



Pathways to Promoting Self-Regulation: What can SLPs do?

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Benny is a four-year old, verbal child with autism. He is in a junior kindergarten classroom with twenty-six other children. His teachers have noted that he is bright and excels in some areas, but that he has significant difficulty following certain routines, particularly circle time. Nearly every morning there is some sort of 'incident' at circle time. Sometimes he just leaves the group and starts to pace around the classroom. Sometimes he sings or hums loudly to himself. And sometimes he becomes what his teacher defines as unpredictable or even 'explosive'.

As a speech-language pathologist on the team consulting to the classroom, I was involved to support Benny's peer interaction, participation at circle time and his understanding of the language used in the classroom. His teacher is concerned that he is distracting the other children. She has used numerous strategies to bring him back to the circle, with little success. She has tried verbally and physically redirecting him, using visuals such as a first-then board, and has offered alternate seating. The teacher feels that she is out of options and that Benny is manipulating her into getting out of work he doesn't want to do. She claims that he just doesn't want to pay attention to the calendar activity, story or song. After observing him in the classroom, I soon realized that Benny was not equipped to interact with his peers, learn language or participate meaningfully in circle time.

How many of you have witnessed a scenario like this? For many of us, situations like these can be very challenging. We might feel that the child is being willful, intentionally defiant or even manipulative and that he needs to be disciplined. However, if we look deeper at the causes of this behaviour, we may learn more about how we can truly help this child. With a bit of investigation and trial and error, we can help him learn to be meaningfully engaged, while restoring balance to the classroom overall. And we can do this through the lens of self-regulation.

What is self-regulation?

Self-regulation is the ability to function at our best in whatever task we are involved in. In the literature, there are many differing opinions of what constitutes self-regulation. For our purposes, we will use Stuart Shanker's definition of self-regulation as the ability to manage the stressors we face in order to maintain a degree of balance (Shanker, 2016). Self-regulation encompasses a variety of factors that support an individual's ability to be calm, alert and responsive to the stimulation they receive. It may not be surprising that self-regulation is crucial to consider in our work with young children.

What's interesting about self-regulation is that, not only is this an important factor in children's ability to cope with everyday life, but it also applies to adults, including ourselves. We all have moments in which we are not very well regulated. Think about a time when you were stuck in a traffic jam and subsequently late for an important meeting at work. How calm were you? You probably felt pretty stressed. Maybe you felt your heart begin to beat faster or perhaps you started to sweat. How quickly did you recover from this stressor? Maybe you took a few deep breaths, used some positive self-talk and calmed down easily or maybe this frustrating drive had a lasting effect on your morning. Were you functioning at your best when your meeting began? Perhaps you weren't able to concentrate fully. Much of your response to this situation depends on how effectively you were able to calm yourself and recover from the stress. This same process applies to young children. When a child is self-regulated and able to recover effectively from the stressors he faces, he can participate functionally in a given task or context. This then paves the way for the child's ability to manage his own thoughts, behaviours, and feelings and engage in goal-directed actions. With self-regulation, executive functions related to attention, memory, inhibition of impulses, and cognitive flexibility are fostered.

At first, young children may need quite a bit of support from adults in order to self-regulate. This is called co-regulation (Murray, Rosanbalm & Christopoulos, 2015). As children mature, they gradually require less support from others as they begin to develop strategies to develop their own self-regulation capacities. It's important to remember, however, that we all need support from others at times, and self-regulation is something that we all continue to work on, even as adults.

Why is this an important consideration for speech-language pathologists?

Self-regulation is an important foundation for further development and learning (Ontario Ministry of Education, 2011; Murray, Rosenbalm, Christopoulos, 2016; Shanker, 2013; Shanker, 2016). It makes sense that a child needs to be calm, focused, attentive and able to participate in order to learn.

Recent studies also point to a clear link between language and self-regulation, with each shown to have an influence on the development of the other (Aro, Laakso, Maatta, Tolvanen, & Poikkeus, 2014; Schmitt, Justice, & O'Connell, 2014; Vallotton & Ayoub, 2011). For more information about research in this area, see our article called Behaviour Regulation and Language: A two-way street?

It doesn't take much to see how relevant self-regulation is in the context of speech and language services. Therefore, as speech-language pathologists, we need to have an understanding of a child's regulation before we can think about targeting goals like improving interaction, communication, language, play and/or literacy. If we think about Benny, how could we begin to support his communication and peer interaction skills if he isn't calm, alert and able to attend to his teacher and peers?

As Hanen speech-language pathologists, we are in a position to empower parents and caregivers to be great co-regulators through the coaching of strategies that may support regulation. The question is: where do we start?

What do we need to consider?

We need to start by observing the child carefully, watching for any signs that a child may not be very well regulated. A few warning signs that the child may be dysregulated include:

- Changes in behaviour, rate of speech, pace or intensity of actions or affect
- Hyperactivity (apparent escalation or over-stimulation)
- Lethargy
- Lack of attention
- Avoidance of situations or people
- Meltdowns

In the case of Benny, the teachers were seeing very sudden changes in behaviour throughout the day, but most notably during circle time. On a good day, he would move more quickly and erratically, and sometimes his singing and humming would become quite loud. On a more difficult day, he would demonstrate meltdowns, such as throwing toys or trying to run out of the classroom. These were clear signs that Benny struggled with self-regulation.

What are the causes?

Next, we need to consider what factors might be affecting Benny's ability to regulate, realizing that these could be different with each child.

There are three sets of internal or external factors that need to be considered – factors to do with the Person, the Interaction and the Environment. We can refer to these elements as PIE.

- P – The person's own, internal make-up as well as some internal, biological experiences. This can include the child's own unique temperament, sensory differences, arousal, as well as potential cognitive, emotional, motor or attention challenges. It is here that we also consider core questions like, "Is the child healthy, hungry, in pain?"
- I – The impact of the interaction on the child's regulation (external). Here we consider how the child's everyday interactions can (often unconsciously) build on or hamper regulation. Are the adults in the child's life tuned-in to the child's preferences and needs? Are they in tune with their own self-regulation? Are they modeling strategies to support self-regulation? It also includes things like parenting/ teaching styles, interactive daily routines, family mental health and any trauma experienced?
- E – The external, environmental factors that support a child's self-regulation. This includes the larger environment in which the child spends most of their time, encompassing factors such as socio-economic status, healthy family environment (i.e. free of abuse, trauma, acute stress or poverty). Environmental factors also include the immediate environment in any given moment (e.g. Is it over-stimulating, such as too bright, busy, or noisy? Is it under-stimulating, lacking opportunity for active engagement and learning? Is it supporting the child's sensory needs and arousal level?)

These factors are all closely connected and they impact each other.

In discussions with the other school consultants, such as the occupational therapist, it became clear that Benny was quite sensitive to sound. During circle time, there were many periods in which voices become louder, such as group singing and chanting. When teachers observed Benny throughout the day, they noticed that it was in contexts like circle time, gym class, outdoor recess and transition times that he demonstrated these changes in behaviour. We then speculated that it may have been Benny's own sensitivity to sound, combined with environmental factors (like being in a louder environment), that were having an impact on his ability to self-regulate. As a team, we knew that we needed to look at supporting Benny, given the environment.

How can we support self-regulation?

As speech-language pathologists, there is a lot that we can do to support a child's self-regulation. Through collaboration and careful consideration of all the factors that can impact self-regulation (P.I.E.), we can then provide coaching regarding effective co-regulation strategies.

For Benny, the initial recommendations that the team made involved modifying the environment so that he was not overwhelmed throughout the school day. The following options were considered:

- Placing half of a tennis ball on chair legs to reduce the noise of scraping chairs at transitions
- Allowing Benny to sit further back from the group at circle time, where it was a bit quieter but he was still encouraged to participate
- Allowing him to wear the noise cancelling headphones that his family provided
- Teacher training regarding co-regulation strategies, including using a quieter voice in circle
- Providing alternate activities in gym class

Once we can support a child's ability to function in his environment, we can then aim to support his ability to participate and interact throughout the day. We can now start to think about using supportive interaction strategies. Hanen speech-language pathologists can provide co-regulation support for young children, educators and families through a variety of strategies. In fact, responsive interactions and the co-regulation that occurs in meaningful social relationships have been found to be supportive of self-regulation (Murray et. al, 2016).

You may be surprised to learn that many of the strategies you are already using to support interaction, communication and language can also support a child's self-regulation. Many Hanen strategies not only support early interactions and language stimulation, but also the development of regulation. OWL™, Face to Face, Follow the Child's Lead and Match your child's turns by pace, length and interest are examples of these strategies.

As Hanen speech-language pathologists, we are in a position to empower parents, caregivers, and educators to be effective co-regulators so they can support the development of children's communication abilities. With a greater awareness of the importance of self-regulation and how we can influence it, we can use our familiar strategies with more intent and also draw upon new ways to best support children's learning.

To learn more about how you can support children's self-regulation and explore additional case examples, watch for our e-seminar "Pathways to Self Regulation," coming this fall.

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About The Hanen Centre

Founded in 1975, The Hanen Centre is a Canadian not-for-profit charitable organization with a global reach. Its mission is to provide parents, caregivers, early childhood educators and speech-language pathologists with the knowledge and training they need to help young children develop the best possible language, social and literacy skills. This includes children who have or are at risk for language delays, those with developmental challenges such as autism, and those who are developing typically.

For more information, please visit www.hanen.org.

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