Strategies for Supporting the Sensory-Based Learner

Mary Murray, Pamela Hudson Baker, Carolyn Murray-Slutsky, and Betty Paris

ABSTRACT: Prevention of behavioral problems in school settings is essential. When the function of behavior communicates a sensory-based need, as it does for many learners with autism, teachers need to know what to do. Therefore, it is important for teachers to have varied strategies available for use in the support of such learners. The authors present behavioral descriptions and specific interventions for the sensory seeker, underresponder, and overresponder. In addition, the authors discuss techniques regarding the effective application of the strategies in the framework of behavior theory to address the dilemma of accidental reinforcement of problematic behaviors with sensory-based activities. The importance of meeting individual learner needs as the basis for comprehensive behavior change that balances environmental modification and skill development is the foundation of the approaches that the authors describe.

KEYWORDS: autism, behavior, sensory

IT WAS GOING TO BE one of those days. Adam appeared at the door of the resource room with a note from Mrs. Jones within 15 min of the start of his instructional time. He had been bounced from the math lesson because he was flailing wildly around the room while counting loudly. Such disruption would not be tolerated. Shortly after Adam’s arrival, a fourth-grade student appeared with a note from Mr. Banks that stated that Manuel had “checked out” again during the reading activities. Mr. Banks requested that the teacher come to his classroom as soon as possible to prompt Manuel to do something other than hum to himself. Later, Carmen arrived, escorted by the school’s guidance counselor. The “little actress,” who is known for providing exaggerated responses to the most basic situations, had kicked another student during lunch. As the only special educator for the upper-level elementary students in her school, Mrs. Casey’s caseload is diverse and her schedule is intense. Adam, Manuel, and Carmen all carry the school-based label of autism; yet, they are so different. What can Mrs. Casey do to provide both the students and the teachers with the variety of supports they need?

Learners with autism spectrum disorders (ASD) often present a myriad of communication and behavioral challenges that need to be skillfully addressed for learning to take place. Although prevalence reports vary, according to the Center for Disease Control’s Autism and Developmental Disabilities Monitoring Network (2007), 1 in every 150 children has some form of ASD. Learners with ASD present four core deficit areas: social area, communication, repetitive or restrictive behaviors, and sensory area (Aspy & Grossman, 2007; Minshew & Williams, 2007; O’Riordan, Plaisted, Driver, & Baron-Cohen, 2001). In the social area, such learners may operate on a continuum ranging from isolated to actively engaged. Their communication skills may be viewed as bizarre and may be nonverbal or completely fluent. The learner with ASD may have simple or complicated patterns of behavior that may become repetitive or restrictive. Last, these learners may have sensory-based needs that require heightened sensory input or diminished sensory input, leading them to function as sensory seekers, underresponders, or overresponders to environmental stimuli. Imagine what happens when one, or all, of an individual’s senses have been intensified or significantly diminished, often indicating a sensory integration dysfunction. This is the case for many individuals on the autism spectrum. The purpose of this article is to provide a collection of strategies that teachers can apply when the function of a learner’s behavior indicates a sensory-based need.

Behaviors Communicate Learner Needs

It is important to recognize that ineffective communication skills, one of the core deficit areas, contribute to most
behavioral problems (Durand, 1990; Quill, 2000). Sensory-based problems are observed through the learner’s behaviors as they work to meet his or her sensory needs. If the sensory issues are ignored and the behaviors are extinguished, an alternative behavior may develop to meet the sensory needs, making successful elimination of the problematic behaviors more difficult (Attwood, 2003; Murray-Slutsy & Paris, 2005). Adaptive behaviors resulting from impaired sensory processing may include inattention, distractibility, fidgeting, acting without thinking, and even aggressive or defiant behaviors. The Ziggurat model (Aspy & Grossman, 2007), a multifaceted intervention program for learners with ASD, advocates that the student’s sensory needs be met before moves to the next levels where learning can take place.

Understanding the function of behavior directly affects the plan for intervention (Alberto & Troutman, 2006; Attwood, 2003). Subsequently, teachers need to be able to teach meaningful replacement behaviors so that learners can meet their needs without resorting to the problematic behavior as a primary form of coping or communicating. It is important to realize that problematic behaviors may be sustained by the sensory component embedded in the behavior itself, the consequence or reaction to the behavior, or the success of the behavior in meeting the learner’s needs (Alberto & Troutman; Durand, 1990; Murray-Slutsy & Paris, 2000, 2005). In addition, the behavior may be sustained by the learner’s underlying sensory processing disorder. Such behaviors can affect social acceptance and deprive the learner of important learning opportunities, thus creating a clear need for a change in behavior.

Therefore, teachers need to be aware of how to implement a behavior plan that can facilitate increases in on-task behavior rather than accidentally reinforcing the learner’s off-task behavior. Many times the approach is as follows: “When you complete your writing assignment, then you can jump on the mini trampoline for 100 jumps.” In this case, the movement is used as a consequence to reinforce the successful completion of the task. This assumes that the learner has the ability to complete the task without first having the sensory need met. However, a more preventative approach views the movement-based activity as an antecedent: “It’s time to do your writing assignment. Please jump on the mini trampoline for 100 jumps so that you are ready to do your work.” Yet, a third situation occurs when busy educators allow the misbehavior (being off task) to cue the intervention (mini trampoline): “You’re out of your seat and not doing your work. Go jump on the trampoline.” Now the problematic behavior has been reinforced with a sensory intervention, and the student learns how to effectively avoid doing the task.

Understanding Sensory Needs

Getting a handle on the terminology that links the medical world of ASD with the educational service delivery model for autism can be a challenge. Although in school-based settings, learners exhibiting some or all of the four core deficits may be viewed as autistic or autistic-like, the medical arena facilitates much more characteristic-specific diagnoses. Many of these diagnostic terms address the sensory deficits more clearly. A sensory processing disorder (SPD), also referred to as dysfunction in sensory integration, is a complex disorder of the brain that affects children and adults. People with SPD misinterpret everyday sensory information such as touch, sound, and movement. They may feel bombarded by information, seek out intense sensory experiences, or have other symptoms. Sensory processing refers to the ability to take in information through the senses (e.g., touch, movement, smell, taste, vision, hearing), organize and interpret that information, and respond meaningfully. For most people, this process is automatic. When individuals are tapped on the shoulder or if their arm is lightly brushed when someone passes by, they respond to that information appropriately and calmly acknowledge the touch. However, children who have an SPD do not experience this process in the same way. They may overreact by interpreting the light touch as painful. Similarly, they may underreact by not recognizing that they were touched and, thus, are nonresponsive. SPD can be a disorder on its own, but it can also be a characteristic of other neurological conditions and is prevalent in nearly 100% of the children and adults diagnosed with ASDs (Case-Smith, 2005).

Sensory modulation dysfunction (SMD), a specific type of SPD, is a problem with turning sensory messages into controlled behaviors that match the nature and intensity of the sensory information (Miller, 2006). According to Dunn (1999), people with atypical sensory processing may display exceedingly high or low thresholds to sensory stimulation. Such individuals require either more sensory input than others or significantly less than others; therefore, the ability to attend and focus is affected, and they are either underresponsive or overresponsive to sensory input or environmental stimuli. SMD is a defined syndrome in the area of sensory processing disorders in which a person is sensory seeking, underresponds, or overresponds (Hanft, Miller, & Lane, 2000; Miller, Anzalone, Lane, Cermak, & Osten, 2007). Behaviorally, this is manifested in the tendency to generate responses that are incongruent with the stimuli.

Three Types of Sensory-Based Learners

To address sensory-based behaviors in educational settings, we discuss three types of learners with sensory modulation disorders. Subsequently, we offer specific intervention strategies for educators. Each collection of strategies is
intended to be applicable for supporting individual learners at Tier III of the positive behavioral support (PBS) model for effective schoolwide discipline (Office of Special Education Programs, Center on Positive Behavioral Interventions and Supports, 2004).

Sensory Seekers

Sensory seekers are learners who use a high activity level to obtain the sensory information they need to counteract their neurological threshold. According to Dunn (1999), their nervous system does not respond to stimuli because it takes a lot of input to reach the threshold. These learners seek out sensory information from the environment; they are easily distracted and need physical activity. They may be described as uncoordinated, hyperactive, distractible, impulsive, or a safety risk. These learners may appear to be all or none. They may be on-the-go all day yet fall asleep when the activity stops. They may frequently touch, mouth, or lick everything in an effort to obtain more sensory information. They may appear excessively affectionate, touch or hug people (even strangers), or be overly aggressive when playing with other children. The schoolwork of sensory seekers is often messy or disorganized, and their papers may be torn as a result of pressing too hard with a pencil when writing. For sensory seekers, getting organized to perform a task and staying organized may be difficult (Murray-Slutsky & Paris, 2005). Although these learners seek and obtain additional sensory input they need, the input is typically disorganized and does not help them to cope with task demands or new situations. Communication-based behavioral problems are often seen together with sensory-based behaviors as the learner tries to obtain or avoid something nonsensory in nature (e.g., task, object, activity, social interaction; Murray-Slutsky & Paris, 2005). For instance, knowing when to stop talking or when to take turns in conversation may be a problem because of the sensory seekers’ poor sensory processing along with secondary problems with skill development and communication. Moreover, sensory seekers often become task avoiders. The task may be too difficult or may not be stimulating because of a lack of sensory feedback to the task, which results in an inability to perform the task. If the learner does not understand the task, cannot physically do the task, or cannot explain that the task is not interesting, he or she would tend to avoid engaging in the task. An assessment of the task and the learner’s skills, sensory processing levels, and emotional reactions to the task are necessary to understand the underlying factors contributing to the task avoidance. A learner may use task-avoidance behavior for reasons that include sensory, communication-based, or learned components; therefore, successful interventions must address all of these.

Remember Adam? Many people describe Adam as hyperactive because he is always on the move. He is often out of his seat, moving around the room, touching other students, picking up their pencils, handling their materials, or distracting them. He often puts bits of erasers, broken pencil tips, and stray threads of fabric in his mouth. He moves around the room so swiftly that he often knocks things off desks or bumps into others without seeming to notice the havoc he causes. If his disruptive behaviors are called to his attention, he responds with “Sorry” but will not amend his behavior to correct the problem. He is often reminded to use his indoor voice because his voice is excessively loud. When he sits down to perform a task, he has trouble finding the supplies he needs in his desk because his desk is such a mess. He throws in his papers, which become folded, torn, crumpled, or dirty. There is no organization to his clutter.

Classroom interventions for sensory seekers. Sensory seekers need sensory activities that provide the needed sensory feedback and sensory input. Activities should involve sensory feedback that is of sufficient strength to register or take on meaning to the learners (Bundy, Lane, & Murray, 2002). The learners respond well to the use of weighted or vibrating pencils, writing on a vertical surface or incline boards, or sandpaper under the written work. A regular program of sensory-based activities, sometimes called a sensory diet, needs to be developed to incorporate additional sensory input into the learners’ routines so that the sensory threshold is met throughout the learners’ day (Murray-Slutsky & Paris, 2005, Nackley, 2001).

Sensory seekers require movement. The teacher needs to provide structured, acceptable movement in the environment. Daily routines and classroom modifications may include sensory-motor breaks or movement breaks (e.g., Murray-Slutsky & Paris, 2000, 2005; Nackley, 2001). The key is not to provide movement for the sake of movement, but exercise to provide learners with the sensory input they need to organize their body, level of arousal, and attention for function. Carrying a heavy book bag, doing wall pushups, or performing isometrics or simple exercises before engaging in a task helps the learners organize themselves and the sensory systems needed for the task. Activities that include jumping, as on a trampoline, should be carefully structured to provide rhythmical, predictable patterns that would organize the learners. These same activities, if not structured for the learners, may be disorganizing. For seated tasks, having the learners sit on an inflatable cushion or ball allows them to bounce in place while remaining seated. This provides needed sensory inputs that keep the learners more alert.

Task avoidance and many nonsensory-obtaining behaviors are methods the learner uses to communicate. Many sensory seeking learners have difficulty in expressing what they want (communicating what they want to obtain or avoid) or
understanding the expectations or demands of others or a task. They develop negative behaviors for communicating (Murray-Slutsky & Paris, 2000, 2005). Communication systems must be developed for the sensory seeking learners to improve understanding of situations, tasks, and environments and to eliminate the need to use non-sensory-based behaviors to communicate preferences, fears, and need for assistance. Educators should use positive behavioral strategies. All learners need to be able to access positive reinforcement and praise (Cipani, 1998). The sensory seekers, with high activity levels, distractibility, and difficulty in functioning, often have a difficult time in spontaneously eliciting positive comments from others. It would require conscious effort from everyone in the learners’ environment to bring positive attention to the learners’ on-task behaviors and positive behaviors that they exhibit, while ignoring the negative. Strategies to stop or alter unwanted behaviors should be embedded in the approach, appear natural, and allow the focus to be on the task or skill being developed. More desirable behaviors are promoted when the teacher avoids giving attention to undesirable behavior while attending to and rewarding all positive efforts. Teaching new coping skills and strategies is an integral part of this approach (Alberto & Troutman, 2006; Murray-Slutsky & Paris, 2005).

In the case of Adam, when his need for physical activity and movement are met before seat work, he is better able to organize his thoughts, follow directions, and attend to the task requested. His sensory seeking is minimized, and he is more comfortable in sitting and working quietly for longer periods of time. However, just meeting the sensory need is not enough; Adam needs to be taught a new way to meet his needs. Through the use of a series of prompts and reinforcers, Adam can then gain new alternative replacement behaviors that are more effective in school. Consider the following strategies:

1. Build structured movement into Adam’s day such as jumping on the mini trampoline, running errands, moving baskets of objects, carrying books, using a weighted backpack, or doing housekeeping chores.
2. Use oral motor activities to help him organize himself by giving him something to chew (e.g., gum or rubber tubings on top of his pencil) or to drink out of a water bottle.
3. Provide cognitive strategies such as deep breathing or the calming repetition of counting; pair these strategies with isometric exercises such as arm pushes to quiet his body.
4. Provide physical activity and movement before seat work to help him better organize his thoughts and attend to the task.
5. Teach Adam to raise his hand, count silently until the teacher responds, and use “I” messages (e.g., “I feel frustrated when . . .”) and question stems (e.g., “How do I . . .”) to clarify his seatwork.

Underresponders

Learners with underresponsivity are usually passive, quiet, and complacent, and may not easily engage. They may not be aware of people or things in their environment. They are often described as quiet, not troublesome. They may move about a room looking at objects but not engaging with them. They may leave the group to engage in their own activity or game, thereby avoiding a task or situation. These same learners may daydream; be in their own world; or obsessed with their own thoughts, plans, or fantasies.

Underresponsive passive learners demonstrate behavioral concerns that are directly related to their sensory systems. They usually have low tone and poorly developed gross motor and fine motor skills, postural control, endurance, and strength. These physical and developmental issues contribute to their lack of engagement. Task avoidance is seen primarily because the task has no meaning to the learner. Task avoidance is subtle; rather than a strong behavioral response, these learners sit quietly doing nothing, wander off aimlessly, or are in their own world (Murray-Slutsky & Paris, 2000, 2005). Their underresponsive nervous system requires intense sensory input for them to register, respond and be moved to action.

Remember Manuel? Teachers and peers tend to overlook Manuel. He is a wide-eyed, pleasant third-grade student. His mother drops him off at school, and he barely notices when she leaves. Manuel has to be prompted to acknowledge the teacher and others in his class. When left on his own, he pleasantly wanders around the room, picks up objects, engages with them briefly, and moves on. Manuel loves trains. He neither plays interactively with his peers nor engages them in conversation, but he happily follows the teacher wherever he is led. Manuel enjoys being an observer during reading time and loves when the paraprofessional engages him physically in songs such as “If You’re Happy and You Know It” or “Ring Around the Rosy” but he doesn’t take an interest in other group activities. In addition, Manuel is a daydreamer and often sings and hums to himself rather than attend to the teacher.

Classroom interventions for underresponders. Strong, meaningful sensory input is needed to register in underresponders’ nervous systems. Underresponsive sensory learners need sensory activities that provide meaningful sensory feedback and sensory input that they can sufficiently register in their sensory systems or find meaningful. It is important to read these learners’ cues to determine what registers in the sensory system and obtains more normal levels of responses. The approach to the learners should then match their sensory needs. Learners who are underresponsive need to work with a person who displays high energy and animation and who can modify his or her style as the learner responds to
obtain further engagement. A thorough approach should include environmental adaptations to not only the physical environment but also the task. The approach should include sensory-based applications, sensory integrative intervention, communication strategies, and positive behavioral strategies (Murray-Slutsky & Paris, 2005).

Sensory-motor strategies (sometimes called a “sensory diet”) need to incorporate additional sensory input into the learners’ routines so that the sensory threshold is met throughout the day (Nackley, 2001; Wilbarger, 1995). Daily routines and classroom modifications may include sensory-motor breaks or movement breaks (Murray-Slutsky & Paris, 2000, 2005; Nackley). The key is to provide increased sensory input to obtain active engagement and sustain responses. High-intensity sensory experiences can be integrated into activities throughout the day to provide sensory feedback that is meaningful to the learner. Writing tasks may be adapted by using an incline board or vibrating pen, whereas circle-time activities may be adapted for more movement. Songs with gestures, high-energy rhythmic activities, jumping on a trampoline, stretching activities, or other activities to wake up the sensory systems may be integrated into the learners’ day. For seated tasks, using an inflatable cushion or ball allows the learners to bounce in place and keep alert. Intervention requires keeping the learner physically active and mentally engaged.

For Manuel. We recommend the following strategies for Manuel:

1. Use movement and physical activity to increase energy, arousal, and engagement. Engage him even during seatwork by having him sit on an exercise ball.
2. Intersperse activities with movement and energy with sit-down tasks. For instance, use a trampoline, do relay races, sing songs with physical movement and fast rhythms, create obstacle courses with jumping, and include clapping and stamping activities.
3. Make tabletop activities a tactile experience by adding resistance where possible. Put sandpaper under the writing surface, use Magna Doodle, and have Manuel write on a vertical surface such as an easel.
4. Provide Manuel with visual prompts that are colorful and of high interest. For instance, use his interest in trains as a tool by making his prompt cards in the shape of different cars on a train.
5. Use an animated teaching style.
6. Teach him to ask for sensory input by using a collection of visual cards that display a variety of activities.

Overresponders

Sensory overresponsiveness (sometimes called sensory defensiveness) is a condition in which learners’ neurological systems are overly sensitive to sensory stimulation and, therefore, triggered by virtually everything in the environment (Dunn, 1999). Learners with sensory overresponsivity respond to sensory messages more intensely, more quickly, and for a longer time than do learners with normal sensory responsivity (Miller, 2006). Sensory sensitive learners may hate noisy environments and loud noises or can be set off by a particular sound such as the noise of a vacuum cleaner or a child crying. They may overreact to being touched, dislike working in textured media such as finger paint, or hate getting dirty. They may be visually distracted by too much on the walls or in the room. They tend to be disorganized, distractible, and emotionally reactive to being touched or having demands placed on them. These learners may refuse to go outside on the playground, not play well with others or refuse to play with others, have poor balance, get motion sickness, or complain of a headache or stomachache.

Anxiety, stress, and difficulty with transitions or change are common among overresponders. When overresponders are upset, they may have difficulty in calming themselves. They may chew on items or clothing to manage stress levels. Their behaviors are typically fright, flight, or fight responses (Bundy et al., 2002; Murray-Slutsky & Paris, 2000, 2005). They may be anxious, cry or whine, or frequently ask questions about what is going to happen, what is expected, or what they must do. These learners often have a need for control and order. When stressed, they may be the learners who become increasingly disorganized and emotionally reactive. They may hide, throw items, push people away, hit and kick, run around the room, or flee from the area.

These learners’ behaviors are rooted in sensory processing difficulties and are sensory avoiding behaviors. These sensory avoiding behaviors are displayed as nonsensory communication-based problems aimed at avoiding people, new situations, activities, and tasks. Transitions to new situations are particularly stressful for these learners, and they tend to avoid new tasks or transitions as much as possible. Task avoidance often occurs because a task is overwhelming to the learner or has an aversive sensory component (Murray-Slutsky & Paris, 2000, 2005).

Remember Carmen? To the outside observer, Carmen is constantly overreacting and dramatic. She cries and has emotional outbursts over the littlest occurrences. She often complains that her head hurts or her stomach aches. She does not like her hair brushed or her face and hands washed, and refuses to get near anything with an odor. She refuses to go to art with the rest of her class because she doesn’t like the feel and the smell of glue, paint, or other art supplies. She often covers her eyes and refuses to interact with nonpreferred tasks.

Carmen is frequently disturbed upon her arrival at school, and her temperament gets worse as the day progresses. She chews on her hair and clothing and may have aggressive
outbursts, lashing out at the teacher, students, or anyone within her reach when she has had enough. The lunch room is a busy and noisy place in which Carmen’s behavior routinely deteriorates. She is quickly overwhelmed by the sounds, congestion, and the chance that others will bump or touch her. Her anxiety is noted just minutes before it is time to go to the cafeteria. She begins to whine and become increasingly agitated as she is asked to line up and walk to the cafeteria. Being a picky eater, she refuses anything but chicken nuggets and french fries. By the end of the lunch period, she usually has to be removed from her seat for lashing out at those near to her. Upon her return to the classroom, she is usually sent to the quiet corner for 5 min to calm herself.

Classroom interventions for overresponders. Environmental modifications are needed to calm the nervous system by eliminating extraneous noise and visual distraction. Sound dampening modifications such as acoustical tiles, carpeting, or vent covers may be helpful in decreasing background noises (Florida Department of Education, 2001; Murray-Slutsky & Paris, 2000, 2005). Everyday events should be structured to facilitate learner success. These learners may need preferential seating within the classroom to give them distance from others who may contribute to noise and touch that may distract. This may be the learner whom the teacher should send ahead of the class or who holds the door open, letting all others pass ahead. These learners may also emotionally overreact when tasks appear overwhelming in their presentation; therefore, tasks should be at these learners’ skill level and presented in organized, manageable bits to prevent sensory overload.

The adult (e.g., teacher, parent) is an integral part of these learners’ environment. The demeanor, mannerisms, and rate or volume of speech used can contribute to either escalating or calming the learners’ nervous system. The adults may need to alter their approach to these learners, using a lower voice volume and pitch, talking more slowly, and approaching them in a less animated or boisterous manner (Murray-Slutsky & Paris, 2000, 2005). The more these learners can predict and anticipate future activities and events and know how to respond, the more they can relax and function. Schedules, visual schedules, social stories (Gray, 1994), sensory stories (Marr & Nackley, 2006), and communication systems are all effective strategies.

Teaching the learner self-regulation strategies and when to use them is vital (Murray-Slutsky & Paris, 2005). Cognitive methods of calming should also be taught to aid self-regulation. Counting or deep breathing are examples of constructive techniques that can be taught to a learner as young as 3 years old. Sensory-based strategies that work well for some overresponsive learners include listening to music with a steady beat, resistive exercises, closing one’s eyes from distractions, wrapping up in a blanket, and using a weighted vest.

Positive behavioral strategies combined with sensory strategies often are effective for teaching the learner new coping skills, getting the learner to learn and use alternative strategies, helping the learner forego the use of problematic behaviors by improving self-awareness and communication skills, and teaching strategies to modulate or regulate nervous systems. Modeling new behaviors, role playing, rerun strategies (e.g., repeating an action to problem solve or correct a behavior or sequence of behaviors), rewards or incentives, choices, and positive behavioral momentum are strategies that can help learners to develop and master new behaviors. As the learners improve self-regulation and become more flexible, they can appreciate the new calmer state of organization and derive positive attention for their behaviors.

For Carmen. We recommend the following strategies for Carmen:

1. Limit environmental stimuli whenever possible. Provide Carmen with preferential seating or a study carrel that places her away from her triggering situations. Have her wear a headset to block out noise or deliver calming music.
2. Use a calm, quiet teaching style and avoid wearing scents (e.g., lotions, perfumes, soaps, hair spray, deodorant).
3. Allow Carmen to brush her own hair and wash her own face and hands.
4. Have Carmen do some physical activities to lower sensory threshold, anxiety, and stress levels such as isometric exercises (e.g., arm pushes, chair pushups), rearranging books, and taking a walk with a weighted backpack.
5. Desensitize Carmen to the cafeteria gradually. She could go lunch early to get her food, eat, and return to the classroom to do work on the computer if a teacher is available. Gradually decrease how early she goes so that her time with the noise and chaos increases slowly.
6. Create visual schedules and notify Carmen of any changes in schedule in advance. Have her adjust the schedules with the teacher when possible.
7. Prepare Carmen for what to expect by using social stories or for what she can do to calm her nervous system by using sensory stories. These should incorporate three to four simple rules and calming exercises, telling her what to do. Review the rules daily, and practice possible responses to differing situations. Provide pictures that will facilitate the communication of her needs.
8. Teach Carmen to recognize when she is getting anxious and to then use self-regulation strategies for support. For instance, when she covers her ears naturally, it is a sign that the noise is getting to her. Teach her to recognize this response and seek out head phones or ear plugs to block out the noise. Pair this with a cognitive calming strategy such as closing her eyes, counting to 10, and asking an adult to help. Visual reminders of the sequence could also be used.
Conclusion

Learners with autism may be (a) sensory seekers who are generally on the move; (b) learners who are underresponsive to sensory input and who are passive, aloof, or daydreaming; or (c) overresponsive learners who tend to overreact or become defensive with high anxiety. To alter these behaviors efficiently and effectively, the learners’ sensory needs should be addressed in an effort to eliminate the core problems. A holistic, comprehensive educational intervention program would address the learners’ sensory needs while teaching the learners effective communication and coping strategies so that they develop desirable replacement behaviors. With a combination of environmental adjustments and skill development, teachers can enhance the learning experience for all students.

AUTHOR NOTES

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