

The Cocoon of Safety: The Impact of Sensory Pods in an Inclusive School Environment

Mario Chiasson, Ph.D.
Université de Moncton (NB, Canada)
mario.chiasson@umoncton.ca

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Photo: Innovative Sensory Pod used in the study site.

Executive Summary

Inclusive education increasingly requires schools to address diverse sensory and emotional needs, particularly for neurodivergent students (e.g., ASD, ADHD) who may experience typical classrooms as overwhelming environments. This qualitative study examined how enclosed, customizable Innovative Sensory Pods (ISPs) functioned as a self-regulation and learning support within a K-12 school in New Brunswick, Canada.

Using semi-structured interviews with students and staff (teachers, a behavior interventionist, and an implementation leader), the study explored usability, benefits and challenges, and perceived impacts on learning and teaching. Thematic analysis identified five overarching themes: usability and perceptions, multifaceted benefits, challenges, impact on learning outcomes, and impact on teaching.

Study at a glance

Design	Qualitative; interpretive phenomenological orientation
Setting	K-12 school (New Brunswick, Canada); Innovative Sensory Pods installed as environmental support
Participants	n=7 (3 teachers, 1 behavior interventionist, 1 implementation leader, 2 students)
Data collection	Semi-structured interviews (Microsoft Teams), 20-30 minutes, English or French; transcribed verbatim
Analysis approach	Braun & Clarke (2006) six-phase thematic analysis; peer debriefing and reflexive journaling for rigor

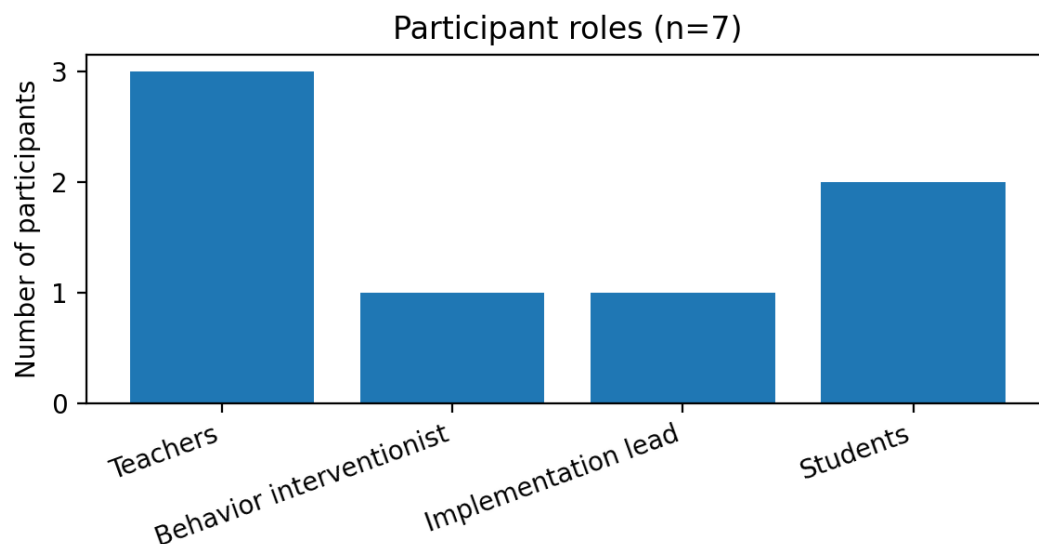


Figure 1. Participant roles (n=7).

Key findings

- Pods were described as a calm, enclosed “cocoon” that reduced sensory overload and supported rapid de-escalation.
- User control (lights, sound, music, fan, and sensory tools) increased agency and supported self-regulation.
- Staff used the pods for their own regulation and stress reduction, which participants linked to improved teaching presence and co-regulation.
- Participants reported improved student focus, faster task initiation/completion, and more effective one-on-one instruction when the pod was available.
- The primary implementation constraint was availability: high demand led to bottlenecks and limited access for students and staff.

Implementation considerations

Access and scheduling: High demand suggests the need for transparent access rules (e.g., booking blocks for instruction and wellness, plus short “regulation” drop-ins).

Placement: Pods in high-traffic areas can introduce visual distraction; positioning should balance accessibility with reduced hallway flow.

Privacy options: Consider optional visual screening (e.g., curtain) for users who need greater enclosure or fewer visual stimuli.

Staff orientation: Train staff to frame pod use as support (not punishment), and to teach students how to select settings and transition back to class.

Data and evaluation: Light-touch usage tracking (who/why/how long) can help manage equity of access and document outcomes over time.

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Mario Chiasson, Ph.D.
Université de Moncton, NB, Canada
mario.chiasson@umoncton.ca

Abstract

The modern educational landscape increasingly recognizes the diverse sensory and emotional needs of students, particularly those with neurodevelopmental disorders such as Autism Spectrum Disorder (ASD) and Attention-Deficit/Hyperactivity Disorder (ADHD). This has led to the exploration of environmental interventions designed to support self-regulation and enhance learning. This qualitative study investigates the perceived impact of Innovative Sensory Pods (ISPs)—enclosed multi-sensory environments—within a K-12 school setting. Through semi-structured interviews with teachers, a behavior interventionist, a behavior management mentor, and students, this research explores the usability, benefits, challenges, and overall effects of these pods on student learning and teacher well-being. Thematic analysis of the interview data revealed four primary themes: (1) Usability and perceptions, highlighting the sensory pods' intuitive design and the sense of an enclosed "cocoon"; (2) Multifaceted benefits, including profound emotional regulation, sensory relief, and the creation of a psychological safe space; (3) Teacher well-being, with educators utilizing the pods for their own self-regulation and stress reduction; and (4) Impact on learning and teaching, demonstrating enhanced student focus, task completion, and improved teaching effectiveness. The findings suggest that sensory pods serve as a powerful space for co-regulation and self-regulation for both students and staff, fostering a calmer, more focused, and psychologically safer school environment. The study concludes that such environmental interventions are a valuable component of Universal Design for Learning (UDL), with significant implications for creating more inclusive and supportive educational settings.

Keywords

sensory pod, multi-sensory environment, emotional regulation, self-regulation, inclusive education, neurodiversity, teacher well-being, Universal Design for Learning (UDL), psychological safety.

1. Introduction

The movement towards inclusive education has gained significant momentum, compelling schools to adapt their environments to meet the diverse needs of all learners [11]. A central tenet of this movement is the recognition that a one-size-fits-all approach to classroom design is inadequate, particularly for the growing population of neurodivergent students [7]. Children with conditions such as Autism Spectrum Disorder (ASD), Attention-Deficit/Hyperactivity Disorder (ADHD), and other sensory processing challenges often experience the typical classroom as an overwhelming sensory environment [23]. The constant auditory and visual stimuli, social demands, and academic pressures can trigger a state of sensory overload, leading to heightened anxiety, behavioral challenges, and significant barriers to learning and participation [18].

In response, schools have begun to implement various environmental accommodations, with multi-sensory environments (MSEs) and sensory rooms emerging as a prominent strategy [1, 10]. These spaces are intentionally designed to provide users with a range of sensory stimuli that they can control, helping them to modulate their arousal levels, de-escalate from a state of distress, and achieve a state of calm and focus [2]. While traditional sensory rooms have proven beneficial, they often require significant physical space and resources. A newer innovation is the sensory pod—a compact, enclosed booth, equipped with customizable sensory features like lighting, sound, music, and tactile elements. These pods offer a more scalable and accessible solution for providing sensory regulation support within the school day. Physically, the sensory pod is a compact, often constructed with glass walls to provide a sense of being safely enclosed without feeling trapped. The core design principle is the integration of a multi-sensory pods that the user can control. This is typically achieved through an interactive touchpad that allows the child to become an active agent in their own regulation. Key features include:

- Visual: A fully customizable LED lighting system, allowing the user to change the color, brightness, and even select calming light patterns.
- Auditory: Significant soundproofing (often reducing external noise by 30-40 dB) combined with high-quality speakers for playing ambient sounds, calming music, or guided meditations.
- Tactile: The inclusion of various sensory toys and fidgets, providing outlets for tactile exploration.
- Olfactory: The option to introduce calming scents through aromatherapy systems.

By putting control over these sensory inputs directly into the user's hands, the pod is designed not just as a quiet space, but as an interactive tool for sensory exploration and management.

This research focuses on the implementation of innovative sensory pods (ISP) such as ForeverMe SensPod within a K-12 school in New Brunswick, Canada. The school introduced these pods as a tool to support students with disabilities, aligning with the principles of Universal Design for Learning (UDL), which advocate for creating flexible learning environments that can accommodate individual learning differences [11, 17]. However, initial observations suggested their use extended beyond the target student population, with teachers and other staff members also utilizing them. This study was initiated to formally investigate the perceived impacts of these sensory pods from the perspectives of those using them directly.



Figure 2. Sensory pods installed in the school (photos from study).

The primary objective of this study is to explore the lived experiences of students and school staff with these innovative sensory pods. More specifically, this research aims to: 1) understand their perceptions of the pods' usability, the benefits and challenges they associate with their use, and 2) assess the potential impact on student learning outcomes and teacher effectiveness. This study seeks to contribute a deeper understanding of the role such environmental interventions can play in fostering a more inclusive, supportive, and psychologically safe school culture for everyone.

2. Literature Review

2.1. Sensory Processing and the Neurodivergent Learner

Sensory processing refers to the way the nervous system receives messages from the senses and turns them into appropriate motor and behavioral responses [21]. For many neurodivergent individuals, particularly those with ASD and ADHD, this process is atypical [7, 22]. They may be over-responsive (hypersensitive) or under-responsive (hyposensitive) to sensory input, or they may seek out intense sensory experiences. In a bustling school environment, these sensory processing differences can manifest as distraction, anxiety, agitation, and behaviors that are often misinterpreted as defiance or a lack of motivation [23]. For example, the ambient noise of a classroom, the flicker of fluorescent lights, or the proximity of other students can be profoundly dysregulating for a hypersensitive child, making concentration on academic tasks nearly impossible [8, 9].

Research consistently shows a strong link between sensory processing challenges and difficulties in emotional regulation, social participation, and academic performance [23]. The creation of sensory-friendly environments is therefore a critical component of supporting these students. This involves designing spaces that minimize noxious stimuli while providing opportunities for calming and organizing sensory input [24]. Multi-sensory environments (MSEs), often known by the trade name Snoezelen rooms, are a well-established intervention based on these principles [10]. A systematic review by Leonardi et al. (2022) confirmed the utility of MSEs in educational and therapeutic settings for autistic individuals, noting their potential to reduce stereotypic behaviors and promote relaxation [2]. The key mechanism is the provision of controllable, predictable sensory input, which allows individuals to self-regulate their arousal levels. The sensory pod can be conceptualized as a miniaturized, individualized MSE, making this therapeutic principle more accessible within the constraints of a typical school day.

2.2. The Science of Safety: Polyvagal Theory in Education

Dr. Stephen Porges' Polyvagal Theory provides a powerful neurophysiological framework for understanding why sensory environments have such a profound impact on behavior and learning [3]. The theory posits that our nervous system is constantly scanning the environment for cues of safety and danger through a process called "neuroception." When the environment is perceived as safe, our social engagement system is active, allowing us to feel calm, connected, and open to learning. Conversely, when cues of threat are detected—which can include sensory overload—the nervous system shifts into a defensive state of fight-or-flight or, in cases of extreme overwhelm, a state of shutdown or collapse [3, 16].

From this perspective, a noisy, unpredictable classroom can be a constant source of neuroceptive threat for a sensitive child, keeping their nervous system in a chronic state of defense. In this state, the physiological resources needed for higher-order thinking, social engagement, and learning are simply unavailable. The sensory pod, by offering a quiet, enclosed, and predictable space, acts as a powerful cue of safety. It allows the user to be removed from environmental triggers, facilitating a shift in their autonomic state from defense to social engagement [16]. The pod, therefore, is not just a quiet room; it is an active intervention that helps to regulate the autonomic nervous system, making learning possible.

2.3. Universal Design for Learning (UDL) and Sensory Pods

UDL is a framework for designing curricula and learning environments that are accessible and effective for all students from the outset [11]. It is based on three core principles: providing multiple means of engagement, representation, and action and expression. Sensory pods directly align with the UDL principle of providing multiple means of engagement, specifically Guideline 7, which focuses on providing options for recruiting interest, and Guideline 9, which addresses providing options for self-regulation [11].

By offering a space for students to manage their sensory needs and emotional state, pods empower them to self-regulate and return to the learning environment ready to engage. This proactive approach is a hallmark of UDL, shifting the focus from retrofitting accommodations for specific students to building a flexible environment that anticipates and supports a wide range of learner variability [17]. The sensory pod is not just a tool for students with diagnosed disabilities; it is a universal support that can benefit any learner who feels overwhelmed, anxious, or distracted, making it a powerful embodiment of UDL principles in practice. The widespread use of the pods by the general student population and staff in this study provides strong evidence for its utility as a universal, rather than a targeted, support.

2.4. Teacher Well-being and Self-Regulation

An often-overlooked element in the creation of supportive learning environments is the well-being of the educators themselves. Teaching is an emotionally demanding profession, and high rates of stress and burnout are a persistent concern [4, 5]. A teacher who is stressed, overwhelmed, and emotionally dysregulated has a diminished capacity to be present, patient, and effective in the classroom [15]. Their own state of dysregulation can be transmitted to students, creating a negative feedback loop of stress and anxiety [16]. Therefore, strategies that support teacher self-regulation are not just beneficial for the individual educator but are essential for the health of the entire classroom ecosystem.

Research has shown that teachers who utilize effective emotion regulation strategies report higher levels of job satisfaction and lower levels of burnout [4]. The concept of co-regulation, central to Polyvagal Theory, emphasizes that a calm and regulated adult presence is necessary to help a child calm and regulate [16]. This reveals a critical need for schools to support staff emotional well-being. When teachers use the sensory pods for their own self-regulation, it highlights a significant, unmet need—and points to a powerful dual benefit: improved teacher wellness that, in turn, strengthens their ability to support students.

3. Methodology

This study employed a qualitative research design, guided by an interpretive phenomenological framework, to gain an in-depth understanding of the lived experiences of students and staff with sensory pods in a K-12 school in New Brunswick, Canada, serving a diverse student population. Purposive sampling was used to recruit a multifaceted group of participants—three teachers, one behavior interventionist working across all grades, two students, and one administrator focused on implementation—enabling a rich examination of the pods’ effects on academic support, behavioral intervention, self-regulation, and classroom management. Data were collected through semi-structured interviews conducted via Microsoft Teams, using open-ended question guides tailored separately for students and staff, with targeted probes to explore usability, benefits, challenges, and impacts on learning and teaching; sessions lasted approximately 20 to 30 minutes, were audio- and video-recorded with informed consent, allowed participants to respond in their native language (English or French) for comfort, and were subsequently transcribed verbatim. Analysis followed Braun and Clarke’s (2006) six-phase thematic analysis: (1) familiarizing with the data through repeated readings of transcripts, (2) generating initial codes by systematically capturing relevant features, (3) collating codes into potential themes, (4) reviewing themes for coherence at both the extract and dataset levels, (5) defining and naming themes to refine the emerging narrative, and (6) ensuring rigor through peer debriefing and the maintenance of a reflexive journal to address potential biases.

4. Findings

The thematic analysis of the interview data revealed a rich and consistent narrative about the role and impact of the sensory pods within the school. Five overarching themes emerged: (1) usability and perceptions, (2) multifaceted benefits, (3) challenges, (4) impact on learning outcomes, and (5) impact on teaching. These themes and their associated subthemes are detailed below, supported by direct quotes from the participants.

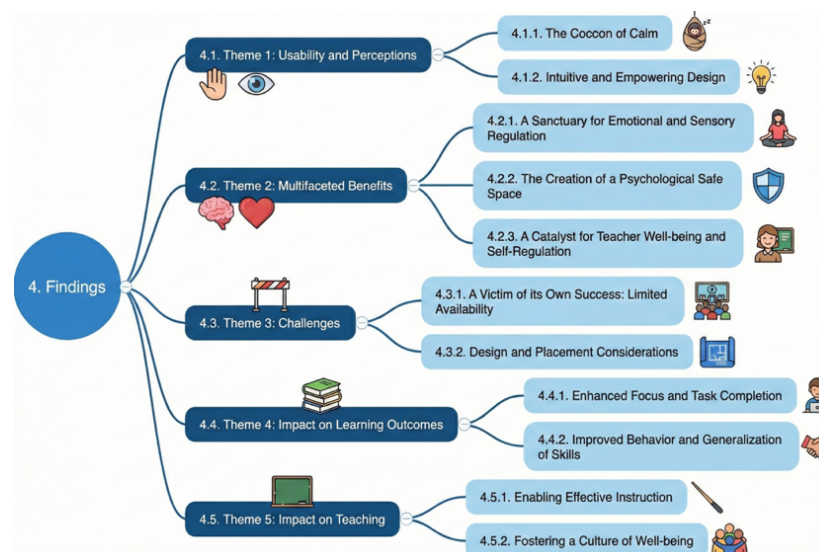


Figure 3. Thematic map of findings (as reported in the manuscript).

4.1. Usability and Perceptions

4.1.1. *The Cocoon of Calm*

A consistent perception across all participants was the immediate sense of calm and enclosure upon entering the pod. It was frequently described as a "cocoon" or a "bubble" that separated the user from the often-chaotic school environment. A teacher (R1T1) described the feeling: "as soon as you enter, you get a feeling... it really helps to calm you down." This sentiment was echoed by a behavior interventionist (R1T2), who noted, "as soon as you open the door and you step into the pod, it feels like everything is just calm, no sound... just relaxing." The design, which is enclosed yet transparent, was seen as a key feature. A behavior mentor (R1T3a) explained, "there is something soothing. The fact that it's glass, you don't feel too suffocated either... but I have students who need that, who need to feel a cocoon, to feel tight, to feel isolated." This sense of being safely enclosed, yet not trapped, was a critical aspect of the pod's appeal.

4.1.2. *Intuitive and Empowering Design*

Participants highlighted the sensory pod's user-friendly interface, which allowed both students and staff to easily customize the environment. The ability to control features such as the lighting, sound, music, and even the fan was seen as empowering. The behavior interventionist (R1T2) made it a core part of her practice: "As soon as I open the door from the pods, I'll let them choose the music. I'll let them choose the lights... They have the chance to choose a fidget if they want to." This element of choice is a key finding, as research on multi-sensory environments with autistic children has shown that providing control over sensory changes can lead to more positive outcomes [1]. For students who often have little control over their environment, this autonomy was a significant benefit.

4.2. Multifaceted Benefits

4.2.1. *A Sanctuary for Emotional and Sensory Regulation*

The most prominent benefit identified was the pod's effectiveness as a tool for emotional and sensory regulation. For students prone to overwhelm, the pod served as a sanctuary. The behavior interventionist (R1T2) stated, "I see a lot of good things with regulating a kid in there. They'll come in in the high peak, then by the end of the discussion... it will help them calm down." The behavior mentor (R1T3a) observed a tangible reduction in the length of emotional crises: "in terms of the duration of a crisis, it helped to reduce it."

The pod's ability to block out the "noise" of the school was crucial. A student articulated this clearly, stating that the classroom is "tiring" because "everyone is talking," which prevents him from concentrating. In the pod, however, he can relax and focus. This noise reduction is a critical environmental accommodation, as studies have demonstrated the negative impact of poor classroom acoustics on student performance, especially for complex cognitive tasks [8, 9].

4.2.2. *The Creation of a Psychological Safe Space*

Beyond sensory regulation, the pod was consistently framed as a "safe space." This concept of safety was multifaceted. For students, it was a place free from social judgment and academic pressure. The behavior interventionist (R1T2) contrasted the pod with her office, noting that for a student, "stepping into an

office it's like, 'oh, I'm in trouble,' but stepping in a pod... it's a different feeling." The pod was perceived as a non-authoritarian, non-punitive space, which facilitated trust and openness.

The behavior mentor (R1T3a), who has a background in neuroscience, articulated this connection explicitly: "You can't have expectations and regulation before there is a sense of security." The pod, by providing a predictable and controllable environment, appears to directly facilitate this foundational state of safety. This finding resonates deeply with the principles of Polyvagal Theory, which underscores that a state of physiological and psychological safety is a neurological prerequisite for positive social engagement and learning [3].

4.2.3. A Catalyst for Teacher Well-being and Self-Regulation

A significant and somewhat unexpected finding was the extent to which teachers and staff used the pods for their own well-being. A teacher (R1T4) was particularly eloquent on this point, stating she used the pod "more for myself." She described it as a place to "unwind and relax" away from the "go, go, go" pace of the school day.

"I feel so much more confident when I get out of there because I feel like I release all of the stress... I feel like a better teacher when I go in there." (R1T4, Teacher)

This use-case highlights a critical, often unmet need within the teaching profession. The concept of co-regulation is central here; as the behavior interventionist (R1T2) wisely stated, "to help a kid regulate, you have to be regulated yourself." By providing a space for teachers to manage their own stress and emotional state, the pods indirectly benefit the entire classroom. This supports a growing body of research indicating that teacher well-being and their ability to self-regulate are directly linked to instructional quality and a positive classroom climate [5, 15].

4.3. Challenges

4.3.1. A Victim of its Own Success: Limited Availability

The most significant challenge was the high usage of the pods. With a limited number of sensory pods in the entire K-12 school, they were always in use. One teacher (R1T1) stated: "We don't have enough," a sentiment echoed by another (R1T2): "we need more of those... I see [the need for] one in every classroom." This high demand, while a testament to the sensory pods' perceived value, created a bottleneck and limited access for the many students and staff who could benefit from them.

4.3.2. Design and Placement Considerations

Minor design challenges were also noted. The behavior mentor (R1T3a) suggested that a curtain could be added to provide an option for more visual privacy, particularly for students who are easily distracted or who require a greater sense of enclosure. Additionally, one of the teachers (R1T4) mentioned that the pod located in a high-traffic common area was less effective for focused work due to the visual distraction of people walking by. These points underscore the importance of thoughtful placement and the need for adaptable features to meet a wider range of sensory preferences [6].

4.4. Impact on Learning Outcomes

4.4.1. Enhanced Focus and Task Completion

The most dramatic example came from the behavior mentor (R1T3a), who described a student who had refused to complete a writing evaluation for two days. After being brought into the pod, the student "took ten minutes" to complete the task. The behavior mentor also noted that for students who typically take 20-30 minutes to transition and settle into a task, the pod could reduce that time to just ten minutes. Students themselves recognized this benefit. A student, when asked if he could work in the pod, replied, "Cool," and another teacher (R1T1) recounted a student proudly stating, "Teacher, I was able to do my work" after using the pod. As the behavior interventionist (R1T2) argued, "Everyone should benefit from the pod, not just people that have challenges."

4.4.2. Improved Behavior and Generalization of Skills

The calm, regulated state achieved in the pod appeared to have a lasting effect. The behavior interventionist (R1T2) explained that they work on regulation strategies within the pod, which students are then "able to bring... into the classroom." This generalization of skills is a crucial outcome for any intervention. The teacher (R1T1) described a student with autism whose vocal stimming ("bruits de bouche") and agitation decreased significantly while in the pod, replaced by a big smile. These behavioral improvements create a more positive school experience for the student and a more manageable learning environment for all [20].

4.5. Impact on Teaching

4.5.1. Enabling Effective Instruction

By providing a quiet, distraction-free space, the pod enabled teachers to conduct one-on-one assessments and provide targeted instruction more effectively. The teacher (R1T4) envisioned having a pod in her classroom, which would allow her to "still see them, I can still manage my class while being secluded and having no noise when I'm evaluating them." This ability to create a controlled micro-environment within a larger, more dynamic classroom setting was seen as a significant advantage.

4.5.2. Fostering a Culture of Well-being

The use of the sensory pods by adults modeled the importance of self-regulation for the entire school community. It normalized the act of taking a break to manage one's emotional state. As the teacher (R1T4) reflected, "If we ask our students to relax and do that, why don't we do that for ourselves too?" This practice contributes to a school culture that values emotional well-being for all its members, aligning with a holistic and inclusive vision of education [19].

5. Discussion

The findings of this study provide a compelling, multi-layered account of the value of individual sensory pods in a school setting. While introduced as a tool for students with disabilities, the sensory pods were rapidly adopted as a universal resource, valued by students and staff alike for their profound impact on emotional regulation, focus, and psychological safety. The results not only affirm the importance of sensory-based interventions but also illuminate the interconnectedness of student well-being, teacher well-being, and the physical learning environment. This discussion will interpret these findings through

the theoretical lenses of Polyvagal Theory and UDL and explore their broader implications for educational practice.

5.1. The Pod as a Neuroceptive Cue of Safety

The most powerful and consistent theme to emerge from the data was the pod's ability to induce a state of calm and safety. Participants' descriptions of the pod as a "cocoon," a "sanctuary," and a "safe spot" align directly with the core principles of Porges' Polyvagal Theory [3]. The human nervous system is constantly, unconsciously evaluating the environment for risk (a process called neuroception). When the environment is perceived as safe, the ventral vagal complex—the body's social engagement system—is activated, promoting feelings of calm, connection, and readiness for learning. The modern classroom, with its high levels of auditory and visual stimulation, social complexity, and performance demands, can easily be perceived as a threatening environment by the nervous system, particularly for neurodivergent children [16].

The findings suggest that the sensory pod functions as a powerful neuroceptive "cue of safety." By providing an enclosed, quiet, and predictable space, it allows an individual to retreat from the environmental triggers that activate a defensive state (fight, flight, or freeze). The user's ability to control the sensory input within the pod—the lights, the sounds, the tactile elements—further enhances this sense of safety and agency. The result, as described by participants, is a physiological and psychological shift: stress is reduced, the mind is calmed, and the capacity for focus and social engagement is restored. The participant's insight that safety is a prerequisite for regulation is not just a philosophical statement; it is a neurobiological fact, and the sensory pod appears to be an exceptionally effective tool for facilitating this foundational state. The pod's design, which offers both enclosure and visibility, may be particularly effective. The glass walls allow for a sense of connection to the larger space while still providing a protective barrier, preventing feelings of complete isolation or claustrophobia, which was a concern raised by one of the teachers. This balance of enclosure and connection is a design principle that warrants further investigation in the context of creating safe spaces.

5.2. An Embodiment of Universal Design for Learning (UDL)

While the pods were initially intended for a specific subgroup of students, their widespread adoption by a diverse range of users demonstrates their power as a tool for UDL. The UDL framework encourages the creation of learning environments that are flexible and supportive for all learners from the outset, rather than relying on retrofitted, stigmatizing accommodations [11]. The sensory pod exemplifies this principle.

These sensory pods appear to directly address the UDL guideline of providing multiple means of engagement by offering a powerful option for self-regulation [11]. The fact that students without diagnosed disabilities, and even teachers, found the pod beneficial underscores that the need for sensory regulation and a quiet space to focus is a universal human need, not a deficit specific to a few. This challenges the school system to move beyond a purely deficit-based model of support and to proactively design environments that acknowledge and support the sensory and emotional needs of all community members. The call from multiple teachers for a pod in every classroom speaks to a desire for this universal, proactive approach to environmental design. This shift in perspective, from an 'accommodation' for some

to a 'space' for all, is a critical step in creating truly inclusive school cultures. The pod becomes not a marker of difference, but a shared resource for well-being and productivity.

5.3. The Symbiotic Relationship of Teacher and Student Well-being

A pivotal finding of this study is the significant role the pods played in supporting teacher well-being. The teacher's testimony that the pod helps her feel like a "better teacher" and more "confident" is particularly telling. This was not about escaping work; it was about finding a space to self-regulate in order to re-engage with the demanding work of teaching more effectively. This finding provides a practical illustration of the critical link between teacher well-being and instructional quality [5, 15].

This connects back to the Polyvagal concept of co-regulation [16]. A teacher who is in a calm, regulated, ventral vagal state is better able to help a dysregulated student find calm. Their regulated presence serves as a powerful external cue of safety for the child. However, as the participants' experiences show, teachers cannot be effective co-regulators if their own nervous systems are in a state of chronic stress. The sensory pod, by providing a readily accessible space for teacher self-regulation, creates a positive feedback loop: a regulated teacher is better equipped to support their students, leading to a calmer classroom, which in turn reduces the teacher's stress. Investing in tools that support teacher well-being is, therefore, a direct and highly effective investment in student well-being and success. The teachers in this study who used the pod for their own regulation were not being selfish; they were engaging in a necessary professional practice that enabled them to be more present and effective for their students. This finding has profound implications for how we conceptualize teacher support and professional development, suggesting that providing resources for emotional and physiological regulation is as important as providing pedagogical training.

5.4. Redefining the "Intervention" Space

The study also sheds light on the psychological power of space. The behavior interventionist's comparison of her office to the pod was illuminating. The office was associated with authority and being "in trouble," while the pod was perceived as a neutral, non-judgmental, and even "fun" space. This difference in perception dramatically changed the dynamic of her interventions. By removing the implicit threat of an authority figure's office, the pod facilitated a more rapid development of trust and rapport, allowing the student to become more open and receptive.

This suggests that the design and perception of intervention spaces are critically important. The pod's success lies not just in its sensory features, but in its ability to reframe the entire context of a supportive interaction. It transforms a potentially stressful encounter into a shared experience of finding calm, shifting the power dynamic from one of authority and compliance to one of connection and collaboration. This reframing is a subtle but powerful mechanism for building the trusting relationships that are the foundation of all effective teaching and intervention. The sensory pod becomes a neutral ground where adult and child can meet as partners in the process of regulation.

5.5. The Pod as a Pedagogical Tool for Interoceptive Awareness

The findings suggest a deeper function of the sensory pod beyond immediate de-escalation; it serves as a pedagogical tool for learning the skill of self-regulation. The pod is not merely a space for regulation, but a space for learning regulation. This is achieved through a process of self-discovery, where the child,

through repeated use and experimentation, learns to identify and respond to their own internal sensory and emotional states. This process is central to the development of interoceptive awareness—the ability to notice and interpret the body’s internal signals (e.g., a racing heart, tense muscles, a feeling of being overwhelmed). When a child enters the pod and begins to experiment with the controls—adjusting the lights, changing the sounds, selecting a tactile object—they are engaging in a form of experiential learning. They are asking themselves, "What does my body need right now?" and getting immediate feedback from their nervous system. Does a blue light feel more calming than a red one? Does the sound of rain help them focus more than music? This trial-and-error process is fundamental to building a personalized toolkit of self-regulation strategies. The pod’s ability to save user preferences is a powerful manifestation of this learned awareness, allowing a child to return to a pre-set environment that they have discovered works for them. Therefore, the sensory pod can be reframed from a reactive intervention to a proactive, skill-building instrument. It provides a safe, controlled environment where children can develop the crucial life skill of understanding their own nervous system and learning what they need to do to find their way back to a state of calm and focus. This aligns with a shift in education away from managing behavior toward teaching self-regulation as a core competency.

5.6. Limitations

It is important to acknowledge the limitations of this study. As a qualitative inquiry conducted in a single school with a small, purposively selected sample, the findings are not intended to be generalizable in a statistical sense. The rich, detailed insights gained from this approach provide depth of understanding, but the specific experiences may be unique to this particular school context. Furthermore, the study captures a snapshot in time, approximately two months after the pods were introduced. The long-term impacts, as well as the potential for novelty effects to diminish over time, were not assessed. The brevity of some interviews, particularly with the younger students, also limited the depth of data that could be collected from those participants.

5.6. Implications for Practice and Future Research

Despite these limitations, the findings offer several important implications for educators, school administrators, and policymakers. First and foremost, this study provides strong evidence for the value of investing in environmental interventions that support sensory and emotional regulation. The clear demand for the pods from both students and staff suggests that the need for such resources is significant. School districts should consider allocating resources for sensory pods and spaces as a core component of their infrastructure for student and staff support. Second, the findings advocate for a Universal Design approach to well-being. Rather than viewing sensory tools as accommodations for a select few, schools should frame them as universal resources that benefit the entire community. This involves educating all staff and students on the importance of self-regulation and creating a culture where taking a “sensory break” is seen as a healthy and productive strategy for everyone. And third, the study highlights the critical, yet often neglected, issue of teacher well-being. School leaders must recognize that supporting the emotional and regulatory needs of their staff is not a luxury, but a prerequisite for creating effective and positive learning environments. Providing spaces like sensory pods for teachers to de-stress and refocus is a tangible and powerful way to combat burnout and improve teacher retention and effectiveness.

Future research should build upon these qualitative findings with quantitative and mixed-methods designs. Longitudinal studies could track the academic performance, attendance, and disciplinary referrals of students who regularly use the pods to provide more objective data on their impact. Comparative studies could examine the relative effectiveness of different types of sensory interventions (e.g., individual pods vs. full sensory rooms). Finally, further research is needed to explore the impact of such interventions on teacher burnout, job satisfaction, and retention rates on a larger scale.

6. Conclusion

This study provides a rich, participant-driven account of the profound and multifaceted impact of individual sensory pods in a school setting. The sensory pods such as ForeverMe SensPod product, emerged not merely as a tool for managing behavior, but as a vital environmental resource that fostered a sense of calm, safety, and focus for a diverse range of users. By offering a “cocoon of safety,” the pods enabled both students and teachers to find respite from the sensory demands of the school day, regulate their nervous systems, and re-engage with their work with renewed confidence and capacity.

The findings powerfully illustrate key theoretical concepts in practice, demonstrating how environmental design, such as innovative learning pods (ILPs), can serve as a direct neuroceptive cue of safety, as described by Polyvagal Theory, and how a single tool can embody the inclusive principles of UDL. Perhaps most significantly, this research illuminates the symbiotic relationship between student and teacher well-being, revealing that investments in resources that support staff self-regulation are a direct investment in the health of the classroom and the success of students.

While the challenge of limited availability underscores the need for greater investment, the message from the participants is clear: safe, quiet, and restorative spaces are not a luxury in education, but a fundamental necessity. As schools continue to grapple with the complex needs of a diverse student population and the persistent challenge of teacher burnout, the humble sensory pod offers a powerful model for creating more humane, effective, and truly inclusive learning environments for all.

7. References

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