University of Dundee

Teachers working in special education in Scotland

Smith, Clara; Mercieca, Duncan

Published in:
Scottish Educational Review

DOI:
10.1163/27730840-05301004

Publication date:
2021

Licence:
CC BY-NC

Document Version
Publisher's PDF, also known as Version of record

Link to publication in Discovery Research Portal

Citation for published version (APA):
Smith, C., & Mercieca, D. (2021). Teachers working in special education in Scotland: Perceptions regarding emotional awareness and regulation amongst pupils within the Autism Spectrum. *Scottish Educational Review*, *53*(1), 42-63. https://doi.org/10.1163/27730840-05301004

General rights
Copyright and moral rights for the publications made accessible in Discovery Research Portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

• Users may download and print one copy of any publication from Discovery Research Portal for the purpose of private study or research.
• You may not further distribute the material or use it for any profit-making activity or commercial gain.
• You may freely distribute the URL identifying the publication in the public portal.

Take down policy
If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Download date: 09. Feb. 2023

Smith, C. and Mercieca, D. (2021) ‘Teachers working in special education in Scotland: Perceptions regarding emotional awareness and regulation amongst pupils within the Autism Spectrum’, *Scottish Educational Review* 53(1), 42-63

Teachers working in special education in Scotland: Perceptions regarding emotional awareness and regulation amongst pupils within the Autism Spectrum

Clara Smith and Duncan Mercieca
University of Dundee

ABSTRACT

Impairments of emotional awareness and regulation are recognised features of autism spectrum conditions and are known to impact school experiences and outcomes. However, most research in this field takes place within clinical settings, and there is a scarcity of literature describing how these difficulties are addressed within schools, particularly in Scotland. This research describes the perceptions of 18 additional support needs teachers within Scotland regarding the emotional awareness and regulation of pupils with autism spectrum conditions. This includes how emotional concepts are taught, and what barriers exist in the development of emotional competence. The research took the form of an open-ended online questionnaire which was distributed through social media platforms. The results demonstrate a recognition of the importance of a collaborative approach across school and beyond to support pupils to develop emotional competence, as well as highlighting potential problems with the ways in which emotions are labelled and concepts are taught.

KEYWORDS: emotion awareness and regulation, autism spectrum condition, Scotland, teachers

---

The topic of emotion has been a focus of studies into autism spectrum conditions for many years, although it has predominantly been with reference to the recognition of emotions in others (Mazefsky et al., 2012). More recently, however, there has been a developing interest in emotional regulation and emotional distress (Mazefsky, 2015), with a recognition that emotional

Downloaded from Brill.com05/23/2022 02:20:18PM
via free access

dysregulation is common amongst those diagnosed with autism spectrum conditions (Mazefsky et al., 2012; Connor et al., 2019). Within education it has been noted that difficulties with emotional regulation and social interaction, alongside inattention, can have a detrimental effect on their school experience, ultimately leading to poorer school outcomes (Scottish Government, 2010). As such emotional regulation can become a focus for intervention and support, particularly amongst those with autism spectrum conditions.

This paper builds on research that aimed to explore the perceptions and experiences of teachers working in special education in Scotland regarding emotional understanding and emotional regulation amongst pupils diagnosed with autism spectrum conditions. The research questions are:

1. What are the perceptions of teachers working in special education of emotional awareness and emotional regulation among primary school aged pupils with autism spectrum conditions?
2. What strategies and programmes are used to support pupils with autism spectrum conditions?

SITUATING THE STUDY IN LITERATURE

Research in the area of emotional awareness and regulation is limited in Scotland, and so this study brings an original contribution to this area of research. Also, and this needs to be highlighted, most research in this area internationally takes place within clinical settings, and there is a scarcity of literature describing how these difficulties are addressed within schools and educational settings. Understanding teachers' perceptions on this topic gives a unique perspective to this field of study. While this study is situated in Scotland, it contributes to international literature on emotional awareness and regulation of pupils with autism spectrum conditions in educational settings.

While there is 'no universal definition' (Soler, 2012: 5) of emotional understanding (alternatively referred to as emotional intelligence, competence or literacy) there is a general agreement that it comprises the recognition of emotional states in self and in others, the ability to express one's own emotions appropriately, and to respond appropriately to the emotions of others. Furthermore, the symbiotic nature of these different aspects of emotional competence is such that recognising emotional states in others helps to inform the development of one's own emotional expression, which in turn is validated when others recognise typical emotional expression in us. This course of emotional evolution, particularly the development of emotion regulation, typically coincides with the development of socio-communicative skills (Soler, 2012). This further strengthens understanding of emotional concepts as children begin to request the support of caregivers and later employ strategies of self-talk and inner language to make sense of and express emotions.

However, the nature of autism spectrum conditions may interrupt the typical process of emotional development, whereby a 'profound lack of affective (emotional) contact' (Wing, 1996: 19) from an early age including atypical eye contact, reduced social smiling, reduced social interest, imitation and orienting to

Downloaded from Brill.com05/23/2022 02:20:18PM
via free access

name (Baranek, 1999; Maestro et al, 2002; Osterling et al, 2002; Werner and Dawson, 2005; McMahon Nichols et al., 2014) may impact a child's ability to recognise emotions in others, but also the degree of feedback that is received from others to support a child to recognise and understand their own emotional state (Rieffe et al, 2007). Additional factors including communication impairment, which itself is a criterion for diagnosis and has been linked with emotional dysregulation (Boonen at al, 2014; Chiang, 2008), and poor central coherence (the ability to piece together information from previous events to make sense of present experiences, specifically to apply emotional understanding flexibly in multiple contexts) (Williams & Happe, 2010; Wing, 1996; Frith, 1989) may also negatively impact the development of emotional concepts amongst those with autism spectrum conditions. Research confirms that difficulties with emotional recognition in others (Uljaveric & Hamilton, 2013) and in self (Rieffe et al, 2007), and the use of maladaptive emotional responses (Mazefsky et al, 2012; Samson et al, 2014; Thompson et al, 2015) are all common amongst those with autism spectrum conditions.

Within education there is a recognition that difficulties with emotional regulation, alongside inattention and social interaction, can have a detrimental effect on school experience, ultimately leading to poorer school outcomes (Scottish Government, 2010). Within the Scottish *Curriculum for Excellence* emotional understanding and regulation form part of the Health and Wellbeing curriculum, thus becoming the responsibility of all, alongside Literacy and Numeracy. However, an investigation of the literature reveals that there is considerable variation in how emotional concepts are taught and there has been no analysis of the types and efficacy of emotional awareness and regulation interventions within Scottish schools to support learners with autism spectrum conditions. In 2017, a 'Health Scotland Review' examined the effectiveness of Health and Wellbeing interventions in schools to reduce inequalities in educational outcomes and featured a section on social and emotional wellbeing across all pupil groups, including those with and without autism spectrum conditions (White, 2017). Moreover, the majority of research over the last 10 years into interventions to support emotional understanding and regulation amongst children with autism spectrum conditions features high functioning individuals and takes place within clinical settings (Connor et al., 2019; Nowell et al., 2019; Beaumont et al., 2015; Mackay et al., 2017; Thomson et al., 2015; Friedrich et al., 2015; Sofronoff et al., 2017; Habayeb et al., 2017; Pahnke et al., 2014; Wood et al., 2014; Santomauro et al., 2016; Shaffer et al., 2018; Parent et al., 2016; Cook et al., 2019; Weiss et al., 2018; Reaven et al., 2012; Wood et al., 2015; Scarpa et al., 2011; White et al., 2012). Findings in a 2008 review into emotional awareness in children with autism spectrum conditions led Begeer *et al*. conclude that focusing research on 'normally intelligent, or high functioning children' (p. 344) provides an inaccurate understanding of the emotional competence of those with autism spectrum conditions. Also, carrying out research within laboratory type settings rather than in natural environments does not give a true indication of emotional competence because 'emotional competence entails the ability to spontaneously regulate natural social interactions by exchanging emotions in accordance with the

Downloaded from Brill.com05/23/2022 02:20:18PM
via free access

requirements of the situation' (p.355). Consequently, understanding of emotional competence amongst children with autism spectrum conditions does not necessarily reflect the whole range of abilities within this group, nor does it fully represent capabilities within real life situations. The experiences and perceptions of special needs teachers offer the potential to contribute knowledge and experience both in terms of the vast range of needs and abilities across the autism spectrum, but also in terms of addressing emotional competence within a real-life setting.

METHODOLOGY

This piece of qualitative research is based on ontological and epistemological assumptions of subjectivity. We seek to understand the experiences and perceptions of special needs teachers in Scotland (which we acknowledge as one interpretation of a multi-dimensional social world), in the belief that the experiences of one group (teachers) will shape the experiences of another (pupils); thus, we can begin to 'conceptualise and illuminate the different components of the 'disablement' process' (Barnes & Mercer, 2004: 3).

To guard against the subjective judgement of ourselves as researchers we have adopted an open stance, drawing on responses of all participants when analysing the data. We have looked for patterns and themes representing concepts shared across settings, and where ideas reflect the opinion of one teacher alone, it has been made apparent. Embracing the subjective nature of qualitative research by acknowledging the position of the researcher and the subjects of the research, in this case the teachers, can provide us with rich data which contributes to our broader understanding of social constructs.

The research was conducted using an online questionnaire made up of 8 open-ended in-depth questions designed to gather the perceptions and experiences of additional support needs teachers in Scotland regarding firstly, the emotional awareness and regulation of pupils with autism spectrum conditions, secondly, the methods and programmes used to teach these pupils about emotions and, thirdly, the barriers faced by both pupils and teachers in this area of education. Prompts were included as a guide to the type of information being sought, while leaving opportunities for participants to include their own ideas. Due to the COVID-19 pandemic it was decided that a questionnaire would be more appropriate than face to face interviews, and it was hoped that a higher response rate would result from the flexibility that this offers rather than scheduled virtual interviews. Using open-ended questions, we hoped to gain rich insights into the lived experiences of teachers.

Links to the questionnaire were advertised on social media, inviting participation from special needs, support for learning and nurture teachers in Scottish Primary settings. A total of 20 teachers completed the survey (see Table 1). Two of those were teachers in mainstream primary classes who had some pupils with autism spectrum conditions placed in their classes, and two were teachers of children with additional support needs within enhanced provisions (specialist settings) in mainstream secondary settings. Some of the special schools catered for pupils spanning both primary and secondary stages, as often teachers

Downloaded from Brill.com05/23/2022 02:20:18PM
via free access

in these settings work with both age groups. A decision was taken to exclude the answers of the two mainstream class teachers as the focus of the research was on the experiences of Support for Learning teachers, Nurture Teachers, and teachers in special schools. However, the responses of the two teachers within specialist provisions in mainstream secondary schools were included because it was clear from the responses that teachers working in this field often work across both primary and secondary settings. The experiences and perceptions of those within special schools, therefore, are likely to include reference to secondary stage pupils as well as primary. While initially the responses of those within primary settings only were sought, as the research progressed it was difficult to categorise experiences and pupils according to age and stage within special needs settings. Thus, the responses are from teachers in Special Schools, Support for Learning Teachers and Nurture Teachers within both mainstream and specialist provisions.

Downloaded from Brill.com05/23/2022 02:20:18PM
via free access

TABLE 1: PARTICIPANTS

	M/F	Age	Years teaching	Years in ASN	Current Setting
1	F	36-40	16-20	11-15	ASD Outreach Service
2	F	31-35	6-10	Undisc	Social, emotional and behaviour needs base in mainstream primary (6 pupils)
3	M	26-30	1-5	1-5	ASD provision in mainstream primary (5 pupils)
4	F	51-55	11-15	6-10	Across 7 primary schools supporting pupils with social, emotional and behavioural needs.
5	F	21-25	1-5		Mainstream class teacher, disregarded
6	F	36-40	1-5	1-5	Special school (6 pupils) ages 3-18
7	Undisc	41-45	16-20	16-20	Complex ASN ages 10-18
8	Undisc	Undisc	Undisc	6-10	Special school ages 3-18
9	M	56-60	26-30	Undisc	Special school
10	F	51-55	26-30	1-5	Nurture base within mainstream primary (6 pupils per group)
11	F	41-45	11-15	11-15	Special school ages 3–18
12	F	46-50	6-10	6-10	Special school ages 3–18
13	F	31-35	6-10	1-5	Special school ages 3–18
14	F	41-45	21-25	21-25	Primary enhanced provision
15	F	51-55	26-30	11-15	Enhanced provision within mainstream secondary
16	F	41-45	16-20	1-5	Enhanced provision within mainstream secondary
17	Undisc	46-50	Undisc	16-20	Mainstream primary, but previously in ASN teacher in mainstream secondary.
18	F	31-35	11-15	Undisc	Across local authority, including support at home where pupils are unable to access due to anxiety.
19	Undisc	56-60	26-30	Undisc	ESA class of 6 pupils
20	F	46-50	11-15		Mainstream class teacher, disregarded

Ethical approval was granted from the University of Dundee at the outset of the study. No personal or sensitive data has been collected, and it is not possible to identify any of the participants from their responses, thus ensuring anonymity. It was not possible to withdraw from the study once the questionnaire had been submitted due to the anonymity of the participants.

We are aware that no voices of children with autism spectrum conditions have been sought and the focus is on teachers who as shown above mostly work in segregated environments. Both authors have experience working as teachers with children with autism in specialised learning environments. In this light, we both situate ourselves within a social model of disability discourse (Oliver, 1981, 1990),

Downloaded from Brill.com05/23/2022 02:20:18PM
via free access

and we bring out this awareness and advocacy within the next section of the paper. The Social Model has helped us think of how systems and people construct children as disabled.

Limitations of the Study

This study is limited to only a small number of participants. While it provides an indication of opinions and experiences, it would be beneficial to reach a wider group of teachers of children with special needs, support for learning teachers and nurture teachers to draw any firm conclusions. Furthermore, it is possible that those who participated in the study are not representative of the whole population of Scottish teachers in special schools, support for learning teachers and nurture teachers, but rather they represent a particular demographic of teachers who use social media and are members of professional communities on social media where the links to the research were posted. In addition, the link was posted on a website, among others, which focused on an emotional education programme. It is therefore expected that this emphasis on emotions might lead to over-representation in the responses, all factors which were considered when reviewing the results of the research.

RESULTS AND DISCUSSION

Data were interpreted using content analysis in order to identify themes and patterns amongst the responses. These themes were initially identified by the first author and then checked by the second author. The different ideas and patterns were collated into two themes. The First Theme, divided into three sub-themes, focuses on teachers' perceptions of emotions related to pupils with autism spectrum conditions. The Second Theme focuses on the intervention teachers engage in with pupils with the autism spectrum conditions to support their development in emotions. This theme is divided into two sub-themes. The results and discussions are integrated as this helps to bring a richer analysis of the themes discussed.

Theme One: Teacher's perception of emotions related to pupils with autism spectrum conditions.

1.1 Recognising and responding to emotions in others

Respondents agreed that their students had a range of ability when it came to recognising and responding to emotions in others. Teacher 1 stated that 'emotional recognition in others is the most difficult' aspect of emotional awareness, whilst others acknowledge the significance it plays in the continuing development of broader emotional concepts (teacher 4, 11). Pupils 'need to be supported in understanding emotion first before being supported in first co-regulation and then self-regulation skills' (teacher 4). This corresponds with the theory that the understanding of emotional signals in others contributes to the advancement of other emotional concepts including the recognition of one's own emotions (Rieffe et al., 2006), which in turn aids the development of emotional regulation skills (Kopp, 1989). It is possible, therefore, that for pupils to progress in

Downloaded from Brill.com05/23/2022 02:20:18PM
via free access

broader aspects of emotional awareness and regulation, the teaching of emotional recognition in others should be a priority.

In the most extreme examples given by teachers it was noted that for some pupils there is very little awareness of others at all, that they didn't seem to 'register that other people were in the room never mind notice what emotion was being displayed' (teacher 13), and that some pupils 'do not seem to be aware of the presence of others for the majority of the time' (teacher 6). Some teachers describe pupils as being in their 'own bubble' (teachers 6, 12) and demonstrating very little concern or interest in others (teacher 12). This resonates with Kanner's (1943) description of a lack of affective contact in early infantile autism, as well as numerous subsequent studies which identify reduced social interest as early indicators of autism spectrum conditions (see Maestro et al., 2002; Baranek, 1999; Osterling et al., 2002; Werner & Dawson, 2005; McMahon Nichols et al., 2014). What is striking is that the rhetoric hasn't changed: we are still describing individuals who seem to occupy a different world within the same space, whom we cannot seem to reach.

Some pupils had difficulties recognising and labelling emotions in others (teachers 3, 14), and where children were able to do so they were not necessarily able to understand or respond appropriately. One teacher felt that some children were able to label emotions because they had learnt to 'read' emotional expression in others (teacher 11). Some other teachers indicated that although pupils could recognise emotions in others, they were unable to truly understand, empathise or respond appropriately (teachers 2, 6, 10, 12). These responses are consistent with current theory regarding emotional recognition and understanding in others amongst those with autism spectrum conditions, whereby individuals can often identify, or be taught to identify, the emotional state of another, but they are unable to truly understand or empathise with another (Frith, 1989; Baron Cohen et al., 2009).

Other teachers have suggested that where pupils can recognise emotions in others their response may not be appropriate: teacher 14 writes that pupils 'are not all unaware to others' distress but rather than showing consideration or care, they are either fascinated or scared of the emotional outbursts of others'. Teacher 6 also describes how pupils can be aware of the emotions of others but will respond inappropriately by trying to move someone who is crying out of the room, or by laughing when someone is angry. In these examples, pupils are demonstrating an emotional awareness, which McPhail (2004) describes as the first stage of emotional development. However, the subsequent stages of emotional application, in which a person can identify an appropriate response to the emotions of another, and emotional empathy, in which the response demonstrates an understanding of another's emotions, seem to be lacking.

Teacher 8 argued that pupils with autism spectrum conditions have less 'social awareness of emotional expression' than other groups but suggests that they 'are aware of others' emotions and show a response to them. They will react appropriately to others' challenging behaviours; one will demonstrate huge anxiety over others' behaviour choices'. Certainly, anxiety is an 'appropriate' response to challenging behaviour in another, and perhaps it is the emotional response that

Downloaded from Brill.com05/23/2022 02:20:18PM
via free access

many teachers have when a pupil behaves in a challenging way. Similarly, when teacher 6 describes a child pushing a classmate out of the room because they are crying, we can perhaps understand that the emotional response of finding the noise irritating could be described as appropriate and may be one shared by others in the room. However, the expression of the emotion is labelled as inappropriate, and teacher 8 later writes that pupils can be 'unsure how to demonstrate their emotions in a socially acceptable manner'. Therefore, the response to the emotions of others may be completely appropriate and understandable, however, the expression of that emotion may not be appropriate in terms of social expectations.

Extrapolating further, if we view these experiences through an autism lens and consider the myriad sensory perceptual differences that may be experienced by those with autism spectrum conditions, we can perhaps begin to understand those responses in different terms. The notion of what is a socially acceptable response to another person's distress is based on a neurotypical experience; but if the sound of someone crying, or the increased activity in the room in response to another's distress, was causing us physical pain, then a neurotypical reaction may be to want to remove that person by any means and as quickly as possible. In these terms not only does the emotional response become appropriate, but so too, one could argue, does the expression of that emotion.

Teacher 8 also describes pupils demonstrating 'a degree of unprompted empathy towards other pupils and staff'. Without the opportunity to discuss this further with the teacher it is impossible to know whether the response demonstrates empathy or an appropriate learnt response. McPhail's model of emotional development (2004) makes an important distinction between emotional application (responding appropriately to the emotions of another) and emotional empathy (entering into the emotional state of another). However, it could be argued that it is never truly possible to enter into the emotional state of another because our view of the world and our emotional responses are based on our accumulated individual experiences. Regardless, the variety of responses from teachers across settings demonstrates that teachers perceive a significant range of ability in emotional recognition, understanding and response amongst those with autism spectrum conditions. What is also apparent from teacher responses is that pupil behaviour and reactions are often measured in terms of social propriety, which is problematic if we consider that social propriety is a construction based on neurotypical experiences of the world and does not consider the sensory perceptual differences experienced by those with autism spectrum conditions.

1.2 Recognising Emotions in Self

All teachers noted differences in the way pupils with autism spectrum conditions understand and demonstrate their own emotions. An interesting response was noted by three teachers (3, 6, 9) who describe children who will only label themselves as 'happy' even when they are demonstrating that they are upset or angry. Teacher 6 suggests this is because the child has 'learned the answer is happy', and another suggests that the pupil perceives it to be the 'correct' answer (teacher 9). The responses that teachers and support staff give to pupils may play a significant part in their developing understanding of emotions. It is incumbent

Downloaded from Brill.com05/23/2022 02:20:18PM
via free access

upon us as teachers to try to understand why some pupils perceive 'happy' to be a correct answer. Is it because of our response? When a child says they are happy do we respond with a smile, and when they say they are 'sad' do we frown to demonstrate empathy?

Teacher 11 describes a response from a pupil who did not want his emotions named at all and would become quite 'irate' when staff tried to engage him in this way. Similarly, teacher 15 refers to some pupils who 'will refuse outright to engage in any tasks that mean examining emotions of any kind'. As teachers we need to question what is leading to this type of response. Without understanding the circumstances of individual events, it is difficult to make any judgements about possible causes. However, teacher responses across the survey suggest that the labelling of emotions is predominantly carried out when a child is displaying negative affect. Although this is never explicitly said, from the 16 teachers' references made to labelling emotions in the moment, only one teacher refers to labelling positive emotions, three other teachers make broad references to labelling emotions as a general strategy to support the development of emotional concepts, and the remaining twelve teachers refer to the labelling of negative emotions tied to incidents of challenging behaviours. This is not entirely surprising since expressions of negative emotions resulting in challenging behaviour may require a response from the teacher, whilst expressions of positive emotions are perhaps less likely to and may often go unnoticed (it should be noted, however, that some expressions of positive emotion may also be considered as challenging, such as running around when happy or excited, shouting out when happy, dependent upon the situation). If it is the case that teachers are more likely to label negative emotions in the moment, then it is possible that some pupils may begin to associate any reference or work that relates to emotions with their own negative feelings and experiences, which in turn could result in an aversion to such activities. Furthermore, labelling negative emotions which are tied to challenging behaviours suggests that a child may already be in a state of dysregulation, and therefore not open to learning experiences.

The significance of adult response to pupil emotions is also acknowledged by several teachers with reference to mislabelling. Teacher 13 describes how a child who smiled a lot was always labelled as 'happy', yet when staff began to observe more keenly, they began to suspect that the pupil was exhibiting what she refers to as a 'fear smile'. She also suggests that some pupils do not change their facial expression, making it difficult for staff to identify how they are feeling. Teacher 14 similarly asserts that pupils with autism spectrum conditions can sometimes 'laugh, out of place, when anxious or upset', making it difficult to identify how they are feeling and resulting in the mislabelling of emotions by the adult. The significance of the feedback that we receive from others in order to build an understanding of our own emotions is well documented, Rieffe et al (2006) identify it as one of three factors that contribute to our development of emotion concepts, alongside self-monitoring (the ability to recognise body sensations and behaviours during an emotional response) and the recognition of emotional signals in others. However, equally well documented are difficulties recognising the emotional cues of children with autism spectrum conditions due to reduced affective contact from

Downloaded from Brill.com05/23/2022 02:20:18PM
via free access

an early age, including reduced social gaze, social smiling and imitating (Werner & Dawson, 2005; Osterling et al, 2002; McMahon Nichols et al, 2013); difficulties with communication which prevent children signalling a need for support from caregivers (Soler, 2012, Prizant et al, 2003) and significantly atypical facial expression (Stagg et al, 2013) particularly amongst those with cognitive impairment (Begeer et al, 2008). It is possible, therefore, that teachers can mislabel pupil emotions, or worse still that they dismiss pupil accounts of how they are feeling because their facial expression does not match with their perceived notion of what that emotion should look like, in other words staff may project their own emotions onto what they see (teacher 13). There is a host of research that has been carried out which demonstrates an impairment in emotional recognition amongst those with autism spectrum conditions (Uljaveric & Hamilton, 2013), but in fact it is possible that there is also a failure amongst 'neuro typical' people to accurately recognise emotions in those with autism spectrum conditions (Brewer et al, 2016).

In addition to the potential pitfalls associated with labelling emotions, teacher 13 suggests that the routine way in which emotions are discussed may also lead to pupils giving a scripted response without really understanding. She reports that discussing emotions usually happens at the same time every day and follows a predictable format. As a result, 'the child feels more secure and safe and 'happy'', which firstly, may perpetuate the misunderstanding that 'happy' is always a correct answer, and secondly, may decrease opportunities for the child to identify other emotions in themselves. However, throughout the survey several teachers refer to the need to create predictable and consistent routines (teachers 9, 12, 14) and others acknowledge that pupils with autism spectrum conditions often struggle to cope with change (teachers 13, 15, 16, 19). Teachers, then, may be left with a very tricky balance to strike between creating a secure environment that suits all pupils whilst at the same time challenging misconceptions and driving forward learning.

The significance of teacher response in labelling emotions, both with regards to the types of emotions (positive or negative) that we are labelling, the accuracy with which we label them due to atypical facial expression and emotional signals in pupils with autism spectrum conditions, and the routines which we build up around emotional learning, arguably warrant further research to increase our understanding.

The intensity of emotions experienced by some pupils with autism spectrum conditions is also commented on by some (teachers 16, 18, 19); and another refers to out of proportion 'meltdowns' (teacher 2) like the maladaptive emotional responses, such as perseveration, that have been identified by a number of researchers (Mazefsky et al., 2012; Samson et al., 2014; Thompson et al, 2015). How individuals experience emotions and recognise the related physical sensations is also commented on by teacher 8, who states that pupils are 'aware of their own emotions as feelings within their bodies but they are unsure how to demonstrate them in a socially acceptable manner'.

Downloaded from Brill.com05/23/2022 02:20:18PM
via free access

1.3 Barriers to recognising and responding to emotions for pupils with autism spectrum conditions.

When asked about the specific barriers to emotional recognition and regulation faced by pupils with autism spectrum conditions teachers identified several factors. The most common factors relate to communication, environmental factors, and adult response.

Communication difficulties can vary immensely amongst those diagnosed with autism spectrum conditions. This ranges from those who are non-verbal, those who have difficulties understanding unspoken language such as gestures, facial expression, tone of voice, or those who understand things in a literal sense but do not grasp sarcasm or literary devices such as similes or irony. Furthermore, difficulties with communication do not necessarily reflect cognitive ability, although they are sometimes perceived to, and teacher 13 writes that many of her pupils have been 'non-verbal and it is not fully known what their understanding is of the language being used'. The very nature of autism spectrum conditions can mask cognitive ability and vice versa (Jordan, 2005); and communication impairments can make it very difficult to ascertain an individual's level of cognition.

Teachers 8 and 11 suggest that when pupils are unable to communicate effectively this can lead to challenging behaviours and emotional dysregulation. This correlation is supported by research which has identified links between communication difficulties and challenging behaviour (Chiang, 2008; Boonen et al, 2014) as well as by some autobiographical accounts from people with autism spectrum conditions: 'When my mother wanted me to do something, I often screamed. If something bothered me, I screamed. This was the only way I could express my displeasure' (Grandin, 2000).

Prizant et al (2003) further argue that as well as the implications of difficulties with expressive language, problems with receptive language may also compromise self-regulatory abilities because 'problems in comprehending gestures and language may cause confusion and/or frustration, resulting in an increase in arousal' (p.305).

Teachers also recognise that environmental factors can act in a 'disabling' way for pupils with autism spectrum conditions. Half of teachers noted some form of environmental barrier to emotional regulation for pupils with autism spectrum conditions. This ranged from recognising sensory triggers within the school and classroom which caused stress and discomfort including noise, smells and visual stimuli (teachers 4, 9, 10, 11, 12), to a lack of physical space (teacher 1) such as break out spaces which allow pupils to escape sensory overload, but also support regulation when a child has become dysregulated (teacher 18). The importance of a calm environment was also highlighted by teacher 13, and teacher 11 noted that the current COVID-19 pandemic which has resulted in far fewer pupils being in school at any one time has resulted in pupils 'coping' better, with fewer incidents of 'escalated behaviours'.

Whilst this demonstrates a willingness amongst teachers who took part in this survey to view the world through the autism lens, it is not necessarily a perspective shared by all school staff. A third significant barrier facing pupils with autism spectrum conditions identified within the survey relates to adult

Downloaded from Brill.com05/23/2022 02:20:18PM
via free access

understanding and responses. This includes mislabelling emotions (teachers 3, 6, 7, 14), as well as a lack of understanding of the nature of autism spectrum conditions (teachers 1, 4, 7, 14, 15, 18, 19), unrealistic expectations (teacher 18), inappropriate responses and misunderstanding 'within the context of large group situations' (teacher 10), and staff consistency (teachers 4, 6, 11, 13, 15) in terms of shared language and approaches.

The significance of mislabelling emotions has already been highlighted by teachers across all settings, but teacher 14 also suggests that as well as misunderstanding emotional signals, staff can also sometimes demonstrate a 'lack of empathy', and teacher 4 similarly describes a 'massive lack of understanding' amongst staff regarding how children with autism spectrum conditions experience their environment, including the 'huge sensory challenges' which they face. The notion that those with autism spectrum conditions lack theory of mind (the ability to understand the mental states of others), then, may be equally true of neurotypical individuals: 'Considering that autistic and non-autistic people do not share perceptual experience due to differences in perceptual and cognitive functioning, don't non-autistic people find it difficult to take the perspectives of autistic individuals?' (Bogdashina, 2016: 21).

Teacher 18 explains that sometimes staff can be 'given the information and they understand the theory but when faced with some of our young people, the theory is not put into practice'. Moreover, teacher 1 suggests that a lack of understanding can sometimes result in pupils being labelled as 'naughty', as demonstrated by this response given to teacher 17 when she enquired about a pupil with an autism spectrum condition who was in her class: 'I had then asked about this particular pupil if there was anything in place for him and my concerns as he was constantly displaying disruptive behaviour, but I knew there was much more to it than 'just wanting attention' which is what a member of the senior management team said to me, 'he needs to sit down and do what the rest do''.

Experiences like this seem to be more prevalent within mainstream settings, whereas difficulties in adult understanding and responses identified within special needs schools tend to relate to consistency in the way that support is delivered in terms of strategies and language (teachers 6, 11, 12, 13), and problems relating to staff not knowing the children well enough due to staffing changes (teachers 8, 9, 12).

Theme Two: How teachers engage with pupils within the autism spectrum to support their development in emotions.

2.1 Teaching Emotional Awareness and Regulation

Several teachers indicated that they use the programme 'Emotion Works' to support their pupils. However, there seems to be a large variety of programmes and tools used across different settings, and in some instances by individual teachers. It is difficult to draw any conclusions from this due to the small number of respondents. However, it suggests that there is no shared strategy for teaching emotional understanding across Scotland, or even within local authorities. Alternatively, one could also conclude that there simply is no 'one size fits all'

Downloaded from Brill.com05/23/2022 02:20:18PM
via free access

solution to teaching emotional awareness, but that teachers in Scotland are engaged in finding relevant resources and strategies to support the needs of individual pupils.

Similarly, the survey results demonstrate a huge variety in the types of activities and strategies employed including the use of symbols and photos of emotions, mirrors to support recognition of emotions in self, targets and incentives, songs, stories, films, social stories, drama and puppets, circle time activities, 5 point scales, modelling, the use of scripts to embed associated language, computer programmes, daily emotion check-ins, text books, reflection and restorative practices.

In accordance with the recognition of the broad range of abilities and needs within this group most teachers describe the need for individual strategies, differentiation and tailored interventions (teachers 1, 2, 6, 7, 8, 10, 12, 14, 15, 16, 17, 18, 19). As such there is a clear focus on understanding the individual child with several teachers highlighting the importance of becoming 'attuned' to each pupil and planning accordingly (teacher 15). This is at odds with the majority of school-based interventions described in the literature, which do not identify the need to tailor interventions to individual needs (Beaumont et al, 2015; Pahnke, 2014; Mackay et al, 2017) nor do they acknowledge the value of teacher expertise and knowledge in developing an understanding of the child (Beaumont et al, 2015; Pahnke, 2014; Mackay et al, 2017; Wood et al, 2014).

Alongside an individualistic approach learning also takes place in group activities (teachers 1, 6, 8, 14). Moreover, several teachers describe a whole school approach to teaching emotional awareness and emotion regulation (teachers 4, 6, 10, 11, 12, 13, 14, 15, 16) and beyond that some refer to the significance of the broader 'ethos' (teacher 10) or 'values' (teacher 15) of the school in building emotional understanding amongst pupils. There is an implication here that whilst some explicit lessons are taught, of equal importance are the shared cultural values of the school and the real-life teaching opportunities that occur throughout the day through social interactions across the school. The need for consistency between all staff in terms of language and strategies becomes more significant in these terms and is identified as an important feature of emotion education by several teachers (teachers 2, 4, 6, 8, 11, 12, 13, 14, 15). This often is not reflected enough in literature. However, Parent *et al*. (2016) focusing on a school-based intervention, refers to the importance of a collaborative approach with both staff and caregivers to ensure effectiveness.

Mackay *et al.* (2017) also argue that working alongside parents and school may produce more significant results. This was also evidenced in this study, where several teachers also refer to the importance of developing shared approaches and strategies alongside families, carers and other agencies (teachers 4, 14). Teacher 11 writes that 'emotional awareness is very much based on the individual and how they experience the world, how they have experienced the world (home and family life) also has a huge impact on their emotional awareness'. Indeed, family life represents an individual's initial experiences of social interactions, and parents' influence on their child's learning by age 7 is six times greater than that of the school (Sacker et al, 2002), which is perhaps not surprising given that only 15%

Downloaded from Brill.com05/23/2022 02:20:18PM
via free access

of a child's time is spent in school (Scottish Government, 2016). The notion of considering a child within their broader cultural context is not new, both Vygotsky (1978) and Dewey (1916) emphasised the importance of culturally meaningful and relevant learning experiences, and more recently Illeris (2009) focuses on the transfer of learning between different settings. This seems particularly pertinent when the very focus of emotional learning is socially and culturally rooted since 'emotional competence entails the ability to spontaneously regulate natural social interactions by exchanging emotions in accordance with the requirements of the situation' (Begeer et al, 2008: 355). Emotion awareness and regulation are not skills solely to be used within the school setting, they are needed in every aspect of, and throughout, life; therefore, the ability to recognise and regulate emotions in one setting does not represent true emotional competence. Once more, then, the sharing of language and strategies should become a focus for emotion education.

Aside from the programmes and tools used there were some recurring themes in the teachers' responses relating to how emotion understanding is taught. Several teachers described identifying and responding to emotions in the moment (teachers 1, 2, 3, 10, 11, 12, 13, 16) to support both emotional awareness and regulation. Teacher 16 explains that 'emotion is such an abstract concept for some pupils that labelling it as it occurs and tying it to the appraisal of a specific situation … is often the best port of call'. The idea of creating a more concrete understanding of emotion is also attempted by some (teachers 7, 8, 11, 14, 18) who refer to the need to discuss how an emotion feels physically in order to support recognition and regulation. The difficulties associated with labelling emotions have already been highlighted, including atypical facial expression, as well as a tendency amongst teachers, perhaps, to focus on negative emotions. However, there is also evidence that physiological responses to emotion may differ, including a lower respiratory sinus arrhythmia (Neuhaus et al, 2013; Guy et al, 2014) and differences in brain activation (Richey et al, 2015). Undoubtedly there is still a lot that we don't know about physical responses to emotions, however, we should be cautious when tying emotions to physical sensations since we are likely to do so based on our own neurotypical experiences, which may not be the same.

2.2 Barriers for staff supporting emotional regulation in pupils with autism spectrum conditions

Whilst most teachers recognised the responses and actions of adults as a potential barrier to the development of emotional awareness and emotional regulation in pupils with autism spectrum conditions, they also identify barriers which make it difficult for staff to effectively teach these skills, these include staffing, resources, time, training, and confidence.

Half of teachers (from all the different settings) identify issues with staff confidence as a barrier to supporting emotional awareness and regulation amongst pupils with autism spectrum conditions. Issues with confidence can stem from staff feeling 'under skilled' (teacher 13) or having the confidence to 'ask/say the right thing' (teacher 11) which may also be linked to skills or experience. However, several teachers refer to the confidence needed to deal with violent and challenging behaviours (teachers 4, 8, 13) which can result in staff themselves

Downloaded from Brill.com05/23/2022 02:20:18PM
via free access

becoming 'overwhelmed' (teacher 4) and can come at 'a huge personal cost' when 'working at these levels constantly' (teacher 8). Teacher 8 also suggests that staff should be aware of their own emotional regulation before they can begin to support the emotional regulation of others. However, if staff themselves feel threatened and lack the confidence required to deal with violent and challenging behaviours, it is possible that they may project their own emotions onto the behaviour of a child and mislabel or misunderstand them, as suggested by teacher 13. For example, if a child is displaying aggressive behaviour and the adult does not feel confident to deal with it, their own fear may lead them to label the emotion as anger, when in fact it may also be fear that the child is experiencing.

Other expectations across the school and curriculum mean that staff do not always feel they have the time to support this area of learning. Staff across all types of settings refer to the various demands placed on them including curriculum, meetings, individual school focuses and planning, amongst others, which mean that supporting emotional awareness and regulation doesn't always receive the attention it requires. However, some teachers within mainstream settings, both those in enhanced provision classes and those supporting learning across one or several schools, seem to express a frustration that the school environment is not set up to support pupils with autism spectrum disorders for several reasons.

Teacher 10 suggests that in broad terms the mainstream classroom does not support staff to 'observe and respond to the variety of ways children can communicate and show learning'. Furthermore, she writes that the amount of time required, both in terms of being able to offer 'in the moment responses and different strategies', as well as working with a child over a prolonged period, is simply not possible in mainstream settings. Several teachers indicate that other staff sometimes perceive the needs of pupils with autism spectrum conditions within their classes to be a 'hinderance' (teacher 14), and they don't have the time to focus on one pupil when they are under pressure to maintain pace of learning for the whole class (teachers 4, 18). Furthermore, teacher 18 suggests that sometimes teachers can be fearful of making adjustments for individual pupils in case the 'rest of the class descend into chaos', or because they are concerned about the response they will get from management, colleagues or parents.

Therefore, although respondents demonstrate an awareness and understanding of the different ways in which children with autism spectrum conditions experience the school environment, they often feel unable to make the necessary adjustments, particularly within mainstream settings. Furthermore, a lack of understanding amongst other staff, including class teachers and management, can exacerbate the situation. Perhaps this is not entirely surprising since special needs and support for learning teachers focus on supporting pupils, usually in small groups or individually, to access learning according to their personal abilities and needs. In contrast, class teachers are likely to have a class in excess of twenty pupils, for whom they have the responsibility of providing challenging and relevant learning over a broad curriculum. Teacher 8 writes 'my biggest wish is that I could get teachers to understand that by getting it right for this one child gives them a greater chance of getting it right for everyone, due to less disrupted teacher time, etc'.

Downloaded from Brill.com05/23/2022 02:20:18PM
via free access

A lack of understanding across the whole school staff, as well as staff confidence (which itself is linked to understanding and skills), and environmental factors including resources, can all impact the ability of teachers to implement consistent approaches across settings and therefore to meet the needs of pupils.

CONCLUSION

Whilst previous research into emotional awareness and regulation has failed to adequately represent all abilities within the autism spectrum, in terms of both cognitive and communication ability, this investigation has sought to represent the experiences and perceptions of teachers working with pupils with a range of needs, within a real-life environment. It demonstrates a richly collaborative environment within schools in which teachers describe the importance of engaging across the school community and beyond in order to best meet the needs of the child through individualised interventions which focus on supporting emotional awareness and regulation in real-life situations.

There is a recognition of the difference in how individuals with autism spectrum conditions experience the world. However, the tone of discourse can often be one of deficit in which the child is perceived as disabled, rather than the environment and social structures being viewed as disabling. Pupils are described as being unable to read the emotions of others, yet where we are unable to read their emotions, the emphasis is on their inability to communicate or demonstrate typical facial expression, rather than our inability to understand. This may be particularly problematic when we consider that labelling emotions in order to support the development of emotional awareness and regulation is identified by ten teachers as an important strategy. This study highlighted the need for teachers to continually ‘be’ with pupils with autism in order to acknowledge their needs and strengths and support them where necessary.

We end this paper by highlighting the following implications that emerge from this study:

- From the responses it is evident that teachers are immersed in the lives of children with autism spectrum conditions. The examples the teachers recount indicate that they give detailed attention to every child. It can also be concluded that the majority of those who participated in this study understand the processes and difficulties that children with autism spectrum conditions engage in with regards to emotional awareness and regulation of children with autism spectrum conditions. Yet, the responses also highlight that more awareness is needed from all teachers. Training and knowledge are essential, as well as a positive attitude that recognises this need.

- This study indicates emerges that emotional awareness and regulation of children with autism spectrum conditions is complex. There is no easy solution that works for every child, as well that every child is not constant but changes. This implies that teachers and educators need to acknowledge and work with uncertainty. While many teachers reported that

Downloaded from Brill.com05/23/2022 02:20:18PM
via free access

they use a variety of programmes to support their work with emotional awareness with children with autism spectrum conditions, still their contextual judgements in the moment are of paramount importance to allow children to grow and flourish. The uncertainty experienced by teachers needs to be recognised and understood as beneficial for the children, and not seen as a limitation. Furthermore, working with emotional awareness and regulation of children with autism spectrum conditions is an ongoing process, and one that never ends. This means that teachers and educators need to be constantly supported by educational systems to be able to sustain this ongoing engagement with children.

- Linked to the previous point, some teachers provided some critical aspects to the programmes that they used to help emotional awareness and regulation of children with autism spectrum conditions. Yet, this critical voice needs to be developed further. It is not to do away with such programmes, but is aimed at being able to see how to best tailor these to each child.

Correspondence to Clara Smith: cxsmith@dundee.ac.uk

Downloaded from Brill.com05/23/2022 02:20:18PM
via free access

REFERENCES

Baranek, G.T. (1999). Autism During Infancy: A Retrospective Video Analysis of Sensory-Motor and Social Behaviours at 9 – 12 Months of Age. *Journal of Autism and Developmental Disorders,* 29 (3), p213 – 224. http://dx.doi.org/10.1023/A:1023080005650

Barnes, C. and Mercer, G. (2004). Implementing the Social Model of Disability: Theory and Research. Leeds: The Disability Press

Baron-Cohen, S., Golan, O. and Ashwin, E. (2009). Can Emotion Recognition be Taught to Children with Autism Spectrum Conditions? *Philosophical Transactions of the Royal Society*, 364, 3567 – 3574. http://dx.doi.org/10.1098/rstb.2009.0191

Beaumont, R., Rotolone, C. and Sofronoff, K. (2015). The Secret Agent Society Social Skills Program for Children with High-Functioning Autism Spectrum Disorders: A Comparison of Two School Variants. *Psychology in the Schools*, 52 (4), 390 – 402. http://dx.doi.org/10.1002/pits.21831

Begeer, S., Koot, H.M., Rieffe, C., Terwogt, M.M. and Stegge, H. (2008). Emotional Competence in Children with Autism: Diagnostic Criteria and Empirical Evidence. *Developmental Review*, 28, 342 – 369. http://dx.doi.org/10.1016/j.dr.2007.09.001

Bogdashina, O. (2005) *Communication Issues in Autism and Asperger Syndrome. Do We Speak the Same Language?* London: Jessica Kingsley Publishers.

Bogdashina, O. (2016) *Sensory Perceptual Issues in Autism and Asperger Syndrome*. 2nd Edition. London: Jessica Kingsley Publishers.

Boonen, H., Maljaars, J., Lambrechts, G., Zinks, I., Van Leeuwenhoek, K. and Noens, I. (2014). Behaviour Problems Among School-Aged Children with Autism Spectrum Disorder: Associations with Children's Communication Difficulties and Parenting Behaviours. *Research in Autism Spectrum Disorders*, 8, 716 – 725. http://dx.doi.org/10.1016/j.rasd.2014.03.008

Brewer, R., Biotti, F., Catmur, C., Press, C., Happe, F., Cook, R. and Bird, G. (2016). Can Neurotypical Individuals Read Autistic Facial Expressions? Atypical Production of Emotional Facial Expressions in Autism Spectrum Disorders. *Autism Research*, 9, 262 - 271. http://dx.doi.org/10.1002/aur.1508

Busch de Ahumada, L.C. and Ahumada, J.L. (2015). Contacting a 19-month-old mute autistic girl: A clinical narrative. *The International Journal of Psychoanalysis*, 96, 11 – 38. http://dx.doi.org/10.1111/1745-8315.12248

Chiang, H. (2008). Expressive Communication of Children with Autism: The Use of Challenging Behaviour. *Journal of Intellectual Disability Research*, 52 (11), 966 – 972. http://dx.doi.org/10.1111/j.1365-2788.2008.01042.x

Connor, C.M., White, S.W., Beck, K.B., Golt, J., Smith, I.C. and Mazefsky, C.A. (2019). Improving Emotion Regulation Ability in Autism: The Emotional Awareness and Skills Enhancement (EASE) Program. *Autism*, 23 (5), 1273 – 1287. http://dx.doi.org/10.1177/1362361318810709

Cook, J.M., Donovan, C.L. and Garnett, M.S. (2019). Parent-Mediated Cognitive Behavioural Therapy for Young Children with High-Functioning Autism Spectrum Disorder and Anxiety: A Randomised Controlled Trial. *Early Child Development and Care*, 189 (1), 119 – 134. http://dx.doi.org/10.1080/03004430.2017.1303684

Cumine, V., Leach, J. and Stevenson, G. (1998). *Asperger Syndrome A Practical Guide for Teachers.* London: David Fulton Publishers.

Dewey, J. (1916). *Democracy and Education*. New York: Macmillan Publishing.

Friedrich, E.V.C., Sivanathan, A., Lim, T., Suttie, N., Louchart, S., Pillen, S. and Pineda, J.A. (2015). An Effective Neurofeedback Intervention to Improve Social Interactions in Children with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 45, 4084 – 4100. http://dx.doi.org/10.1007/s10803-015-2523-5

Frith, U. (1989). *Autism: Explaining the Enigma*. Oxford: Blackwell Publishing

Grandin, T. (2000). *Visual Thinking, Sensory Problems and Communication Difficulties*. Autism-help.org. Available at https://www.autism-help.org/story-sensory-communication.htm (Accessed September 2020).

Downloaded from Brill.com05/23/2022 02:20:18PM
via free access

Guy, L., Souders, M., Bradstreet, L., DeLussey, C. and Herrington, J.D. (2014). Brief Report: Emotion Regulation and Respiratory Sinus Arrhythmia in Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 44, 614 – 2620. http://dx.doi.org/10.1007/s10803-014-2124-8

Habayeb, S., Rich, B. and Alvord, M.K. (2017). Targeting Heterogeneity and Comorbidity in Children with Autism Spectrum Disorder Through the Resilience Builder Group Therapy Program. *Child Youth Care Forum*, 46, 539 – 557. http://dx.doi.org/10.1007/s10566-017-9394-1

Illeris, K. (2009). Transfer of Learning in the Learning Society: How Can the Barriers Between Different Learning Spaces be Surmounted, and How Can the Gap Between Learning Inside and Outside Schools be Bridged? *International Journal of Lifelong Education*, 28, 137 – 148. http://dx.doi.org/10.1080/02601370902756986

Jordan, R. (2001). *Autism with Severe Learning Difficulties*. London: Souvenir Press.

Kanner, L. (1943). Autistic Disturbances of Affective Contact. *The Nervous Child*, 2, 217 – 250.

Kopp, C.B. (1989). Regulation of Distress and Negative Emotions: A Developmental View. *Developmental Psychology,* 25 (3), 343 – 354. http://dx.doi.org/10.1037/0012-1649.25.3.343

Mackay, B.A., Shochet, I.M. and Orr, J.A. (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, 3458 – 3478. http://dx.doi.org/10.1007/s10803-017-3263-5

Maestro, S., Muratori, F., Cavallaro, M.C., Pei, F., Stern, D., Golse, B. and Palacio-Espasa, F. (2002). Attentional Skills During the First 6 Months of Age in Autism Spectrum Disorder. *Child Adolescent Psychiatry,* 41(10), 1239 – 1245. http://dx.doi.org/10.1097/00004583-200210000-00014

Mazefsky, C.A., Pelphrey, K.A. and Dahl, R.E. (2012). The Need for a Broader Approach to Emotion Regulation Research in Autism. *Child Development Perspectives*, 6 (1), 92 - 97. http://dx.doi.org/10.1111/j.1750-8606.2011.00229.x

Mazefsky, C.A. (2015). Emotion Regulation and Emotional Distress in Autism Spectrum Disorder: Foundations and Considerations for Future Research. *Journal of Autism and Development Disorders*, 45, 3405 – 3408. http://dx.doi.org/10.1007/s10803-015-2602-7

McMahon Nichols, C., Ibanez, L.V., Foss-Feig, J.H. and Stone, W.L. (2014). Social Smiling and Its Components in High-Risk Infant Siblings Without Later ASD Symptomatology. *Journal of Autism and Developmental Disorders*, 44, 894 – 902. http://dx.doi.org/10.1007/s10803-013-1944-2

McPhail, K. (2004). An emotional response to the state of accounting education: developing accounting students' emotional intelligence. *Critical Perspectives on Accounting*, 15, 629 – 648. http://dx.doi.org/10.1016/S1045-2354(03)00050-9

Neuhaus, E., Bernier, R. and Beauchaine, T.P. (2014). Brief Report: Social Skills, Internalizing and Externalizing Symptoms, and Respiratory Sinus Arrhythmia in Autism. *Journal of Autism and Development Disorders,* 44, 730 – 737. http://dx.doi.org/10.1007/s10803-013-1923-7

Nowell, S.W., Watson, L.W., Boyd, B. and Klinger, L.G. (2019). Efficacy Study of a Social Communication and Self-Regulation Intervention for School-Age Children with Autism Spectrum Disorder: A Randomised Controlled Trial. *Language, Speech, and Hearing Services in Schools*, 50 (3), 416 – 433. http://dx.doi.org/10.1044/2019_LSHSS-18-0093

Oliver, M. (1981). A New Model of the Social Work Role in Relation to Disability. In J. Campling (Ed), *The Handicapped Person: A New Perspective for Social Workers?* London: Radar

Oliver, M. (1990). *The Politics of Disablement*. Basingstoke: Macmillan

Osterling, J.A., Dawson, G. and Munson, J.A. (2002). Early Recognition of 1-year-old Infants with Autism Spectrum Disorders Versus Mental Retardation. *Development and Psychopathology*, 14, 239 – 251. http://dx.doi.org/10.1017/S0954579402002031

Pahnke, J., Lundgren, T., Hursti, T. and Hirvikoski, T. (2014). Outcomes of an Acceptance and Commitment Therapy-Based Skills Training Group for Students with High-Functioning Autism Spectrum Disorder: A Quasi-Experimental Pilot Study. *Autism*, 18 (8), 953 – 964. http://dx.doi.org/10.1177/1362361313501091

Parent, V., Birtwell, K.B., Lambright, N. and DuBard, M. (2016). Combining CBT and Behaviour-Analytic Approaches to Target Severe Emotion Dysregulation in Verbal Youth with ASD and

Downloaded from Brill.com05/23/2022 02:20:18PM
via free access

ID. *Journal of Mental Health Research in Intellectual Disabilities*, 9 (1-2), 60 – 82. http://dx.doi.org/10.1080/19315864.2016.1166301

Prizant, B.M., Wetherby, A.M., Rubin, E. and Laurent, A.C. (2003). The SCERTS Model: A Transactional, Family-Centred Approach to Enhancing Communication and Socioemotional Abilities in Children with Autism Spectrum Disorder. *Infants and Young Children*, 16 (4), 296 – 316. http://dx.doi.org/10.1097/00001163-200310000-00004

Reaven, J., Blakeley-Smith, A., Culhane-Shelurne, K. and Hepburn, S. (2012). Group Cognitive Behaviour Therapy for Children with High-Functioning Autism Spectrum Disorder and Anxiety: A Randomised Trial. *Journal of Child Psychology and Psychiatry*, 53 (4), 410 – 419. http://dx.doi.org/10.1111/j.1469-7610.2011.02486.x

Richey, A.J., Damiano, C.R., Sabatino, A., Rittenbery, A., Petty, C., Bizzell, J., Voyvodic, J., Heller, A.S., Coffman, M.C., Smoski, M., Davidson, R.J. and Dichter, G.S. (2015). Neural Mechanisms of Emotion Regulation in Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 45, 3409 – 3423. http://dx.doi.org/10.1007/s10803-015-2359-z

Rieffe, R., Tergwogt, M.M. and Stockmann, L. (2000). Understanding Atypical Emotions among Children with Autism. *Journal of Autism and Developmental Disorders*, 30 (3): 195 – 203. http://dx.doi.org/10.1023/A:1005540417877

Rieffe, C., Meerum Terwogt, M. and Kotronopoulou, K. (2007). Awareness of Single and Multiple Emotions in High-functioning Children with Autism. *Journal of Autism and Development Disorders*, 37, 455 – 465. http://dx.doi.org/10.1007/s10803-006-0171-5

Sacker, A., Schoon I. and Bartley, M. (2002). Social Inequality in Educational Achievement and Psychosocial Adjustment Throughout Childhood: Magnitude and Mechanisms. *Social Science and Medicine*, 55, 863 – 880. http://dx.doi.org/10.1016/S0277-9536(01)00228-3

Samson, A.C., Philips, J.M., Parker, K.J., Shah, S., Gross, J.J. and Hardan, A.Y. (2014). Emotion Dysregulation and the core features of Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders,* 44, 1766 – 1772. http://dx.doi.org/10.1007/s10803-013-2022-5

Santomauro, D., Sheffield, J. and Sofronoff, K. (2016). Depression in Adolescents with ASD: A Pilot RCT of a Group Intervention. *Journal of Autism and Developmental Disorders*, 46, 572 – 588. http://dx.doi.org/10.1007/s10803-015-2605-4

Scarpa, A. and Reyes, N. M. (2011). Improving Emotion Regulation with CBT in Young Children with High Functioning Autism Spectrum Disorders: A Pilot Study. *Behavioural and Cognitive Psychotherapy*, 39, 495 – 500. http://dx.doi.org/10.1017/S1352465811000063

Scottish Government (2010). *Growing up in Scotland: Children's Social, Emotional and Behavioural Characteristics at Entry to Primary School*. Available at https://www.gov.scot/publications/growing-up-scotland-childrens-social-emotional-behavioural-characteristics-entry-primary/ (Accessed: September 2020).

Scottish Government (2016). *Review of Family Learning Supporting Excellence and Equity*. Available at https://education.gov.scot/improvement/Documents/Family-Learning-Report-full-document.pdf (Accessed September 2020)

Shaffer, R.C., Wink, L.K., Ruberg, J., Pittenger, A., Adams, R., Sorter, M., Manning, P. and Erikson, C.A. (2019). Emotion Regulation Intensive Outpatient Programming: Development, Feasibility, and Acceptability. *Journal of Autism and Developmental Disorders*, 49, 495 – 508. http://dx.doi.org/10.1007/s10803-018-3727-2

SLTforkids.co.uk (2020), *High-functioning autism,* available at: https://sltforkids.co.uk/conditions-we-treat/high-functioning-autism/ (Accessed September 2020)

Sofronoff, K., Silva, J. and Beaumont, R. (2017). The Secret Agent Society Social-Emotional Skills Program for Children with a High-Functioning Autism Spectrum Disorder: A Parent-Directed Trial. *Focus on Autism and Other Developmental Disabilities*, 32 (1), 55-70. http://dx.doi.org/10.1177/1088357615583467

Soler, J.G. (2012). *Improving Emotional Understanding in Children with Autism*. MPhil Thesis. University of Birmingham. Available at: https://etheses.bham.ac.uk/id/eprint/4513/1/Soler13MPhil.pdf (Accessed: September 2020).

Sparrow, M. (2017). *Autism is Not a Shell Surrounding A 'Normal' Child. Thinking Person's Guide to Autism.* Available at http://www.thinkingautismguide.com/2017/01/autism-is-not-shell-surrounding-normal.html (Accessed September 2020).

Downloaded from Brill.com05/23/2022 02:20:18PM
via free access

Stagg, S.D., Slavny, R., Hand, C., Cardoso, A. and Smith, P. (2013). Does facial Expressivity Count? How Typically Developing Children Respond Initially to Children with Autism. *Autism*, 18 (6), 704 – 711. http://dx.doi.org/10.1177/1362361313492392

Thompson, K., Burnham Riosa, P. and Weiss, J.A. (2015). Brief Report of Preliminary Outcomes of an Emotion Regulation Intervention for Children with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 45, 3487-3495. http://dx.doi.org/10.1007/s10803-015-2446-1

Uljaveric, M. and Hamilton, A. (2013). Recognition of Emotions in Autism: A Formal Meta-Analysis. *Journal of Autism and Developmental Disorders*, 43, 1517 – 1526. http://dx.doi.org/10.1007/s10803-012-1695-5

Vygotsky, L. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.

Weiss, J.A., Thomson, K., Burnham Riosa, P., Albaum, C., Chan, V., Maughan, A., Tablon, P. and Black, K. (2018). A randomized waitlist-controlled trial of cognitive behavior therapy to improve emotion regulation in children with autism. *Journal of Child Psychology and Psychiatry*, 59 (11), 1180 – 1191. http://dx.doi.org/10.1111/jcpp.12915

Werner, E. and Dawson, G. (2005). Validation of the Phenomenon of Autistic Regression Using Home Videotapes. *Arch Gen Psychiatry*, 62, 889 – 895. http://dx.doi.org/10.1001/archpsyc.62.8.889

White, J. (2017). *Rapid Evidence Review: Reducing the Attainment Gap – The Role of Health and Wellbeing Interventions in Schools*. Edinburgh: NHS Health Scotland.

White, S.W., Ollendick, T., Albano, A.M., Oswald, D., Johnson, C., Southam-Gerow, M.A., Kim, I. and Scahill, L. (2013). Randomised Controlled Trail: Multimodal Anxiety and Social Skill Intervention for Adolescents with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders,* 43, 382 – 394. http://dx.doi.org/10.1007/s10803-012-1577-x

Williams, D. (1996) *Autism An Inside-Out Approach*. London: Jessica Kingsley Publishers

Williams, D., Happe, F. (2010). Recognising 'social' and 'non-social' emotions in self and others: A study of autism. *Autism*, 14 (4), 285 – 304. http://dx.doi.org/10.1177/1362361309344849

Wing, Lorna (1996). *The Autistic Spectrum*. London: Robinson

Wood, J.J., Fujii, C., Renno, P., Van Dyke, M. (2014). Impact of a Cognitive Behavioural Therapy on Observed Autism Symptom Severity During School Recess: A Preliminary Randomised, Controlled Trial. J*ournal of Autism and Developmental Disorders*, 44, 2264 – 2276.

Wood, J.J., Ehrenreich-May, J., Alessandri, M., Fujii, C., Renno, P., Laugeson, E., Piacentini, J.C., De Nadai, A.S., Arnold, E., Lewin, A.B., Murphy, T.K., Storch, E.A. (2015). Cognitive Behavioural Therapy for Early Adolescents with Autism Spectrum Disorders and Clinical Anxiety: A Randomised Controlled Trial. *Behaviour Therapy,* 46, 7 – 19. http://dx.doi.org/10.1016/j.beth.2014.01.002

Downloaded from Brill.com05/23/2022 02:20:18PM
via free access