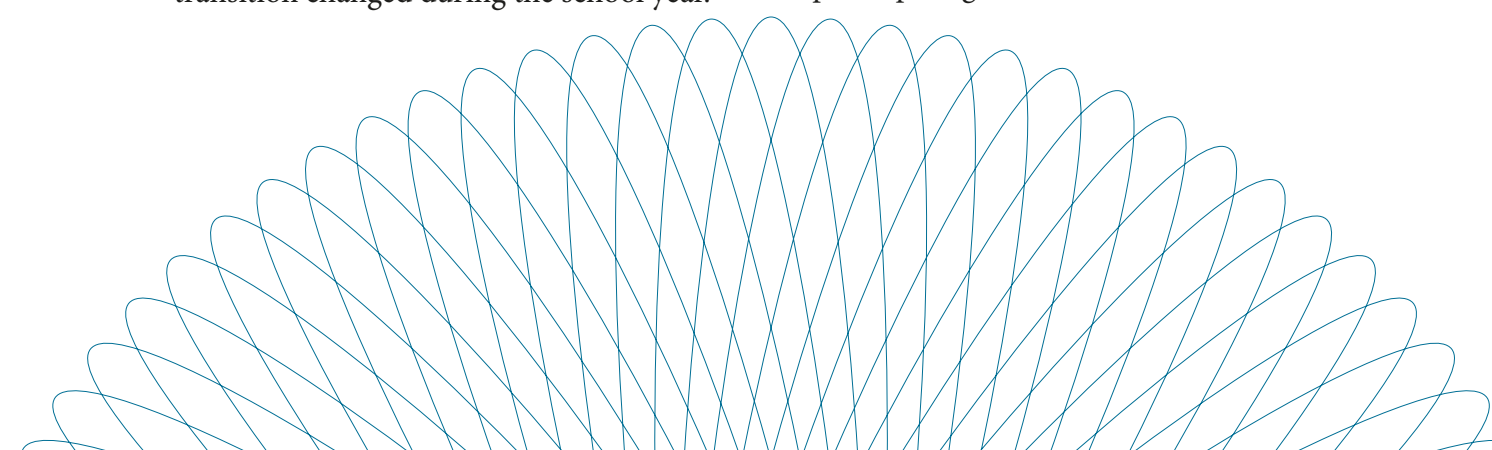
Parents were most satisfied with transition-related activities that involved external support and information. This highlights the opportunity

to develop resources and services specifically focused on transitions in adulthood that parents and young people could avail of.

Given that the authors suggest that expectations may not always be met in situations where school-based services are provided, it may be useful for parents to communicate their expectations from the outset. This may give in-school service providers the opportunity to work with parents to develop shared expectations and ensure that parents have a clear understanding of the services delivered and the nuanced impact they may have. Equally, it may reveal that a static level of preparedness across the academic year is experienced by parents who feel sufficiently prepared throughout.

Full Reference

Kirby, A.V., Diener, M., Adkins, D. and Wright, C., (2020). Transition preparation activities among families of youth on the autism spectrum: preliminary study using repeated assessments across a school year. *PLOS ONE*. 15(4), p. e0231551. <https://doi.org/10.1371/journal.pone.0231551>.



YOUNG ADULTS ON THE AUTISM SPECTRUM AND EARLY EMPLOYMENT RELATED EXPERIENCES: ASPIRATIONS AND OBSTACLES

BACKGROUND

It is understood that autistic young adults often face challenges securing and maintaining employment; however, the reasons for this are not fully explained by research. Regardless of cognitive ability, autistic young adults in the United States experience poor employment outcomes compared to their same-age peers, including those with other types of disabilities. Data from the National Longitudinal Transition Study-2 (NLTS-2) suggest that public high schools are failing to fulfil their obligation to connect autistic young adults with the appropriate adult support services needed to make the successful transition to employment, with poor outcomes persisting over a 10-year period. Autistic young adults therefore work less hours, receive lower wages and take longer to secure employment overall, as compared to their peers.

RESEARCH AIMS

The aim of the study was to explore the early employment experiences of autistic young adults using first-person accounts to improve services designed to help them gain and subsequently maintain employment.

RESEARCH METHODS

This research used data from a larger study in which 36 parents and 12 autistic young adults took part in 90-minute interviews. The interviews mostly took place in the participants' homes to ensure comfort and privacy. As the post-high school experiences of autistic young adults and their families is such an underexplored area, an unstructured interviewing approach was adopted using open-ended questions.

The current study analysed the narratives provided by 28 of the original 36 parents (8 cases were excluded as the autistic young adult required 'very substantial support' as defined in the Diagnostic and Statistical Manual (DSM-5)) and 12 young adults. The interviews were analysed using the constant comparative method associated with a grounded theory approach. Within the context of the findings 'work' refers to both paid and unpaid employment, including vocational training, volunteering or internships, due to the different stages the young adults were at in their career trajectory.

The young adults were placed in five categories based on a simplified version of Taylor and Seltzer's Vocational Index for Adults with ASD.

1. Competitive Employment without Support (n=3)
2. Competitive Employment with Support/ Employment Prep (n=5)
3. Sheltered Vocational Setting/Supported Community Employment/Day Programme (n = 7)
4. Post-Secondary Degree Seeking (n=10)
5. No Activity (n=3)

To increase the trustworthiness of the study, participants were asked to review their interview transcripts.

RESEARCH FINDINGS

Three major themes emerged, each with its own set of subthemes (see table, right): employment aspirations and potential, challenges of job finding and keeping, and differing parent and young adult work-related roles and views.

Employment aspirations and potential

The advantages of work

(e.g., meaningful daily occupation, social engagement, self-esteem, wages, independence)

ASD-related strengths at work

(e.g., passion, attention to detail, loyalty, honesty, rule following, willingness to help)

Challenges of job finding and keeping

ASD-related challenges at work

(e.g., social difficulties, rigidity, anxiety, self-regulation issues, lack of speed/stamina)

Interviews and disclosure

(e.g., socially awkward, anxious, overly honest, managing stigma around ASD)

Accommodation: capacity and consequences

(e.g., acceptance vs. inflexibility, trauma, damaged self-esteem)

Differing parent and young adult work-related roles and views

When families can and can't help

(e.g., providing encouragement, arranging pre-employment experiences, interfacing with employment-related service providers, changing role)

Work satisfaction: differing perspectives

(e.g., parental worry about the future, young adult contentment vs. parental push for higher-level jobs)

Employment aspirations and potential

The first theme revealed the hope parents and young adults held for a future that would involve meaningful daily occupation for the young adult in a capacity that would encourage their ASD-related strengths (e.g. passion and attention to detail) while minimising any challenges related to their autism diagnosis. Young adults and their parents saw numerous advantages to employment, including providing structure and meaning to the young adult's time, social interaction and belonging outside of the home, financial benefits, independence and self-esteem.

Challenges of job finding and keeping

However, participants identified many ASD-related obstacles to achieving successful employment, including difficulty reading and responding to social cues, anxiety, self-regulation and reduced stamina. The nature of the interview process was felt to be particularly intimidating for autistic young adults, while disclosing their diagnosis to a potential employer led to fears of discrimination for some. Inflexible and

unaccommodating employers was a recurring theme raised by participants, which highlighted that many barriers to employment were more to do with organisational prejudices than the characteristics of the individual themselves. Such obstacles can lead to feelings of failure and discouragement on the part of the young adult, and it is unclear the extent to which such challenges could have been addressed through earlier intervention from schools, families or adult support agencies.

Differing parent and young adult work-related roles and views

The disparities arising between parents' and young adults' perspectives of job satisfaction were revealed and felt to be rooted in parental worries about a future in which they were no longer there to support their child. Parents tended to be concerned with long-term outcomes and were therefore more likely to be dissatisfied with the current role and conditions of employment than the young adult.

IMPLICATIONS FOR PRACTICE (by the authors)

The authors highlight the need for further research in three areas:

1. Determining how to effectively prepare autistic young adults for the working world while promoting their strengths.
2. Exploring how to best assist parents of autistic young adults working to support achievement of employment milestones.
3. To identify best practices within and across the multiple, intersecting systems that impact employment for autistic young adults.

Full Reference

Anderson, C., Butt, C. and Sarsony, C., (2021). Young adults on the autism spectrum and early employment related experiences: aspirations and obstacles. *Journal of Autism and Developmental Disorders*. 51(1), pp. 88–105.

‘I’M READY FOR A NEW CHAPTER’: THE VOICES OF YOUNG PEOPLE WITH AUTISM SPECTRUM DISORDER IN TRANSITION TO POST-16 EDUCATION AND EMPLOYMENT

BACKGROUND

Although transition to adulthood can be perceived by many as exciting with new roles, responsibilities and opportunities, autistic young people and their families face challenges in leaving the known educational setting for the unknown next step, with many feeling unprepared for adult life.

Article 12 of the Convention on the Rights of the Child says that every student has the right to express his or her views, feelings and wishes in all matters affecting him or her, and to have his or her views considered and taken seriously. Therefore, this research chose to examine the views, feelings, apprehensions and anxieties of 12 autistic teenagers as they began this journey.

RESEARCH AIMS

This study aimed to ascertain and understand the worries, hopes, dreams, plans, aspirations, engagement and concerns of 12 autistic young people between the ages of 15 and 19 years, as they transitioned or prepared for transition from post-primary school to post-16 provision, whether that be a different education setting, employment or independent living. Once this insight was ascertained, researchers wanted to discover if parents and practitioners could use this knowledge to better support the autistic teen to achieve in a supportive yet more autonomous manner.

RESEARCH METHODS

As it was imperative to hear the opinions and concerns of the young autistic person, the researchers used semi-structured interviews, lasting between 16 and 45 minutes, with each of the participants, where each interview was individualised to include and reflect each participant’s current skill set. Each young person was afforded a ‘STOP’ sign, a visual interview schedule and an already-prepared tablet with ‘Talking Mats’ software. The initial questions concentrated on individual aspirations, feelings and available supports, including independent living skills, regarding transition out of post-primary school, hopes for their transition into post-16 environments and goals for adulthood. Prior to these interviews researchers visited each young person and discussed the study, the recordings and answered any questions or queries they may have had. Only when the researchers had individual signed consent was the young person included.

RESEARCH FINDINGS

Five key areas emerged after evaluation of the interviews, each with a component of greater wish for independence highlighted.

1. Ambivalent feelings about change and the future

Although the students saw that this transition towards adulthood may be exciting and an advancement towards greater levels of independence, they appreciated and were apprehensive that change can be difficult. Moving from the familiar environment with familiar supports to the unknown, with uncertainty, brings with it a range of challenges. Two thirds of the students said they felt nervous at the perspective of this new start and had still not planned what course they would actually be pursuing.

2. Independence

Only one out of the twelve envisaged living completely independently, while the other eleven saw their independence as being able to attend new activities either with or without parental support because more than half had not experienced being unaccompanied at an event. The vast majority, 10 still felt they would need the advice and guidance of their parents throughout the various forthcoming transitions, finding comfort in knowing that their parents had experience in such situations. The others disagreed with their parents in how transitions were prioritised, with the parents looking to the future and the young person focusing solely on the immediate change.

3. Friendship and free time

Although many of the young people spent much of their time on their own, indoors engaging in solitary activities, watching television, playing online games, all 12 recognised the importance of spending time with friends, and some of these friendships had been forged at primary school. These friendships included spending time chatting, telling jokes, watching videos and playing computer games, although only five of the young people had visited their friend's house for a meal and most of the socialising was confined to in-school time and activities. This change and transition led to the teenagers experiencing a range of feelings – they would miss their friends, were anxious about whether they could make new friends and felt they did not have the life skills to meet up in other environments.

4. Bullying

Several of the teenagers have experienced bullying in the past and recognised that this may happen again in the new environment where they would not know whom to ask for help or even to whom it should be reported.

Four of the teenagers (a third) were already worried about how others would perceive them, with two saying that this was the main reason they avoided social activities.

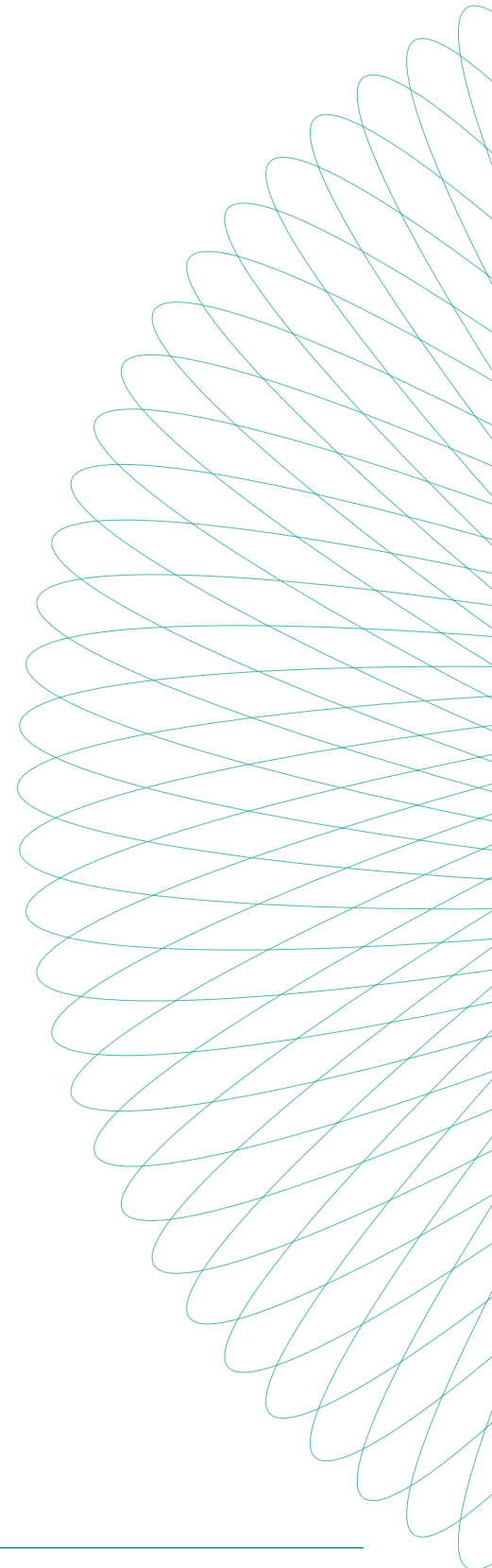
5. School and family support

Although all the young people recognised and appreciated their family, in particular their parents, as sources of support, knowledge and experience when decision-making, one young person expressed a greater desire to be more fully involved with any decision-making process, especially in terms of transition options, which he perceived as appearing secretive. Others, half of the cohort, wanted to be offered the chance to work through the problem on their own and only when they could not fathom an appropriate response, be allowed to ask for help.

Several were concerned about the school support they would receive in the future, attesting that previous school staff had provided a supportive, positive school experience. However, one young man wanted to prove to his teacher that he had the ability to pass a certain subject area yet was uncertain if he could.

IMPLICATIONS FOR PRACTICE (by the authors)

- T• Autistic teenage students have a desire to become more independent. This was highlighted in this study as an aspiration of the student, yet the support to do so must begin much earlier, particularly in terms of choices to be made during transition. Student views must be sought and used as part of the plan for successful transition to the next stage of their education and life.
- This need for greater independence was a thread running through all the five key themes, thus implying that planning for greater autonomy must be provided throughout their post-primary school experience and not just seen as an aspect of the transition process.



- Teenagers may become isolated if we do not prepare them effectively for the transition. Students need to be taught specifically from whom to ask for help, how to access this person, and what activities, resources and options will be available for and to them. They may need to be taught specific independent living skills, sorting laundry, independent travel, making toast, making a meal, but also opportunities for greater community involvement, which in turn may develop and expand a sense of belonging and ownership in their environment.
- As many of the students were concerned about having fewer friends, the researchers felt that a concerted effort pre-transition, with school and family being involved as well as the young person, must be afforded; teaching students how to make new and maintain older friendships, look out for opportunities where they could become involved, look for shared interest groups and new and diverse opportunities, and thus be open to meeting others.
- Building self-confidence, resilience and realising that everyone is not looking at you because many of the other students who are also making a transition are experiencing the same level of doubt, concern and apprehension.
- Teach young people about the means of decision-making – even how to work through an issue. Being aware of and reviewing all the options, but reminding the student that the support, knowledge and experience of others is always available should they need it.
- There appears to be a need to develop stronger links between the post-primary school and the post-16 providers, with autistic students being offered a key worker or point of contact prior to transition as a means of building supportive relationships.
- The young person's voice must be heard. It is imperative for understanding in whatever manner the student favours. Talking Mats is an option, but further visual supports must be used to ensure there is no miscommunication and the student's wishes are recognised and means of facilitation designed.

Full Reference

Gaona, C., Palikara, O. and Castro, S., (2019). 'I'm ready for a new chapter': the voices of young people with autism spectrum disorder in transition to post-16 education and employment. *British Educational Research Journal*. 45(1), pp. 340–355.

BUILDING SKILLS, CONFIDENCE, AND WELLNESS: PSYCHOSOCIAL EFFECTS OF SOFT SKILLS TRAINING FOR YOUNG ADULTS WITH AUTISM

RESEARCH AIMS

Research suggests work-related social skills, or soft skills, facilitate the acquisition of employment and are essential for continued success within the workplace. The study aim was to pilot the Assistive Soft Skills and Employment Training (ASSET), which is a manualised group intervention focusing on six work-related soft skills including communication, attitude and enthusiasm, teamwork, networking, problem-solving and critical thinking, and professionalism.

The research pilot measured psychosocial outcomes for young people with high-functioning autism on the following constructs:

1. Social skills including social functioning, social cognition and communication.
2. Self-confidence (general, social and empathy self-efficacy).
3. Psychological wellness (anxiety and depression).

It was hypothesised that social functioning affected by autism can be improved with training, experiences of successful learning can increase self-efficacy, and skill acquisition and self-confidence improves psychological well-being among young adults.

RESEARCH METHODS

A quasi-experimental repeated time series design was used to explore the psychosocial outcomes of the ASSET group programme on soft skills. Intervention was delivered to 27 young autistic adults aged between 17 and 25. Participants took part in small groups of 4–6 over a 3-year period. Intervention sessions were offered weekly for 8 weeks, this comprised of one 90-minute group session followed by a social hour.

Psychological well-being was assessed at baseline, post intervention (within 2 weeks) and at 2-month follow-up (8–10 weeks). Final sample size was 26 due to concerns about one participant's self-report response. Five participants were female and the remaining 21 were male. All were enrolled in college, high school or within special education career services and lived with parent/s or caregiver/s during the delivery of the programme.

Researchers administered a demographic questionnaire and other primary and secondary measures including the Wechsler Abbreviated Scale of Intelligence, the Social Responsiveness Scale and brief measures of mental health (Patient Health Questionnaire-9, General Anxiety Disorder Questionnaire-7 and Social Functioning Questionnaire). Self-efficacy was measured using the General Self-Efficacy Scale, the Perceived Empathic Self-Efficacy Scale and the Perceived Social Self-Efficacy Scale.

RESEARCH FINDINGS

Descriptive statistics were produced for outcomes measures at baseline, post intervention (within 2 weeks) and at 2-month follow-up. Additionally paired sample t-tests were used to compare mean differences for each outcome between the measurement times, including T1–T2 and T1–T3.

Primary outcomes

Social functioning: statistically significant changes with medium effect size in social functioning were found after programme completion and at 2 months. Statistical significance with medium effect size was also found for social cognition immediately after the programme but not at 2-month follow-up. There was no statistical significance shown for improvements in social communication following the programme or at 2-month follow-up.

Self-efficacy: there were large statistically significant gains in general self-efficacy immediately after the programme with some regression at follow-up. However, at 2-month follow-up there were statistically significant improvements with medium effect size measured. Both perceived empathy self-efficacy and social self-efficacy showed very large statistical significance post intervention. However, this was no longer measurable at the 2-month follow-up.

Secondary outcomes

Anxiety and depression: on average, participants did not show statistically significant gains post intervention in anxiety; however, there were statistically significant gains with medium effect size in anxiety 2 months after completion of the programme. Improvements in depression were also not statistically significant immediately after the programme or at 2-month follow-up.

IMPLICATIONS FOR PRACTICE (by the authors)

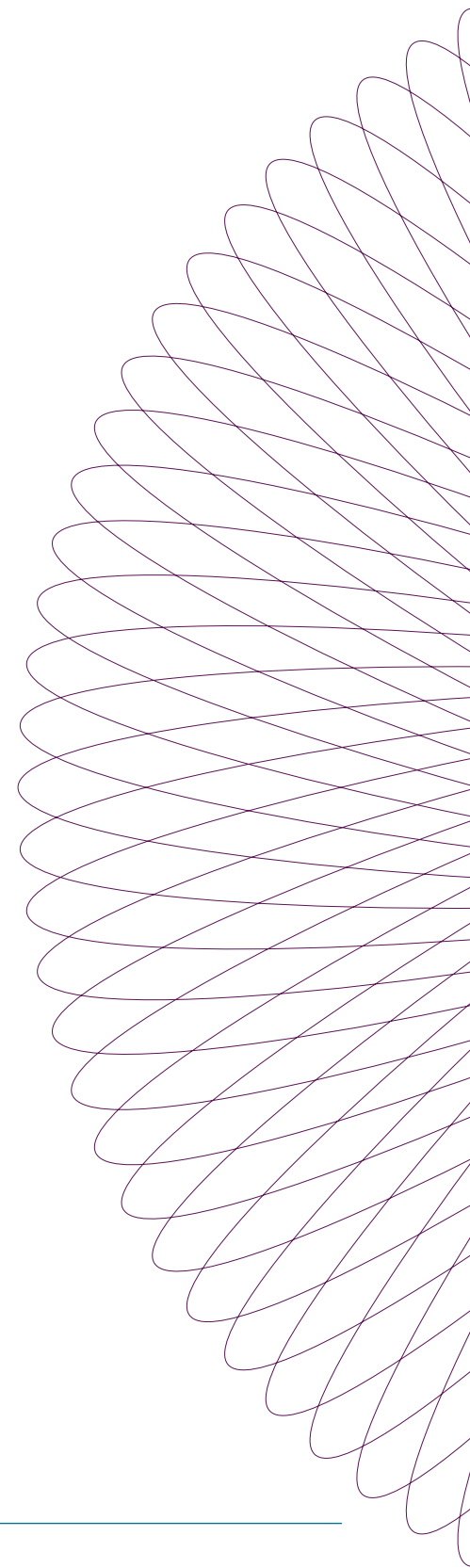
- Results indicated that overall participants in the ASSET programme made significant gains in each of the three psychosocial domains of social skills, self-efficacy and psychological wellness.
- Examination of the results suggest improvements in a broad range of social behaviours not typically associated with work, including feeling connection to others, participating in enjoyable leisure activities and navigating relationships. Further research is needed to explore whether these broad social skills learned within the group are generalised to varied social contexts, particularly as generalisation of skills can be difficult for the autistic population.
- The researchers noted that participants' self-perceived social performance continued to show statistically significant improvement at follow-up whereas social cognition scores were within normal limits at post and follow-up. They suggest participants may acquire social knowledge but require more time and experience to effectively apply social knowledge in social settings outside of the group context.
- Improvements in general self-efficacy post intervention suggest participants perceived an increased ability to manage problems and be calm in difficult situations. Additionally, participants reported increased improvements post intervention in empathy skills and social self-efficacy, implying that they felt more confident in expressing opinions, interacting with new people and taking part in a group. However, these improvements were not maintained at 2-month follow-up.

The researchers suggest that although the ASSET programme can improve these constructs, additional intervention is required to promote long-term effects.

- The results of this study support existing literature in terms of the efficacy of group intervention for autistic adults. Researchers highlight that the group setting creates a therapeutic space to not only practice social skills but to also learn prosocial behaviours via modelling from peers and facilitators.
- The results in this study show modest improvements in secondary measures of self-reported anxiety and potentially depression. These findings are particularly relevant to autistic adults who experience high rates of co-occurring anxiety and depression linked to social skill difficulties. The study showed that social skills training programmes have potential for improved mental health outcomes and are suitable for autistic adults with clinically significant levels of anxiety or depression.
- The researchers acknowledge that limitations in sample size and study design means that caution should be taken before generalising findings to the larger population.

Full Reference

Connor, A., Sung, C., Strain, A., Zeng, S. and Fabrizi, S., (2020). Building skills, confidence, and wellness: psychosocial effects of soft skills training for young adults with autism. *Journal of Autism and Developmental Disorders*. 50(6), pp. 2064–2076.



ACCEPTABILITY OF EMPLOYMENT READINESS MEASURES IN YOUTH AND YOUNG ADULTS ON THE AUTISM SPECTRUM: A MIXED-METHODS STUDY

BACKGROUND

Despite the valuable skills the neurodivergent population can bring to the workforce, only 21.5% of working-age people identified as having autism spectrum disorder are in employment in Canada. This reflects international employment figures for the autistic population, which range from 10% to 50% working or seeking work. The barriers to employment are complex for this group, and unemployment is associated with lower financial security, limited independence, less community participation and diminished self-esteem, which often leads to lower quality of life and well-being. Supports to improve access to employment for autistic individuals rely on a combination of factors; one of which is employment readiness. Employment support services typically target specific work-preparation tasks such as résumé writing to improve employment readiness; however, autistic and neurodiverse individuals may benefit more from the development of soft skills in areas such as relationships and communication, work and study life, self-care, and career and life planning. Thus, the success of employment support programmes is often based on measures developed for use with neurotypical populations that have not yet been assessed for use with individuals on the spectrum.

RESEARCH AIMS

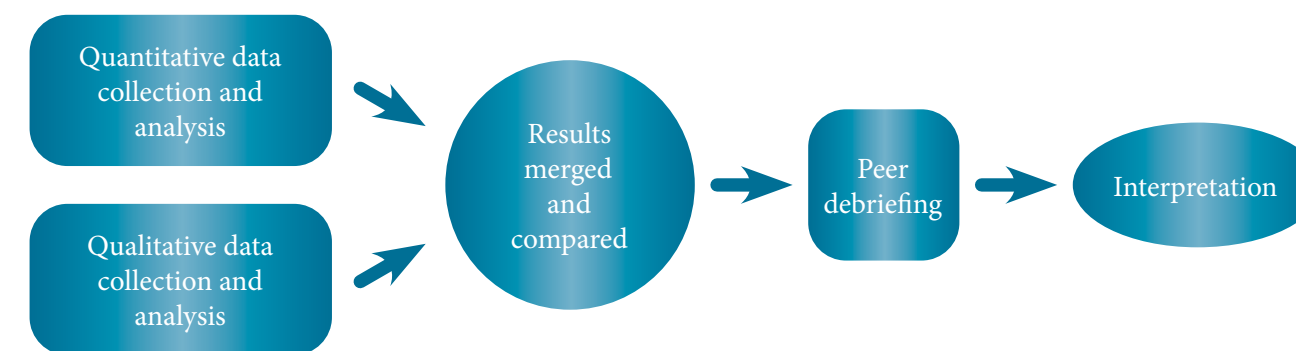
The study aimed to determine whether two measures of employment readiness – the Work Readiness Inventory (WRI) and Ansell–Casey Life Skills Assessment (ACLSA) – are acceptable and valid measures for youth and young adults on the autism spectrum.

RESEARCH METHODS

In this mixed-methods study, acceptability of the measures was assessed concurrently (during implementation) from a participant perspective and retrospectively (after implementation) from a stakeholder perspective. To meet the criteria for the concurrent acceptability phase, participants had to be enrolled in a community-based vocational intervention called Employment Works Canada (EWC), which used the WRI and a modified version of the ACLSA (ACLSA-M). A total of 177 participants aged 17–29 years took part in the EWC between April 2017 and April 2018; 73% of those were male. Acceptability of the measures was assessed quantitatively using pre-post measurement and analysed using paired sample *t*-tests. Two participants (M, 18 and F, 24) were selected for further qualitative assessment to elaborate on the construct of employment readiness in relation to autistic individuals.

Peer debriefing was then used to strengthen the validity of the findings. Participants were selected from existing researcher networks based on their expertise in employment readiness for autistic individuals, and ten experts took part in semi-structured interviews to assess the retrospective acceptability of the measures. Audio recordings of the interviews were transcribed verbatim and analysed inductively. In addition, participants were asked to rate each item on the measure in terms of its relevance in reflecting the underlying construct of employment readiness using a four-point Likert scale. The scale ratings were anonymised and pooled by item and showed the proportional agreement on acceptability of the measure items.

Figure 1. Study methods consisting of a concurrent triangulation design followed by peer debriefing.



RESEARCH FINDINGS

Concurrent acceptability assessment indicated statistically significant increases in employment readiness following the EWC intervention using both instruments. On the ACLSA-M, participants had significantly more positive scores in areas directly related to employability: (i) relationships and communication, (ii) work and study, (iii) career and education planning, and (iv) looking forward; while results of the WRI pre-to-post-test domain scores decreased significantly, indicating increased employment readiness among participants. This was reflected in the qualitative assessment, with both participants demonstrating improvements in domains relating to employment readiness and positive changes in social and communication skills observed.

Peer debriefing for retrospective acceptability identified three categories for improvement of the two measures: (1) item specific, (2) individual specific, and (3) job specific.

Item specific

Items with abstract concepts or lacking specificity and/or context were highlighted as potentially problematic and the experts advised that many items needed nuancing to avoid misinterpretation by individuals on the autism spectrum.

Individual specific

Participants noted the lack of items relating to skills specific to autistic individuals and recommended including items relating to more comprehensive generalised life skills and soft skills, such as relationships and communication, self-care, career and life planning, and behavioural responses to new, different and/or frustrating circumstances going forward.

Job specific

Most participants pointed out that many of the skills assessed were not needed for all jobs, emphasising the need to focus more on the person–job fit.

Overall, stakeholders believed the measures were consistent, clear and readable, and with these amendments could improve their ability to meaningfully measure employment readiness in autistic individuals.

IMPLICATIONS FOR PRACTICE (by the authors)

The authors note that the findings illustrate the need and relevance for autism-specific measures of employment readiness to be developed or modified as outlined in this study. The modifications suggested by stakeholders during peer debriefing would enhance the acceptability rates and implementation effectiveness of both measures.

Full Reference

Wittevrongel, K., Mitchell, W., Hébert, M.L., Nicholas, D.B. and Zwicker, J.D., (2021). Acceptability of employment readiness measures in youth and young adults on the autism spectrum: a mixed-methods study. *Disability and Rehabilitation*. April 16, pp. 1–13. DOI:10.1080/09638288.2021.1902578.

‘I’M DESTINED TO ACE THIS’: WORK EXPERIENCE PLACEMENT DURING HIGH SCHOOL FOR INDIVIDUALS WITH AUTISM SPECTRUM DISORDER

BACKGROUND

Youth with autism spectrum disorder (ASD) aspire to hold stable and fulfilling jobs in much the same way as their peers. Yet in Australia, young people with ASD are less likely than the general population to complete tertiary education and gain employment. Despite the benefits of workplace participation for individuals with ASD (e.g. financial independence, community engagement, social opportunities and a sense of well-being), the unique social, communication and behavioural characteristics that can contribute to difficulties securing post-secondary opportunities mean that more than half are unemployed. This is despite the specific skills many autistic individuals possess in terms of attention to detail, visual perception, technical abilities, and preference for working on repetitive tasks – all of which are well suited to jobs within the ICT industry. Studies show that providing support for adolescents with ASD around the time of transition can lead to improved outcomes, with high school work experience and job shadowing leading to improved career prospects. However, limited opportunities exist for autistic young people to avail of these early career preparation opportunities, and there is little empirical research outlining the experience of these programmes from the perspective of individuals with ASD and other stakeholders.

RESEARCH AIMS

The aim of the study was to understand what makes a successful short-term work-experience placement from the perspectives of young people with ASD, their parents and employers.

RESEARCH METHODS

The Autism Academy for Software Quality Assurance’s (AASQA) CoderDojo programme supports students aged 12–18 years in developing skills and interests in STEAM (science, technology, engineering, arts and mathematics) areas. Participants of the programme are called ninjas and work alongside specialist volunteers to learn computer-based skills such as coding. The current study examined AASQA’s work-experience programme; an initiative designed to give short-term work placements matching the interests, strengths and abilities of senior adolescents with ASD with the goal of better preparing students with ASD for the post-school transition to the workplace. A total of 17 individuals participated in the study, including five CoderDojo ninjas (all males aged 15–18 years), six parents (all female) and six supervisors from the host organisations, which included financial institutions, university ICT services and tech solutions companies. The placements ran throughout the school holidays and lasted an average of 5 days (7 hours per day), with all students completing at least one placement.

The research team developed a semi-structured interview schedule with the intent of understanding the impact of the work-experience placement, any challenges and difficulties encountered and how the placement could be improved. Options were given to participants as to how they wanted their interview or focus group to be conducted (face to face, telephone or sending written responses via email), and these lasted 30–60 minutes. Audio recordings of the interviews and focus groups were transcribed verbatim and analysed thematically using a grounded theory framework.

RESEARCH FINDINGS

Three key factors were found to contribute to a successful work-experience placement: preparing for the workplace, harnessing strengths and interests and developing work-related skills.

Preparing for the workplace

Parents and employers played an important role in ensuring the young person with ASD was prepared for the work-experience placement. Parents provided practical support regarding workplace attire and using public transport, while employers educated themselves and their teams on autism.

Harnessing strengths and interests

Working on tasks that used their strengths and interests helped to alleviate the anxiety that young people reported feeling prior to their placement, and ultimately helped to reinforce their interests and career goals.

Developing work-related skills

The young people developed skills both directly related to working in ICT and other social and personal skills important in the workplace. This included meeting etiquette, time management and following a structured routine.

The key factors therefore led to the following outcomes: insights into the workplace, recognising and realising potential, working as a team and the pathway ahead.

Insights into the workplace

The work-experience placements gave adolescents with ASD an insight into the differences between the workplace and school, allowing hands-on opportunities to apply their skills and build their confidence.

Recognising and realising potential

Parents reported that the programme had helped them to see their child's strengths and potential and had given them hope for the future, while employers learned from the unique perspectives of the adolescents.

Working as a team

The young people were reported to produce high-quality output beyond the expectations of their employers, who in turn built positive relationships with the adolescents and learned more about autism. Parents felt the workplaces were inclusive.

The pathway ahead

The exposure to different tasks allowed the young people to develop and explore their interest in various aspects of the ICT field. All participants felt that the placement was helpful in enabling the young person with ASD to plan for their future education and career pathways.

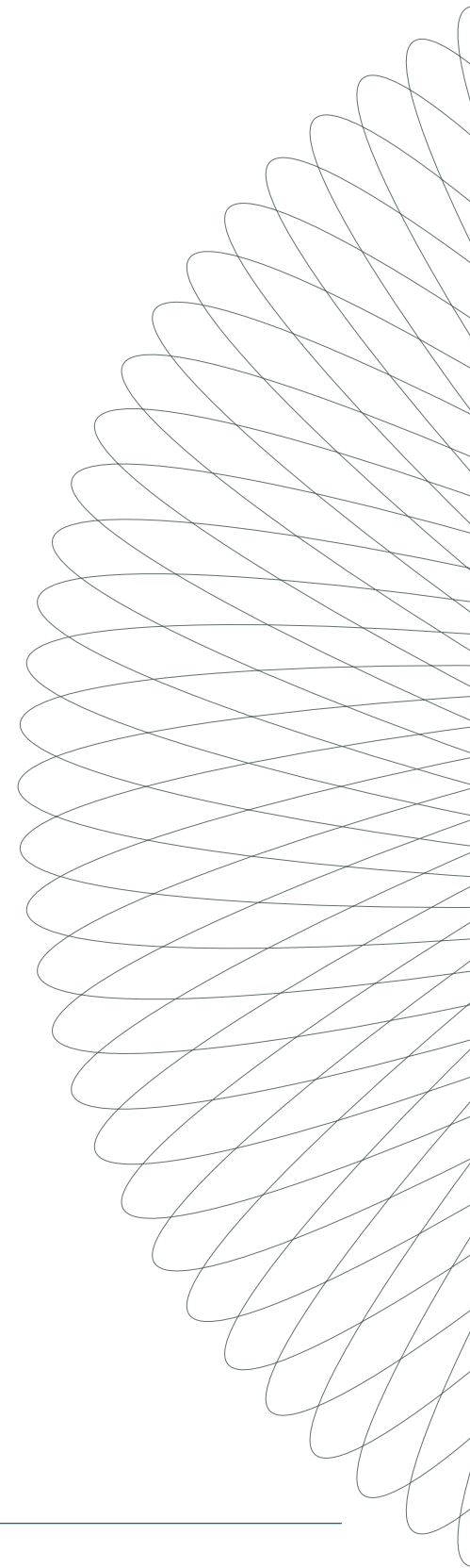
Participants made a number of suggestions for improving the work-experience placement, which included giving the young person experience of different departments (within the same company), having a short workplace visit prior to commencing the placement or an informal first day with a 'buddy' mentor to alleviate anxiety, the opportunity to engage in a greater variety of tasks to extend learning, and giving employers additional background information on the students, including their skills, interests and what they had already learned at the AASQA coding classes.

IMPLICATIONS FOR PRACTICE (by the authors)

The authors note that while the relationship between work experience and longer-term employment outcomes is yet to be fully understood, work-experience programmes such as the one described in this study may contribute to improved employment outcomes for adolescents with ASD in the future. They acknowledge that further studies with a broader scope of participants in other fields of industry would be beneficial for comparison.

Full Reference

Lee, E.I.L., Black, M.H., Tan, T., Falkmer, T. and Girdler, S., (2019). 'I'm destined to ace this': work experience placement during high school for individuals with autism spectrum disorder. *Journal of Autism and Developmental Disorders*. 49(10), pp. 3089–3101.

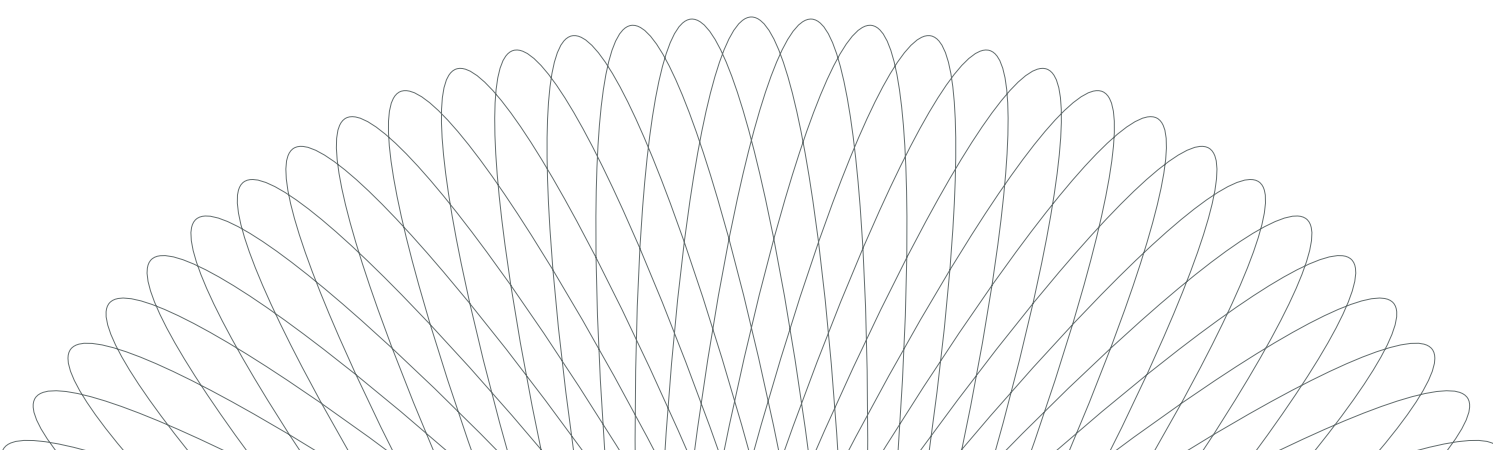
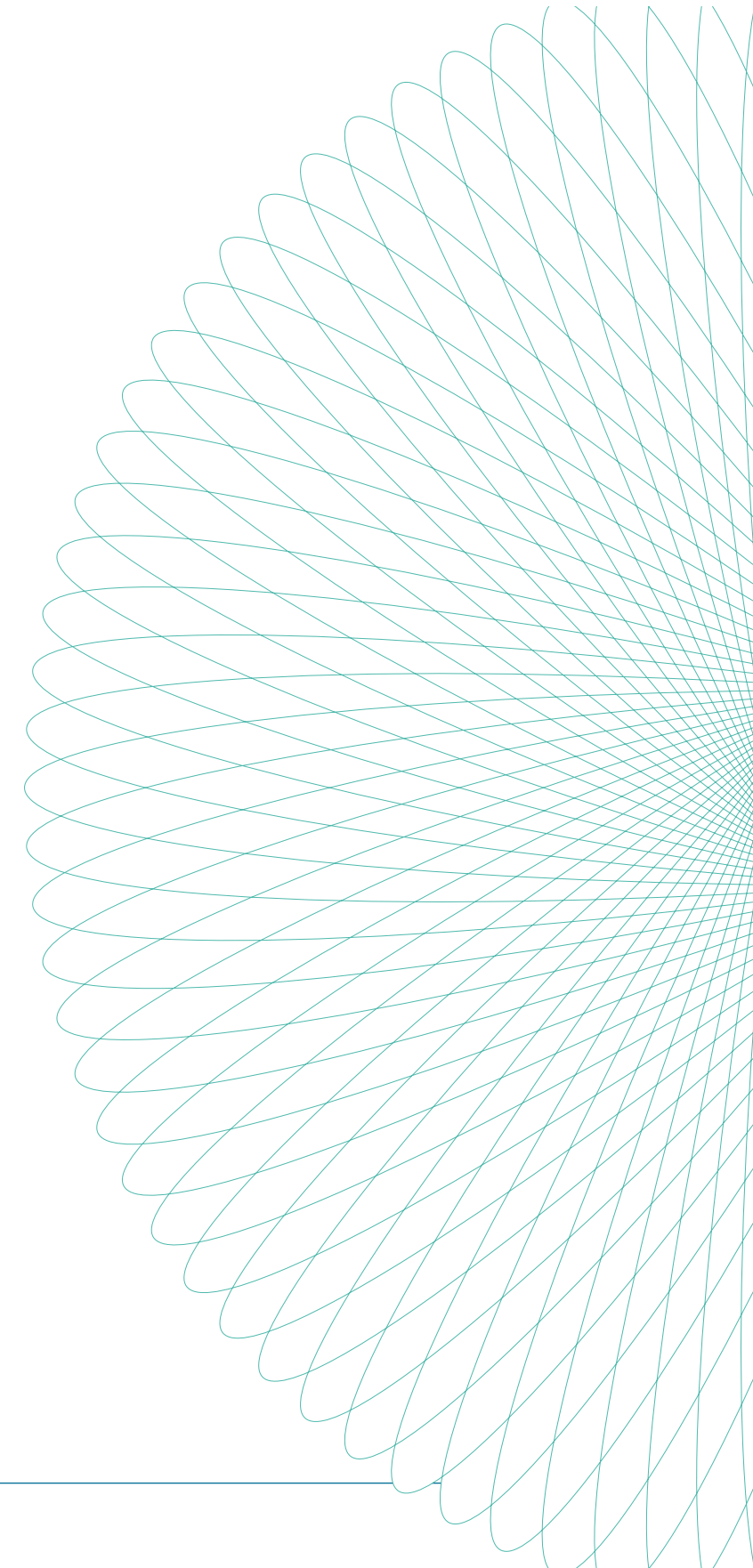


CONCLUSION

This Bulletin highlights the importance of access to the workplace for autistic young people and the challenges involved in providing this access.

Some key takeaway points from the articles summarised are below.

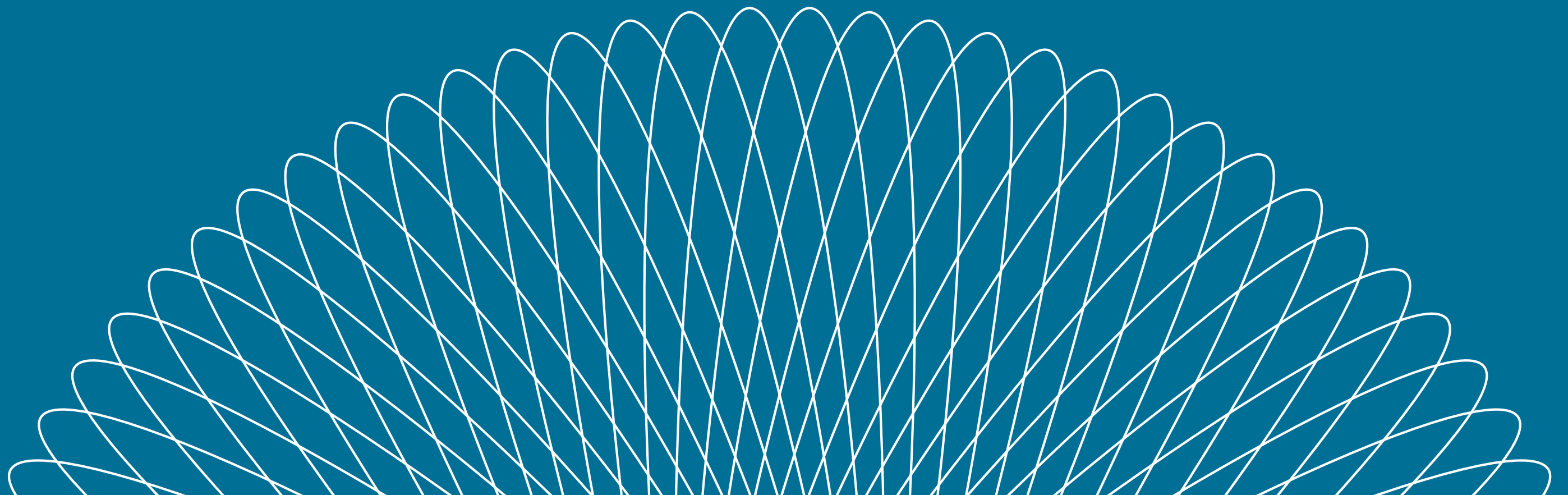
- Support should be consistent across the school year and not just provided at the beginning or end of the school term.
- Practical real-world experience is critical, should this be workplace-related chores around the home/school environment or real-time work experience.
- Teaching daily functioning skills is important preparation for the workplace – young people entering the workplace need to have life skills.
- Parental and professional partnerships work and are a factor in successful work placements.



YOUR OPINION

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