PATHWAYS TO RESILIENCE
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Pathways to Resilience

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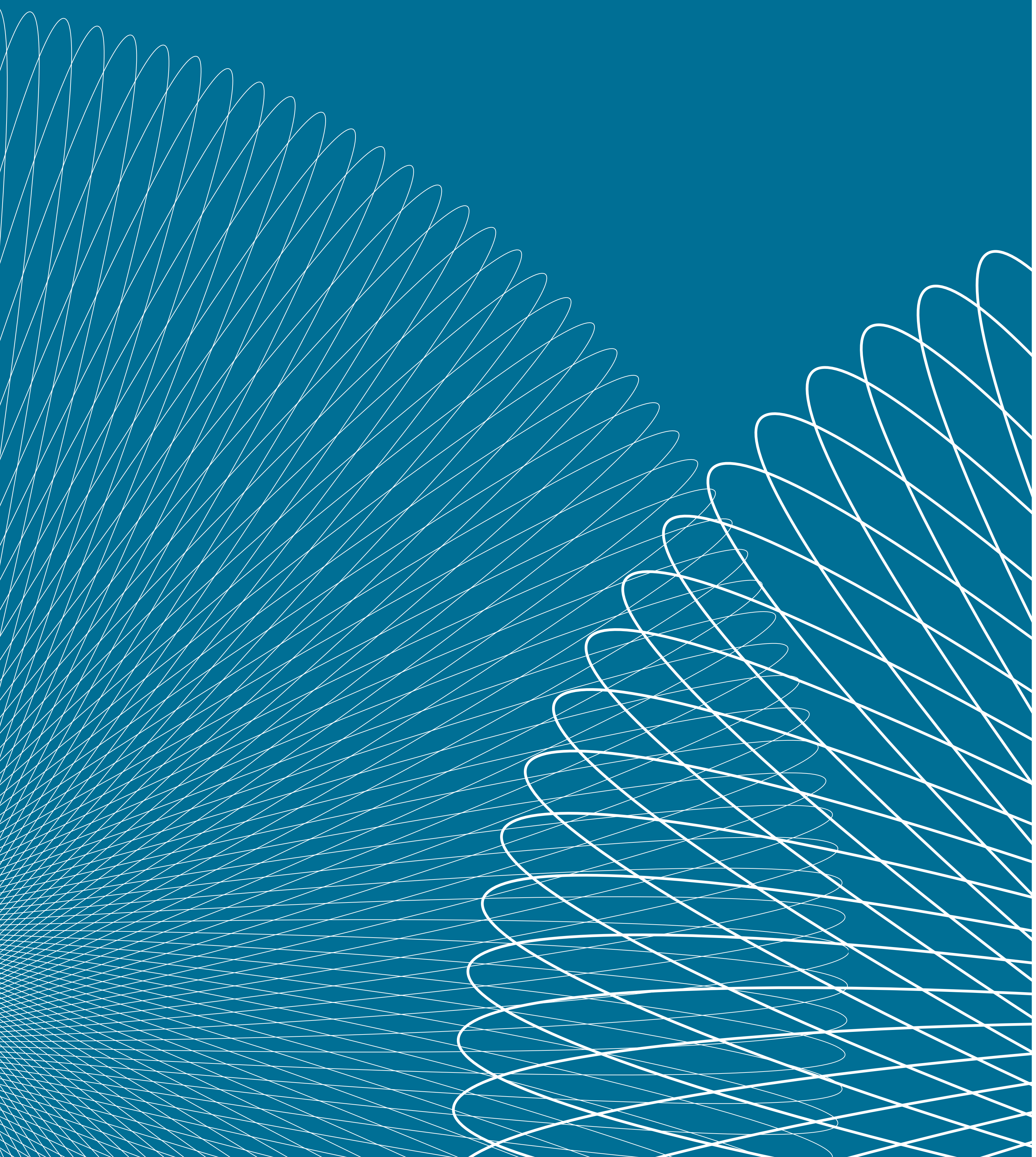

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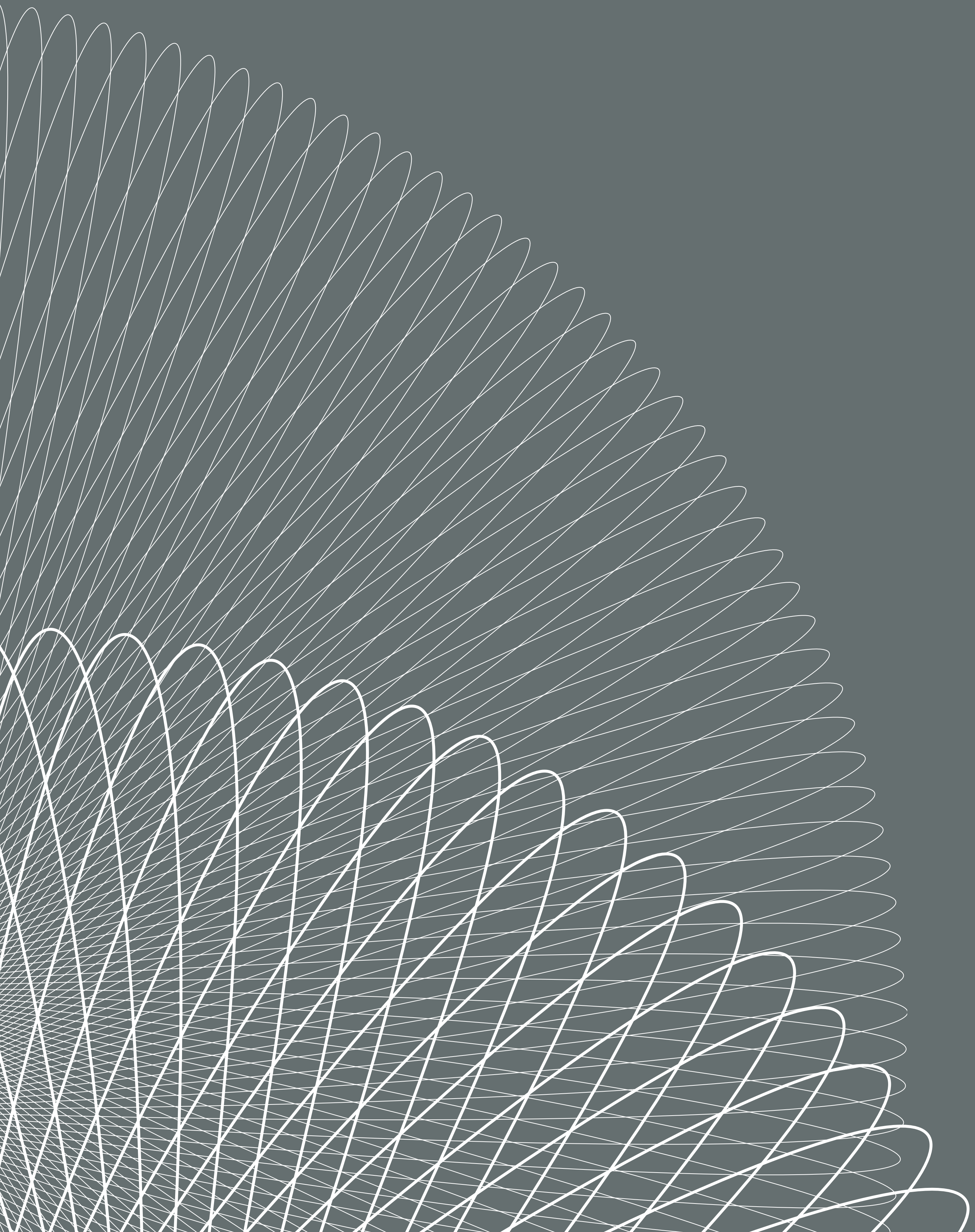


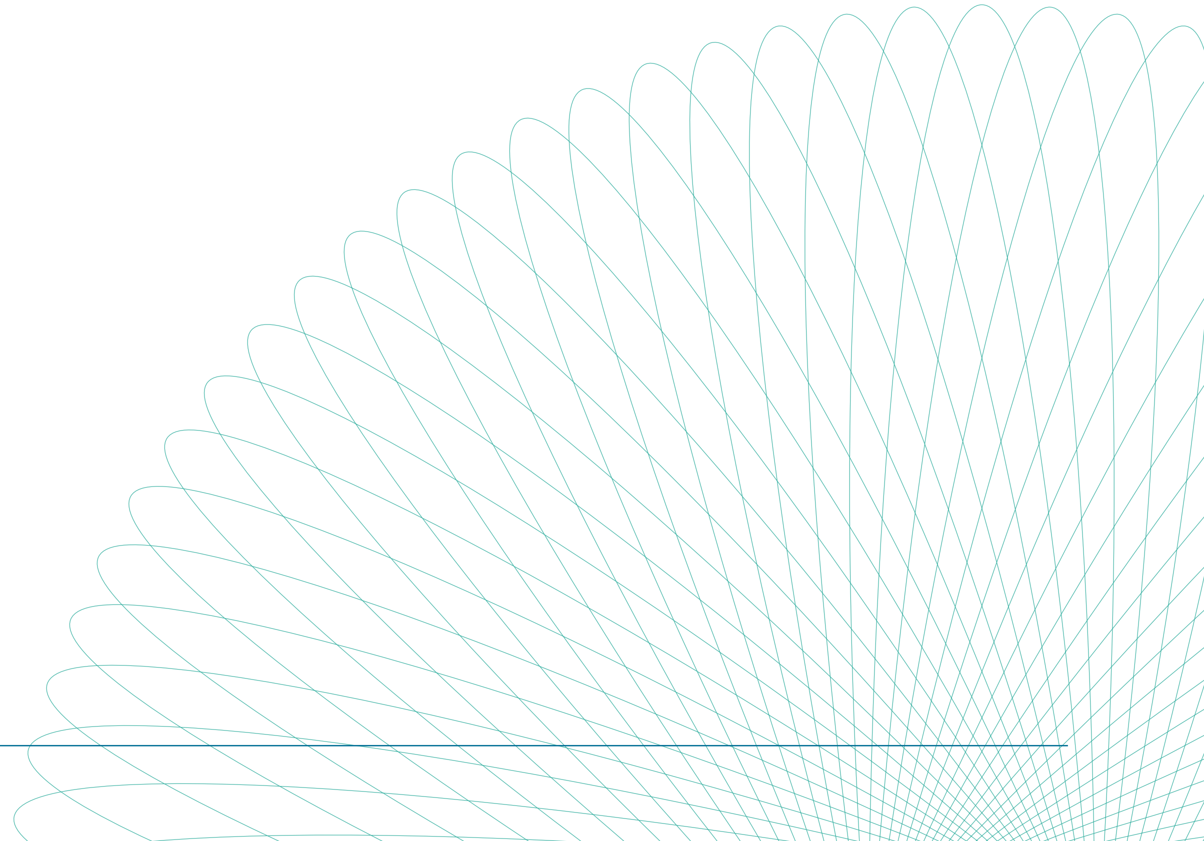
INTRODUCTION

Pathways to Resilience

This is a special edition of Middletown Centre's Research Bulletin that complements the Centre's third international conference; the focus of which is to provide practical strategies and supportive ideas to promote resilience in homes and schools.

The Bulletin commences with biographies and interviews from conference speakers: Dr Brenda Smith Myles, Kari Dunn Buron and Dr Patricia Daly.

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.



DR BRENDA SMITH MYLES

Dr Brenda Smith Myles PhD is president of AAPC Publishing – a small niche company that publishes books on autism spectrum disorder. Formerly a consultant with the Ohio Center for Autism and Low Incidence (OCALI) and the Ziggurat Group, as well as a professor in the Department of Special Education at the University of Kansas, she is the recipient of the Autism Society of America's Outstanding Professional Award, the Princeton Fellowship Award, The Global and Regional Asperger Syndrome (GRASP) Divine Neurotypical Award, American Academy of Pediatrics Autism Champion and two-time recipient of the Council for Exceptional Children, Division on Developmental Disabilities Burton Blatt Humanitarian Award. She served as the editor of *Intervention in School and Clinic,* the third largest journal in special education, and has been a member of the editorial board of several journals, including *Focus on Autism and Other Developmental Disabilities, Remedial and Special Education and Autism: The International Journal of Research.* Brenda has made over a thousand presentations across the world and written more than two hundred and fifty articles and books on ASD. In addition, she served as the co-chair of the National ASD Teacher Standards Committee, was on the National Institute of Mental Health's Interagency Autism Coordinating Committee's Strategic Planning Consortium and collaborated with the National Professional Center on Autism Spectrum Disorders, National Autism Center and the Centers for Medicare and Medicaid Services, who identified evidenced-based practices for individuals with autism spectrum disorders, and served as project director for the Texas Autism Resource Guide for Teachers (TARGET). Myles is also on the executive boards of several organisations, including the Scientific Council of the Organization for Autism Research (SCORE), College Internship Program and ASTEP – Asperger Syndrome Training and Education Program. Furthermore, in the latest survey conducted by the University of Texas, she was acknowledged as the second most productive applied researcher in ASD in the world.

KARI DUNN BURON

Kari Dunn Buron is an autism educational specialist who has worked with children and young adults on the autism spectrum for more than twenty-five years. Kari was one of the founding members of the Minnesota Autism Project and developed the ASD certificate program for educators at Hamline University in St Paul, Minnesota. Kari currently teaches in the Hamline program and coordinates a summer camp for teens with Asperger syndrome. She is the author of *When My Worries Get Too Big!,* a relaxation book for children who live with anxiety, and co-author of *The Incredible 5-Point Scale: Assisting Students with Autism Spectrum Disorders in Understanding Social Interactions and Controlling Their Emotional Responses* and *A 5 Is Against the Law! Social Boundaries: Straight Up!,* an honest guide for teens and young adults.

DR PATRICIA DALY

Dr Patricia Daly was born in Cork and is a graduate of University College Cork. She taught in Adamstown (Co. Wexford) and Macroom (Co. Cork) and completed the post-primary remedial course at St Patrick's College, Dromcondra, in 1978. She completed an MA in Emotional and Behavioural Disorders (1982), and a PhD in Applied Behaviour Analysis at The Ohio State University in 1986. She worked in undergraduate and graduate special education in the US at Miami University of Ohio, Central Michigan University and Ohio Dominican University from 1986 until 2006 when she returned to Mary Immaculate College to direct the graduate diploma in SEN. She was seconded half time to the Special Education Support Service (SESS) for five years and is currently head of department of Educational Psychology, Inclusive and Special Education.

AN INTERVIEW WITH DR BRENDA SMITH MYLES

1. Why does resilience matter for children and young people with autism?

Resilience is the ability to withstand difficulty and recover from adversity. Although complex definitions exist, resilience is related to recognising risk and responding to it in a manner that is compatible with the environment (cf. Bayat, 2007). We recognise resilient people as having the ability to (a) recognise risk and (b) respond to it adaptively (cf. Kaboski, McDonnell and Valentine, 2017).

Why is being resilient important? Because as Heraclitus (535 BC–475 BC), the Greek philosopher said, 'The only thing constant is change'. We experience change across our lifespan and in every environment. Even the most structured life has myriads of changes. Handling change is an important life skill.

And change is hard. Even for those so-called neurotypical (NT) people who are neurologically wired for adaptability. Conversely, autistic individuals are neurologically wired for consistency – processing daily-occurring changes as overwhelming and sometimes traumatic (cf. Gomot and Wicker, 2012).

When change is called for, the NT neurology often detects its need through a 'feeling' or 'notion'. The problem (or risk) is then identified, options are identified and analysed and action is taken. The autistic neurology, on the other hand, melts down or shuts down.

So how do we help? We teach and support. While there are many teachable skills to support resilience, two that are often overlooked are (a) interoception and (b) problem-solving.

Interoception, the eighth sensory system, allows us to feel a variety of sensations from our organs. For example, the interoceptive system allows us to feel hunger, fullness, itch, pain, anger, calmness, distraction or fear. Therefore interoception allows us to answer the question, 'How do I feel?' It is foundational to being able to detect a problem. Instruction in the interception system helps autistic people understand themselves better (Mahler, 2019).

Another important skill that supports resilience is problem-solving. Resilience is enhanced when a child or adult knows that no matter the situation, a situation is nearby. Autistic people who are good problem-solvers can recognise a problem, identify solutions and outcomes, and act (Mataya and Owens, 2012).

References

Bayat, M., (2007). Evidence of Resilience in Families of Children with Autism. *Journal of Intellectual Disability Research.* **51**(9), pp. 702–714.

Gomot, M. and Wicker, B., (2012). A Challenging, Unpredictable World for People with Autism Spectrum Disorder. *International Journal of Psychophysiology.* **83**(2), pp. 240–247.

Kaboski, J., McDonnell, C. G. and Valentino, K., (2017). Resilience and Autism Spectrum Disorder: Applying Developmental Psychopathology to Optimal Outcome. *Review Journal of Autism and Developmental Disorders.* **4**(3), pp. 175–189.

Mahler, K., (2019). *The Interoception Curriculum: A Step-by-Step Framework for Developing Mindful Regulation.* Hershey, PA: kelly-mahler.com.

Mataya, K. and Owens, P., (2013). *Successful Problem-Solving for High-Functioning Students with Autism Spectrum Disorder.* Shawnee Mission, KS: AAPC Publishing.

2. How can peers support children and young people with autism to build resilience in school?

Resilience and Peer-Mediated Interventions: Who is an Important Question

Most individuals with ASD want friends but may not have the necessary skills to establish and maintain friendships. Peer helpers, Circle of Friends, lunch buddies and opportunities for supported friendships can all be motivators for the autistic individual. Involving neurotypical (NT) peers as facilitators for individuals with ASD is collectively known as a peer-mediated intervention – an evidence-based practice.

Peer-mediated interventions, which incorporate myriad instructional strategies, occur when trained NT peers teach or support the use of academic or social skills for learners with special needs, including those with autism. Some autistic students benefit from being in a peer group with those who have similar language abilities and are working on similar skills. A group that contains too many NT peers can be daunting due to the large difference in social abilities across the two groups. The importance of providing autistic students opportunities to develop relationships cannot be overestimated. For example, the National Technical Assistance Center on Transition (NTACT) identified a collaborative network of student support as one of the predictors of adult success for individuals with special needs.

It is important to identify peers who would provide meaningful support. Loomis (2008) has identified desirable and undesirable qualities of peers. This is the first step in implementing a peer programme.

References

Chan, J. M., Lang, R., Rispoli, M., O'Reilly, M., Sigafoos, J., & Cole, H. (2009). Use of peer-mediated interventions in the treatment of autism spectrum disorders: A systematic review. *Research in Spectrum Disorders,* 3(4), pp. 876-889.

Dillenburger, K. (2015). Evidence-based management and intervention for autism spectrum disorders. In M. Fitzgerald (Ed.), *Autism spectrum disorder: Recent advances,* pp. 245-266. InTech. https://doi.org/10.5772/58983.

Loomis, J. W. (2008). *Staying in the game: Providing social opportunities for children and adolescents with autism spectrum disorders and other developmental disabilities.* Shawnee Mission, KS: AAPC Publishing.

National Technical Assistance Center on Transition. (n.d.). Improving postsecondary outcomes for all students with disabilities. Retrieved August 1, 2017 from http://transitionta.org.

Schlieder, M. (2007). With open arms: Creating school communities of support for kids with social challenges using circle of friends, extra-curricular activities, and learning teams. Shawnee Mission, KS: AAPC Publishing.

1. Friendly	1. Vulnerable to peer pressure
2. Good social and communication skills	2. Heavily involved in clique or exclusive peer group
3. Strong connection to a peer network	3. Quiet or reserved
4. Empathetic, able to look at situations from more than one perspective	4. Sarcastic or biting sense of humour
5. Comfortable interacting with peers from different social groups	5. Poor communication skills
6. Good sense of humour, but doesn't need to be funny all the time	6. Unusual, disruptive or negative behaviours
7. Follows through with commitments	7. Frequently late to commitments – or doesn't show up at all
8. Punctual	8. Negative attitude towards people with disabilities or other minority groups

AN INTERVIEW WITH KARI DUNN BURON

1. How do difficulties in social cognition affect the development of resilience skills in children and young people with autism?

Autism is a neurodevelopmental condition that significantly impacts how a person perceives and socialises with others. This condition involves a delay in the area of social cognition, or what can be considered social thinking. Having a delay in social thinking and social understanding leads to problems in successful social interaction. Consequently, children with autism seem to lack the skills needed to have meaningful and mutually reinforcing social interactions with peers, which leads to fewer social interactions overall. It is through these social interactions that children develop social resiliency. Neuroscientist Robert Schultz and colleagues suggest that this situation might initiate a maladaptive cycle of development where a child does not find social interaction rewarding and such skills as social orienting and social maintaining are diminished. This cycle can lead to a lack of motivation, which could lead to a lack of seeking social environments, which could ultimately lead to a lack of social opportunities. Social resiliency develops from frequent and repetitive social interaction and play. Neurotypical children engage in hundreds of thousands of hours of such social practice.

Social resilience is the ability to bounce back after a frustration or some sort of adversity or challenge. This is not easy, especially for someone with autism who not only engages in fewer social interactions, but also can encounter more frustration in social settings like school. For example, social thinking skills are needed for someone to predict the behaviour of others. If the schedule at school changes, all children might be a bit put off but they quickly learn that school schedules are likely to change and that the teacher will make that decision. The child with autism might not learn this lesson through experience. He might respond by losing emotional control because he not only didn't anticipate the change, but the emotion he experiences might feel like a horrible shock with no reasonable explanation. The result might be intense fear and confusion all because the teacher changed snack time to ten thirty. This situation is likely to lead to disruptive behaviour. Understanding the nature of social cognition and the need for resiliency can help to support parents and teachers when developing programmes to address such maladaptive responses. Programmes should focus on the direct teaching of social problem-solving, emotion regulation, relaxation and flexible thinking.

2. How can we best teach children and young people with autism to become more resilient in terms of developing strategies to support them with anxiety management, flexible thinking and problem-solving?

Whenever someone with autism responds to a social or emotional demand, expectation or event by hitting, biting, refusing, screaming, swearing or even self-injury, parents and educators should first consider the issues of social cognition and emotional regulation. The support team needs to ask, 'What skills might be lagging or absent? What skills does this person need to be more successful?' This approach acknowledges new advances in the area of neuroscience, emotion regulation and cognition. We previously made good guesses about why a person behaves in the way he does – most of our methods for change involved motivation, either positive or negative. Many of these motivational methods assumed competence and attempted to change behaviour by creating rewards and punishments. This author suggests that a problem involving a lack of developmental skills should involve direct teaching of those lagging skills.

There are a several approaches to creating social and emotional resilience through the teaching of social information and emotion regulation skills. One of the most researched and effective approaches to teaching emotional regulation is called cognitive reappraisal. Cognitive reappraisal involves helping a person to rethink how he is thinking about a given situation to reduce the level of the emotion he is experiencing because of that situation. Is this problem the end of the world or just a little bump in the road? One way to do this is through the use of a visual and highly systematic five-point scale. The five-point scale makes use of common learning strengths. It is visual, predictable, repetitive and systemised. Here is an example of how a scale in this situation might look:

5 = The end of the world! Too late!
Very doubtful this will ever happen.

4 = Bad stuff – this can hurt me. Talk to my mum or a teacher.

3 = A problem – this will make life harder and I might need some help.

2 = A dilemma – this is not fun but I can handle it myself.

1 = A glitch – this is a little bump in the road.
I can go around and keep on going.

When you teach with a scale, you are taking a social or emotional concept and breaking it into five parts. You will need to relate each level of the problem to the person personally and the scale will need to be studied, used and reviewed in various environments for the method to be most effective. This problem scale is an example of cognitive reappraisal.

A method of teaching flexible thinking is the simple use of a daily calendar. This is a very concrete and highly systematic way to teach 'tolerance for change'. Make sure your calendar has room to write information on each day. Make note of birthdays and family or classroom events on the calendar, and then teach the person to check the calendar every morning to see what is happening and to check for any changes. If a parent travels, you can mark out of town trips so that your child clearly sees when someone is leaving and returning. If there is a school assembly, a substitute teacher or a weather-related cancellation of outdoor play, the calendar gives you a predictable systematic way to frame and present the change. This can make hearing about the change easier and the emotion related to the change smaller and more manageable.

Bibliotherapy is a method of teaching both emotion regulation and social thinking through the use of fiction. Bibliotherapy has been around since the turn of the last century and is often used in psychotherapy but only recently has it been studied in neuroscience. The idea of bibliotherapy is for a person to read (or be read to) a story whose character experiences and solves the same or similar social problems as the person. The research in this area found that when a person problem-solves a real-time dilemma, a particular part of the brain is used, and when a person reads a story about a character who solves the same problem, the same part of the brain gets busy. This is particularly exciting for teaching children and adults with autism because, as mentioned above, people with autism have less experience solving problems in real time, so reading is a valid option for teaching some of the skills needed to navigate daily social life.

AN INTERVIEW WITH DR PATRICIA DALY

1. As educators how can we best monitor the anxiety levels of children and young people with autism within the school environment?

Monitoring stress has to occur one child at a time. Whereas we may know, as educators, what common stressors may be for children with autism, some unique stressors always exist. Knowing your child, getting input from parents and carers, asking the child when possible, and then being observant all play a role. Teachers cannot always avoid situations that produce anxiety in children with ASD, nor should they try to remove all stressors. The next step is then to prepare the child to handle some anxiety. Most teachers can tell by looking at the child in the morning if they are experiencing a bad day and may need to be protected from additional anxiety-producing events. Teachers need to respect that instinct and insight.

2. How can educators help reduce sources of stress and anxiety within the school environment?

Some of this is general and some specific to individual children. Having appropriate signposts in the school and classroom indicating how to behave in different environments is a good start. Tweaking the timetable a little to enable some children to move in the school during quiet times may help. Reviewing the visual schedule – written or pictorial or object-based, at the start of the day can prevent and prepare children for events that may cause anxiety. Selecting common events that produce stress and focusing on them for a time period to teach specific strategies to manage them is helpful. Once a routine for managing anxiety works for one common event, then build the routine and gradually change it to meet the demands of other stressful events. Using sensory-based events, spaces and places can be helpful for many children to calm their stress or anxiety. Giving an out to them such as a break card, a routine for going somewhere else that is monitored, access to stress-reducing items can all help. It all comes back to knowing the child. By building a relationship with the child, the teacher can choose humour, physical activity, quiet times, headphones or any number of possible interventions to help them. Ultimately, it is important for the child to learn to know him or herself, to know what produces anxiety and what helps calm it.

THE RELATIONSHIP BETWEEN ADVERSE CHILDHOOD EVENTS, RESILIENCY AND HEALTH AMONG CHILDREN WITH AUTISM

BACKGROUND

Adverse Childhood Events (ACEs) are events that occur during childhood and which have a negative effect on adult physical and mental-health outcomes. They include cases of psychological, physical or sexual abuse as well as household dysfunction such as witnessing violence against a parent, parents who were substance abusers, mentally ill, suicidal or who had been imprisoned.

Research has shown a negative relationship between ACEs and health and resiliency among the general population; however, research has not yet examined this relationship among children with autism.

RESEARCH AIM

This study aims to determine the prevalence of ACEs among children with autism. It will also examine the connection between ACEs and resilience (the ability to bounce back from negative life events). The study will examine the association between ACEs, resiliency and health, specifically the trend found in previous literature within the general population, which is that as ACEs increase, resiliency decreases.

RESEARCH METHOD

This study analysed data from the 2011–2012 National Survey of Children's Health (NSCH). This survey is a telephone interview conducted by Centres for Disease Control and Prevention (CDC) and National Centre for Health Statistics, US (NCHS). Data was gathered from 95,677 parental and caregiver interviews with one child randomly selected from all the children in the household. Interviewers asked questions based on the child's health, disability, family functioning, parental health and characteristics of the local community.

Four variables were identified in this study and all responses were based on parental and caregiver reports and not confirmed independently. Variables included: parents' and caregivers' ratings of their child's adverse childhood experiences, resiliency, physical and mental health. Researchers used a range of statistical analysis to test six hypotheses.

RESEARCH FINDINGS

Demographics

Initial demographic and background information mirrors findings from previous literature. Most children within the data set were non-Hispanic white, and children with autism were mostly male (83%). Children ranged in age from 6–17, the average age being 11.52. The average number of ACEs was 1.05 for children with autism and 0.72 for children without health-care needs. Children living in a low-income family or with a parent who had a mental-health issue were highest within the autism population. The number of children experiencing parental divorce (0.28) or a parent's death (0.04) were equal among children with autism and their peers. The health scores for children with autism (2.84) were lower compared to their peers (3.52). Resilience scores were lower for children with autism (0.58) compared to their peers (1.17). The number of children with anxiety and depression was higher among those with autism (0.37 and 1.13) compared to their peers.

Hypothesis 1: Among children in the general population, resiliency will mediate the association between ACEs and physical health/mental health

Results indicate resiliency appears to mediate the association between ACEs and mental health in children with autism as per the general population. Higher resiliency acts as a protective factor decreasing the negative association between ACEs and health/mental health. As predicted by previous literature within the general population, as ACEs increase among children without autism, resilience decreases significantly.

Hypothesis 2: Children with autism will experience significantly more ACEs compared to their peers

Children with autism had significantly higher odds of experiencing divorce, family income problems, death of a parent and a parent with a serious mental-health problem. These children also had higher (but not significantly higher) odds of having a parent who spent time in jail, witnessing community violence and having a parent with a drug or alcohol problem.

Hypothesis 3: Children with autism will have significantly lower resiliency compared to their peers

Results showed children with autism have significantly lower resiliency compared to their peers.

Hypothesis 4: Autism will moderate the relationship between ACEs and resiliency

Hypothesis 4a: As ACEs increase children with autism will report significantly lower resiliency compared to their peers.

Hypothesis 4b: As ACEs increase children with autism will not report a significant change in resiliency

Findings indicate that the interaction between autism and ACEs is significant and positive. Results suggest that autism moderates the association between ACEs and resiliency, decreasing the negative association between ACEs and resiliency. Further analysis indicates that children with autism begin with significantly lower levels of resiliency compared to their peers, and the experience of ACEs are not significantly associated with their level of resiliency as they are for the general population.

Hypothesis 5: Autism will moderate the relationship between resiliency and physical and mental health

Results indicate that autism does not moderate the relationship between resiliency and physical and mental health, indicating that resiliency is associated with health and mental health similar to children without autism.

Hypothesis 6: As ACEs increase, children with autism will experience decreased reported physical and mental health similar to their peers

Results indicate that the negative impact of ACEs on physical and mental health is similar for children with and without autism, which is as ACEs increase the odds of child health decrease significantly.

IMPLICATIONS FOR PRACTICE
(by the authors)

- Children with autism experience significantly more adverse childhood experiences than their peers. It is likely that this increased risk is related to increased parental stress experienced by parents and caregivers of children with autism.
- Similar to their peers, ACEs appear to be negatively associated with the physical and mental health of children with autism; however, for children with autism resiliency does not appear to be significantly associated with an increase in ACEs as it is with the general population.
- Future research on resiliency among children with autism is necessary. It is possible that resiliency as a concept is different for children with autism.
- Interventions should target parental and family stress to decrease the incidence of ACEs experienced by children with autism.

Full Reference

Rigles, B., (2017). The Relationship between Adverse Childhood Events, Resiliency and Health Among Children with Autism. *Journal of Autism and Developmental Disorders.* **47**(1), pp. 187—202.

A QUALITATIVE STUDY OF STRESS AND COPING WHEN TRANSITIONING TO ADULTHOOD WITH AUTISM SPECTRUM DISORDER

BACKGROUND

The transition to adulthood can be fraught for many young people with autism and their families as it includes, in many instances: the desire to live independently, attaining and maintaining a job, attending further or higher education, developing a wider range and diversity of relationships and friendships, finding out what the individual wants from adulthood and how best to achieve these goals. The researchers claim there is a paucity in research, meaning we do not fully understand the impact such transitions have on either the young adult or their supportive parents. While traversing these enormous life changes, many young people with autism are also combating depression or elevated levels of anxiety, have lost their entitlement to services and formal supports, and thus have their progression impeded.

RESEARCH AIMS

This qualitative study aims to examine the multiple stressors impacting on young people with autism and their parents or caregivers during this crucial transition to adulthood, the coping strategies used by them, and the strategies and resources used by outside agencies, social workers, as a means of support.

The key research questions were:

1. What are the key challenges and stressors within the transition phase for adolescents with ASD and their caregivers?
2. What key strategies and resources have been used to cope with stressors and challenges?

RESEARCH METHODS

A phenomenological approach was employed to describe the actual experiences of thirteen young people, eleven males and two females, aged 15–25 years with autism and their nineteen caregivers, seventeen females and two males, eighteen of whom lived with the young person, during the transition to adulthood. Within the group, five young people were currently in post-primary education, seven had left post-primary education, with two of these young people in part-time employment, one attended a day centre and three remained at home every day.

Four focus groups, two for the young people and two for the caregivers, using semi-structured questions were conducted to achieve the results. Examples of the questions used included:

a. What help do you need most as you become an adult?

b. What aspect of becoming an adult do you feel most confident with?

1. What kind of help does your child need to become an adult?
2. What aspect of your child's transition to adulthood do you feel most confident about?

RESEARCH FINDINGS

The challenges identified were in the realms of:

- Receiving and accessing relevant services, many of which ceased at this crucial time. Twenty-five per cent of young people with autism who do not have a learning difficulty do not have access to any daytime services, including education.
- Making the adaptations needed for such a transition with unpredictability, appreciating the consequences, anxiety and stress being regarded as incapacitating.
- For caregivers, managing multiple responsibilities as they were managing not only their family home but also that of the young person with autism.
- Accessing further, vocational and higher education; appreciating and recognising their individual skill set and what was on offer to meet their ability and interests; the social skills needed for this new environment; and the perceptions of their ability from employers or placement supervisors, which limited the opportunities afforded to them.

The identified coping strategies and resources included:

- Accessing community support, as the young person frequently did not have the necessary life skills, including applying for and presenting at interview for courses in further and higher education settings or for work. Students also said that access to supportive individuals who could help with anxiety was important.
- Receiving support from family, friends and teachers. This support comes primarily from caregivers and family members and ranges in assistance from taking medication to approving present accommodation and accommodation when the caregiver dies. Yet teachers were seen as offering support on the intricacies of further and higher education and also providing many life skills such as cooking, housekeeping and everyday life circumstances in structured teaching sessions.
- Creating opportunities for self-determination. Caregivers felt that the young people needed to be provided with opportunities to make independent choices and set goals, including the use of individual schedules that broke down the tasks of laundry, cleaning the house and using daily life skills. Volunteering was seen as an ideal opportunity not only to attain specific skills but also to generate a sense of pride and raise levels of self-esteem and confidence.

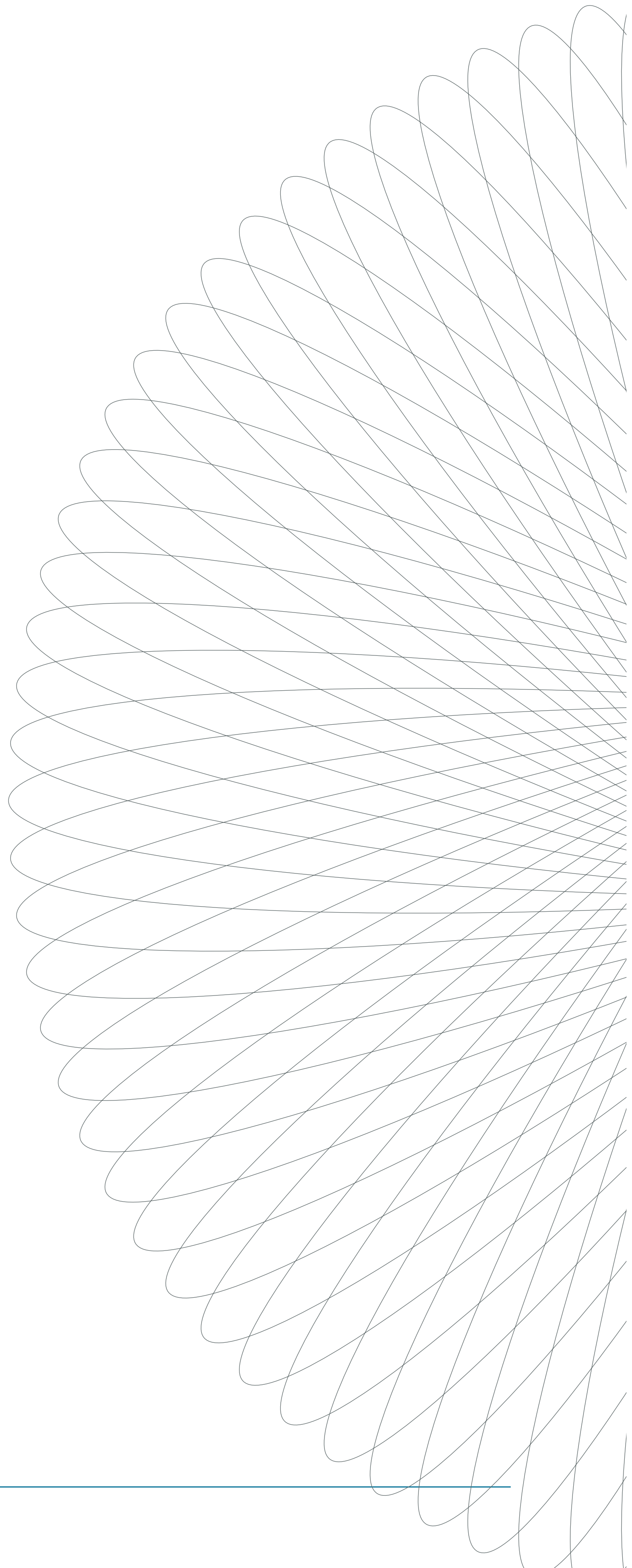
IMPLICATIONS FOR PRACTICE (by the authors)

- Preparation for any transition is vitally important but for the transition to adulthood and impending independence, greater time and preparation is required. We must begin the process earlier for both the young person and their caregivers.
- Young people need to be afforded a range of social skills presented and practised in different contexts to assist with the generalisation and thus discrimination of which skill is needed in specific contexts when away from the caregiver.
- Teaching of life skills is crucial to assist with this growing need for independence. These must be presented in an accessible format that the young person keeps with them, even if it is just a gentle visual reminder.
- Recognition that anxiety can be debilitating and impinges on every aspect of the young person's life. Therefore being taught anxiety-alleviating strategies is essential.

- Young people need to be part of their community, not sitting back waiting on services but encouraged to volunteer in a variety of ways. These life and social skills will be supportive during the transition phase or phases of adulthood.
- Social workers must discuss options available, medical treatment, mental-health services, social skills, independent living, respite care, college supports and vocational education opportunities with young people and their families in a more timely manner, appreciating the need for the transition process to be an integral part of early post-primary, if not primary, education.

Full Reference

First, J., Cheak-Zamora, N.C. and Teti, M., (2016). A Qualitative Study of Stress and Coping when Transitioning to Adulthood with Autism Spectrum Disorder. *Journal of Family Social Work*. **19**(3), pp. 220–236.



WHICH PSYCHOLOGICAL RESILIENCE ATTRIBUTES ARE ASSOCIATED WITH LOWER ASPECTS OF ANXIETY IN BOYS WITH AN AUTISM SPECTRUM DISORDER? IMPLICATIONS FOR GUIDANCE AND COUNSELLING INTERVENTIONS

BACKGROUND

Autism spectrum disorder (ASD) often co-occurs with anxiety. Anxiety has been shown to interfere with learning and social skill acquisition across childhood. Understanding the factors that may help those with ASD reduce their anxiety levels would therefore be highly beneficial.

Psychological resilience refers to an individual's ability to cope with stressors and protect themselves from the potential negative effect of these stressors. Psychological resilience may offer a buffer against anxiety.

Despite the intervention potential inherent in such a relationship, the authors failed to find any previously published studies examining the association between psychological resilience and anxiety among samples of children with ASD.

RESEARCH AIMS

The authors aimed to investigate whether resilience moderates anxiety levels in a sample of boys with high-functioning ASD. The also wished to examine the effects of resilience on specific anxiety disorders and depression symptoms, and which particular aspects of resilience are especially powerful in moderating anxiety severity. Finally, the researchers aimed to examine the effects of aspects of resilience on the cognitive, emotional and somatic symptoms of anxiety.

RESEARCH METHODS

The participants of this study were thirty-nine boys from Australia with a diagnosis of high-functioning autism spectrum disorder. The participants were aged 7–12 years and had all received their diagnosis under DSM-4 criteria. The boys' mothers also took part in the study.

Participants were recruited through a newsletter posted out to members of an ASD parents' group in Australia. The newsletter contained links to online questionnaires, with separate versions for parents and children. Parents were asked questions about their child's ASD symptomology, while children completed two questionnaires: the Child and Adolescent Symptom Inventory (CASI) and the SPRS Psychological Resilience Scale (SPRS).

CASI was used to measure symptoms of child anxiety and includes several subscales for different anxiety disorders as well as a subscale measuring symptoms of depression. The SPRS measures child resilience with factors such as friendship skills, social support and emotional competence.

Children completed the questionnaires without assistance from their parents.

RESEARCH FINDINGS

CASI anxiety total score and SPRS total score were not significantly correlated, suggesting no direct link between overall anxiety and overall resilience; however, there were significant negative correlations between SPRS total score and CASI Generalised Anxiety Disorder subscale, as well as CASI Social Phobia subscale. This suggests higher overall resilience is related to lower levels of generalised anxiety disorder and social phobia symptoms.

Further analyses showed that the children's resilience skills, which were significantly associated with lower generalised anxiety disorder symptoms, were: feeling that they could handle problems that are difficult for other children, that they could make good decisions, that they could think before acting and that they would be able to help someone calm down.

Being able to think before acting was associated with lower levels of social phobia symptoms; however, this association did not reach statistical significance.

The authors also looked at which specific aspects of generalised anxiety disorder were related to the four resilience skills previously identified as associated with the disorder. They found that belief in being able to teach someone to calm down and belief in the ability to think before acting were relatively unrelated to generalised anxiety disorder symptoms individually but the resilience characteristic of believing they were able to make good decisions was significantly related to lower levels of difficulty with paying attention (an example of cognitive anxiety), fewer difficulties with controlling worries (an example of emotional anxiety) and fewer feelings of restlessness or inability to relax (examples of somatic anxiety). Having a belief in your ability to handle problems that may bother other children was significantly related to having less concerns about life difficulties (an example of emotional anxiety) and being irritable, feeling fatigued and struggles with relaxation.

Regarding social phobia, having the ability to think before acting was associated with lower levels of the social phobia characteristics of withdrawing or freezing in an uncomfortable social situation and feeling more anxious in social situations than most people.

IMPLICATIONS FOR PRACTICE (by the authors)

- Specific aspects of psychological resilience appear to be associated with lower levels of anxiety symptoms among boys with high-functioning ASD.
- There appear to be intricate relationships between certain psychological resilience skills and certain types of anxiety.
- This knowledge could be used to develop highly individualised interventions, whereby specific anxiety symptoms are assessed and a programme is developed to target the particular psychological resilience skills identified as countering these anxiety symptoms.
- Resilience training should be centred around performance domains such as problem-solving strategies, social skills and self-reviewing. Training should be practical and active, giving children opportunities to try out their new skills in relevant situations.
- The findings of this study should be replicated to ascertain whether the relationships between resilience and anxiety identified are seen universally among boys with high-functioning ASD.
- The current study is one of the first to examine the relationship between psychological resilience and anxiety in boys with high-functioning autism. The results suggest that an understanding of the intricacies of this relationship may help build individualised interventions to promote psychological resilience against anxiety among those with autism.

Full Reference

Bitsika, V. and Sharpley, C. F., (2014). Which Psychological Resilience Attributes are Associated with Lower Aspects of Anxiety in Boys with an Autism Spectrum Disorder? Implications for Guidance and Counselling Interventions. *British Journal of Guidance & Counselling.* **42**(5), pp. 544—556.

AN EVALUATION OF THE 'FRIENDS FOR LIFE' PROGRAMME AMONG CHILDREN PRESENTING WITH AUTISM SPECTRUM DISORDER

BACKGROUND

Many individuals with autism experience anxiety and are at risk of developing anxiety disorders. Cognitive behavioural therapy (CBT) can be effective in reducing anxiety but it is not always appropriate for those with autism. Limited ability in recognising and regulating emotions, receptive and expressive communication deficits, Theory of Mind deficits, concrete and inflexible thinking and lack of generalisation across different contexts all impact upon the effectiveness of CBT for people with autism.

CBT programmes can be adapted to meet the specific needs of children and young people with autism. Some recommended adaptations are:

- The use of more concrete concepts and concrete language
- The use of visual supports and tangible objects
- A high level of structure in sessions
- Adjustments for child's developmental level
- The use of alternative communication strategies
- A greater focus on social skills
- The use of multiple-choice questions

The 'FRIENDS for Life' programme is a ten-week programme that uses a CBT approach to reduce anxiety and improve emotional resilience in children aged 7–11 years. The aims of the programme are:

- To teach children to recognise and manage emotions
- To teach children to recognise their thoughts in anxiety-provoking situations
- To challenge negative self-talk
- To teach coping skills and self-reward for positive attempts at overcoming anxieties

Positive outcomes from the programme have been cited in previous studies.

RESEARCH AIMS

This study examined the effectiveness of 'FRIENDS for Life' when adapted for a group of children aged 10–11 years with high-functioning autism (HFA).

The authors state a quantitative and a qualitative research question:

1. Quantitative evaluation: Does the FRIENDS intervention reduce anxiety among children with HFA?
2. Qualitative evaluation: In what ways do children benefit from participation in the FRIENDS intervention programme?

RESEARCH METHODS

The 'FRIENDS for Life' programme was carried out with seven children over ten weekly sessions, each lasting two hours. Each child had a diagnosis of autism, was of average or above-average intellectual ability and attended a mainstream school. They had all been referred for anxiety intervention in the psychology service and received a multidisciplinary team service. The following adaptations were made to the programme to meet autism-specific needs:

- Structured environment with five different zones
- A structured activity at the start of each session
- Use of visual communication supports and schedules
- Provision of movement breaks and other sensory strategies
- Use of puppets and props

- Emphasis on Theory of Mind, i.e. verbalising feelings in oneself and others

The study methodology is described as a component design as it collected qualitative and quantitative data separately and then combined it in data synthesis and triangulation.

Quantitative data was collected before and after the intervention programme using the Children Beck Youth Anxiety Self-report Inventory (BAY-I) with the participants.

Qualitative data was collected through narrative observations of sessions and semi-structured interviews with parents of the participants. The children completed a post-intervention evaluation form using smiley faces on a Likert-based rating scale.

RESEARCH FINDINGS

The BAY-I scores remained largely the same for each child pre- and post-intervention, indicating that the programme did not reduce anxiety. It was noted, however, that children seemed to under-report their own anxiety when results were triangulated with information from parents and clinicians.

Qualitative data, which was collected from the children's evaluation forms, indicated that participants found the programme useful, especially the skill of 'changing red thoughts to green thoughts', which involved challenging negative thinking. Four of the children stated they had 'learned a lot' about their feelings and coping strategies, and most reported that they had made new friends and 'really enjoyed' the programme. One child 'did not enjoy it' and none reported using the skills frequently outside the group sessions. The authors report that the children particularly enjoyed the use of puppets.

Information collected from parents regarding their child's anxiety highlighted the following themes:

- Children struggling in mainstream schools and schools reporting episodes of emotional and behavioural breakdowns
- Social isolation and bullying
- Feelings of 'not fitting in'
- Low self-esteem, depressed moods and self-harm

Following the 'FRIENDS for Life' programme parents reported the following observations:

- Less episodes of behavioural difficulties in school
- Improvement in the use of coping strategies, e.g. relaxation, asking for help
- Increased positivity and self-confidence
- Improvement in discussing feelings
- Formation of positive relationships and a sense of belonging to the group

The negative points raised by parents focused on the difficulty in generalising the skills outside the group, and parents felt that they could not support application of the skills as they were not part of the programme. One parent stated that the programme did not target the specific anxieties of each child.

IMPLICATIONS FOR PRACTICE (by the authors and reviewer)

- The 'FRIENDS for Life' programme may have a positive impact on self-confidence, the ability to communicate emotions and the use of coping strategies. These factors can then contribute to improvements in emotional resilience. The sample used in this study, however, was small (n=7) and only included those with HFA, so it is difficult to determine if the programme is appropriate for a wider autism population.
- A group programme, such as 'FRIENDS for Life', can give children with autism a sense of belonging and reduce feelings of social isolation, and may help them form friendships. But these outcomes could be gained from other group-based programmes and may not be specific to 'FRIENDS for Life'.
- One limitation of the programme was that skills learnt within the group were not generalised to other settings outside the group. This is a difficulty often observed in skills-based programmes for people with autism due to rigid thought patterns. Programmes therefore need to include strategies that will support generalisation of skills, such as educating parents and teachers in the skills, providing visual prompts which can be generalised to other contexts or teaching skills across a range of settings.
- Programmes which are based on a CBT approach can be effective when adapted for the specific needs of children and young people with autism. Adaptations may include a higher level of structure, the use of visual supports and the use of more concrete language when teaching skills and coping strategies.
- Self-report assessments, such as BAY-I, may not be appropriate for measuring anxiety and emotional resilience in individuals with autism. This is probably due to difficulties in recognising and describing emotions. Instead, observational measures could be used.
- The use of puppets may be a useful intervention approach for children with autism and seem to support engagement and interaction and facilitate the development of relationships with others.

Full Reference

Burke, M-K., Prendeville, P. and Veale, A., (2017). An Evaluation of the 'FRIENDS for Life' Programme Among Children Presenting with Autism Spectrum Disorder. *Educational Psychology in Practice.* **33**(4), pp. 435–449.

COPING STRATEGIES OF TAIWANESE CHILDREN WITH AUTISM SPECTRUM DISORDERS

BACKGROUND

Children with autism spectrum disorder experience stress as a result of daily social and living challenges.

RESEARCH AIMS

This qualitative study employed an exploratory descriptive design to investigate and describe the coping experiences of children with autism spectrum disorders in Taiwan.

RESEARCH METHODS

A sample of seventeen children with autism (aged 6–19 years) and their parents were recruited from a child psychiatry clinic in northern Taiwan. Data was collected from in-depth face-to-face structured interviews. The children and their parents were interviewed separately but they were all asked the same questions. Interviewing the parents was essential for obtaining clarifications or details omitted by the children.

Interviews explored coping strategies of Taiwanese school-aged children with autism spectrum disorders. Transcribed interview data were thematically analysed.

RESEARCH FINDINGS

This study found that the children with autism used many strategies to cope with stress. Five themes described their coping strategies: (1) problem-solving (2) acting out (3) avoidance (4) seeking help (5) self-regulation. These strategies reduced or managed stress associated with stressors that could not be controlled.

The participants in this study used coping strategies employing the concepts of engagement and disengagement, which are used by all children and adolescents to cope with stress.

- Engagement coping includes strategies that orient to the stressor or to the emotion or thought resulting from the stressor. The children in this study used engagement coping strategies like problem-solving, searching for help and self-regulation.
- Disengagement coping includes strategies that orient away from the stressor, such as avoiding emotions or thoughts. The children in this study coped with stress by using disengagement strategies of acting out and avoidance.

IMPLICATIONS FOR PRACTICE (by the authors)

- Identification of stresses and evaluation of coping behaviours should assist professionals to develop individualised strategies to assist in stress reduction for children with autism.
- This study shows that children with autism can utilise and develop healthy coping strategies for stress, such as problem-solving and asking for help. Children with autism may require supports and practise to develop these valuable life skills.
- Professionals should work together with children with autism and their families to develop coping strategies.
- Caregivers and professionals should be provided with support and training to help them understand the difference between coping strategies and challenging behaviour. Instead of attempting to eliminate challenging behaviour, facilitating coping strategies for these children should be emphasised, which could allow them to improve and strengthen their ability to adjust to difficult situations.

Full Reference

Chin, W.C., Chao, K.Y., Chang, H.L., Li, H.M. and Chen, S.H., (2017). Coping Strategies of Taiwanese Children with Autism Spectrum Disorders. *Journal of Clinical Nursing.* **26**(21–22), pp. 3408–3421.

RESILIENCE AND AUTISM SPECTRUM DISORDER: APPLYING DEVELOPMENTAL PSYCHOPATHOLOGY TO OPTIMAL OUTCOME

BACKGROUND

Traditionally autism has been linked with persistent deficits in several functional areas throughout the lifespan. Recent studies have proposed that for some individuals diagnosed with autism they may be able to achieve functioning within normative scales, referred to as optimal outcome (OO), effectively suggesting that they may recover from autism. Authors of this article examined the empirical support of OO from a developmental psychopathology viewpoint.

RESEARCH AIMS

The current project is a literature review that aims to position an understanding of resilience and protective factors as identified in some individuals with autism spectrum disorders within the research for OO for an autism diagnosis.

RESEARCH METHODS

Through a detailed analysis of current literature, the researchers discuss the understanding of developmental psychopathology and its impact on autism research to date. A further review of the literature base for resilience and protective factors is presented as these relate to OO in autism treatments. Using the overlap between normative developmental psychopathology of resilience and the empirically significant variables affecting positive outcomes from autism treatments, the researchers pinpoint potential protective factors for individuals with autism although no prior research is in existence at this time.

RESEARCH FINDINGS

This literature review has spotlighted several potentially useful theories in the development of resilience and the effect protective factors can have in increasing the likelihood of OO for interventions with individuals with autism spectrum disorder. Many factors potentially influencing OO have yet to be empirically researched, especially within the population with autism. This review suggests several future research directions, including post-adolescent OO, based on lifespan developmental trajectories.

IMPLICATIONS FOR PRACTICE
(by the authors)

This review has found possible predictors of positive outcomes from autism interventions to be:

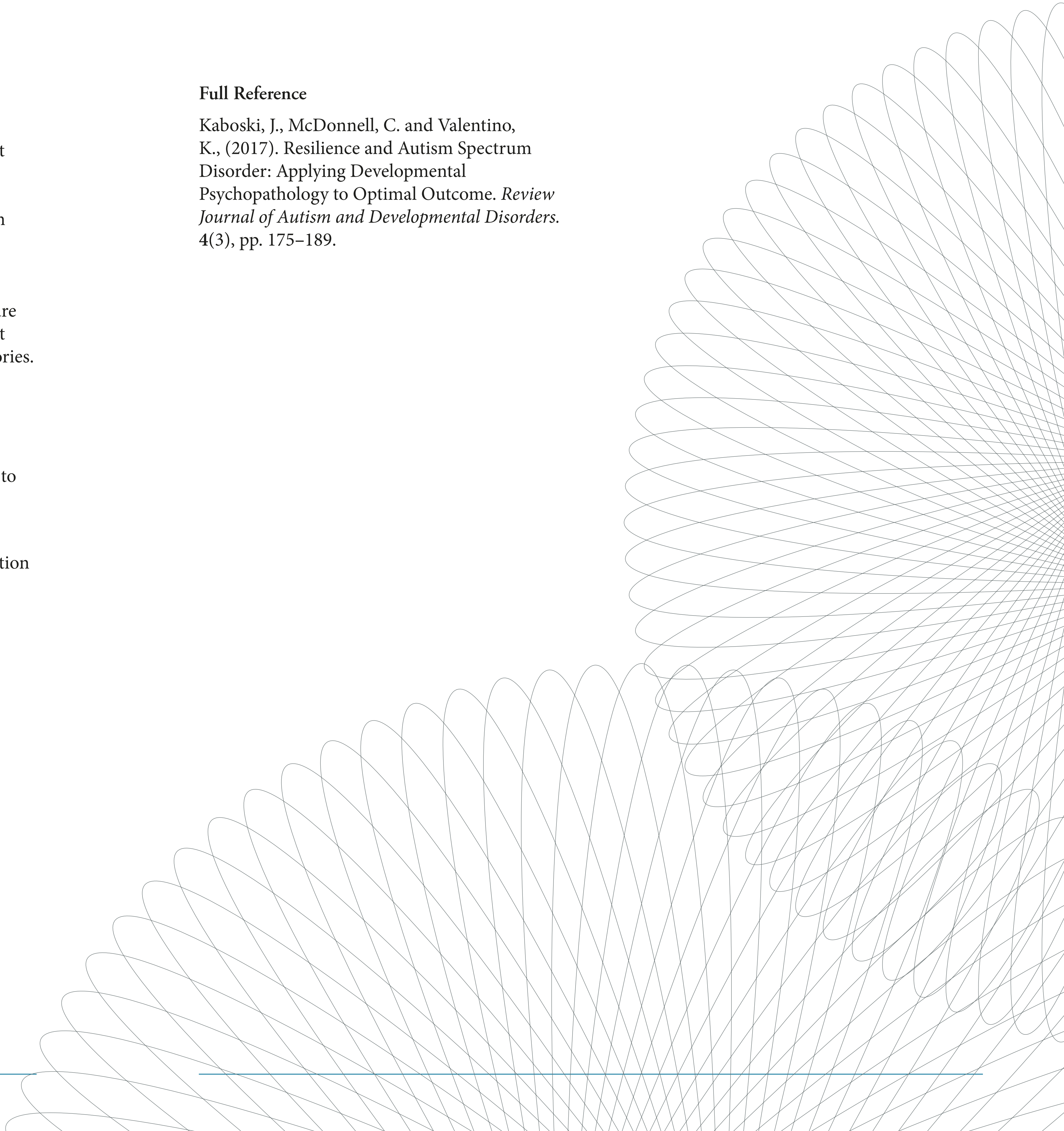
- Higher cognitive ability
- Higher ability level (skills) before intervention
- Diagnosis at the higher end of autism spectrum (HFA, Asperger's)
- Early identification and early intensive behavioural interventions

Possible protective factors include:

- Higher socio-economic status
- Early treatment
- More Applied Behaviour Analysis-based treatments
- Earlier parental concern
- Cognitive strengths (e.g. visuospatial processing skills)

Full Reference

Kaboski, J., McDonnell, C. and Valentino, K., (2017). Resilience and Autism Spectrum Disorder: Applying Developmental Psychopathology to Optimal Outcome. *Review Journal of Autism and Developmental Disorders.* **4**(3), pp. 175–189.



A PILOT RANDOMISED CONTROLLED TRIAL OF A SCHOOL-BASED RESILIENCE INTERVENTION TO PREVENT DEPRESSIVE SYMPTOMS FOR YOUNG ADOLESCENTS WITH AUTISM SPECTRUM DISORDER: A MIXED METHODS ANALYSIS

BACKGROUND

Co-occurrence of depression is high in the population of people with ASD symptomology of autism. Social communication difficulties and reduced coping mechanisms put people with ASD at a greater risk of developing depressive symptoms and depression. Few studies have focused on addressing depression in the population with ASD despite some positive outcomes from research into interventions for ameliorating symptoms in young people at risk of depression.

RESEARCH AIMS

The researchers have set the following hypothesis:

- Research tool (RAP-A-ASD) can be implemented with fidelity and will be acceptable as an intervention by research participants (adolescents with ASD).
- Experimental treatment group would be observed to have fewer depressive symptoms, greater coping skills and improved behaviour and emotional regulation than the control.
- Treatment effects would be maintained and evident at six-month follow-up.

RESEARCH METHODS

Researchers: This study was completed by the first author as part of a doctoral programme at the Queensland University of Technology (Australia) under the supervision of the second author.

Participants: School participation was recruited in Brisbane, Australia, a major urban centre. Eighteen schools accepted the invitation to participate in the study and twenty-nine students from these schools were identified as having ASD. The age range of participants was 10–13 years, with 90% being male. Additionally, more than 50% of participants were identified as having subclinical or clinical depressive symptoms upon intake.

Schools provided the researcher with documentation to show each student had an ASD diagnosis. The students were all high-functioning as the demands of the intervention programme required a relatively high level of cognitive ability.

Child Depression Inventory (CDI) was used to determine the level of depression symptomology for each participant. Coping Self-Efficacy Scales (CSES), Strengths and Difficulties Questionnaire (SDQ) and a process evaluation scale were used to indicate individual participants' scores in each area. The latter instrument was used by participants to indicate their satisfaction with and willingness to participate in the study activities.

Student participants were randomly assigned to either a control or experimental group. The experimental group received eleven weekly sessions of fifty minutes in a one-to-one format. These sessions were facilitated by a university student who was trained in the intervention as well as specific ASD training. The sessions were thematically developed and included instruction and activities on the weekly topic. The control group were in receipt of the usual resources available in their schools: school guidance councillor, learning support teachers and monitoring by classroom teachers.

In addition to the empirical data collected using the above instruments, qualitative data were collected through short post-intervention interviews with participants and written feedback from parents and teachers. Ten student participants were interviewed using a convenience sampling method. Parent responses (n=16) and teacher responses (n=12) were also analysed for intervention effect. While quantitative data were collected on three occasions: pre-intervention, post-intervention and at six-month follow-up, qualitative data were only collected during the post-intervention phase of the project.

RESEARCH FINDINGS

Findings supported the first research aim in that the intervention (RAP-A-ASD) was delivered with fidelity and was rated as highly acceptable by participants; however, the second research hypothesis had mixed results. There was no evidence for intervention effect on depressive symptomology, emotional regulation or behaviour in this study. The research did report significant intervention effect of RAP-A-ASD on coping skills as reported in the parent feedback. The qualitative data also supported the improvement of social skills, self-confidence and emotional regulation in the participants.

The researchers attributed part of the failure of the intervention to the small sample size as it fell below the threshold for significance testing. Also, the finding of several participants to be within clinical range for depressive symptomology was likely a factor in the intervention outcomes.

IMPLICATIONS FOR PRACTICE (by the authors)

- The intervention used, RAP-A adapted for use with students with autism, was found to be acceptable to the students and its implementation was carried out with fidelity. This means schools can utilise this and similar programmes to support individuals with ASD.
- This study adapted an evidence-based practice (cognitive behavioural therapy) to be utilised specifically for young people with autism. Converting from group to individual sessions has potential for use with this population as it should maintain the validity of the programme while suiting the strengths and needs of students with ASD.
- The current research utilised a brief training programme consisting of eleven fifty-minute weekly sessions. Despite this low level of intensity, this intervention showed mixed results. Increased frequency or session time may have an impact on effectiveness and still be within the means of schools to implement.

Full Reference

MacKay, B., Shochet, I. and Orr, J. (2017). A Pilot Randomised Controlled Trial of a School-Based Resilience Intervention to Prevent Depressive Symptoms for Young Adolescents with Autism Spectrum Disorder: A Mixed Methods Analysis. *Journal of Autism and Developmental Disorders.* **47**(11), pp. 3458–3478.

RESILIENCE AND EMOTIONAL INTELLIGENCE IN CHILDREN WITH HIGH-FUNCTIONING AUTISM SPECTRUM DISORDER

BACKGROUND

Prior research with young adults has hypothesised that children with high-functioning autism spectrum disorder (HFASD), i.e. those who present with developmentally normative cognitive ability (IQ≥ 85), display reduced emotional intelligence (EI) and differential relations between EI and resilience compared to typically developing children (TD). Having this cognitive ability can result in individuals with HFASD being aware of their social difficulties, which can elevate their risk for and severity of co-occurring mental health issues such as anxiety, depression, poor self-esteem, loneliness and distress when socially interacting with others.

The concept of resilience, i.e. the capacity of individuals to demonstrate positive outcomes despite the experience of trauma or adversity in their lives, fundamentally endeavours to explain the inherent and environmental protective and risk factors related to developmental outcomes.

Despite the focus to identify factors related to positive developmental outcomes, these have largely comprised TD samples experiencing adversity with limited research conducted among children and young people with psychopathology, a circumstance that inherently presents facets of difficulties and risk.

RESEARCH AIMS

The primary purpose of this article is to acquaint readers with the concept of resilience and how it applies to autism spectrum disorder. An additional aim of the research is to present the results of an investigation of resilience factors in relation to EI as an area of potential strength for children with HFASD.

RESEARCH METHOD

The study involved forty children aged 8–12 years (twenty with HFASD and twenty TD children) who were recruited through community-based agencies that provide support to children with autism and their families, educational organisations that provide support to TD children and children with learning needs, as well as community-based medical offices. The sample was age and gender matched but not matched by IQ. Information about the study was provided to parents who completed a brief screening task to determine if their child had an indicator of a cognitive disability. Those who had a cognitive disability were thanked for their interest but excluded from the study, while those who did not have a cognitive disability provided informed consent for their child's involvement. Parents of TD children undertook the same prescreening task but were also asked their child's gender and date of birth so they could be matched with a child with autism.

Measures Utilised

The diagnosis of the autism sample was provided by a professional not linked to the study and confirmed by the research team via the Autism Diagnostic Interview-Revised (ADI-R). All participants were required to demonstrate cognitive functioning as indicated by verbal intelligence (VIQ) and performance intelligence (PIQ) ≥ 85 on the standard measure of cognitive ability. This was measured through the utilisation of the Wechsler Abbreviated Scale of Intelligence (WASI). The TD and autism group did not significantly differ on VIQ.

To measure EI the BarOn Emotional Quotient Inventory-Youth version (BarOn EQ-i:YV), a self-report measure of trait EI for individuals aged 7–18 years, was used. This measure consists of sixty items with a completion time of 25–30 minutes using a five-point Likert rating scale that generates a total emotional quotient (EQ) composite score and seven EQ subscale scores: intrapersonal, interpersonal, stress management, adaptability, general mood, positive impression and inconsistency index. The first five indexes and the total EQ were only used in this study with standard scores generated.

The Resiliency Scales for Children and Adolescents (RSCA) measure of resilience designed for 9–18 year olds comprises a sixty-four-item self-report. Three primary resilience domains, including sense of mastery (optimism, self-efficacy and adaptability), sense of relatedness (trust, support, comfort and tolerance of others) and emotional reactivity (sensitivity, recovery and impairment from emotional situations), are assessed through this measure. The first two domains are symptomatic of protective factors that support or enhance resilience whereas the third is representative of a risk factor for reduced resilience. T scores were generated from this measure.

Participants initially completed tasks to ensure they met the inclusion criteria. This included the ADI-R, which was completed by the parent of the child, and the WASI, completed by all children in the study. Those who met these two criteria were then invited to complete the additional measures. These were administered in a randomised order to account for order effects.

RESEARCH FINDINGS

Results indicated that children with HFASD do not significantly differ from TD children on either measure. Across all the participants none responded in a biased or inconsistent manner when investigating the positive impression and consistency indexes of the BarOn EQ-i: YV measure. There was also no significant difference between the autism and TD samples on the following three resilience aspects: mastery, relatedness and reactivity or on the six primary EI factors. In determining the relation between resilience and EI as to whether EI was differentially related to positive or negative outcomes across both samples, the results indicated that although there was some overlap in the pattern of relationship between both cohorts, there were many unique significant relations for both samples. Total EI was significantly related to mastery, relatedness and reactivity in the autism sample compared to the TD sample whereby this relation was only significant for mastery and relatedness.

Several unique significant correlations were reported. Interpersonal skills were significantly found to be related to both mastery and relatedness in the autism group only; this EI factor was not significantly related to any resilience factor in the TD sample. Similarly, intrapersonal skills was significantly related to mastery and relatedness for the autism sample only. Stress management was only uniquely related to mastery on the TD sample and negatively correlated with reactivity in both groups. Adaptability was also uniquely significantly related to relatedness for the autism sample and to reactivity in the TD sample, with adaptability also significantly related to mastery in both sample groups. Lastly, general mood was distinctively related to relatedness only in the autism sample but related to mastery in both the TD and autism samples.

The findings suggest that EI may be a unique area of interest for those with HFASD in relation to interventions that capitalise upon potentially inherent strengths. This is encouraging as these findings suggest areas of strength for children with HFASD, differing from previous studies which has indicated explicit deficits in EI and resilience; however, the authors highlighted that trait EI difficulties may develop at a later age than that of the sample within this study.

IMPLICATIONS FOR PRACTICE (by the author)

- Children with HFASD do not experience reduced protective or increased risk factors for positive outcome.
- It is important to acknowledge that children with HFASD can often encounter several challenges, such as bullying and isolation, and limited peer relations that continue from their adolescent years into adulthood and which negatively impact their post-secondary education and employment outcomes. Understanding methods for improving resilience among this vulnerable cohort of the autism spectrum is imperative to improve their life outcomes.
- Identifying predictive factors that promote resilience may be crucial in informing service delivery, funding initiatives and policy on how best to support children with HFASD and their families.
- Intervention should also focus on improving interpersonal, intrapersonal and adaptive skills and general mood that could then promote positive outcomes across domains and environments for children with HFASD.

Future research opportunities were also recommended including:

- The replication of this study with a larger sample, including more females. This would allow for greater generalisability of findings.
- An investigation into trait EI and resilience in children with autism with lower cognitive ability (i.e. ≤ 85) should further be explored as having a lower cognitive ability may be a protective factor that could also result in additional unique relations between EI and resilience.
- Including parent-reported measures may add additional insights on distinct similarities or differences in how children and parents view EI and resiliency factors.
- A thorough understanding of the developmental nature of the trait EI and resilience may also be gained from longitudinal studies of a larger cohort of children as they progress into adolescence and adulthood.

Full Reference

McCrimmon, A.W., Matchullis, R.L. and Altomore, A.A., (2016). Resilience and Emotional Intelligence in Children with High-Functioning Autism Spectrum Disorder. *Developmental Neurorehabilitation.* **19**(3), pp. 154–161.

RISK AND RESILIENCE IN AUTISM SPECTRUM DISORDER: A MISSED TRANSLATIONAL OPPORTUNITY?

BACKGROUND

The researcher claims that the previous twenty years' research has added significantly to societal knowledge on the causation, diagnosis and appropriate supportive interventions for autism, yet suggests that although viewing autism and those who experience it as a homogeneous group belies the diversity of those with autism. This diversity of experience, skills, abilities and challenges has left a paucity in the research into the resilience of those with autism with resilience being defined as, 'a better than expected outcome in the face of adversity' and diagnosis being seen as a risk factor.

Using the aforementioned definition, resilience in autism may be deemed as 'doing better than expected given the diagnosis of autism', thus necessitating examining the risk factors in autism:

1. Gender: males are more frequently diagnosed than females, yet there's no clear reason for this disparity.
2. Familial: genetics appear to be a risk factor, supported by studies on siblings and in particular involving twins with autism, claiming that perhaps more than 90% of the phenotypic variance in autism is due to genetic factors. Yet claims have been made that the unknown or unexplained variations in genetics may also account of this overlap.
3. Environmental or natural history: the researcher claims that further research is needed to ascertain the exact nature of environmental factors as although many have been noted none have been substantiated.

RESEARCH AIMS

The primary aims of this paper were to review risks and resiliency in autism across the lifespan.

RESEARCH METHOD

The authors of this paper provided a narrative summary to fulfil the aim of this paper.

RESEARCH FINDINGS

1. Gender: one key factor has been the seemingly disproportionate number of females with a learning difficulty not receiving a dual diagnosis of autism compared to males; while females who are meeting their developmental norms of cognition display fewer repetitive behaviours and have better social communication skills and so go unrecognised. The researcher purports the theory of a multiple-threshold model, whereby the threshold for diagnosis is different for males and females. Can females cope better with some of the characteristics? Are male children at a higher risk of having autism? Are females in some way protected from the manifestation of all the characteristics? Further research is needed.
2. Familial: the Baby Siblings Research Consortium (BSRC) reports that 20% of infants with siblings with autism also receive a diagnosis; however, what about the remaining 80%? They are of interest in terms of resilience, but within this cohort many were reported to be experiencing several characteristics of autism or genetic risk factors, anxiety, difficulty with social interaction and communication even if they did not meet the diagnostic benchmark for autism.

3. Environmental or natural history: children with a diagnosis of autism aged 2–4 years were followed through their development, and a few anomalies presented. Ninety per cent of the sample, who initially displayed greater difficulty with the impact of their autism, subsequently remained stable until six years of age, yet made huge improvements in adaptive functioning. The remaining 10%, who initially displayed fewer characteristics, continued acquiring skills and displayed fewer difficulties, but did not show the reciprocal development in terms of adaptive functioning; leading the researcher to claim that children can have resilience in certain aspects of their autism but not in all.

Protective factors have been identified as supporting resilience in adults with autism:

- Inclusive education
- Positive parenting: volume of positive interactions and comments
- Early inclusion in social and academic activities

The incorporation and provision of such proactive factors have led to much more positive and productive outcomes for young adults with autism.

IMPLICATIONS FOR PRACTICE (by the author)

As the protective positive factors have proved so successful in managing and maintaining resilience and have added to the 'doing better than expected given the diagnosis of autism' outcomes, we need to devise strategies and opportunities to allow further maturation and development of young people with autism by:

- Encouraging, where possible, opportunities for inclusive education if it is in the best interests of the child at that particular time. Flexibility and creativity in our approach may be necessary.
- Offering social opportunities in the early years if the child feels comfortable in the environment. We may need to devise effective transition plans for entry and exit.
- Encouraging parents to adopt a positive expression of their child's autism, which will only come when parents see the strengths of their child and the fact that as a community, we see value in and from the child with autism.
- Individually Centred Planning: giving a voice and recognition of the needs of the child and the insight from the parents. We need to investigate:
- What both the parents and the individual with autism perceives as a 'better than expected outcome'. What would each describe as important? How can we support the acquisition of such skills?
- What are the dreams and aspirations of each child? How can we better support their realisation? What additional resources must be in place?
- What does the individual need to be more resilient? What does he or she perceive as being important?

Full Reference

Szatmari, P., (2018). Risk and Resilience in Autism Spectrum Disorder: A Missed Translational Opportunity? *Journal of Developmental Medicine and Child Neurology.* **60**(3), pp. 225–229

REFRAMING AUTISM: YOUNG ADULTS WITH AUTISM SHARE THEIR STRENGTHS THROUGH PHOTO-STORIES

BACKGROUND

Young people with autism spectrum disorder (ASD) face challenges that typically include difficulties with communication, social interactions, repetitive behaviours and restricted interests. They are also at an increased risk of anxiety, depression and bullying, while almost half have a coexisting medical condition.

Given these challenges, the majority of research around ASD has focused on improving understanding of the difficulties associated with the disorder, yet few research studies have focused on the strengths and talents of those with ASD and the ways in which they exhibit resiliency.

The Photovoice method may be useful in allowing young people with ASD to explore their strengths. It involves participants taking pictures of aspects of their life and sharing these pictures with others as a way to communicate their experiences. Photovoice allows participants to express themselves and their feelings about their strengths and resiliency in a creative, visual way.

RESEARCH AIMS

The researchers aimed to examine the experiences of young adults growing up with ASD using the Photovoice method. The strengths and resilience of these participants emerged as a key theme during the process and the present article focused on analysing participants' expressions in this area.

RESEARCH METHODS

This study took place in the USA. The participants of the study were eleven young adults aged 18–23 years with a diagnosis of ASD and a level of functional ability that would allow them to engage with the study activities. The participants took part in small groups of three or four.

Participants took part in three group meetings, an exhibition of their work and then individual interviews. The sessions were recorded for analysis.

During the first session, the purpose of the project was explained to participants. They were given the chance to get to know each other and talk about ideas for what they would take photos of during the week. During the second and third meetings, participants met up to present their photos to the group and discuss what they meant. Following a public exhibition of their photos, participants took part in individual interviews to discuss and reflect upon their photos and their experiences of the project.

Group and individual interviews were transcribed and analysed using theme analysis. Researchers began by looking generally for key themes around growing up with ASD. The theme of 'strengths and resilience' emerged and the researchers then focused on coding the data according to this theme.

RESEARCH FINDINGS

Participants reported challenges with everyday life such as feeling isolated, having difficulties with social interactions and dating, as well as worrying about achieving independence and coping with adult responsibilities, yet three sub-themes emerged around areas of strengths and resilience.

Special Interests Which Cultivate Positive Emotions and Coping Strategies

Participants used photos to capture images of their special interests. Having special interests was seen as a strength among people with ASD. These special interests were described as helping to cultivate positive emotions. Participants reported enjoying the process of developing skills and talents in areas such as building electronics, biking and photography and the positive feelings that these activities inspire in them.

Participants also described using special interests as coping strategies. Interacting with animals was reported as helping to take participants' minds off their worries and reduce anxiety. Special interests allowed participants to feed and express their imaginations. Participants reported that they used music to focus and calm themselves.

Skills and Activities that Evoked Pride

Participants also took pictures of activities and skills that they took pride in. Participants described taking pride in their cooking skills, their ability to take care of animals and their efforts with taking pictures for the project. Participants outlined individual activities that they felt proud of, such as being able to take the bus alone or learning to ski. They also shared pictures of exercising and mentioned being proud of being fit and healthy.

Some participants shared pictures of achievements or awards they had received such as horse-racing ribbons or pictures of their college or workplace.

Reframing ASD as Special rather than a Disadvantage

Participants felt that taking photographs showed that they had skills and interests that they could share with others. They felt that their photos helped communicate positive attributes of those with ASD, such as being detail-oriented and artistic. They also felt that their photos would help give people an insight into how people with ASD experience the world.

Participants thought that the process of taking photographs took them out of their comfort zone, displayed their skills and their potential and showed their ability to carry out an activity independently.

IMPLICATIONS FOR PRACTICE (by the authors)

- The visual method of Photovoice is a useful tool for allowing those with ASD to communicate their ideas and needs, counter internalised stereotypes and develop a sense of independence and empowerment.
- Young adults with ASD can find pride in being able to accomplish everyday activities. Caretakers should support these young people to engage in activities independently.
- The Photovoice method may help to engage young adults with autism within groups and community activities.
- Practitioners should explore the ways in which the use of pictures can help those with ASD improve their receptive and expressive communication. The method has the potential to help those with ASD express their needs to practitioners.
- Future research should investigate whether engaging with the Photovoice method affects participants' self-motivation or quality of life.
- Interventions aiming to increase independence and confidence of those with ASD should adopt methods that allow individuals to express and share their strengths and skills with others. Such interventions have the potential to assist with young adults' future goal setting and increase their self-esteem and self-worth.

Full Reference

Teti, M., Cheak-Zamora, N., Lolli, B. and Maurer-Batjer, A., (2016). Reframing Autism: Young Adults with Autism Share their Strengths through Photo-Stories. *Journal of Pediatric Nursing.* **31**(6), pp. 619–629.

AN EVALUATION OF A GROUP CBT PROGRAMME FOR CHILDREN WITH A DIAGNOSIS OF AUTISM SPECTRUM DISORDER IN A SCHOOL AGE DISABILITY SERVICE

BACKGROUND

Children and adolescents with autism have consistently been found to present with higher anxiety levels when compared with clinically referred children and typically developing peers. Cognitive behaviour therapy (CBT), a structured form of psychotherapy that links thoughts, feelings and behaviour, has been well-researched as the treatment option of choice for children and adolescents with anxiety and anxiety disorders. Findings have demonstrated the effectiveness of modified CBT programmes administered both individually and in group format to treat childhood anxiety. Empirical literature on modified CBT programmes for young people with autism is emerging.

This paper presents the findings of an exploratory investigation into the impact of Special FRIENDS, a specifically tailored CBT group programme designed to assist children diagnosed with autism aged 9–13 years cope with anxiety and manage challenging situations. The programme also involves psycho-educational sessions for parents where they are helped understand anxiety, develop appropriate strategies to deal with their own anxiety and improve their child management and problem-solving skills.

RESEARCH AIM

The aim of this study was to determine the prevalence of adverse childhood events (ACEs) among children with autism and how ACEs are allied with resiliency and health.

RESEARCH METHODS

This programme was delivered by a psychologist and two trainee educational psychologists, all of whom had previous training in the programme. The psychologist took the lead and followed the Special FRIENDS *Group Leader Manual,* which was adhered to weekly to ensure intervention fidelity. Prior to programme commencement, the researchers delivered an information session about the programme to the parents of all the children involved in this exploratory study. A handout outlining information on the programme and weekly sessions was also provided to each of the parents.

The programme consisted of twelve hourly sessions, delivered weekly, followed by two booster sessions delivered one month and three months after programme completion. Following weekly delivery, the researchers met to discuss general observations of the group, to reflect upon delivery and to plan for the following week.

Twelve children (two girls and ten boys) aged 9–12 years participated in this exploratory study. All were diagnosed with ASD based on a multidisciplinary team assessment using DSM-4 or DSM-5 criteria. All were on a waiting list for psychological intervention for specific anxiety management intervention in a child disability service in Ireland. The children were either referred by their parents or a member of the multidisciplinary team. All participants had IQs within the low-average to high-average range of ability (FSIQ between 80 and 119) as measured by the Wechsler Intelligence Scale for Children (4th edition) WISC-IV. All parents/guardians and all child participants consented to taking part in the programme. Nine of the children and their parents returned for the follow-up booster session.

The researchers used an embedded mixed method design by collecting and analysing quantitative and qualitative data separately, then drawing inferences from both sets of data. The aim of the quantitative phase was to identify any changes in anxiety levels from pre-intervention to one-month post-intervention and at four-month follow-up using the Spence Children's Anxiety Scale (SCAS) and SCAS parent version. Qualitative data was collected to provide contextual information on the impact of the programme on anxiety levels through semi-structured interviews with parents, parent comments on a researcher-designed feedback form and weekly session summaries compiled by the researchers.

Effectiveness of the programme was evaluated by analysing the child self-report on the SCAS and parent report on the SCAS parent version at pre-intervention, post-intervention and four-month follow-up.

All children and their parents completed the SCAS and SCAS parent version at pre-intervention and one-month post-intervention. Nine children and their parents completed the SCAS and SCAS parent version at four-month follow-up. The parent feedback forms, the interviews and the researcher's weekly summaries were coded and analysed using thematic analysis and integrated with interview data. This produced five themes, a map of which is displayed in the paper:

- Overall enjoyment of the programme
- Impact of Special FRIENDS subdivided into:
    - Decreased anxiety levels
    - Development of CBT skills
    - Opportunity for social interaction
- Parent involvement subdivided into:
    - Follow-up at home
    - Session attendance
- Acceptance
- Barriers to success subdivided into:
    - Session timing
    - Child not wanting to talk to parents

To establish dependability and credibility of findings, the researchers documented each step of the analysis process to produce a chain of evidence and recruited an objective observer to conduct an audit on all qualitative material gathered.

RESEARCH FINDINGS

This study offers preliminary evidence for the positive impact of the Special FRIENDS programme on overall anxiety levels of children with ASD in a school-age disability service setting.

Analysis of the SCAS and SCAS parent version indicate an overall decline in Total Anxiety scores across time. The quantitative findings concurred with this. While a reduction in anxiety levels was reported, parents described some levels of anxiety still experienced by their children but that their children were now better able to manage anxiety with coping skills including visualisation, turning red thoughts into green thoughts, breathing and massage exercises. Parental involvement and practise at home were identified as key to the generalisation of CBT skills across settings.

Application of these skills is consistent with the goal of CBT programmes in general: to equip children with the necessary skills to cope with anxiety and manage challenging situations. The authors advise, given the small sample size, the significance of this impact cannot be determined with certainty but that the findings of this explorative study is in keeping with previous studies demonstrating the positive impact of modified CBT programmes on anxiety levels in children with autism.

IMPLICATIONS FOR PRACTICE (by the authors)

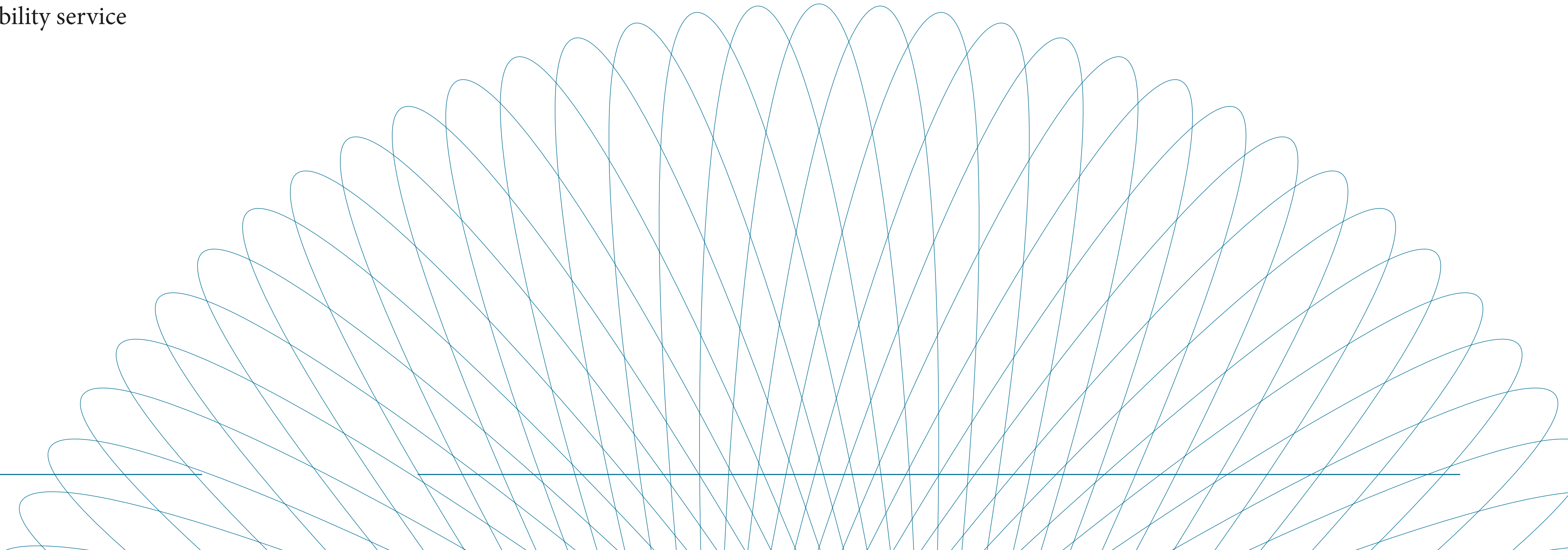
Developing shared awareness and understanding of anxiety in supportive, accepting environments for this targeted group, i.e. children aged 9–12 years diagnosed with autism, is required.

Teaching CBT coping and regulation skills can help manage anxiety and build resilience in children with autism.

The results of this explorative study found preliminary evidence for the positive impact of the Special FRIENDS programme on anxiety levels in children with autism with average intellectual ability.

Full Reference

Higgins, E., Slattery, C., Perry, J.L. and O'Shea, J., (2018). An Evaluation of a Group CBT Programme for Children with a Diagnosis of Autism Spectrum Disorder in a School Age Disability Service. *Educational Psychology in Practice.* **35**(4), pp. 1–17.



CONCLUSION

This Bulletin provides summaries of eleven articles relating to the impact that building resilience can have on autistic children and young people. One article notes the increased likelihood of an autistic person having experience of negative life events and how that affects future stress and coping. This emphasises the importance of teaching and promoting resilience from an early age and continuing to provide age-appropriate supports into adulthood.

The articles suggest that practical, active strategies are most effective in building up a sense of self-efficacy and an ability to cope with life events. Practitioners should bear in mind the generalisability of the strategies promoted and how autistic children and young people can be supported through generalisation of supportive strategies.

Examples of effective strategies are:

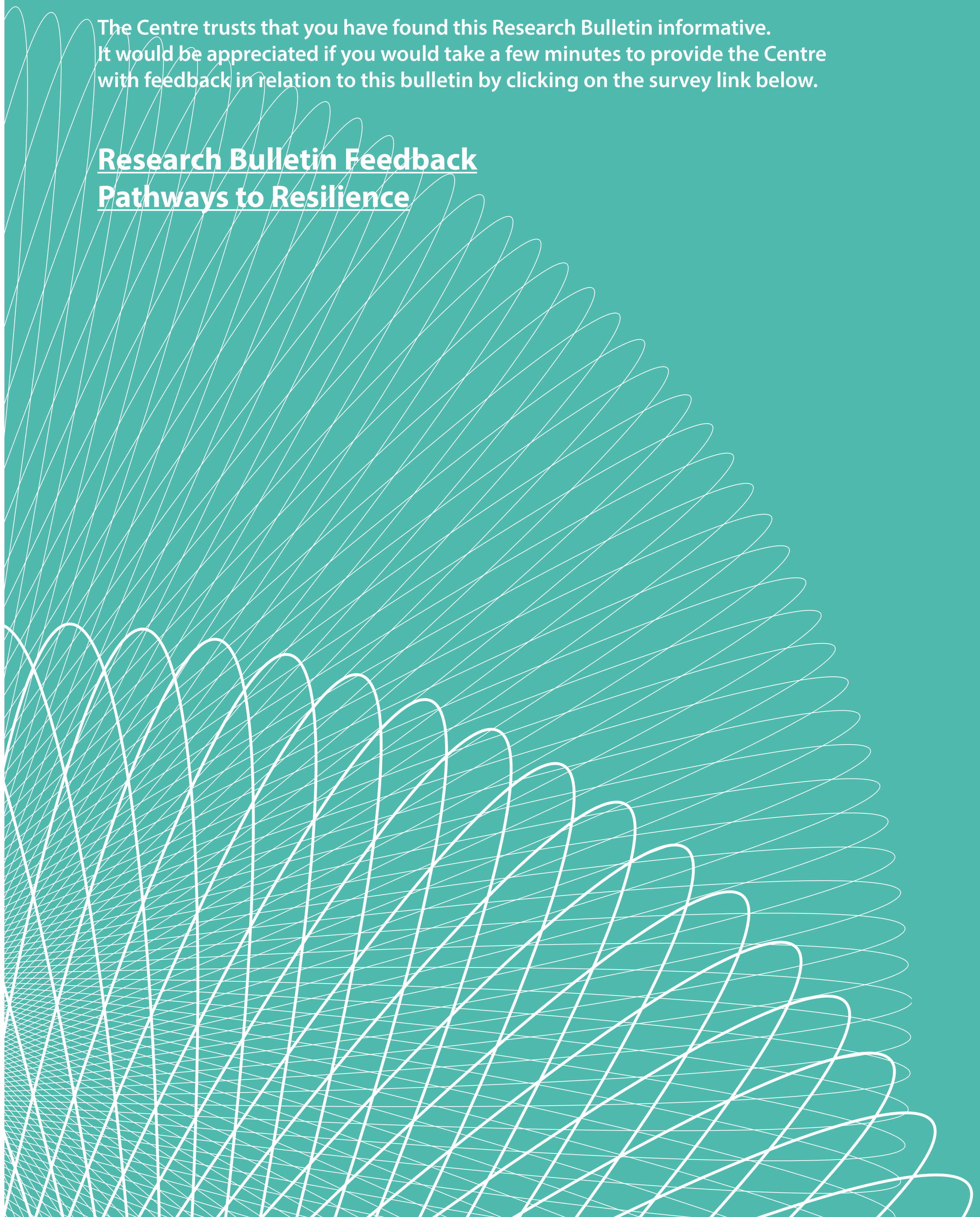
- Learning about anxiety, the role that it has and understanding when it is starting to build.
- Working on building practical life skills to promote independence.
- Engaging in practical tasks, e.g. part-time job or volunteering.
- Using a special interest (if there is one) as a coping strategy.
- Working with teenagers and older children to consider reframing autism from being a negative to a positive part of their lives.

The Centre's 2019 conference aims to provide those attending with a range of practical strategies that can be individualised to develop and promote resilience.

YOUR OPINION

The Centre trusts that you have found this Research Bulletin informative.
It would be appreciated if you would take a few minutes to provide the Centre with feedback in relation to this bulletin by clicking on the survey link below.

Research Bulletin Feedback
Pathways to Resilience



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