



An Exploration of an Individualized Self-Regulation Programme Using the Stress, Self-Regulation and Communication Framework (SSC) for Autistic Children

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Abstract

The United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) has called for a global human rights approach to remove barriers to enable the full participation of people with Special Educational Needs (SEN) in society [1]. This includes enabling people with SEN to maximise their academic and social development and develop autonomy and self-determination [1, 2]. Supporting the development of self-regulation is viewed as key to this goal [3]. This paper provides insights into the development of self-regulation for autistic children. Additionally, the paper presents the methodology and expected outcomes of an ongoing case-study design for supporting the individual development of self-regulation for autistic children which is currently being implemented in an Irish context. The case study design draws on the Stress, Self-Regulation, and Communication Framework [4] to offer an individualised programme for supporting self-regulation for autistic children. Participants include six children with a diagnosis of autism in Ireland. The research is situated within a reflexive qualitative stance [5]. A multiple-embedded design is used to offer an in-depth exploration of each child's response to the intervention and to help to understand common themes and individual differences. The results of the study will have implications for the future of international educational policy and informing best practice for choosing and applying interventions to support the autonomy and self-determination of autistic people.

Keywords: *Inclusive Education, Special Needs Education, Autism Spectrum Disorder, Primary Education, Self-Regulation, Emotional-Regulation*

1. Introduction: An Equitable Diagnosis of Autism?

Autistic people tend to have a dyad of differences, which include differences in social communication, restricted interests, and repetitive behaviours [6]. The complexity of autism is echoed in debates regarding the diagnosis and labelling of autism. The DSM-V [6] has collapsed the sub-types of autism into a single diagnosis of Autism Spectrum Disorder (ASD). This was meant to capture the spectrum of presentations of autism. Nonetheless, autistic people are often labelled as having "high" or "low"-functioning autism within the diagnosis of ASD. Recently, the Lancet Commission also proposed the term "profound autism" to identify individuals with a diagnosis of autism who have intellectual and/or language difficulties [7]. Kapp [8] contends that these labels focus on the intellectual impairments associated with a medical model of autism, and fail to capture a holistic model of ASD, or the ability of autistic people who are non-verbal to self-advocate for themselves.

The diagnosis and labelling of autism have considerable implications for autistic people and their families. Researchers argue that people who are diagnosed with 'high-functioning autism' can be put at a disadvantage, particularly in relation to social-communication development [9]. Croke [9] explains that people with a diagnosis of high-functioning autism may have reduced social cognition, which is not measured in traditional standardised assessments. Therefore, the authors contend that each case of autism is variable, and interventions should be planned to meet the individual needs of autistic people [9]. Similarly, the United Nations Convention on the Rights of Persons with Disabilities [1] calls upon governments to provide the necessary supports to enable the full participation of people with disabilities in society. Equitable supports for social communication, including self-regulation is necessary to achieve this goal [2, 3].

2. Autism and Self-Regulation



Self-regulation refers to the capacity to cope with stressors and return to homeostasis where the person is calm and alert [10]. Comparison studies have reported that autistic children have higher levels of dysregulation than their peers [11]. As the school years progress, difficulties in social communication can become more apparent for autistic children [12]. Some researchers contend that due to communication challenges, autistic people may use maladaptive behaviour to communicate their needs [13]. Similarly, autistic children can have reduced executive functioning in social situations in comparison to their peers [14]. These studies illustrate the importance of evidence-based self-regulation interventions for autistic children.

2.1 A systematic literature review

A systematic literature review was conducted to determine what self-regulation interventions were the most effective for school-aged autistic children. The review questions were: *What are the main interventions used to improve self-regulation outcomes for autistic children? What are the outcomes of self-regulation interventions for autistic children?* The literature search was conducted between the 17th of May 2022 – the 28th of July 2022 using the following electronic databases: ERIC (EBSCO), PsychINFO and PsychARTICLES. The initial search yielded 109 results. Following a closer look at the studies' titles and abstract, six studies met the inclusion criteria and were appraised by the researcher.

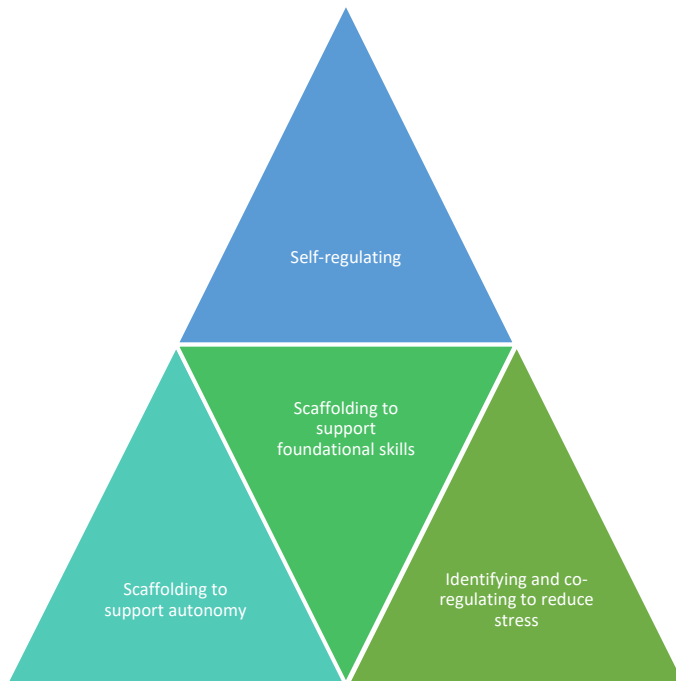
A total number of 159 children with a diagnosis of ASD were included in this review. The ages ranged from 6-16 years old. Three studies came from Australia ($n = 3$). Two studies took place in the United States of America and one study was located in Romania, in Europe. All of the studies stipulated that the participants had a formal diagnosis of ASD. Additionally, most of the studies set requirements for intellectual, linguistic and cognitive testing scores. For example, two studies [15, 16] stipulated that participants required a minimum IQ score to be included in the study. Three of the six studies focused on adapted versions of the well-established Secret Agent Society (SAS) program [12, 15, 16]. One study focused on robot-enhanced therapy [17] while another study developed a Cognitive Behavioural Therapy (CBT) intervention for two autistic individuals with co-occurring intellectual needs [18]. Another intervention combined well-known social skills programmes to create their self-regulation intervention [19]. Overall, all of the studies reported positive outcomes in self-regulation scores. However, caution may be warranted in drawing conclusions from brief interventions, as autism is a lifelong developmental disability and spontaneous short-term gains can be unlikely [15]. Many of the studies' intellectual and linguistic requirements also pose a key question about the accessibility of interventions and the need to adapt interventions to meet the individual needs of autistic children [19].

3. The Current Research

In light of this literature review, I developed a self-regulation intervention that draws on the Stress, Self-Regulation and Communication Framework [4]. This framework was developed to enable clinicians and educators working with autistic children to adapt interventions to meet the individual needs of the children. The model starts with co-regulation where the social partner adapts the environment to help reduce dysregulation. The framework then moves onto phase two, where the child is supported to develop foundational self-regulation capacities, including emotional literacy. The third phase is scaffolding to support autonomy. The objective of phase three is to support autistic individuals in recognising and developing their self-regulation strategies. These phases are illustrated in Figure 1.



Fig.1. The Stress, Self-Regulation and Communication Framework [4].



Based on the SSC Framework, I employed an exploratory case study design to allow for an in-depth exploration of the development of self-regulation for autistic children in a special class setting in Ireland. The research adopts a qualitative stance, and information is collected about the classroom environment, pupils' sensory profiles, and their development of self-regulation through semi-structured interviews with the class teacher and parents. This research is currently ongoing. The results of this study are expected to add to our understanding of how self-regulation develops for autistic children, and how to adapt interventions to meet the individual needs of autistic children. This will have considerable implications for informing international policy on education and meeting the United Nation's desire for all individuals to meet their fullest potential [1].

4. Conclusion

Differences in labels and diagnosis of autism can limit access to social skills interventions for autistic children. Social skills interventions, such as those that target self-regulation are critical to the life-long outcomes of autistic people. The results of a systematic literature review illustrated that self-regulation interventions can have a positive outcome on autistic children. However, it is important to ensure accessibility for all autistic children regardless of linguistic and cognitive measures. I am currently implementing a case study in an Irish setting to explore the impact of an individualized self-regulation intervention for autistic children, based on the Stress, Self-Regulation and Communication Framework. It is expected that the current intervention will have positive effects on the accessibility of self-regulation interventions for all children and our understanding of the individual development of self-regulation for autistic people.

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