Supporting Students with ADHD in the Mainstream Classroom Through the Use of the Alert Program®

By

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Abstract

This project investigates how two teachers implement the Alert Program® to support their students with characteristics of Attention Deficit Hyperactivity Disorder in the general education classroom. Qualitative methods of data gathering were employed in the form of participant interviews. Participants were interviewed for approximately forty-five minutes each. This qualitative research study looks at the teachers’ perspectives and opinions about the successes and challenges of implementing the Alert Program®. Findings that emerged from the data are presented in themes. The predominant themes presented are the implementation of the Alert Program®, perceived impacts on students and the classroom environment, and a change in teacher understanding. A final discussion where the findings are situated within the literature is also presented. These teachers provide valuable insight into the challenges and strengths of implementing the Alert Program® such as, the improved relationships between teachers and students with characteristics of ADHD. There must be greater discussion about supporting diverse learners, particularly for students’ who have challenges with self-regulation. This research helps to focus greater attention to the connection between ADHD, self-regulation, and sensory processing disorder.

Keywords: ADHD; self-regulation; sensory processing disorder; Alert Program®; accommodation
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Chapter 1: Introduction

Introduction to the Research Study

With an increasing demand for teachers to accommodate and support all students successfully, there is a disconnect between how students with Attention Deficit Hyperactivity Disorder (ADHD) learn and operate in a classroom, and how they are actually being taught. It is estimated that five percent of children in Canada have ADHD (American Psychiatric Association, 2013). Students with ADHD experience being distracted in the classroom. They are more distracted than their peers, and often more impulsive and hyperactive than their peers due to their difficulty to think critically about their actions; consequently making the classroom experience more challenging for them (Shapiro, DuPaul & Bradley-Klug, 1998). This, of course, also makes it more challenging for teachers as “the majority of classroom teachers lack knowledge of what constitutes appropriate interventions and modifications” (Nowacek & Mamlin, 2007, p.28). The focus of this research is to provide support to teachers on how to support these students.

Purpose of the Study

Keeping these challenges in mind, the objective of my study was to focus the experiences and perspectives of two classroom teachers who have implemented the Alert Program® as a way to support the self-regulation of students with ADHD in their classrooms. The Alert Program® is a program focused on helping students self-regulate by monitoring their sensory needs and alertness levels (Williams & Shellenberger, 1996). Although teachers may not receive formal training for the Alert Program®, my hope is that teachers will be able to use some of the Alert Program®
methods and elements in their classrooms to help students regulate their behavior in order to better perform to their abilities.

**Research Questions**

The specific research question I addressed is: How do teachers use and implement the Alert Program® and what are the perceived impacts on students with attention deficit hyperactivity disorder?

Four specific sub questions I addressed were:

1) What aspects of the Alert Program® are most successful and why?
2) What is the perceived impact of the Alert Program® on the classroom environment?
3) How is the Alert Program® implemented into classrooms?
4) What is the perceived impact of the Alert Program® on peer and teacher relationships?

To find responses to my above questions, I conducted qualitative research using semi-structured interviews and a literature review. I interviewed two elementary teachers from Quebec who are implementing the Alert Program® in a mainstream classroom setting with students with characteristics of ADHD.

**Background of the Researcher**

I initially took interest in the Alert Program® after working with a teacher who implemented the program into her classroom with great success. As I observed children positively respond and take responsibility for their learning through regulating their own sensory needs and behaviors, I knew that it was something I wanted to learn more about. After attending a two day conference delivered by the founders of the Alert Program®, I became more interested in
learning about sensory processing disorder and how it can affect students with characteristics of ADHD in the classroom. I chose to research this program and its applications for students with characteristics of ADHD specifically because I was interested in learning more about how teachers can better support students with self-regulation of behavior by using the Alert Program®.

**Overview**

In chapter two, I review literature focusing on definitions of the ADHD, self-regulation, sensory integration, and the Alert Program®. I also reviewed the literature on how students with characteristics of ADHD affect teachers’ emotionally and in regards to their teaching practice, how sensory integration and self-regulation are beneficial in a classroom, and finally, how the Alert Program® benefits students with characteristics of ADHD by looking at methods the program uses. In chapter three, I expand on my research design focusing on: participant criteria, how I located my participants, how I intended to do my data collection and analysis, and a reflection on the ethical protocol and interview questions. In chapter four, present my research findings which are organized by themes. These themes are: why the Alert Program®, implementation of the Alert Program® in classrooms, perceived Impact on students and classroom environment, noted drawbacks of the program, and change and understanding. Finally, in chapter five, I discuss my findings and situate them within the literature. In addition, I discuss the implication and recommendations from my study.
Chapter 2: Literature Review

What is ADHD?

**ADHD Defined**

Attention Deficit Hyperactivity Disorder (ADHD) is a disability that presents itself in the form of "executive function deficits" (Ministry of Education, 2010, p.25). Executive functions involve control processes such as goal-oriented planning, self-monitoring of behavior, regulation of emotions, and inhibition (Clark, Prior & Kinsella, 2000). The four defining symptoms of ADHD are impulsivity, hyperactivity, distractibility, and inattention (Shapiro, et al., 1998; Nowacek & Mamlin, 2007; Viola & Noddings, 2006; Ohan & Johnston, 2007; Mangeot, et al., 2001). This disability is the most frequently diagnosed neurodevelopment, biological condition (Viola & Noddings, 2006; Fedewa & Erwin, 2011) that is typically diagnosed in childhood and can affect academic and social performance (Dunn & Bennett, 2002). Research has shown "boys are three times more likely to be diagnosed with ADHD than girls" (Viola & Noddings, 2006, p. 11). According to The Diagnostic and Statistical Manual of Mental Disorders (DSM-5), ADHD is displayed as a “persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or developing as characterized by [inattention] and/or [hyperactivity and impulsivity]” (American Psychiatric Association, 2013, p.60). The symptoms above need to have “persisted for at least six months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities” (American Psychiatric Association, 2013, p.60). In order to diagnose ADHD, children must display six or more of the symptoms listed in the DSM-5 for at least six months prior to the age of twelve in two or more settings that show “clear evidence that the symptoms interfere with, or reduce the quality
of, social, academic, or occupational functioning” (American Psychiatric Association, 2013, p. 60).

Ultimately, a students’ ability "to regulate their own behavior is an important component of academic success" and this is an ability students with ADHD often lack (Ministry of Education, 2010, p.31). When students struggle to make smooth transitions between activities, classes and school settings, they fall behind in the class (Ministry of Education, 2010). The impairment in a students’ ability to pay attention and concentrate are detrimental to a student, especially in a school setting as "they are key elements in the learning process” (Gallotta, et al., 2011, p.550). Often accompanying the symptoms of ADHD, is "the presence of a low frustration tolerance, which causes the student to become upset or angry at seemingly minor infractions to his or her personal space and being" (Scheerer, 1992, p.344). This impairs a students’ ability to learn as they are consistently getting discouraged at the work they are unable to complete as well as getting irritated with their peers easily (Scheerer, 1992).

**ADHD in School**

Students with ADHD may present difficulties in paying attention at school due to their inattention or hyperactivity. Carbone (2001) states, paying attention is a “multitask process” which requires students to “select something to attend to, sustain focus for a necessary period, resist distractions, and finally shift our attention elsewhere” (p.77). A student with ADHD may have difficulty at one or more of these steps due to their disability (Carbone, 2001). With this difficulty paying attention, students “often have difficulties following teacher instructions and completing school assignments” leading them to appear less successful in school (Dang, et al., 2007, p.3). Ultimately, students with ADHD may struggle in school due to their lack of attention, im-
pulsivity to call out, or difficulty remaining seated which disrupts their own learning as well as their classmates (Viola & Noddings, 2006; Greene, et al. 2002). It is suggested that teacher response to ADHD must be individualized and should be “tailored to each child's needs with careful consideration of the child's personal history and coexisting conditions” (Dang, et al., 2007, p. 10). It is common for educators to make quick decisions due to the nature of their job: covering a curriculum, managing a class, creating IEP’s and accommodating a variety of students. Due to the business and demands of the teaching profession teachers may focus more on what they perceive to be the problem within the child rather than reflecting on what may be happening in the classroom to initiate these behaviors.

Misunderstanding Surrounding ADHD and the School System

There are many conflicting thoughts surrounding ADHD in the school system, and perhaps one of the most concerning conflicts is that onus is being placed on the child for misbehaving “rather than considering that the problems may exist within the educational system” (Glass & Wegar, 2000, p.414). Perhaps students show characteristics of ADHD because the traditional teaching methods require students to sit and remain quiet for extended period of time, while working on repetitive assignments, do not work for the twenty-first century child who is constantly engaged and entranced by video games, movies and television (Glass & Wegar, 2000). An idea that relates closely to placing blame on the student is that children are being over labeled and being labeled incorrectly. If a student is labeled, teachers may have preconceived notions about the students’ behavior or work ethic; these labels “erode [ ] away the potential to see the best in every child” (Krowski, 2009, p.5). Similarly, Glass and Wegar (2000) state teachers have become “more accepting of the concept that the undesirable behaviors are inherent within the
child and are not affected by outside influence” making them more eager and open to labeling children rather than taking the time to investigate the cause of the behavior (p.415). A final conflict is the idea that children with ADHD have ‘abnormal’ behavior. As Glass and Wegar (2000) state, “the designation of abnormality allows the introduction of medication and social control of behavior” (p.415). Perhaps as a society we are placing too great an emphasis on what is wrong and ‘abnormal’ with the child as opposed to what is exceptional and unique about the child, which causes teachers to develop the views and misconceptions they have about students with characteristics of ADHD.

Social Implications for ADHD

Children diagnosed with ADHD are at risk for poor social relationships and are more likely to be rejected by peers (Frankel & Feinberg, 2002). Social interactions with students with ADHD have often been found to be "more frequent[ly] [ ] intensely awkward" (Ohan & Johnston, 2007, p.249). Children with ADHD tend to show more aversive behaviors, such as being hostile, disruptive, assertive, impulsive, and aggressive, but in some cases these children have also been noted to become withdrawn in classroom settings (Frankel & Feinberg, 2002; Viola & Noddings, 2006; Nowacek & Mamlin, 2007). A study conducted by Carlson, Lahey, Frame, Walker and Hynd discussed the possibility of the aversive behavior lending itself to "peers more frequently nominat[ing] children diagnosed with ADHD as ‘least liked’" (Frankel & Feinberg, 2002, p.125). In another study investigated by Frankel and Feinberg (2002), students with ADHD were put into hypothetical social situations and asked to problem solve; the results showed that the children with ADHD took “less friendly and effective, more assertive and impulsive solutions to social problems” (p.129). While many cases have been presented for those with
ADHD being less friendly, more assertive and impulsive, there are cases in which students with ADHD have withdrawn from social situations in classroom environments (Frankel & Feinberg, 2002). Although ADHD is more common in boys than girls Ohan and Johnston (2007) found, conducted a study that observed the social impacts of ADHD on girls which reveals, "ADHD behaviors may be even more destructive to girls' tighter, more intimate social milieu than to boys' looser for active social networks" (p.239).

*Student Parent Relationships*

There is evidence that positive parental relationships “are beneficial throughout the schooling years” impacting a students’ schooling outcome (Froiland & Davison, 2014, p.3). According to Graziano et al. (2011), when parenting a child with ADHD, there is additional parenting stress due to the “mismatch between perceived demands of parenting and available resources to meet those demands, [creating] aversive feelings” (p.1073). Children with ADHD are seen as more talkative, negative, demanding, less compliant, and less cooperative (Graziano et al., 2011 & Johnston, 1996), which may cause higher levels of parenting stress. Higher levels of parenting stress has been linked to parents being more authoritarian, harsh, commanding, negative, controlling, less interactive and less involved with their children (Graziano et al., 2011; Johnston, 1996; Lifford et al., 2008). Graziano et al. (2011) found that “reducing parenting stress has been recognized as crucial in [ ] improving the parents’ psychological well-being, but also because it may impact the parents’ ability to successfully implement a treatment for their child’s difficulties” (p.1073).
How does having a student with ADHD impact a teacher and their teaching?

*Emotional Impacts on Teachers who have students with ADHD*

Having a student or many students with ADHD can be time consuming and exhausting for teachers (Cahill, 2006; Green, et al., 2002). Many teachers have reported feeling frustrated, overwhelmed, and stressed, finding students demanding, and being challenged by identifying and labeling students (Cahill, 2006; Ohan & Johnston, 2007; Krowski, 2009; Greene, et al., 2002). Cahill found teachers expressed their “dissatisfaction with active children [students with ADHD] who walk to the beat of a different drummer and consequently drive them crazy” (Cahill, 2006, p.2). Similarly, Greene et al. (2002) found that teachers reported and rated their students with ADHD as “significantly more stressful to teach (across multiple domains) as compared to their classmates without ADHD” (p.83). Students with ADHD often behave in impulsive ways, by calling out, or become a distraction in the classroom due to their fidgeting, which “demands a lot of attention” from a teacher to control the behavior so that other students are not distracted (Ohan & Johnston, 2007, p.240). Another emotion that emerges with having students with ADHD is an overwhelming feeling in having to “identify[ ] these students and subsequently implement[ ] the most effective ways of assisting them” (Krowski, 2009, p.7).

*Teacher Preparedness and Prior Knowledge of ADHD*

In an upsetting find, Krowski (2009) found, “teachers pressure parents to put their children on medication, schools are unable to implement behavior management, [and] teachers are not willing to accommodate children with ADHD” (p.18). Perhaps this can be attributed to the lack of preparedness and prior knowledge when addressing students with ADHD in their classrooms.
Researchers have found that teachers who have inadequate knowledge and minimal training with ADHD become burdened, overwhelmed and unconfident in tackling ADHD (Krowski, 2009; Carbone, 2001).

**Implications for Planning and Teaching**

As Krowski (2009) states “making sense of students’ problematic behaviors and meeting their individual needs, while at the same time meeting the needs of other students in the class, poses a unique challenge for educators” (p.1). Teachers have a primary responsibility of creating and implementing effective interventions tailored to each student’s emotional and educational needs (Reynolds & Lane, 2009; Krowski, 2009). This is a time consuming task and may account for teachers not “willing to accommodate children with ADHD” (Krowski, 2009, p.18). In an observation by Greene et al. (2002), student-teacher interactions were recorded between control-led students and students with ADHD. This study found “teachers engaged in significantly higher rates of negative interactions with students with ADHD as compared to students in the control group” (Greene et al., 2002, p.86). This is a devastating find, negatively reflects teachers who are overwhelmed, stressed, and unsure how to handle these students due to their lack of training in special education (Greene et al., 2002).

**Sensory Processing; What is it and how is it connected to ADHD?**

*Sensory Processing Defined*

Sensory processing is the "neurological process involving the registration, modulation, and integration of sensory information" in an environment (Bagatell et al., 2010, p.895). Sensory information is received through the "mouth, body (movement, touch), eyes, and ears" (Morgan &
Motin, 2011, p.23). Efficient sensory processing is necessary for "optimal occupational functioning, including the ability to learn and modulate behavior" (Bagatell et al., 2010, p.896). Ghanizadeh (2011) suggests, "the cause of sensory processing disorders is unknown but may be linked to genetics" (p.90). When the nervous system is "unable to integrate incoming information smoothly, resulting in the misinterpretation of information and roadblocks to creating appropriate perceptions, behaviors, and learning experience" a dysfunction occurs (Viola & Noddings, 2006, p.40). There are two types of dysfunctions that may occur making people hypersensitive or hyposensitive. Hypersensitive children usually demonstrate "strong emotional reactions to sensations and may appear anxious and frustrated by the world around them" (Reynolds, Lane & Gennings, 2010, p.469). Hypersensitive children also register sensory sensations faster, longer and more intensely than normal developing peers (Viola & Noddings, 2006; Ghanizadeh, 2011). The behavioral responses to hypersensitivity are usually 'flight or fight' which include aggression, fear, avoidance, withdrawal, irritability, moodiness, anxiousness, and clinginess (Reynolds & Lane, 2009; Mangeot, et al., 2001). For example, a child that has tactile hypersensitivity may become defensive when they are getting their hair brushed or cut, or avoid interacting with play media such as sand, finger paints, glue, or clay (Ghanizadeh, 2011; Reynolds, et al., 2010).

Hyposensitive children register sensations less intensely and may sometimes be unaware or slow to respond to the sensory input than their peers (Viola & Noddings, 2006; Ghanizadeh, 2011). The behavioral responses to hyposensitivity are a disregard for others, an inability to regulate intensity during interactions with others, mania, and hyperactivity (Mangeot, et al., 2001; Reynolds & Lane, 2009). Often, when students have difficulty expressing appropriate behaviors "teachers feel that it is a behavior issue and are not aware that the behavior is due to the students'
inability to process sensory information from their environment" (Morgan & Motin, 2011, p.22). One intervention approach to address the behavioral problems of children with ADHD at school, is to adapt the environment to meet the children's needs" (Schilling, et al., 2003, p.535). Another intervention is introducing students to sensory processing and self-regulation. In doing so, teachers may able to help their students focus their attention better as well as help them respond appropriate to their environment or a situation (Schaefer, 2011).

_Sensory Processing and ADHD_

Although sensory problems in children with ADHD is not a highly studied area, there is evidence that sensory processing problems in children with ADHD are more common than in children without ADHD and the patterns of sensory self-regulation are significantly different from typically developing children (Ghanizadeh, 2011). Children with ADHD may not be taking in and processing sensory information properly and "therefore have difficulty producing appropriate responses at school, home, or in the community" (Dunn & Bennett, 2002, p.6). In a study conducted by Mangeot et al. (2001), responses to sensory stimulation in twenty-six children with ADHD found that children with ADHD display "significantly greater difficulties with sensory processing than a sample of typically developing children" (p.403). They also found that a good prediction of particular behavioral problems such as aggression, and delinquent behaviors, was the stimulation levels of students with ADHD (Mangeot, et al., 2001).

Sensory processing has a "strong correlation with academic achievement and cognitive processing in ADHD" (Ghanizadeh, 2011, p.91). Children diagnosed with ADHD often “experience significant academic and sensory motor problems that make typical school activities a challenge" (Schilling et al., 2003, p.534).
Maslow’s Hierarchy of Needs

Maslow’s hierarchy of needs is “a hierarchical list of needs with physiological needs at its’ base and psychological needs at the top” (Gordon Rouse, 2004, p.47). Maslow defined these needs as “goal states that motivate and drive people to increase and reduce tension” (Gordon Rouse, 2004, p.47). The levels of the hierarchy are physiological needs, safety needs, belongingness needs, esteem needs, and finally self-actualization (Gordon Rouse, 2004). These needs specifically refer to different aspects in a student’s life:

- Physiological needs, refers to needs such as food, water, and sleep. Safety needs, refers to the needs for shelter and protection from danger. Belongingness needs, refers to the needs to be part of a group and also to the needs to love and be loved. Esteem needs, concerns the needs to feel good about oneself, ones’ abilities and characteristics. At the top of Maslow’s hierarchy of motivators is self-actualization (Gordon Rouse, 2004, p.47).

When one of these needs are fulfilled, a person can move up through the different levels of the hierarchy; “as a need is satisfied, it largely disappears, and the individual begins new motivation, new focus, to fulfill the next higher need of the pyramid” (Weinberg, 2011, p.17).

Weinberg (2011) states in an education setting “more positively oriented education concerns itself more with the growth and future self-actualization of the child” (p.17). According to Weinberg (2011), “the average child in our society generally prefers a safe, orderly, predictable, organized world, which [he or she] can count on” (p.17). In a classroom, “the need to feel safe can be as dominant and obsessive as the need for food. It can monopolize all of an individual’s energies and attention” (Weinberg, 2011, p.18). Similarly, Slade and Griffith (2013) found,
when students’ basic physiological and psychological needs (safety, belonging, autonomy, and competence) are satisfied, they are more likely to become engaged in school, act in accord with school goals and values, develop social skills and understanding, contribute to the school and community, and achieve academically” (p.26).

The Alert Program® appears to be one method that helps fulfill students’ needs on the hierarchy in order for students to become successful members of the school community.

What is self-regulation and why is it important?

Self-Regulation Defined

As self-regulation is the primary focus of the Alert Program® it is important to understand what is it (Williams & Shellenberger, 1996). Researchers found that alertness or arousal levels fluctuate considerably within an activity or class (Schilling, et al., 2003). Self-regulation is a process that involves the technique of monitoring one’s own behavior and regulating intensity and nature of behavioral responses in a given situation (Shapiro, et al., 1998; Schilling, et al., 2003; Mangeot, et al., 2001). Looking specifically at behavioral responses, sensory self-regulation presents "as the responses to sensory stimulation that facilitate appropriate interactions with the environment" (Reynolds, et al., 2010, p.469). Contingency-based self-regulation has been quite effective for students with ADHD. It involves the "individual [ ] evaluat[ing] his or her own responses using self-monitoring, self-rewards, and self-recording" (Shapiro, et al., 1998, p.546). In a classroom setting, self-regulation can be defined as the "ability to attain, change, or maintain an appropriate level of alertness for a task or situation" (Schaefer, 2011, p.24).

Self-Regulation and the Connection to ADHD
Children with ADHD have been reported to have difficulties in all areas of sensory processing and their emotional responses to sensations (Mangeot, et al., 2001). Self-regulation with sensory processing deficits may contribute to attention deficits. One explanation for why students with ADHD are hyperactive or fidgety is because they are trying to meet their sensory needs to maintain an optimal state of arousal for learning (Schilling, et al., 2003).

In a study conducted by Bolstad and Johnson, self-regulation procedures were reported to be "as effective, if not slightly more effective, than external regulation procedures" (Bolstad & Johnson, 1972, p.453). Although very time consuming during initial phases of implementation, over the long run, the majority of monitoring can be handed to the child as they take on more responsibility of their self-regulation (Shapiro, et al., 1998; Bolstad & Johnson, 1972). In the study, students as young as first grade "were capable of self-observing their behavior with respectable accuracy" (Bolstad & Johnson, 1972, p.451). It has been observed that when the "disruptive behavior of [ ] the most disruptive students in a class [were] substantially reduced," the disruptive behaviors of the whole class also declined (Bolstad & Johnson, 1972, p.453). Above all, Cahill (2006) notes, there is an element of student self-worth to consider when implementing self-regulatory programs. He states, "instead of being judged [for their label], students are empowered to be in control of their engines [alertness levels], and therefore, their behavior" (Cahill, 2006, p.2).

**What is the Alert Program®?**

*Alert Program® Defined*

The Alert Program® was created to help children "monitor, maintain, and change their alertness level, so that it is appropriate to a situation or task" (Morgan & Motin, 2011, p.22). The
program introduces children and adults to a variety of sensory processing strategies that "are designed to provide [ ] the sensory input needed to maintain arousal states" (Bagatell et al., 2010, p. 895). The literature suggests that this program helps give children independence in handling their own sensory needs rather than trying to control negative outcome as they learn to identify their own arousal states (Morgan & Motin, 2011; Williams & Shellenberger, 1996). The Alert Program® is designed to teach children how to recognize their own "arousal states as they relate to attention, learning and behavior" and help children recognize and expand on the self-regulation strategies they use (Williams & Shellenberger, 1996, p.1-1). This program uses the metaphor of a car engine, which either runs at high, low, or just right. Every person has an engine and the "trick is to find where your engine runs best for optimal performance and learning" (Schaefer, 2011, p. 24).

Implementation of the Alert Program®

There are three stages involved in implementing the Alert Program®. In keeping with the car engine metaphor, stage one involves identifying engine speeds, where students learn engine words and learn to identify their levels and labels (Williams & Shellenberger, 1996). Stage two involves experimenting with activities and tools to change engine speeds by trying different strategies or methods to regulate their engine levels. Finally, stage three involves regulating engine speeds independently; students are given freedom to choose their strategies or methods to adjust their engine speed to the task at hand (Williams & Shellenberger, 1996).

Alert Program® and the Classroom Environment
Often, when students have difficulty expressing appropriate behaviors "teachers feel that it is a behavior issue and are not aware that the behavior is due to the students' inability to process sensory information from their environment" (Morgan & Motin, 2011, p.22). An important aspect of the Alert Program® is the implementation of the program into the classroom environment, rather than having a specific schedule for when students will be using the Alert Program® tools. Glass and Wegar (2000) argue, “the educational environment of the child [ ] lead[s] the child to exhibit negative behaviors that are uncharacteristic of him or her outside the academic setting [because there is a] mismatch between the child and the environment” (p.413). The Alert Program® helps to address students’ sensory needs before they become problematic within the classroom. Carbone (2001), states it is important that teachers “emphasize antecedent intervention classroom changes directed toward proactive change, before the problem becomes overwhelming” (p.72). This aligns with the Alert Programs® idea of the top down approach versus the bottom up approach. If you are using the bottom up approach, you give the students what they need to successfully complete an assignment or activity. If you are using a top down approach, you are encouraging the student to complete an assignment or activity by rewarding them with a sensory item they may need upon completion. The bottom up approach focuses on the body to the brain while the top down approach, which is least effective, focuses on the brain to the body. By integrating the Alert Program® tools into the classroom environment, students can “regulate [their] stimulation levels to the appropriate degree” (Carbone, 2001, p.73).

Alert Program® Tools

Some tools that the Alert Program® use are "therapy ball chairs, weighted vests, [ ] fidgets [objects to hold and manipulate] as well as chewy's" (Bagatell et al., 2010, p.895). These
tools are meant to meet the child's sensory needs from the sensory inputs: mouth, body (movement, touch), eyes, and ears. The therapy ball appears to have a positive impact as it gives the child an opportunity to move and maintain their alertness level without being a distraction to the class (Bagatell et al., 2010, p.895). In a study conducted by Fedewa and Erwin (2011) teachers reported that when students sat on a therapy ball, they were more attentive, had higher achievement outcomes, and were able to concentrate better than when they were sitting on a classroom chair. In this study conducted over a twelve-week period, the observed students were initially spending an average of forty-five percent of their time being seated and were on task only ten percent of the time. After the implementation of the therapy balls, students were seated approximately ninety-four percent of the time and were on task almost eighty percent of the time (Fedewa & Erwin, 2011). The teacher noted that it appeared that students were using the therapy balls as a means of self-regulation for their personal sensory needs (Fedewa & Erwin, 2011). Similarly in a study conducted by Schilling et al., (2003) improvements in seating behavior and productivity were evident and for all participants "both in-seat behavior and legible word productivity improved when seated on the therapy balls" (p.537).

Another self-regulation strategy used by the Alert Program®, is the use of movement to promote alertness and bring students back to an optimal state for learning. A study conducted by Gallotta et al. (2011) found that "acute exercise of different duration, different intensities and different types" can positively influence a student's alertness (p.550). These activities involve brain breaks, brain gym and dances. Gallotta (2011) noted the exercise or exertion had immediate effects on students’ performance, but did not extend throughout the day. Schilling et al. (2003)
speculates that exercise does not produce effects that last throughout the day because children's alertness varies throughout the day, from minute to minute.

To fulfill the need for oral stimulation, the use of a chewy is strongly suggested. A chewy can be a piece of rubber tubing, a straw or another object students can chew on (Scheerer, 1992). There are connections in the mouth to the dorsal motor nucleus, which affects autonomic structures of the chest and abdomen (Scheerer, 1992). The authors argue that, "these connections can slow down the heart rate" which may be a reason that "having something in one's mouth to chew or suck on can provide a calming, organizing, and focusing effect" (Scheerer, 1992, p.344). A chewy can be considered part of a total package that can "help children cope with stress, their own activity levels, or the individual sensory needs of their mouths" as this satisfies their sensory diet" (Scheerer, 1992, p.345).
Chapter 3: Methodology

Procedure

This investigation is a qualitative research study that investigates two teachers’ experiences implementing the Alert Program® in mainstream classrooms with students with characteristics of ADHD. My literature review was used to inform my data analysis. I used many sources including qualitative studies, quantitative studies, Ministry documents, and a program guide for the Alert Program®. The majority of my sources were published in the last ten years, however some sources were published beyond that and were still relevant with current findings. I also conducted two separate interviews over the phone with two teachers who have been formally trained in the Alert Program® and at the time of the study, were implementing the Alert Program®.

Instruments of Data Collection

I conducted informal semi-structured interviews, which allowed me to focus on my research questions with the possibility of further expanding the questions. The interviews were no more than 50 minutes in length. They were focused on pre-determined questions that were sent to the participants three days prior to the interview. The questions focused on professional background and experience of participants, the Alert Program® in the classroom, and successes and drawbacks of the program (see Appendix B for interview questions).

Participants

I interviewed two primary teachers (Kindergarten to Grade 3) working in a Quebec public school in the Eastern Townships. Both teachers work at a school where the program was first im-
plemented as a school wide approach in 2009. The participants were trained in 2010 by a local occupational therapist, and received official training in 2011 by the founders of the Alert Program®, Mary Sue Williams and Sherry Shellenberger. Both participants have had students who had characteristics of ADHD within their classrooms. My decision to interview primary teachers comes from my own interest in this specific age group in school, particularly when students are less likely to have been formally identified with ADHD because of their young age. I chose to interview teachers in Quebec, because it is initially where I learned about this program and I knew that I would find teachers in Quebec who are Alert Program® trained.

**Data Collection and Analysis**

Each interview was digitally recorded and then transcribed for analysis. During the interviews I made notes of thoughts and questions that emerged throughout. During the transcription process I noted key ideas and commonalities between the two interviews. I used the data analysis spiral presented by Creswell (2013) which details the procedures that I followed, beginning with data collection; data managing, reading and memoing; describing, classifying and interpreting; representing and visualizing, and finally account (p.183). I began my analysis process by coding the interview transcripts which as Creswell (2013) describes is the process in which the text is accumulated into small categories of information (p.184). I then proceeded to sort the many codes I developed into themes. Creswell (2013) describes themes as, “broad units of information that consist of several codes” (p.186). The data analysis process was conducted through a lens that is focused on supporting students’ with characteristics of ADHD.
Ethical Review Procedures

I followed the ethical review approval procedures for the Master of Teaching program at OISE. My participants were recruited through an email sent to teachers implementing the Alert Program® in their classrooms to participate in my study. Once participants showed interest, they were sent a consent letter (see Appendix A) and a preview of the interview questions (see Appendix B). Participants were required to sign the consent form in order to participate in the study. For the purpose of anonymity, pseudonyms were used. Participants also had the right to withdraw from the study at any time. Both the participants and I have a hard copy of the signed consent form for record keeping. All raw data has been stored safely on my personal laptop.

Limitations

There are limitations related to this study, partially due to the parameters of the Master of Teaching program and time constraints. The limitations are selective literature review, limited interview questions, small sample size and interview method, lack of generalizability, and researcher bias.

My literature review is limited in its scope. This is primarily due to the lack of research on the Alert Program® specifically. I was required to research elements of the Alert Program® separately. The literature review is not comprehensive as there are many academic research studies that have contributed to this field that I have not included in my study, specifically addressing the connection between ADHD and sensory processing as well as the implementation of the Alert Program® as a whole in classrooms.
In order to stay within the 45-minute interview structure, I designed eleven questions that I believed would answer the guiding question, and subquestions. I realize that these interview questions were limited and focused specifically on my interests and did not provide an opportunity to address my participants wealth of experience and knowledge. Due to technological difficulties, interviews were conducted over the phone, rather than Skype, which was a drawback as I could not see the informal communication that could have helped in the communication (Creswell, 2013).

This study’s small sample size was another limitation. The results of this study were very specific for primary teacher experiences in one specific school in Quebec. This was partly due to the limited exposure that the Alert Program® has in Canada. As a result, the findings from this study are not generalizable to the larger population. The participant’s strategies and comments are particularly those they find successful and the experiences that have been successful for their own classrooms. However, I believe that the results achieved give ideas and suggestions for implementing the program in any primary/junior classroom.

I also acknowledge my own bias in this research as the primary investigator of this study; the research presented reflects my own understanding of the data collected. These understandings are informed by my own personal experiences, biases, and assumptions. I have observed the successes of the Alert Program® in a school setting, which initially sparked my interest in this program. I have also completed the Alert Program® training with Mary Sue Williams and Sherry Shellenberger, where I gained insight into the theory behind this program and a genuine interest in implementing this program into my own classroom. These experiences may inform my bias towards favoring this program.
Chapter 4: Findings

Introduction

In this chapter I present the findings from this study by themes. The research findings were gathered and analyzed from two interviews which were conducted in October 2014. The data was collected from two participants responses. Both participants are full-time teachers currently working in the Eastern Townships in Quebec. Both participants have had training in the Alert Program®, and have been using the Alert Program® as a school-wide program. Transcripts of their interviews were analyzed for emergent themes, which will be discussed below organized by theme headings. Their teaching experiences and beliefs about implementing the Alert Program® and supporting students with characteristics of ADHD offer insight into how this program can help teachers support their students. My findings are comprised of an introduction to each of the participants, an overview of why they use the Alert Program® in their teaching, how the Alert Program® has been implemented, perceived impact on students and the classroom environment, noted drawbacks of the program, and finally, the change and understanding of teaching practices.

Context and Background

Charlotte:

Charlotte is a grade one teacher who has been teaching for thirty-four years in Quebec. She has taught in a variety of schools and has taught Kindergarten to grade six homeroom as well as French as a second language and English as second language. She received her first Alert Program® training from a local occupational therapist and then by the creators of the Alert Pro-
gram®, in 2010. It took her four years to implement the program the way that worked best for her and her classroom. She initially decided to implement the program because she knew that it answered the needs of some of her students. Charlotte’s purpose for implementing the Alert Program® is to help students grow. She emphasizes this by telling students, “every time I give you tools it’s because I’m here to help you grow”.

*Lucy:*

Lucy is a grade two teacher who has been teaching for sixteen years in Quebec. She has taught every subject from Kindergarten to grade three. Over the last eight years, she has specialized in early intervention for children at risk in grade one and grade two. She has been using the Alert Program® personally with her own children for at least ten years and has been using it in the classroom for five years. Her initial Alert Program® training was also given by a local occupational therapist, followed by formal training by the creators of the Alert Program® in 2010. She made the decision to implement the program in order to help students, “stay engaged, [and] increase their self-confidence.” Lucy's goal is to be a facilitator by introducing tools such as a chewing objects, keeping track of the tools used, and tracking the students’ profiles, specifically noting whether the student uses these tools successfully or not.

**Why Alert?**

*See a Need, Fill a Need*

Both participants talked about the importance of a student’s ability to self-regulate their own behavior. Lucy emphasized, “it’s [self-regulation] becoming big everywhere… you can’t get around it anymore.” Charlotte noted, “even in a normal situation, we all have our self-regulation
[habits], you know how to behave in society.” Lucy and Charlotte both emphasized their belief in the program and their determination to help their students. Charlotte feels strongly that this program, “answered the needs of some of the kids and it would help their self-regulation and their engagement.” Similarly, Lucy recognized that some of her students were struggling and decided to use this program to help students, “stay engaged, increase their self-confidence and empower them to be able to take care of their little bodies.”

**Maslow’s Hierarchy of Needs**

Lucy felt that while the Alert Program® may not be prevalent in the Canadian school systems, the theory behind it is not a new educational philosophy. She emphasized the importance of understanding Maslow’s impact on this. She stated, “Maslow was the grass-root of all this, now they’re just tagging the name on it ‘self-regulating’, it really is just his first two tiers.” Lucy said, “this is not a new educational philosophy, and it’s not a flavor of the day, it’s not going to go away”. Both participants highlighted the importance of understanding how critical these underlying theories behind the Alert Program® are.

**Implementation of the Alert Program® in classrooms**

While both teachers feel they successfully implement the Alert Program® into their classrooms, the way that they approach this is drastically different.

**Charlotte’s Approach**

Charlotte believes that you have to find what works best for you, rather than using someone else’s approach. Charlotte’s approach begins in September, by observing the students and their habits for the month. She said, “I just take noted and I observe” and then by the end of Sep-
tember, students are ready to have an afternoon of workshops. The workshop involves an after-
noon, usually on a Friday, of centers so that students can try all of the different tools for the diffe-
rent senses. The five centers are focused on the mouth, touch, movement, reading, and supports
for desk work. At the mouth center, students “try [ ] chew[ing] [on] different things, [ ] blowing
with the feathers, [ ] then [with] the straws and the gum.” At the touch center, students try “fidgets and they feel the kind of texture they like and things like that with their hands.” The move-
ment center is in the hallway, which offers students a place to leave the classroom throughout the
year. At the movement center, students “do heavy work, [ ] they have the elastic and the inner
tube of a tire [to stretch and pull], [and] they have a poster where they can do brain gym or push
ups”. At the reading center, students “explore using head sets and whisper phones, and little
strips of paper, the yellow ones to help them follow when they read; the pointer, [and] they try a
lizard on their lap [weighted for sensory purposes].”

Finally, at the desk center, students “try a wedge [a special cushion for the chair]. They
also try to work with the whisper phone, [different types of] cushions to sit on the chair, the elas-
tic around the legs of the chair, [and] different pencil holders, or pencil grips. The kids try those
and see what they like.” Following the exploration of all the centers Charlotte said, “I ask them
[the students] what they really liked about all [of] this and all the tools and I explain to them that
these are not toys they are tools” and that they will be starting to use the tools in the classroom.
With this whole process, tools are given out at the beginning of October.

*Lucy’s Approach*

Lucy approaches implementing the Alert Program® in a completely different way. She
stated, “the environment is the first no brainer for me.” She adapts the environment in the class-


room for the students insisting, “you [the teacher] may like it [the way the classroom is set up] and that’s good for you, but it’s not your classroom. The classroom environment is supposed to be for your children.” The environment starts with the colors on the walls and what actually is put up onto the walls. Lucy stated,

> When I’m setting up my classroom [I] [have] one color scheme, the light blue and the pop of yellow and that’s it. Those are the only two colors you’re going to see in the room on the lines or on the bookcases. You have that uniformity, so they’re not distracted by a gazillion things.

Adjusting the classroom environment goes beyond the simple aesthetic features for Lucy; she emphasizes the importance of adjusting the lighting, as well as the classroom furniture to fit every student the way it should. Lucy mentioned,

> even the florescent lights are filtered through blue covers, which I try to then match with my walls, so that they don’t stand out like a sore thumb. Even painting my heaters a soft grey, so that they blend into the walls, we don’t have to be looking at the heaters.

The students that sit under these covered lights are typically the students with characteristics of ADHD so that they have the least distractions possible. At the beginning of the year, the class may do a read aloud book about getting what you need; Lucy noted, “[we do] the whole Goldilocks and The Three Bears thing, which the kids think is really funny.” Lucy may read the story Goldilocks and The Three Bears and then ask students ‘what’s wrong with our classroom’ on the first day of school, which segues into a discussion that we are not all supposed to have the
same chair and desk. The entire first week, the class adjusts the desks and chairs. Lucy said she “do[esn’t] have the desks at the same height,” and that changing chairs for students as well as introducing cushions or other seating tools like exercise balls creates a dynamic classroom environment for all students.

Once Lucy and the students have adjusted the furniture in the room, Lucy’s class transitions to further adjusting and implementing the program, introducing anything oral such as “getting chewys, getting gum, getting chew tubes, getting the coffee stir sticks” for the students. Lucy noted that oral tools are the next easiest tools to implement. Listening is the second aspect of the Alert Program® that is implemented. This includes providing students with “broken headsets to muffle sounds, putting things on the chairs, [like tennis balls]… play[ing] quite, calming music to calm everyone down, [and] using the rain stick [to get student’s attention].”

Finally, touch is introduced, but Lucy comments on the fact that “touch is tricky, [it involves] movement and movement is tricky because some people don’t like movement.” Some simple tools and activities that she has implemented in the classroom that are effective are crawling through a tunnel or on the floor through chairs “like a GI Joe obstacle course,” having a hopscotch mat the students can roll out, which are both heavy workouts, and finally implementing Brain Gym, which is another form of movement. This process involves trial and error, with the teachers tracking what tools work best for what students. For example, Lucy said,

If a student sits on a hard cushion, and within seconds of [sitting down] he’s getting up to get a softer one… I would put on it on the card ‘hard cushion’ and cross it off, [and] now I know that he cannot sit on a hard surface. It really is a process of trial and error, as there is no diagnostic tool for this program.
Both participants were in agreement that the implementation process heavily involves trial and error but Lucy noted, “the whole trial and error is a huge stage.” Charlotte stated that the way to keep track of the trial and error stage is by using index cards, where she writes what works and what does not work. Similarly, Lucy also uses index cards to track Alert Tools through trial and error. Charlotte said, “even if it doesn't work you still have to track it.”

*Class Discussions*

As Charlotte explained, the importance of hosting many classroom discussions prior to and while implementing the Alert Program® is crucial to the success of the students as well as the Alert Program®. It is important for teachers to explain how their brain works and why certain tools will be better for some and not so great for others. In Charlotte’s class there are many whole class discussions leading up to the implementation of the program, particularly focusing on the connections in a student’s brain and using Alert terminology:

I talk to the kids [about] learn[ing] how to read and write [and how] you need to make connections in your brain and your brain has to be just right. If you’re too excited you won’t be able to learn, and [] if you’re too tired or your engine is too low you won’t be able to learn.

Charlotte also presents the brain and the connections and how the brain works, so that the students can understand what is happening in their brain and why they should do something to help themselves. She specifically talks to her students about “how we learn and how we make connections and that we’re all different, and give them different examples of this.”
Lucy also has discussions with students, but does so by having conferences with the students. She said, “some kids I conference with more than others, because I really need to make sure they get the message.” To help students understand self-regulation beyond the classroom, she also discusses parental habits at home and clues to look for so that students build a “connection between self, school and home.”

_Manging Alert Tools_

Managing tools is another aspect of the Alert Program® that a teacher should consider when choosing to implement this program. Both participants unanimously agree that using index cards to track tools for students is the most effective way to keep track of the program. Lucy particularly noted that index cards are “the quickest thing to flip, [they’re] easy to store, [they’re] easy to cart from one class to another, [and they’re] easy for another teacher to quickly find and flip through.” The cards make it easy to track both what tools work for a student and what tools do not work for students.

Throughout the school year the use of the tools is also not always as evident or necessary in the classroom. Throughout the year, students also gain more control over the use of their tools and how they use the tools. Charlotte specifically noted, “the kids that use the tools more [often] at the beginning of the year, use them less as the year continues.” Similarly, Lucy stated, “some tools are seasonal, [and] some tools we only use for part of the day.” Students in Lucy’s class are encouraged to vote and choose which tools they want in the morning or afternoon, she specifically stated that voting empowers her students and “show[s] them that they have a voice, [and] that their needs are recognized” which, makes them happier students.
Perceived Impact on Students and Classroom Environment

Change in Student Behavior

Charlotte and Lucy were confident in saying the Alert Program® makes positive changes in student behavior, but emphasized that the Alert Program® will not help students that have other diagnosis that go beyond sensory processing and hyperactive or hypoactive needs. Both emphasized that this program will help students become more self-aware and independent when it comes to regulating their own behavior and sensory needs. Charlotte noted that students playing with their pencil are regulating their behavior by using their pencil in place of an Alert tool, while Lucy noticed that students become more self-aware of their needs and realize when their bodies are feeling tired or fidgety and they will use their tools to regulate their behavior. Charlotte additionally mentioned that this program can help students on occasions rather than at all times, specifically saying, “everybody can use tools at different times because even a great student one day can need a tool the next.” Implications beyond single students in the class are also apparent as both interviewees noted that students’ personalities seem happier, calmer, less tension and more availability of mind.

Changes in classroom dynamic

Charlotte and Lucy noticed the positive changes that the Alert Program® made in the classroom dynamic and community, as well as the relationships between students in the classroom.

Charlotte emphasized the acceptance of differences in the class because of this program. She found the Alert Program® helped other students accept the students with characteristics of
ADHD; they are not seeing students with characteristics of ADHD as the ‘bad’ students anymore. Before she began implementing this program students were labeling each other and now students “are more aware of the way they [and others] learn” and this creates a dynamic of acceptance of differences. According to Charlotte, this program emphasizes, “that everybody is different and we have different interests” and that this is okay because it is what everybody needs to learn in the classroom.

Similarly, Lucy spoke to the fact that the Alert Program® has helped develop “more community spirit” as students do not feel “singled out because everyone in the room has a tool, not just them.” Beyond the classroom community, Lucy speaks about the relationships between students having improved as students are calmer, more engaged, happier and enjoy coming to school. Lucy said classroom management is also easier “which is half the battle” making for a happier classroom where students enjoy coming to school, “it’s very rare that one of the children in my classroom are ill.”

Parental Involvement

Lucy discussed, the positive effects of the Alert Program® going beyond the classroom and into the home with child-parent relationships. She observed that students have “healthier relationships with their parents” because there is less negative communication between home and school, which is leading to less tension and confrontation about what is happening at school.
Noted Drawbacks of the Program

While this program has many benefits that impact students in the long term, there are some drawbacks to this program in the training, misconceptions of expectations, lack of support and student dependence.

Training

Charlotte believes that the training did not give her “enough of the how to do it [implementing the Alert Program®] in a regular classroom.” The initial training was introduced to these teachers by an occupational therapist and lacked the in-depth theory that supports the Alert Program®. Charlotte emphasized, once you gain an understanding of the theory behind this program, “the theory and brain research behind [it], that promotes a genuine understanding of what Alert is.” Lucy mentioned that there also seems to be a disconnect between the Alert Tools, the training and how to determine which tools are the best for which children because there is not a diagnostic tool, “it’s a judgement call, that’s one of the drawbacks.” Ultimately, Charlotte felt if the teacher had given the workshop, perhaps the outcome would have been different.

Misconceptions of Expectations

One common misconception that both participants mentioned people may have before learning about this program, was that the Alert Program® was not developed as a quick fix or a fix that would cure psychological or social development issues. They discussed that this is a program that should be implemented over an extended period of time to help support students in their development of self-regulation. Charlotte emphasized that you cannot expect this program to work in a traditional class. As Charlotte stated, you would just be managing tools, “you cannot be boring and think that Alert will solve the program… it is a compliment to good teaching.”
Similarly, Lucy mentioned that if you are just having students sit on the exercise ball all day, it is not effective nor is it healthy for the physical being. Lucy emphasized that Alert will help behavior by giving students tools to empower them to make better choices “but it will not fix anything that is a psychological issue, or a social development issue, it’s to either increase or decrease your energy.”

*Lack of Support and Continuity*

Lucy discussed that the lack of support and continuity from the whole school is the biggest drawback, because if you do not have all teachers buying into it, it does not correlate between each teaching in every room [from] kindergarten to high school, then you’re confusing the sensory motor development for [students]. If everyone [is] not using it, it’s like [telling students] ‘you can only act this way in this room’ and then [they] go down the hall to [another] room with [another] teacher and [they] have to act [a different] way. You’re setting [students] up for failure. [Teachers] setting [students] up to have a blow up because there is no consistency.

Lucy also mentioned how a lack of support from administration also impacts how well you will be able to implement this program, particularly because the tools for this program are costly, if you did not have the budget it would be a difficult program to implement.

A solution proposed by Lucy to ensure that there is consistency through the grades is that if a student has an action plan, IEP or Educational plan, you must list every tool the child has tried successfully and unsuccessfully. Lucy stated,
[the] next [ ] teacher [will] have a real hard fight if a parent comes up and says I want these tools back in or if the principal says why aren’t these tools being used. So just document, it’s the single biggest thing so that teachers can force the next teacher to at least try some of these tools.

Student Dependence

Charlotte emphasized that she has observed some students adopt learned-helplessness when the Alert Program® is over-emphasized in the classroom. Some students become defined by the tools that they are using and claim that they are not able to do their classwork without using their tool. She re-emphasized this by saying “I find they are making excuses”. While the tools are helpful students will not always have them and they must learn how to self-regulate without having Alert tools at all times.

Change and Understanding

On the Alert Program®

Lucy began implementing the program without hesitation. Lucy said “it was just a natural process, I saw children struggling… [and I thought] how am I going to get them to stay engaged.” Charlotte on the other hand began the Alert Program® only seeing the implementation of the fidgets and did not see the purpose of them “because I am not a fidgety person” but after official Alert Program® training with Mary Sue Williams and Sherry Shellenberger, she understood the theory behind the program, stating “I didn’t just see the toys, I saw why, then I understood why.”
On students with ADHD

Charlotte has seen drastic changes in her opinion about students with characteristics of ADHD and in the way she taught her lessons. She specifically recalls teaching twenty years ago and holding the belief “the kids are bad and it’s their fault if they are not listening.” She also felt that teachers would have to fix the children but now she realizes the importance of making changes as the teacher. Students would be sent out of the class for misbehaving rather than the teacher helping the student process their sensory needs. Now that she understands “maybe it is something in their nervous system or their sensory needs are not being met,” and she sends her students out it is part of the Alert Program® and students must go out if their engines are too high, do their heavy work exercises and come back into the class.

Lucy noted that it is not necessarily that children are behaving badly but you must also take into consideration the teachers personality as “behavioral issues can be in one teacher’s eyes a positive thing and in another teachers eyes it could be something that’s annoying.” It is important to give students a chance to express themselves in the ways that they need to without getting annoyed or judged. Lucy noted that perhaps having a student express themselves in a regulated setting such as a one on one conference with the teacher or in a thought journal for the student who constantly wants to share, it is the most effective way to make a student feel valued. This program has helped Lucy develop “a healthier relationship with my ADHD children.”

On teaching practices

Both participants indicated that this program has altered their teaching practices. One participant in particular, Charlotte, emphasized that the Alert Program® brought more awareness to
her own teaching practices and habits. Lucy noted that it is important to maintain novelty to keep students engaged and excited about learning, and movement “because children are not made to sit all day, our brains are not made that way.” While Lucy discussed novelty and movement, Charlotte found that the Alert Program® significantly altered the way she approached teaching and her teaching practices. She noted that the Alert tools are helpful but first and foremost your teaching has to be engaging. She first changed her teaching practices by completing training in smart learning and whole brain learning and introducing more movement, singing, and cooperative learning into the classroom. She emphasizes that while the tools are helpful, if she notices her class is off-task she will readjust her teaching but if most of the class is following and there are one or two students disengaged then she knows that those are the students that need to make use of the Alert tools at that moment in time.

Changes in physical environment

As previously stated by Lucy, the Alert Program® drastically changes the classroom environment. When you walk into these classrooms, they do not look like traditional classrooms where the desks are all facing toward the board and in lines. In Lucy’s class, some children are sitting on exercise balls or cushions or students are laying on the floor or standing and working, and the desks are at all different heights depending on the students. She further discusses having desks rather than shared working tables because then students have their own personal space. If you are dealing with working tables it is important to implement working placements or taping the desk so students can clearly see their space. Charlotte also felt that the appearance of her classroom has also changed; when you walk into the classroom she said, “you have kids on the floor, standing up” and emphasized that it does not look like a traditional and formal classroom.
Another aspect of the physical environment that both participants discussed was the decorations, or lack there of, on their classroom walls. Lucy mentioned, often classroom walls are overloaded posters and are over decorated. This provides students with too many distractions in the classroom and becomes too much to process. Charlotte has come up with a solution to this distraction by putting many of her posters onto an extra large ringed notepad and flipping to the poster when she needs it. By doing this she stated, “they [the posters] become more significant for the kids because they don’t see them all the time… and for the kids, [ ] it’s too hard for the brain if there is too much visual stimulation,” so this method is helpful.

Both teachers also use different elements to create very relaxing atmospheres, or as they called them ‘zen’ atmospheres, in the classroom. Lucy talked about bringing nature into the classroom to create the zen atmosphere. Similarly, Charlotte uses the smart board to create zen atmospheres by showing aquariums or fireplaces, which signals to students to what the energy in the classroom should be.

No single Alert inspired classroom will look the same because it is dependent on the students in the classroom for that year. As Lucy states, “one shoe does not fit all,” and this is why every classroom will look different.
Chapter 5: Discussion

Introduction

The objective of my study was to focus on the experiences and perspectives of two classroom teachers who implement the Alert Program® as a way to support the self-regulation of students with characteristics of ADHD in their classrooms. My guiding question for this research was: How do teachers use and implement the Alert Program® and what are the perceived impacts on students with attention deficit hyperactivity disorder (schoolwork performance, classroom behavior)? The main motivating factor for completing this research on this topic was that I had seen this program being implemented in a classroom and saw the positive effects that it had on the students in the classroom. The science and theory behind this program made sense to me and helped me understand children’s behaviors within and beyond a school setting.

Findings

The findings that emerged from the two interviews reveal that the participants feel the Alert Program® has had some positive effects on their students with characteristics of ADHD. The themes that have emerged demonstrate that a successful method of implementation depends on the teacher implementing the program as well as the students in the classroom. Participants shared a great deal of information on their own successes and concerns with implementing this program, specifically focused on how they had to alter their teaching practices and their classroom environment rather than altering the student. Schilling et al. (2003) note that students’ behaviors may be linked to their efforts to meet their sensory needs, which supports the notion that the classroom environment and teaching practices needed to be altered.
As stated by Frankel and Feinberg (2002), Graziano (2011) and Greene et al. (2002) children with ADHD often struggle with relationships with their peers, parents and teachers, often having negative interactions with others. Both participants emphasized how these relationships improved partly due to the Alert Program®. Children who are diagnosed with ADHD have a higher risk for poor social relationships and unfortunately are more likely to be rejected by their peers (Frankel & Feinberg, 2002). On a positive note, Lucy and Charlotte both reported that implementing this program has altered the whole class dynamic to be more accepting of the differences in students. Both participants also spoke highly of their new exchanges and relationships with their students with characteristics of ADHD after implementing this program and understanding the science and theory behind this. They also emphasized that due to the effects of the program they have healthier relationships with and better opinions of their students who show characteristics of ADHD. It is important to note this as some teachers with students with ADHD experienced more negative interactions with their students (Greene et al., 2002). Lucy also reported that students appear to have healthier relationships with their parents due to the decrease in negative communication between home and school. This is an especially exciting find as some parents with children of ADHD have been found to be more controlling, less interactive and less involved with their children (Graziano et al., 2011; & Johnston, 1996). Ultimately, the implementation of this program has impacted the way students with characteristics behave but it has also impacts how others view these students.

According to Charlotte and Lucy, there is no one right way to implement the Alert Program®. It is clear from both teachers’ experiences that you must find the way that best suits you and your students in order to run a smooth program. While Charlotte begins the year by obser-
veng and making notes and then making changes to the classroom beginning in October, Lucy begins changing the classroom environment during the first week of school and then introduces the different tools as the school year progresses. You may not use all elements of the Alert Program®, or you may use all; it is a process of trial and error, as there is no diagnostic tool for this program. If you can support your decisions with the theory that this program is grounded in, you have a compelling case for implementing this program into your classroom. According to both participants it is crucial to take detailed notes about the tools that have been tried either successfully or unsuccessfully in order to run the most successful Alert Program®. They said that these were the quickest and easiest way to make notes, remind themselves about the trials and errors, and pass on information to other teachers.

Students with ADHD often have difficulties paying attention, following teacher instruction, remaining seated, and resisting calling out which disrupts their own learning as well as their classmates (Dang et al., 2007; Green et al., 2002; Viola & Noddings, 2006). Both Lucy and Charlotte emphasized that the Alert Program® helped students become more self-aware and independent when regulating their own behavior and sensory needs. Charlotte noted that students begin self-regulating without using the Alert tools as the year progresses and they become more independent. Lucy mentioned that students became more self-aware and realized when their bodies need a specific sensory input to regulate their behavior.

Glass and Wegar (2000), note that rather than viewing the student with ADHD as the problem, we should consider that the problem may exist within the educational system. Traditional teaching methods require students to sit and remain quiet for extended periods of time, which does not work for the twenty-first century child (Glass & Wegar, 2000). Charlotte and Lucy both
discussed the changes that they made to their own teaching rather than trying to change the students’ behavior. Charlotte has noted the changes she has made in the way she teaches to better suit the needs of the students. Rather than trying to fix the student she focuses more on the way she carries out lessons. Similarly, Lucy discussed the importance of maintaining novelty and movement in the classroom to ensure students remain engaged and excited about their learning.

**Implications and Recommendations**

**Implications for the Researcher**

When I initially decided to research the Alert Program® and its relation to students with characteristics of ADHD, I had the impression that this was the sole program responsible for the success I had seen with students in my previous experiences. Even after taking the two-day course on the Alert Program®, I could see no flaws in the process and the theory. I now have gained an understanding of the balance one must strike when implementing a program like the Alert Program® into the classroom. I knew initially I was researching a topic that did not have much research about it to date and that I would have to work hard to find the information I was looking for, which at times was discouraging. My participants’ responses and the discussions we had during the interviews helped me gain an understanding of the program, and how to implement it. It also gave me insight into some of the struggles they faced when implementing the program.

From listening to Lucy’s and Charlotte’s responses I came to an understanding that the Alert Program® was not the only program or strategy they were using in their classrooms and that it is not a quick fix program. In fact, it is a program that needs time to infiltrate the students’ daily habits and become part of their daily mindset and self-regulation habits. I have also gained
knowledge on a variety of ways to implement and approach the Alert Program® in my own classroom. I acknowledge that I will have to find what works best for my students as there is no one right method; there is, rather, a period of trial and error.

Implications and Recommendations for the Educational Community

This study has several implications for the field of education. First, it advocates for the importance of learning not only about ADHD, but also the importance of learning about sensory integration. This study reinforces the theory that a student with characteristics of ADHD is not necessarily misbehaving but may be expressing a behavior that is a symptom of their executive function impairment. My recommendation is that teachers continue to stay up to date with research so that they are able to be more understanding and empathetic toward students with characteristics of ADHD and create environments that support and include students with characteristics of ADHD.

The second implication is, it suggests the importance of a willingness to implement new programs that may help our students. My recommendation moving forward is that teachers should take opportunities to learn about implementing different programs and ideas into their classrooms. There are no consequences to trying something and it not working, but the possibilities for success are unlimited if something is tried and it is successful.

This study also encourages teachers to reflect on their own teaching practices and habits and how they may be impacting their students. The participants were adamant about reflecting on their own teaching practices and classroom environment, and adjusting these aspects of teaching rather than placing the blame on the student. As teachers, we are aware that every child learns differently, it just takes a bit more to understand students who have different characteristics than
the ‘neurotypical’ student. My recommendation is that teachers continue to take professional development courses to ensure that they remain up to date and creative in their teaching methods and in the way that they set up their classroom and respond to student behavior.

Limitations

There are some limitations I must reiterate from Chapter 3. Due to the limited interview questions and small sample size the information gathered does not produce all of the information of a well-rounded study. The addition of a variety of perspectives from men, and children from a variety of schools would have provided a diversity of perspectives that would have produced a well-rounded study. Another limitation to this research was that it was limited in scope particularly due to the limited research about the Alert Program® and its impact on students with characteristics of ADHD.

Further Study

There are two suggestions I will make for further study. Although this study focused on implementing the Alert Program® with students with characteristics of ADHD, my first suggestion for further research would be to focus on the Alert Program® specifically in a school context. This would greatly benefit the education community. There is research about the separate elements of the Alert Program® but not much to date about this program specifically. As this program continues to grow and become part of classrooms more research will be required to evaluate its effectiveness and success in a school setting. The second suggestion for further research is, for there to be more research that focuses on ADHD and sensory processing. As the numbers of students with ADHD or characteristics of ADHD continues to grow in North America, it is
essential that there is more research that focuses on ADHD and sensory processing. ADHD is an important research topic but more research must be done on the connection between ADHD and sensory processing and its implications for student behaviors in the classroom.

Conclusion

It is essential that teachers find a program or method to help students who struggle to be in the classroom. The Alert Program® is one that offers many solutions for integrating and supporting students with characteristics of ADHD. Teachers must understand the science and theory behind ADHD as well as the Alert Program® before integrating it into their classroom. It is clear from the interviews that the participants have both introduced the Alert Program® into their classes in different ways, but that they both have seen positive impacts on the students with characteristics of ADHD in regard to their classroom behavior and relationships. Beyond the specific children that show characteristics of ADHD, the Alert Program® also improved the classroom environment and dynamic physically and emotionally, students were more accepting to individual differences, and the classroom appearances and set up also differed from the teachers past set ups. Although the Alert Program® has been successful in these two classrooms, implementing the Alert Program® comes with its own challenges, including the lack of classroom implementation support in the training, lack of support and continuity throughout a school, and finally, misconceptions of expectations of the program and its outcomes. Ultimately, the Alert Program® is only one way to better support students, among others. Teachers need to figure out what program works best for them in their particular contexts and with their students and their individual and unique needs.
References


Appendix A: Letter of Consent for Interview

Date: ___________________
Dear ___________________,

I am a graduate student at OISE, University of Toronto, and am currently enrolled as a Master of Teaching candidate. I am studying the Alert Program® and its success with students with characteristics of ADHD for the purposes of investigating an educational topic as a major assignment for our program. I think that your knowledge and experience will provide insights into this topic.

I am writing a report on this study as a requirement of the Master of Teaching Program. My course instructor who is providing support for the process this year is Dr. Mary Lynn Tessaro. My research supervisor is Dr. Shelley Murphy. The purpose of this requirement is to allow us to become familiar with a variety of ways to do research. My data collection consists of a 40 minute interview that will be tape-recorded. I would be grateful if you would allow me to interview you at a place and time convenient to you. I can conduct the interview at your office or workplace, in a public place, or anywhere else that you might prefer.

The contents of this interview will be used for my assignment, which will include a final paper, as well as informal presentations to my classmates and/or potentially at a conference or publication. I will not use your name or anything information that might identify you in my written work, oral presentations, or publications. This information remains confidential. The only people who will have access to my assignment work will be my research supervisor and my course instructor. You are free to change your mind at any time, and to withdraw even after you have consented to participate. You may decline to answer any specific questions. I will destroy the tape recording after the paper has been presented and/or published which may take up to five years after the data has been collected. There are no known risks or benefits to you for assisting in the project, and I will share with you a copy of my noted to ensure accuracy.

Please sign the attached form, if you agree to be interviewed. The second copy is for your records. Thank you very much for your help.

Yours sincerely,

Researcher name: Kathryn Thibeault
I acknowledge that the topic of this interview has been explained to me and that any questions that I have asked have been answered to my satisfaction. I understand that I can withdraw at any time without penalty.

I have read the letter provided to me by Kathryn Thibeault and agree to participate in an interview for the purposes described.

Signature: ________________________________

Name (printed): ________________________________

Date: ________________________________
Appendix B: Interview Questions

Thank you for participating in this interview. My research is looking into using the Alert Program® for self-regulation with students with characteristics of ADHD. I sent the interview questions to you last week so please feel free to answer them in the order you want to. Before we start, I have some questions about your teaching experience. How long have you been teaching, what grades and where?

Professional Background:
1. Can you talk a little bit about your training and experience with the Alert Program®?

Implementation Process:
2. Why did you decide to implement the Alert Program® into your classroom?
3. How do your students do the Alert Program® and what is your role in this?
4. How do you begin to implement the program into your classroom at the beginning of the year?

Positives and Drawbacks
5. What components of the program do you find most effective? Why?
6. What components of the program do you find least effective? Why?

Elements of the Alert Program®
7. Can you tell me about the specific elements or activities from the program that you use in your classroom?

Impact on Students and Classroom Environment
8. Since implementing the Alert Program®, what have you noticed in terms of your students and the classroom environment, in general?
9. Have you found the Alert Program® has helped reduce negative behaviors in your students with ADHD? How? What changes have you seen?
10. How has implementing the classroom affected your teaching experiences?

Advice and suggestions
11. Is this a program you would recommend to other teachers? If yes, why? If no, why not?