

ORIGINAL ARTICLE

# Social-Emotional Learning for Adolescents on the Autism Spectrum: High School Teachers' Perspectives<sup>†</sup>

Anita Gardner<sup>1,2,\*</sup> , Michelle Wong<sup>1</sup> and Belinda Ratcliffe<sup>2</sup>

<sup>1</sup>The Children's Hospital at Westmead, Australia and <sup>2</sup>Western Sydney University, Australia

\*Corresponding author. Email: [Anita.Gardner@Health.nsw.gov.au](mailto:Anita.Gardner@Health.nsw.gov.au)

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## Abstract

Social-emotional learning (SEL) is key to student success. Teachers can effectively implement SEL programs to a variety of school populations, with demonstrated improvements in emotional, social, and academic outcomes. Research also suggests that SEL for students on the autism spectrum can result in improved outcomes. Although social-emotional difficulties are core characteristics of autism, there is a dearth of research identifying the SEL needs for high school students on the autism spectrum and how to meet these needs. The aim of this preliminary qualitative study was to explore teachers' perceptions of SEL needs in a high school setting with adolescents on the autism spectrum. A focus group was conducted with 8 experienced teachers from mainstream and special needs settings. The thematic analysis identified 3 themes: (a) SEL needs of students on the autism spectrum, (b) teaching SEL in high school settings, and (c) gaps in SEL. The study also revealed suggestions for how a SEL program could be developed so that it best meets the needs of the teachers who would be implementing it. Outcomes from this study provide important insights into SEL in adolescents on the autism spectrum in special education and have practical implications for intervention models.

**Keywords:** autism spectrum disorder; intellectual disability; social-emotional learning; adolescents; teacher perspective; special education

A primary goal of Australian education is for all students to become 'successful learners, confident and creative individuals, and active and informed citizens' (Ministerial Council on Education, Employment, Training and Youth Affairs, 2008, p. 8). The development of social-emotional skills is considered key to reaching this goal (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). As such, social-emotional learning (SEL) is an integral part of the personal social and community health strand, from foundation to Year 10, of the Australian National Health and Physical Education Curriculum (Australian Curriculum, Assessment and Reporting Authority, 2014). However, as identified by Walker et al. (2018), the Australian Curriculum does little to guide teachers in how to assess and meet the objectives of students with special education needs. While all teachers are expected to teach SEL to all students, there is a potential gap in knowledge and understanding of the SEL needs of special education needs students.

SEL arose from theories of emotional intelligence and is described as a set of learned skills or emotional competence including emotional self-awareness, self-regulation, social awareness, and the ability to regulate others' emotions (Goleman, 2005). The social-emotional developmental framework suggests that skills emerge in infancy and continue to develop throughout adolescence and into adulthood (Zeidner, Matthews, & Roberts, 2009). The sequential pattern of development begins with basic

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emotional competence (such as identifying one's own emotions), which lays the foundation for more complex skills (such as emotional regulation and social skills; National Scientific Council on the Developing Child, 2004). The social-emotional developmental framework stipulates that effective social skills and positive outcomes in life, such as academic achievement and work success, are reliant on the earlier development of emotional competence (Zeidner et al., 2009).

Given the importance of SEL, researchers have focused on developing evidence-based teaching programs targeted at the development of social-emotional skills in school settings (Gregory, Herreen, & Brinkman, 2018). The Collaborative for Academic, Social, and Emotional Learning group in the United States has identified five interrelated core social-emotional competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (Collaborative for Academic, Social, and Emotional Learning, 2018). These core competencies contribute to the theoretical basis for SEL in educational departments across Australia (Cahill et al., 2018; Centre for Education Statistics and Evaluation, 2015; Gregory et al., 2018; Queensland Government Department of Education, Training and the Arts, 2008; Tasmanian Government Department of Education, 2016). SEL programs for typically developing students are aimed at being universal, with the most effective SEL programs being those that are sequenced, focused, explicitly taught, and involve active engagement of the student (Durlak et al., 2011). Although historically there was a focus on teaching social and emotional skills in the early years, more recently researchers have focused on early adolescence as being another period of important development in teaching SEL (Main, 2018).

Adolescence is a time of transition from child to adult. Along with the physical changes in puberty, social networks become more complex and demanding, conflict increases, and mood swings can lead to adolescents feeling overwhelmed by emotions (Humphrey, Curran, Morris, Farrell, & Woods, 2007). Adolescents with poor social-emotional competence are at greater risk for emotional dysregulation and mental health concerns (Humphrey et al., 2007; Spence, 2003). However, neuroscientists have found that during adolescence major brain changes are occurring, providing an opportunity for explicit teaching of social-emotional competence to this student population (Robinson, 2017). Yet studies of evidence-based SEL programs taught in high schools have found them to be less effective and often failing to engage students (Yeager, 2017). As SEL programs are often designed for a younger population, it is hypothesised that they may not reflect the different learning needs of adolescents (Main, 2018). For example, one Australian-developed program, Aussie Optimism, was found to have varied evidence for developing social and emotional skills and promoting mental health, with greater improvements in primary aged students than high school students (Gregory et al., 2018; Johnstone, Rooney, Hassan, & Kane, 2014). Furthermore, although many SEL programs are designed to be universal, when supporting students with special education needs, such as students on the autism spectrum, adaptations are required to ensure that the current skill base and learning support needs of the population are understood and specifically targeted (Berkovits, Eisenhower, & Blacher, 2017).

Autism spectrum disorder (ASD), or autism, represents a growing special education needs population. In Australia, approximately 2.8% of children and adolescents aged 5 to 14 years old are reported as being on the autism spectrum (Australian Bureau of Statistics, 2015). A key diagnostic criterion for autism is linked to social understanding and social communication; this includes understanding their own and other people's emotions and managing these appropriately (American Psychiatric Association, 2013). Social-emotional difficulties can result in a range of challenges, including increased negative emotional response in social situations (Woodcock, Cheung, González Marx, & Mandy, 2020), restricted social participation (Ghanouni et al., 2019), and difficulty regulating emotions (Samson et al., 2014). In an Australian needs analysis, addressing social-emotional needs was identified as a priority by educators, specialists, and parents of students on the autism spectrum (Saggers et al., 2015). To improve the lives of students on the autism spectrum, researchers have highlighted the need for explicit teaching of social-emotional competency, including recognising and labelling emotions, sharing feelings (Bernier, Webb, & Dawson, 2006), and building emotion-based language and communication (McGee, Feldman, & Chernin, 1991).

Social-emotional difficulties are also associated with poorer mental health in children on the autism spectrum (Ratcliffe, Wong, Dossetor, & Hayes, 2015). Over 70% of individuals on the autism spectrum will also have a mental health disorder (Brereton, Tonge, & Einfeld, 2006; Lai et al., 2019). Furthermore, adolescence is particularly challenging for individuals on the autism spectrum and may contribute to their higher rates of mental illness (Mackay, Shochet, & Orr, 2017). However, while the emotional development of adolescents on the autism spectrum is poorly understood, intensive targeted programs aimed at social skills development have resulted in improvements in children and adolescents on the autism spectrum (Anderson, Oti, Lord, & Welch, 2009; Mazefsky et al., 2013; Ratcliffe et al., 2015).

Targeted evidence-based emotions-focused programs in autism are considered crucial in promoting mental health (Wong et al., 2014). However, there is a severe lack of evidence-based SEL programs developed for adolescents on the autism spectrum that focus on teaching emotional competence (Saggers et al., 2015). Given the time constraints and competing demands in schools, evidence-based strategies should form the basis of teaching (Durlak et al., 2011). Several general autism strategies have been agreed upon as evidence-based practice for teaching students on the autism spectrum. These include video modelling, explicit teaching of new skills and behaviours, and the use of praise and rewards when new behaviours are demonstrated (de Bruin, Deppeler, Moore, & Diamond, 2013). However, such strategies are not always implemented in schools, leading to a research–practice gap (Durlak et al., 2011). Explorations of the gap have suggested that teachers have not been provided with enough training, resources, or time, or that evidence-based strategies lack social validity when transferred from a clinical or home-based setting to a school setting (Alexander, Ayres, & Smith, 2015). Furthermore, when such strategies do not exist, the onus of developing curriculum and resources for special education needs students rely on self-directed teacher adaptations (Walker et al., 2018). This presents an additional challenge, as teachers often report a lack of confidence in knowing what and how to teach SEL, and they are therefore more reluctant to incorporate SEL into their classroom (Main, 2018).

It is accepted that teachers have an important role to play in fostering social and emotional development in students. In mainstream student populations, SEL has been shown to be successfully implemented by teachers (Durlak et al., 2011). However, within the social-emotional domain, only the single aspect of social skills has been extensively explored in students on the autism spectrum. Research is often limited, with only a few studies focusing on high school settings, and even fewer focusing on adolescents on the autism spectrum with an additional intellectual disability (Laugeson, Ellingsen, Sanderson, Tucci, & Bates, 2014).

A few evidence-based, manualised social skills programs have demonstrated social skills improvement in children and adolescents on the autism spectrum. These include PEERS® (Programme for the Education and Enrichment of Relational Skills), developed in America (Laugeson, 2014), Kontakt, which translates to ‘contact’ in German and Swedish and was developed in Germany (Herbrecht, Bölte, & Poustka, 2007), and Secret Agent Society, developed in Australia (Beaumont, 2010). However, none of these programs are aimed at teaching social-emotional skills to adolescents on the autism spectrum with an additional intellectual disability. Furthermore, as these programs focus on the explicit teaching of social skills, they also have minimal to no content that is centred on developing emotional competence.

Two manualised evidence-based emotions-focused programs for children on the autism spectrum, developed by Australian clinical psychologists, are the Westmead Feelings Programs (Westmead Feelings Program 1 [WFP1]; Ratcliffe et al., 2017; Westmead Feelings Program 2 [WFP2]; Wong et al., 2018) and Secret Agent Society: Operation Regulation (SAS-OR; Beaumont, 2013). Both have demonstrated an increase in emotional competence (Ratcliffe, Wong, Dossetor, & Hayes, 2014; Ratcliffe, Wong, Dossetor, & Hayes, 2019; Weiss et al., 2018; Wong, Ratcliffe, & Li, 2018). With additional professional development training, teachers have demonstrated that they can effectively implement WFP1 and WFP2 to students on the autism spectrum, both with and without intellectual disability (Wong et al., 2018). However, both WFP and SAS-OR have been developed for primary age students. SAS-OR is also limited in that it only teaches emotional regulation to students on the

autism spectrum without an intellectual disability and requires one-to-one implementation (Weiss et al., 2018). Thus, there is a significant gap in SEL programs for adolescents on the autism spectrum, both with and without an intellectual disability.

Given the benefits of teaching social-emotional skills to adolescents on the autism spectrum in school settings, it is important that programs initially designed for clinical intervention will translate into a classroom environment and meet the curriculum needs of the students (Greenway, McCollow, Hudson, Peck, & Davis, 2013). Teachers, even those trained to deliver an evidence-based practice, can negate any benefits if the program is not seen as having a good ecological fit (Alexander et al., 2015). Previous researchers have found that more experienced teachers have a deeper understanding of the needs of their students, yet they are often 'left out [of the] dialogue' by researchers (Greenway et al., 2013, p. 463). Qualitative approaches can strengthen research by capturing complex and rich information that may be otherwise neglected (Bricki & Green, 2007). Thus, to develop an authentic and socially valid school-based SEL program for adolescents on the autism spectrum, an essential first step is to understand high school teachers' perspectives and experiences. Nevertheless, there is currently a lack of research investigating teacher perspectives of SEL of high school students on the autism spectrum. Therefore, the aim of this preliminary study was to undertake a qualitative investigation to gain insights into the SEL needs of adolescents on the autism spectrum with and without intellectual disability, from the perspective of high school teachers.

## **Method**

### ***Participants***

The focus group consisted of eight teachers from metropolitan Sydney representing three mainstream high schools (two public and one private) with support units and one high school for specific purposes (mental health disorder). The years of experience working with students on the autism spectrum was 3 to 12 years, with a combined total of over 50 years of experience. Purposive sampling resulted in the recruitment of two head teachers of special education support units, one teacher aide and five special education classroom teachers. Due to time and resource limitations, only one focus group was conducted.

Participants were recruited through established professional organisations and networks, including Autism Spectrum Australia (Aspect), allied health professionals connected to the Children's Hospital at Westmead, Sydney, Australia, and via participants involved in a larger research project. These deliberate, non-probability recruitment methods are commonly used in qualitative research as they ensure that participants being recruited to the study are likely to provide rich, in-depth personal accounts of the central phenomenon (Creswell & Guetterman, 2019; Liamputtong, 2017). As the study aimed to explore SEL in high school adolescents on the autism spectrum, criterion sampling was also required to ensure that participants could be considered as key informants. Specifically, participants were only recruited if they self-identified as having experience working with high school students on the autism spectrum, both with and without intellectual disability.

### ***Methodological Framework and Approach***

A phenomenological framework best fits the aims of this project as it is founded on the belief that understanding the human experience and perspective is central to understanding any concept or phenomenon (Sullivan, 2010). It is increasingly popular in psychological and educational research when the lived experience of participants is key to understanding where to focus research (Sullivan, 2010). Qualitative research provides a deeper understanding of the phenomenon being investigated as it aims to explore and understand complex issues through stories and words that in turn assist in the development of meaningful interventions (Creswell & Guetterman, 2019; Liamputtong, 2017). A qualitative

approach was utilised in this study to gain insights into the SEL needs of adolescents on the autism spectrum from the perspective of high school teachers.

### **Ethics**

This project is embedded in a larger study conducted at the Children's Hospital at Westmead and has been approved by the Sydney Children's Hospitals Network, Human Research Ethics Committee (HREC/17/SCHN/386), New South Wales State Education Research Applications Process, and reciprocal approval by the Western Sydney University Human Ethics Committee.

### **Procedure**

Working with key informants is a methodological approach that has been shown to be valuable in health, education, medicine, and psychology (Liamputtong, 2017). Due to their first-hand experience teaching students on the autism spectrum, both with and without intellectual disability, teachers are key informants in SEL for this population. Focus groups with key informants is a common and efficient qualitative methodology used to provide a preliminary understanding of the phenomenon being explored (Liamputtong, 2017). Therefore, in this preliminary study, a focus group was conducted with experienced teachers from a variety of high school special education settings.

The 2-hour, semi-structured focus group was conducted at the Children's Hospital at Westmead (see Appendix). With participant consent, the focus group was video- and audio-recorded. Participants were provided with pen and paper response options, online response options, and verbal discussion. This provided an opportunity for all participants to share their thoughts or ideas without the need to speak up in a group, thus minimising the impact that differences in seniority or length of teaching experience might have on focus group dynamics and participation.

### **Data Analysis**

Qualitative data from the focus groups were collected through a purpose-built online questionnaire (Survey Monkey) and from transcribing the focus group discussions. An interpretative thematic analysis, following the steps proposed by Braun and Clarke (2006), was conducted on the qualitative data. This approach was selected as it 'involves . . . searching across a data set . . . to find repeated patterns of meaning' (Braun & Clarke, 2006, p. 86) and is widely used in qualitative research in education, health, and psychology (Liamputtong, 2013). To assure the trustworthiness and consistency of the analysis, the following six steps were taken to demonstrate credibility, transferability, dependability, and confirmability:

1. Data familiarity occurred as the data were manually entered, read, and extracted.
2. Generation of initial codes was based on content analysis and as perceived as important to the aims of the research (Pokorny et al., 2018).
3. Once data had been coded, a coding manual was created by the first author and data were viewed from a broader perspective (Nowell, Norris, White, & Moules, 2017; see supplementary material). Subthemes were created and grouped to form themes. This data-driven approach assisted in the generation of themes and provides additional transparency (Pokorny et al., 2018).
4. Potential themes were reviewed for face validity.
5. Each theme was named and reviewed.
6. A draft of this paper was peer reviewed as well as being offered to participants for member checking. Triangulation of data was unable to be achieved as only one focus group could be held.

To ensure that the method of using both computer-based written responses and verbal discussion in a focus group setting was appropriate, at the end of the focus group participants were asked to rate their

experience of attending the focus group. Specifically, participants were asked to rate on a 5-point Likert scale if the mix of technology worked well for them, if they believed their views were able to be expressed and captured in the focus group, and if their opinions were reflected in the focus group.

## Results

All participants indicated that they either agreed or strongly agreed that the focus group format of both computer-based written input and verbal discussions worked well for them and ensured their perspective and views were captured. All participants strongly agreed that their opinions were reflected in the focus group. Three themes emerged from the thematic analysis. Under each theme were four to five subthemes (see Table 1).

### ***SEL Needs of High School Students on the Autism Spectrum***

#### *Common high school issues*

Teachers reported that there are common factors for every student going through high school and going through puberty. These include high school friendship ‘dramas’ and experiencing new and pleasurable sexual physical sensations, and sometimes sexual frustration. Friendships become ‘massive in high school’. Some friendships might become romantic relationships. The current Personal Development, Health and Physical Education school curriculum includes discussions around boundaries, being safe online, and knowing which behaviours are appropriate, and changes during puberty. There is a need to understand and teach this content to students, regardless of their disability. The key message was that all ‘teenagers need to learn what is appropriate, it is not shameful, it is okay’; however, there is a right time and place. It was also noted that high school, and particularly in the school playground, can be a socially and emotionally challenging place for many teenagers, regardless of special needs.

#### *Additional considerations associated with autism*

It is important to understand the special learning needs of students on the autism spectrum, including how intellectual or cognitive difficulties can impact students on the autism spectrum. Teachers described the core features of autism, including difficulties in social communication, such as theory of mind, black and white thinking, and difficulty with perspective taking or understanding the consequences of their behaviour on others. A student’s lack of insight often resulted in them reporting that they were being bullied in the playground. The teachers could see that the student on the autism spectrum had inadvertently behaved in a way that annoyed the other students, and eventually the other students had enough and responded back. However, the student on the autism spectrum could not make this connection – they only felt victimised. Teachers also mentioned students’ restricted and repetitive behaviours, or special interest areas, and sensory sensitivities and sensory regulation difficulties. Teachers all acknowledged that teaching students on the autism spectrum required a specific set of skills and professional understanding. For students on the autism spectrum in high school, there was also concern for the student’s level of self-confidence. These students are becoming increasingly aware that they are different from mainstream students, and that their differences limit their life options. Feelings like jealousy and resentment were used to describe how these students felt towards their mainstream peers. The students’ awareness of their difference seemed to increase with cognitive ability. Teachers noted that students were critical of themselves and this resulted in lower self-confidence. Teachers reported that parents seemed to have a limited understanding of their child’s disability, which resulted in teachers also having to educate the parents about their child’s support needs.

**Table 1.** Themes Emerging From Focus Group on High School Teachers’ Perspectives of the Social-Emotional Learning (SEL) Needs of Students on the Autism Spectrum

Theme	Subtheme	Characteristic responses
SEL needs of high school students on the autism spectrum	Common high school issues	‘Friendship is a massive one ... a big thing in high school’
	Additional considerations associated with autism	On bullying: ‘They don’t see the other side, they don’t see the impact of their behaviour on other people’s emotions’
	Emotional competence	‘A lot of kids you know they’ll go “oh, I feel sick” and well like “is it sickness? Or do you feel nervous or do you feel anxious?” ... helping them differentiate that’ Need to learn to ‘verbalise his emotions more clearly and manage them before getting to the point of exploding’
	Social skills needs	‘Not just can they build a relationship, but can they keep it going as well’
Teaching SEL to high school students on the autism spectrum	Utilising evidence-based autism-specific teaching strategies	‘Visuals will support them ... social stories, personalised visuals will really help ... because it is their face so they can put themselves in that situation’
	Adapting what is available	‘For like social skills programs with ASD in terms of adolescence ... there is a lot of stuff out there for kids but then you have got to adapt it’ ‘Our class that’s predominantly IM and ASD but we wouldn’t use [Inside Out] characters necessarily with a high functioning ... class. So we might use the colours but we would change that up a little bit’
	Limited emotional competence resources	‘Calming down on the bean bag and then jumping on the trampoline, deep breathing [and] music’
	Different settings and students	‘We end up with such diversity in one class. Like even though we are supposed to just be an Autism Unit, we end up with so many kids with such complex behavioural and emotional disturbances, so it’s kind of hard for us’
	Who is currently supporting SEL?	‘Class teachers (to a lesser degree), Learning support teacher, Learning support coordinator, Year coordinator, Parents’
Identified gaps in SEL	Role of parents	‘Parent training ... would enhance the overall effect of the program for our students’
	Gaps in SEL programming	‘We’re funded differently to an SSP ... I worked in SSPs ... they get so much additional support for like welfare and wellbeing programs because it’s externalised behaviour. But with internalised behaviour with ASD, people think because they are quiet that are ok, until it becomes a mental health issue, an externalising one. So that’s a gap, that’s a huge gap’
	Gaps in understanding of social and emotional development	‘Emotional needs in terms of like, developing their theory of mind and sensory regulation, emotional regulation those things. Those things?’ School-based interventions currently available to support emotions competence development included ‘timeout, verbal discussions and reward system’
	Every student on the autism spectrum is unique	‘I just don’t think it can be a one size fits all in a secondary setting’

Note. ASD = autism spectrum disorder; IM = mild intellectual disability; SSP = school for specific purposes.

### *Emotional competence*

Skills specific to SEL were broken down into emotional competence and social skills. Teachers reported that the majority of their students on the autism spectrum could label and identify happy and a few other basic emotions, with some requiring prompting from teachers. However, overall, their students' emotional competence was underdeveloped. Most students on the autism spectrum struggled to identify a range of emotions, both in themselves and in others. Physical feelings were sometimes confused with emotions (both by teachers and by students). One teacher reported that her student could identify the feeling 'tired'. Another teacher told a story of a student who would say they 'feel sick' when the student was actually expressing the physical sensation connected to feeling worried. Students on the autism spectrum were reported to struggle to recognise their not-so-good emotions, needing external teacher support to regulate their emotions. Some students required constant reassurance to alleviate their anxiety. In many cases, teachers reported that some students' emotional challenges led to frustration and externalising explosive behaviours or withdrawal and internalising invisible distress. For some students, mental health was being impacted, particularly by anxiety. The students' difficulty self-managing their emotions was also limiting their ability to engage fully in the school curriculum, including community access: 'it does make his world smaller'. For some, emotional outbursts were also confusing to other students and could trigger distress in classmates due to sensory sensitivities. Students on the autism spectrum were often unable to articulate or identify triggers for their behaviours. Finally, students on the autism spectrum had little insight into how others were feeling or the skills to respond to a distressed peer.

### *Social skills needs*

While some teachers reported that students on the autism spectrum showed little social motivation, other students were described as being very socially interested but lacking the social skills to make and keep friends: 'One boy, you can tell he's desperate to make friends, but you can just see in his body almost, he is unable to articulate and get out what he needs to even talk to somebody'. Social skills identified by the teachers included initiating, processing, and maintaining conversations, respecting boundaries, including personal space, managing conflict (small problems as well as bigger problems), using socially appropriate behaviours, and being able to bond with others. Unlike emotional competence, teachers frequently reported teaching social skills to their students.

## **Teaching SEL to High School Students on the Autism Spectrum**

### *Utilising evidence-based autism-specific teaching strategies*

Regardless of the content of the lesson, teachers all recognised that autism-specific teaching strategies worked well with their students on the autism spectrum. These evidence-based strategies included using visual supports, including photos of the student, creating individualised social stories, video modelling, using schedules and choice boards, displaying behaviour expectations, reinforcing appropriate behaviour with rewards charts and tangible rewards, collecting data, providing breaks, having a structured classroom layout, and structuring learning tasks. Providing opportunities for repetition was also helpful for students with both autism and intellectual disability. Students learned best when concepts were made concrete and personalised. As one teacher said, 'it's their face so they can put themselves into that situation'.

### *Adapting what is available*

All teachers agreed that it would be very beneficial to have access to a program that anticipated the SEL needs of their students, allowed for flexibility of implementation, and could be individualised to their students. However, they also agreed that in a high school setting for students on the autism spectrum, such a program is not currently available. Teachers therefore aimed to adapt curriculum guidelines and teach SEL in other ways. Some schools have developed their own emotion colour charts, aiming to



teach students to identify and label their emotions. Many implement sensory strategies to try to calm the student or block out upsetting triggers, which might include jumping on a trampoline or allowing the student to wear noise-cancelling headphones. Students were offered time out when they became emotionally dysregulated. Social skills programs were implemented in most schools in one form or another, often adapting mainstream content to meet their students' perceived needs. One school included one-to-one mentoring for their high support needs students. Another school promoted involvement in social and work experience programs. However, these approaches tended to be more reactive or attempts at a best fit of the current curriculum.

#### *Limited emotional competence resources*

When asked about specific interventions or support currently available to address emotional development needs of the student on the autism spectrum, teachers reported that there was 'not much at school level that I am aware of'. Emotional dysregulation was often seen as a classroom management issue and therefore dealt with through strategies such as 'timeout, verbal discussions or rewards'. Some schools developed their own emotional literacy programs but reported that such programs need to be tailored to the individual. Teachers were most familiar with emotion regulation strategies used by students, referring to them as 'wellbeing strategies', which included deep breathing, distraction, shifting to a more pleasurable activity (often linked to the student's special interest), physical activity (such as dancing, going for a walk, or jumping on the trampoline), or talking with a teacher about the problem, their thoughts or feelings. Teachers sometimes reported working together with the student to problem solve. Some teachers reported that their student responded to having a break and some quiet time to reflect on the situation. However, as one teacher noted, the real challenge for teachers is knowing which strategy to implement when and with which student.

#### *Different settings and students*

Teachers in the focus group represented a range of educational settings: public and private schools, mainstream settings, support units, and schools for specific purposes. The practicalities of teaching social-emotional content to students on the autism spectrum in high school varies greatly depending on the school, type of class, and specific learning needs of the class. Funding, time allocation, resources, and requirements of the curriculum all impacted on the type of SEL currently being implemented in schools. These same factors would also influence the best fit for a program within each individual school. In some classes, SEL would be best taught in a small group for short periods of time with increased teacher support. In other schools, a whole-class approach would be required, and the program would need to clearly map onto the new Australian Curriculum, with ready-to-use resources. Some schools had flexibility in when a lesson could be held, whereas others would need to fit with the timetable. Overall, teachers felt most comfortable with a SEL program that provided them with the required resources and allowed the teacher to determine how the content would best be delivered in their class to their students. The teachers also recognised that although a structured classroom environment assisted with learning, the student must also learn the harder task of adjusting their behaviour to match the context and to generalise their skills to settings outside the classroom, such as the playground, community, and home.

#### *Who is currently supporting SEL?*

While most of the focus group indicated that the class teacher was the best person to teach SEL, others indicated a great diversity in who would be best to deliver these programs to students on the autism spectrum. Within the school this could include school learning support officers, roll call teachers, health teachers, year coordinators, and school counsellors. It was also recognised that SEL should also be taught outside the school, primarily by parents and family, but also by behaviour therapists, speech therapists, doctors, and other specialists. Professional development for all staff was a priority. Having

all staff and parents training in the same program was considered beneficial to the effectiveness of the program and ensured a consistent approach. As one teacher commented, ‘gaps arise through having different teachers with varied teaching styles and strategies’.

### **Identified Gaps in SEL**

#### *Role of parents*

While having training for both teachers and parents was considered important, it was also acknowledged that currently no such professional development or training program exists. Teachers reported that although involvement from parents often reduces in a high school setting, with special education needs students, parent–teacher collaboration and shared language remains very important. Teachers also acknowledged that parents did not always agree on what skills the students need. One teacher spoke about a parent who did not want their child on the autism spectrum with an additional intellectual disability to learn about child studies, as they did not want them to ‘learn about sex and babies’. Some parents were embarrassed to address adolescent issues such as same sex attraction and masturbation. Teachers believed it was important to foster a relationship that allowed for explicit conversations around sexual development and sexual expression. It was suggested that having parent workshops could assist with building the home–school connection, developing shared language, and supporting the generalisation of new skills. It could also assist the parents in building their understanding of their child in a supportive environment where they could role-play being an emotional coach for their child. When a student has additional mental health issues, teachers identified an even greater need to create a space for collaboration and mutual support. One teacher said we are ‘working hard with the student, and probably more importantly, with mum’.

#### *Gaps in SEL programming*

The focus group participants were able to identify many gaps in SEL programs and the impact of those gaps on the individual and school. For example, the gap between learning a skill in the classroom and then being able to use it when needed in a different setting: ‘That’s when all hell breaks loose . . . bridging the gap between the nice supportive environment and managing yourself and regulating your own emotions and behaviour is really hard’. Teachers spoke of specific areas where there was either a lack of resources or a lack of adapted program for students on the autism spectrum in high school. While it was identified that across the board for students on the autism spectrum there is a lack of resources, in SEL, this included autism-specific social skills, sexuality, online safety, puberty, and mental health support targeted at adolescents. Teachers would often take any resources available for mainstream students and attempt to adapt them to meet their special education needs students. However, that takes time, additional resources, and a specific skill set. Teachers are already poor in both time and funding; therefore, they identified that it would be easiest for them if ‘targeted programs included resources and showed how it was aligned to some of the outcomes in the syllabus, because programming is a never-ending task’. Teachers also identified that helping their students on the autism spectrum manage their emotions was particularly hard. Mental health and trauma create an even more complex situation, one in which many teachers felt ill-equipped to support. When shown the suggested content of the Westmead Feelings Program, adapted for high school students on the autism spectrum and a mild intellectual disability (Gardner, Wong, & Ratcliffe, 2020), one teacher commented there is a ‘huge lack of resources and programs, and this program looks like a great start’.

#### *Gaps in understanding of social and emotional development*

While the teachers had a variety of backgrounds, many with years of experience working with special needs students, including autism and intellectual disability, one subtheme that emerged from the focus group was the limited understanding of the emotional competences and the sequential development of these skills. When asked about the teachers’ understanding of social and/or emotional needs, one

teacher put forward that it referred to ‘developing their theory of mind and sensory regulation, emotional regulation, those things’. Although some teachers identified that students on the autism spectrum needed support to ‘learn how to understand their own emotions, the emotions of others, the reasons for these emotions and how to respond’, there were limited ideas for how these skills could be taught in a high school setting. Furthermore, strategies discussed were often not evidence-based strategies, and at times were strategies that would target more complex emotional competence, social skills, or support sensory needs. Gaps in the reporting of foundation-level emotional competence and social skills strategies also reflected the diversity of the student population and teacher experience.

#### *Every student on the autism spectrum is unique*

Teachers’ experiences and perspectives of the special education needs of students on the autism spectrum highlighted that the ‘needs are just so diverse when you are talking about ASD’. What worked best for teachers was using a personalised adjusted Personal Development, Health and Physical Education curriculum that matched the individual students’ learning needs. Some students displayed a range of emotions, others did not. Some responded to emotion regulation strategies, others would escalate. Some students would manage a more intensive program, others required more gradual learning opportunities. Some were socially motivated, others preferred their own space. Some would dominate a small group discussion, others would be more shy and quiet. Level of cognitive ability needs to be considered in developing teaching programs. Teachers all agreed that while students on the autism spectrum, both with and without an intellectual disability, are all so different, their social-emotional needs remain high. It was agreed that teaching social-emotional competence skills is most effective when utilising an individualised approach, and the person who knows best what will work for each student is their class teacher.

## Discussion

This study provides an initial insight into the complexity of providing SEL to adolescents on the autism spectrum from the perspective of teachers working in high school settings. As found in previous studies (e.g., Alexander et al., 2015), results from this study demonstrate that, from design and development to implementation, addressing the ecological fit of SEL in a special education high school setting is essential. Any social-emotional program must be based on a clear understanding of difference and similarities between mainstream students and students on the autism spectrum, both with and without intellectual disability, both in their learning styles and social-emotional needs.

Consistent with previous research (de Bruin et al., 2013), special education teachers in this study are aware of and utilising good evidence-based autism-specific teaching strategies, including visual supports, structured teaching, and positive behaviour support techniques. However, as seen in previous studies (Case-Smith, Weaver, & Fristad, 2015; Durlak et al., 2011; Walker et al., 2018), in the absences of targeted social-emotional programs drawn from evidence-based practice, teachers are doing their best to draw from other areas, such as non-evidence-based sensory support strategies, to address more complex skills, such as emotion regulation, or adapt social skills material developed for a typically developing population. As the emotional competence of adolescents on the autism spectrum are often delayed, teachers may spend time trying to adapt a foundation-level curriculum to make it both autism and adolescent appropriate. Alternatively, teachers draw from a high school or life skills social skills-based curriculum, which may miss emotional development content found in the primary school-level curriculum (Australian Curriculum, Assessment and Reporting Authority, 2014).

Consistent with previous research (Durlak et al., 2011; Laugeson et al., 2014), another key finding was that in the area of SEL there is currently a greater focus on the development of social skills rather than foundation emotional competence. Although it was recognised that high school students on the autism spectrum lacked early emotional competence, teaching strategies targeting emotional competence were limited and, in many cases, not available. As difficulties with emotional dysregulation are

common in the majority students on the autism spectrum, regardless of age or level of cognitive functioning (Anderson et al., 2009), it is crucial that along with social skills development, more work is done to support emotional competence. Results from this preliminary study suggest that this may involve additional teacher and parent training on the core competence areas of SEL, and the development of evidence-based targeted programs to teach foundation-level social-emotional competence to high school students on the autism spectrum.

### **Limitations**

As a small preliminary qualitative study there are limitations to the generalisability of the findings. Furthermore, the study did not capture data on the teachers' experience of students on the autism spectrum's verbal abilities. As such, it is unknown if these results can be generalised to both verbal and nonverbal students on the autism spectrum. Future studies may benefit from exploring the different communication profiles of students on the autism spectrum. Although all participants indicated that they had previous experience supporting SEL in a high school setting with students on the autism spectrum, data were not collected on the years of experience or previous professional development training that participants had received in SEL or time spent implementing such programs.

Future research would benefit from collecting more information regarding participants' previous training and experience delivering SEL in a high school setting. As with other hierarchical organisations, there was a potential power imbalance between participants due to differences in length of experience and roles, which could bias results. Observation notes of the group discussion also report that there were three particularly vocal participants. However, providing computer-based responses allowed quieter participants to have their views captured in the analysis. All participants reported that they believed their views and opinions were accurately captured in the focus group.

### **Impact**

Students' social-emotional skills are crucial to their success at school and mental health. SEL programs that promote resilience and wellbeing have the potential to make a lifelong impact on adolescents on the autism spectrum. Results from this study have been incorporated into an adaptation of the Westmead Feelings Program, co-designed with adolescents on the autism spectrum with a mild intellectual disability (Gardner et al., 2020). This new manualised program is currently being piloted in a support class within a mainstream high school in Sydney.

### **Future research**

As this is a small preliminary study, additional focus groups from other parts of Australia, including regional areas, would assist in developing this narrative. Extending the conversation to other key informants, such as professionals, parents, and adolescents on the autism spectrum would also help to deepen the understanding of the phenomenon. To address the limitations of this study, future research should also aim to capture more detailed information from participants regarding their previous training and experience delivering SEL programs in school settings. Finally, as this study has highlighted the importance of understanding the unique profile of the individual, future research would benefit from comparing the SEL needs of students on the autism spectrum with different communication and learning profiles. Moreover, when developing social-emotional programs for students on the autism spectrum, it is important that researchers ensure that they evaluate the program from the perspective of the teachers implementing or supporting the program.

## Conclusion

The current study provides insights into the SEL needs of students on the autism spectrum from the perspective of teachers working in a variety of high school settings. Key elements of SEL were identified, as well as teaching considerations for students on the autism spectrum and gaps in current SEL programming. This preliminary pilot study is a first step in achieving more inclusive research and intervention development processes for adolescents on the autism spectrum. Specifically, this study highlights the value of including teacher perspectives in the development of school-based social-emotional programs as they are the professionals delivering or supporting the programs at the school level. These preliminary findings provide a basis for future research into the exploration of SEL for adolescents on the autism spectrum.

**Supplementary material.** To view supplementary material for this article, please visit <https://doi.org/10.1017/jsi.2020.13>

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## APPENDIX

### **Focus Group Semi-Structured Interview Core Questions**

We would like to learn from your experience of social-emotional learning in schools. You're welcome to add any comments on your device, or pen and paper, or just join in the discussion.

When we talk about social-emotional learning – what does that mean to you?

From your perspective, what are the social-emotional learning needs of high school students with autism, both with and without an intellectual disability?

We would like you to think about a student you have taught. Consider their age, gender, and diagnosis (known or suspected). What emotions can that student label (in themselves or in others)? What emotional difficulties do they have? What is the impact of their emotional difficulties (for the student, the class, the school, or beyond)?

What emotional skills do you wish the student could improve?

Who is part of the team assisting with the student's SEL?

What SEL interventions are currently available to that student to help with their emotions?

What are the current teaching strategies or programs you use to support the development of emotions competence in your students?

Do you think there are any differences between a mainstream school, a special school, or a support class within a mainstream school?

What currently works and what doesn't work? What gaps, if any, can you identify?

We are now going to think about situations that happen to some students with autism and mild intellectual disability. Thinking about life at home/school/in the community, what situations do you think the student you have in mind encounters due to their social-emotional difficulties? Can you describe a situation where your student encountered a problem due to their social-emotional difficulties?

Who supports the student through difficult situations and difficult emotions?

How would an SEL program best fit in with your school? Consider the number of sessions, length of sessions, size of class, and who might teach the program.

What barriers are teachers currently facing regarding implementation of SEL programs in their school? What would it require for these barriers to be overcome?