

A PHENOMENOLOGICAL STUDY ON THE EXPERIENCES OF SPECIAL EDUCATION TEACHERS ON IMPLEMENTING PHYSICAL MOVEMENT BREAKS FOR STUDENTS OF DETERMINATION IN SELECTED SCHOOLS IN ABU DHABI, UAE

Rizmar S. Rivera
Frederick Edward T. Fabella

Graduate School, FEU Roosevelt, Cainta, Rizal, Philippines

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Corresponding author's email: rizmarrivera05@gmail.com

ABSTRACT

Student engagement and sustained attention are critical factors in the learning success of students of determination, particularly within inclusive classroom environments where diverse needs must be addressed. This study examined the perceptions and lived experiences of Special Education (SpEd) teachers regarding the use of physical movement breaks as a strategy to improve focus, behavior, and engagement among students of determination in selected schools in Abu Dhabi, United Arab Emirates. A qualitative descriptive phenomenological research design was employed, involving eight Special Education teachers from private schools, charter schools, and specialized education centers who were selected through purposive sampling based on their experience in implementing movement breaks. Data were collected through semi-structured interviews conducted either face-to-face or through secure online platforms. The collected data were analyzed using Braun and Clarke's thematic analysis to identify recurring patterns and themes representing shared experiences. Findings revealed that teachers perceive physical movement breaks as purposeful instructional strategies that support students in regulating attention, improving classroom behavior, and increasing participation in learning tasks. Students were observed to return to activities calmer, more focused, and more motivated to engage. However, challenges such as limited instructional time, varying sensory needs, and insufficient formal training were also identified. The findings indicate that physical movement breaks are effective and practical strategies that enhance engagement and learning readiness among students of determination in inclusive educational settings.

Keywords: *Physical Movement Breaks, Students of Determination, Special Education Teachers, Student Engagement, Inclusive Education, Phenomenological Study*

INTRODUCTION

The United Arab Emirates (UAE), particularly Abu Dhabi, has made significant progress in advancing inclusive education through comprehensive legislative and policy frameworks that promote equitable access for students of determination. Policies such as Federal Law No. 29 of 2006, Ministerial Resolution No. 647 of 2020, and the Abu Dhabi Strategy for People of Determination (2020–2024) mandate the provision of individualized supports, including Individual Education Plans (IEPs), therapeutic services, and multidisciplinary interventions. Despite these developments, students of determination, particularly those with Autism Spectrum Disorder (ASD)—continue to experience challenges in sustaining attention, regulating behavior, and managing sensory input, which may hinder classroom engagement and learning outcomes (Emonson et al., 2022; Ford, 2024).

Physical movement breaks have emerged as a practical intervention to address these challenges. Defined as brief, structured physical activities embedded within instructional time, movement breaks are associated with improved attention, emotional regulation, and classroom behavior (Jensen, 2005; Nielsen, 2020). Empirical evidence suggests that such interventions can reduce disruptive behaviors and increase time-on-task, particularly among students with ASD and attention-related difficulties (Fedewa & Ahn, 2011; Yarımkaya & Esentürk, 2022). Additionally, movement breaks provide essential sensory input that supports self-regulation and helps students cope with classroom demands and transitions (Scanlon, 2023). However, challenges such as time constraints and limited professional training continue to affect their consistent implementation (Chorlton et al., 2022).

Given their central role in inclusive classrooms, special education teachers offer critical insights into the effectiveness and practical application of movement-based strategies. However, research exploring these perspectives within the UAE context remains limited. Therefore, this study investigates the perceptions and experiences of special education teachers in Abu Dhabi regarding the use of physical movement breaks, with the aim of informing contextually relevant, evidence-based practices that enhance student engagement and learning outcomes.

Background of the Study

Recent expansion in inclusive education within Abu Dhabi has led to a substantial increase in the enrollment of students of determination across public, private, and charter schools (ADEK, 2023; Gulf News, 2024). This growth has intensified the demand for classroom practices that are responsive to diverse cognitive, behavioral, and sensory needs. While policy frameworks have established access and support structures, variability remains in how inclusive strategies are enacted at the classroom level, particularly in addressing student engagement and attention.

Students with neurodevelopmental conditions, including autism spectrum disorder (ASD) and attention-deficit/hyperactivity disorder (ADHD), frequently demonstrate challenges related to sustained attention, self-regulation, and behavioral control (CDC,

2020; Emonson et al., 2022). These challenges are further compounded by the predominantly sedentary nature of classroom instruction, which may limit opportunities for sensory regulation and active engagement. As a result, there is increasing interest in instructional strategies that integrate physical activity within academic contexts.

Physical movement breaks have been identified as a promising approach to mitigate these challenges. Empirical studies indicate that structured movement integrated into classroom routines can enhance cognitive functioning, improve on-task behavior, and support emotional regulation (Mazzoli et al., 2021; Scanlon, 2023; Schaeffer, 2022). These outcomes are particularly relevant in special education settings, where individualized and adaptive strategies are essential. However, implementation remains uneven, with reported barriers including limited teacher training, time constraints, and the need to tailor activities to diverse learner profiles (Salters & Scharoun Benson, 2022; Sadlier, 2021).

Despite a growing international evidence base, there is a lack of context-specific research examining how such strategies are perceived and applied within the UAE educational system. In particular, limited attention has been given to the perspectives of special education teachers, who play a central role in adapting and delivering inclusive practices.

Accordingly, this study investigates the perceptions and experiences of special education teachers in Abu Dhabi regarding the use of physical movement breaks. By situating teacher insights within the local educational context, the study aims to contribute to the development of practical, evidence-informed approaches that support engagement and learning among students of determination.

The Benefits of Physical Movement Breaks for Students with Special Needs

Physical activity supports cognitive, social, and emotional development in students with special needs. Structured movement breaks improve attention, impulse control, and social interaction for students with ASD and Emotional and Behavioral Disorders (EBD) (Scanlon, 2023). Kinetic treatments, which tailor exercises to individual needs, enhance motor skills, self-confidence, and classroom participation (Ionescu, Cordun, & Di Carlo, 2020). Movement interventions reduce aggressive behaviors, lower stress, and improve executive functioning, attention, and memory (Yarımkaaya & Esentürk, 2022; Mazzuca, 2024).

Sensory benefits are also well-documented. Students with Sensory Processing Disorder (SPD) demonstrate improved focus and behavior regulation through structured physical activity (Autrey, 2020; Sadlier, 2021). Neurocognitive theories, such as Jensen's Brain-Based Learning Theory, support that movement stimulates neural pathways necessary for attention and cognitive processing (Williams, 2020). Collectively, these findings indicate that physical movement breaks promote self-regulation, engagement, and classroom readiness, aligning with special education goals to optimize learning outcomes.

However, systematic reviews suggest variability in effectiveness, particularly regarding academic performance (Lynch et al., 2022; Reyes-Amigo et al., 2025). The benefits depend on activity intensity, duration, structure, and alignment with instructional objectives, emphasizing the need for context-sensitive and individualized implementation.

The Role of Physical Movement Breaks in Education

Movement breaks, or “brain breaks,” counteract the negative effects of prolonged sedentary behavior, enhancing cognitive focus, attentiveness, and classroom productivity (Campbell & Lassiter, 2020). In special education, these breaks help students release excess energy, refocus, and re-engage with tasks, improving attention and behavioral engagement (Ford, 2024). Evidence shows that structured breaks increase on-task behavior, reduce off-task behaviors, and support cognitive alertness, particularly for students with sensory or motor challenges (Broad et al., 2023; Autrey, 2020).

Physical activity also addresses sedentary behavior, improving physical health and overall engagement (Emonson et al., 2022; Chorlton et al., 2022). Tailored movement breaks enable sensory regulation, creating a “gateway to learning” for students with sensory sensitivities (Sadlier, 2021; Schaeffer, 2022). Neurocognitive benefits, including enhanced memory and oxygenation, further reinforce the link between physical activity and learning outcomes (Nielsen, 2020; Kleinjan, 2020; Mazzoli et al., 2021).

Despite these benefits, effectiveness is context dependent. Classroom design, teacher facilitation, and alignment with instructional goals significantly influence outcomes (Larose et al., 2024; Kariippanon et al., 2021). Movement breaks require intentional structuring to maximize cognitive, emotional, and behavioral gains in special education settings.

The Overall Views and Perception of Special Education Teachers on Physical Movement Breaks

Teachers’ perceptions are central to successful implementation. Educators recognize improvements in student focus, behavior, and engagement following movement breaks (Campbell & Lassiter, 2020; Gentile et al., 2023). Positive attitudes toward inclusive strategies predict consistent application, while lack of training, resources, and time constraints limit effectiveness (Ford, 2024; Emonson et al., 2022).

Implementation is often inconsistent despite awareness of benefits (Chorlton et al., 2022). Professional development enhances teacher confidence and ability to integrate movement breaks effectively (Salters & Scharoun Benson, 2022; Williams, 2020). Addressing logistical challenges such as resource availability, class size, and curricular pressures is critical to bridging the gap between perception and practice.

The Needs and Challenges of Implementing Physical Movement Breaks

The diverse abilities and sensory needs of students with disabilities necessitate individualized approaches. Structured interventions must account for overstimulation risks and behavioral challenges (Rummelhart, 2023; Schaeffer, 2022). Movement breaks are most effective when aligned with Individualized Education Programs (IEPs) and tailored to student-specific sensory and motor profiles (Mazzuca, 2024; Autrey, 2020).

Teacher training and professional support are critical, particularly for students with motor or sensory difficulties (Meijers et al., 2024). Logistical constraints, including equipment limitations and large class sizes, present barriers to effective implementation (Sadlier, 2021; Rummelhart, 2023). Recent studies also highlight variability in student outcomes, suggesting that benefits of movement breaks are not universal and require differentiation based on student characteristics (Yin et al., 2025).

Overall, physical movement breaks enhance cognitive, social, and emotional outcomes for students with special needs. Their success depends on teacher preparedness, structured implementation, and context-sensitive adaptation. Addressing barriers through professional development, resource allocation, and policy support is essential for maximizing the benefits of movement-based interventions in special education classrooms.

Theoretical Framework

This study is grounded in a coherent integration of cognitive and learning theories that collectively explain how special education teachers perceive and utilize physical movement breaks to enhance student engagement. Central to this framework is the perspective that learning and perception are active, dynamic, and context-dependent processes shaped by experience, bodily interaction, and intentional engagement.

From a cognitive standpoint, perception is understood as an active and inferential process rather than a passive reception of sensory input. Drawing from the work of Gregory (1970; 1997), perception operates through hypothesis testing, where individuals interpret sensory information using prior knowledge, expectations, and contextual cues. This interaction between bottom-up sensory input and top-down cognitive processes results in subjective and evolving interpretations of experience. In educational settings, this suggests that special education teachers construct their understanding of movement breaks not only through direct classroom observations but also through their prior teaching experiences, professional training, and beliefs about effective pedagogy. As perception evolves through repeated exposure and reflection (Démuth, 2013; Carbon, 2014), teachers may reinterpret movement breaks from being perceived as disruptions to recognizing them as valuable tools for improving attention and behavior. Furthermore, contextual factors such as classroom environment, student diversity, and institutional expectations influence how these practices are understood and applied, reinforcing the idea that teacher perception is both constructed and situational.

Complementing this cognitive perspective, learning is also viewed as inherently embodied, emphasizing the interdependence of mind, body, and environment. Lakoff and Johnson (1999) argue that cognition is grounded in sensory and motor experiences, where understanding is shaped through physical interaction with the world. This view is further supported by grounded cognition theory, which posits that cognitive processes are rooted in perceptual and motor systems (Barsalou, 2008). Within classroom contexts, this implies that physical movement is not merely an auxiliary activity but a fundamental component of cognitive engagement. Empirical evidence supports this connection, demonstrating that movement enhances attention, memory, and executive functioning (Diamond & Ling, 2016; Mavilidi et al., 2018). For students with special needs, movement breaks provide opportunities to regulate sensory input, sustain attention, and re-engage with learning tasks. Consequently, teachers' implementation of movement-based strategies reflects an understanding—whether explicit or implicit—of the role of bodily engagement in supporting cognitive processes.

In addition to perception and embodiment, learning is conceptualized as an intentional and self-regulated process. According to Scardamalia and Bereiter (1985; 1991), meaningful learning occurs when learners actively and purposefully engage in

constructing knowledge, supported by cognitive and metacognitive regulation. This involves the ability to plan, monitor, and evaluate one's learning while maintaining attention and motivation (Brown, 1987; Zimmerman, 2002). Engagement, therefore, is multidimensional, encompassing behavioral, emotional, and cognitive components (Fredricks et al., 2004). For learners with special needs, sustaining such engagement can be challenging without structured support. Research indicates that physical movement breaks can enhance on-task behavior, attention, and readiness to learn (Mahar et al., 2006; Vazou et al., 2020), thereby facilitating more intentional participation in classroom activities. Through this lens, movement breaks serve as regulatory tools that help students regain focus and actively re-engage in the learning process.

Integrating these perspectives, the study adopts a holistic framework in which teacher perception, embodied learning, and intentional engagement interact to shape classroom practices. Teachers interpret and evaluate movement breaks through constructed perceptions influenced by experience and context; students benefit cognitively through embodied interactions with their environment; and learning outcomes are optimized when students are able to intentionally regulate their engagement. This synthesis underscores that the effectiveness of movement breaks is not determined by a single factor but emerges from the dynamic interplay between how teachers understand their value, how students physically and cognitively respond, and how classroom environments support intentional participation.

Overall, this integrated theoretical foundation provides a comprehensive lens for examining how physical movement breaks are perceived and implemented in special education settings. It supports the premise that learning is constructed through experience, grounded in bodily activity, and sustained through intentional engagement. Through this framework, the study seeks to explore how these interconnected processes contribute to improving student focus, participation, and overall engagement in inclusive classrooms.

Conceptual Framework

Figure 1 presents the conceptual framework of this study, illustrating the flow and relationships between special education teachers, their views, perception and experiences, the use of physical movement breaks, and the resulting impact on students of determination. At the core, this framework seeks to explore how teachers' views influence the implementation of movement-based strategies designed to enhance student outcomes, specifically focus and engagement.

The framework begins with Special Education Teachers, who serve as the primary agents in delivering instructional strategies. Their views, perception, and experiences that is, their beliefs, and understanding regarding the value and effectiveness of physical movement breaks directly influence how and whether these strategies are integrated into the classroom environment. The views, perception and experiences of the teachers play a pivotal role because positive beliefs and high perceived effectiveness are more likely to result in active implementation of movement breaks during instruction.

Following this, the framework highlights Physical Movement Breaks as an intervention or strategy utilized by special education teachers. Movement breaks are short periods of physical activity integrated into the learning environment, intended to help

students reset their attention spans, manage sensory needs, and re-engage with learning tasks. This framework shows that the use of physical movement breaks is dependent on teachers' perceptions and views. If teachers perceive these breaks as beneficial, they are more likely to incorporate them consistently and effectively.

The third major element of the framework focuses on the Students of Determination. Based on several studies, the implementation of physical movement breaks positively affects these students by improving their focus and engagement in academic tasks. In this relationship, students are the primary beneficiaries of the strategy, as enhanced focus and engagement are critical for their learning progress and overall classroom participation.

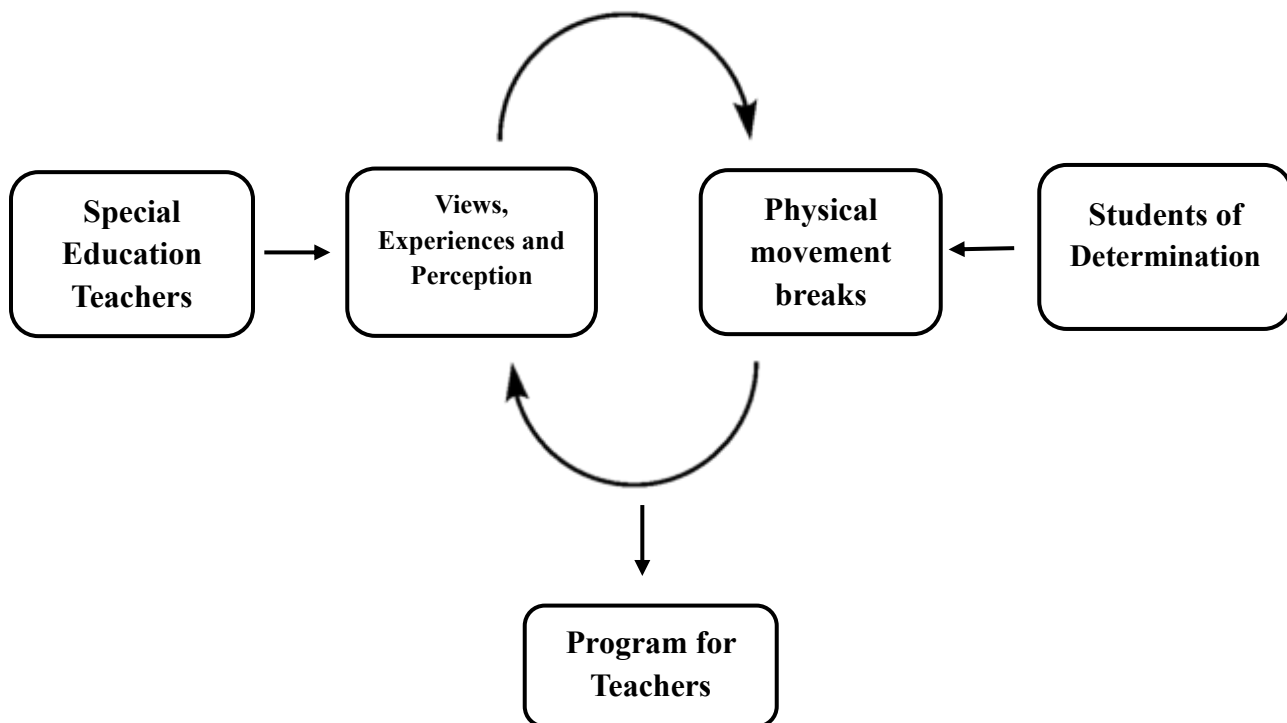


Figure 1: Conceptual Framework of the Perception and Experiences of Special Education Teachers on Physical Movement Breaks to Improve Focus and Engagement in students of determination

Recognizing the critical role of teachers' perception and experiences, the framework also leads to the development of a program for teachers. Rather than focusing directly on students, this program is targeted at empowering and equipping teachers, since they are the ones who implement and adapt the physical movement breaks in the classroom. The program would be based on the findings of the study, providing strategies, best practices, and additional training to enhance the implementation of movement breaks. By supporting teachers with knowledge, skills, and confidence, the program seeks to create a positive feedback loop: as teachers become more skilled and see better outcomes from their efforts, their perception and experiences are likely to become even more positive, thereby sustaining or even expanding the use of physical movement breaks. Thus, the conceptual framework comprehensively captures the dynamic

interaction between teacher views, perception, and experiences, strategy implementation, student outcomes, and the professional development needed to sustain and enhance these practices. This structure ensures that the research study not only explores current views, perception and experiences but also opens a pathway for potential interventions that can foster better educational experiences for students of determination.

Research Questions

This study explored the perceptions and experiences of special education teachers regarding the use of physical movement breaks as a strategy to enhance engagement among students with determination.

Specifically, this research seeks to address the following questions.

1. What are the overall views of special education teachers about the role of physical movement breaks in improving students' engagement and focus?
2. How do Special Education (SpEd) teachers implement physical movement breaks for students with determination?
3. What benefits do special education teachers observe in students of determination after incorporating physical movement breaks?
4. What challenges do special education teachers observe in students of determination after incorporating physical movement breaks?
5. What coping strategies do special education teachers employ to address these challenges?
6. Based on the findings of this study, what type of program or intervention can be recommended to support the effective use of physical movement breaks in special education settings?

Scope and Delimitation of the Study

This study focused on exploring the views, perceptions, and experiences of special education teachers regarding the use of physical movement breaks as a strategy to enhance engagement and focus among students of determination. The scope of the research was intentionally concentrated on eight special education teachers working with secondary students in schools within Abu Dhabi during the academic year 2024–2025. This localized focus allowed for an in-depth understanding of how movement breaks are implemented within inclusive classrooms in the UAE context, where related research remains limited compared to international settings.

The study examined key areas including teachers' beliefs about movement breaks, their perceived effectiveness in improving student engagement, the benefits and challenges encountered during implementation and observed student behavioral responses. These areas were explored through teacher-reported data, providing insight into their lived experiences and professional interpretations of movement-based strategies.

The research employed qualitative phenomenological design, focusing solely on teacher perspectives. As such, it did not include direct classroom observations or quantitative measures of student performance. While this approach enabled a deeper exploration of teacher experiences, it may limit the ability to objectively measure the direct impact of movement breaks on student outcomes.

The scope of the study was further delimited to special education teachers and did not include general education teachers or other stakeholders. Additionally, the study was geographically limited to schools within Abu Dhabi, which means that the findings may not be generalizable to other emirates or international educational contexts with differing policies, resources, and cultural expectations.

Overall, the study provides context-specific insights into the use of movement breaks in inclusive special education settings. While the findings may inform teaching practices and professional development, they should be interpreted within the boundaries of the study's design, sample, and setting.

METHODOLOGY

Research Design

This study used a qualitative descriptive phenomenological design to explore special education teachers' experiences and perceptions of physical movement breaks in inclusive classrooms. The approach captured authentic teacher experiences while identifying shared meanings of implementing movement breaks (Creswell, 2013; Sandelowski, 2000). Data were analyzed using Braun and Clarke's (2006) thematic analysis, with rigor ensured through bracketing, reflexivity, audit trails, and coherence checks (Nowell et al., 2017). This design provided a focused framework for understanding how movement breaks support student engagement and informed instructional practice.

Locale of the Study

The study was conducted in Abu Dhabi, focusing on special education settings that support students of determination. The selected schools cater to secondary learners and implement structured inclusive education programs aligned with national initiatives such as the School for All. The study ensured that the setting supported the use of physical movement breaks through established classroom routines, adequate space for movement, and teachers experienced in applying engagement strategies, enabling the collection of relevant data on their implementation and perceived effectiveness.

Participants of the Study

The participants in this study consisted of eight special education professionals from private, charter, and specialized educational settings in Abu Dhabi, United Arab Emirates. These participants were actively involved in teaching or supporting students of determination and had prior experience in implementing physical movement breaks as part of instructional, behavioral, or regulatory classroom practices.

A purposive sampling technique was employed to select information-rich participants who met the following inclusion criteria:

- (a) possession of a valid teaching qualification or certification in Special Education, Inclusion, or a related field, recognized by the UAE Ministry of Education (MoE), ADEK, or an equivalent international body;
- (b) current employment as a Special Education Teacher, Inclusion Teacher, SEN Teacher, SEN Coordinator, or Head of Inclusion in a primary or secondary educational setting in Abu Dhabi;
- (c) a minimum of one year of experience working with students with diagnosed

special educational needs, such as Autism Spectrum Disorder (ASD), Attention-Deficit/Hyperactivity Disorder (ADHD), intellectual disabilities, or learning difficulties; and

(d) at least six months of experience implementing physical movement breaks within classroom routines.

The participant group represented a range of professional roles and educational contexts, including inclusion teachers, SEN teachers, heads of inclusion, and coordinators working across mainstream schools, private international schools, charter schools, and special needs centers. Their professional backgrounds varied in terms of academic qualifications, years of teaching experience, and training related to student engagement, behavior regulation, and inclusive instructional practices. Despite these variations, all participants shared direct and sustained experience in using movement breaks to support the learning and regulation of students of determination.

To preserve confidentiality and align with ethical qualitative reporting practices, participants were assigned pseudonymous identifiers (Participant 1 to Participant 8).

Participant Profile Summary

A brief demographic and professional summary of the participants is presented below:

- Participant 1 was a 31-year-old male inclusion teacher in a charter/public school setting with 10 years of teaching experience, including 2 years in special education. He held a master's degree and reported daily use of movement breaks supported by training in Universal Teaching Routines.
- Participant 2 was a 28-year-old male inclusion teacher in a private international school with 8 years of teaching experience, including 5 years in special education. He held a Master of Arts in Education major in Special Education and implemented movement breaks daily, supported by training in Applied Behaviour Analysis (ABA).
- Participant 3 was a 52-year-old female Head of Inclusion in an American private school with more than 10 years of teaching experience, including 5 years in SEN. She held a Bachelor of Arts in Psychology and used movement breaks as needed, informed by professional development in ABA and Shadow Teaching.
- Participant 4 was a 38-year-old female Executive Head of Inclusion in a British private school with more than 10 years of SEN experience. She held a bachelor's degree and additional qualifications in NASENCO/CCET, and reported daily use of movement breaks to support emotional and behavioral regulation.
- Participant 5 was a 28-year-old female SEN teacher in a special needs center with 6 years of teaching experience, including 5 years in special education. She held a Bachelor of Elementary Education major in Special Education and incorporated movement breaks daily into her classroom routine.
- Participant 6 was a 41-year-old female SEN teacher in a special needs center with almost 7 years of teaching experience, all within special education. She held a bachelor's degree in education and reported daily use of movement breaks, informed by prior CPD in student engagement.
- Participant 7 was a 39-year-old female Senior Classroom Teacher in a semi-public special education center with 17 years of teaching experience, including 13 years

in special education. She held a Master of Science in Special Education and implemented movement breaks both on a fixed schedule and responsively, based on student needs.

- Participant 8 was a 41-year-old female inclusion teacher in a private international school with 8 years of SEN teaching experience. She held a bachelor's degree in Special Education and regularly implemented movement breaks to support attention, participation, and self-regulation in inclusive classrooms.

Sampling Technique

This study utilized purposive sampling, a widely accepted strategy in qualitative research for selecting participants who possess direct knowledge and lived experience relevant to the phenomenon under investigation (Palinkas et al., 2015). In this study, purposive sampling was appropriate because it enabled the intentional recruitment of special education professionals who had firsthand experience implementing physical movement breaks in educational settings for students of determination.

The final sample consisted of eight participants, which was deemed appropriate for a phenomenological inquiry focused on generating rich, in-depth descriptions of shared professional experiences. In qualitative research, sample adequacy is determined not by numerical size alone, but by the depth, relevance, and sufficiency of the data collected to achieve data saturation, the point at which no substantially new themes emerge (Vasileiou et al., 2018). Given the relative homogeneity of the participants in terms of professional context and experience, the selected sample was considered sufficient to support a rigorous exploration of the phenomenon.

Instrument of the Study

The instruments used in this study were developed specifically to explore the experiences and perceptions of Special Education teachers regarding the use of physical movement breaks in inclusive classrooms:

1. **Semi-Structured Interview Guide** – This researcher-made instrument consisted of open-ended questions aligned with the study objectives and grounded in relevant literature on physical movement, student engagement, and inclusive education. The guide provided a flexible structure for dialogue, allowing participants to elaborate on their classroom experiences while ensuring consistency across interviews. It facilitated rich, in-depth discussions by combining guided questions with opportunities for emergent insights.
2. **Video or Audio Recording Device** – With participants' informed consent, interviews were recorded to ensure accuracy and reliability of the data. Recording supported active listening, facilitated detailed transcription, and preserved participants' responses for thorough analysis.
3. **Field Notes and Reflexive Journal** – The researcher maintained field notes to capture immediate observations such as non-verbal cues, classroom context, and initial impressions. A reflexive journal was also kept to document evolving interpretations, thoughts, and potential biases, supporting transparency and rigor in qualitative analysis.

Interviews were conducted in person or via secure video conferencing platforms such as Zoom or Microsoft Teams, providing flexibility, accessibility, and participant comfort. The

use of video conferencing also enabled observation of non-verbal cues, supported rapport-building, and offered practical advantages such as reduced costs and enhanced data security (Archibald et al., 2019).

Data Gathering Procedure

Before the data collection, permission to conduct the study was formally requested through a letter addressed to the participants, and individual informed consent was obtained from each participant. Participants were assured of the voluntary nature of their involvement and informed of their right to withdraw at any time without consequence. The qualitative descriptive phenomenological approach was employed, allowing SpEd teachers to express their perceptions and experiences regarding the use of physical movement breaks to enhance student focus and engagement in inclusive classrooms. Prior to the interviews, the purpose and scope of the study were explained to each participant, and an interview guide based on the study objectives was provided to structure the conversation while allowing open expression. Individual interviews were conducted either in a private space within the school premises or virtually via secure online platforms, depending on participant preference, with confidentiality and privacy strictly maintained. Participants responded verbally or in a paper-and-pencil format, and with their permission, interviews were video or audio-recorded to ensure accurate data capture. Each interview lasted approximately 45 to 60 minutes, and all identifying information was anonymized during transcription. The data collected were analyzed to identify common themes and insights relevant to the research objectives.

Data Analysis

This study utilized Braun and Clarke's (2006) thematic analysis to examine the experiences and perceptions of special education teachers regarding the use of physical movement breaks to enhance student focus and engagement. The approach was selected for its systematic yet flexible nature, making it well-suited for a phenomenological study that seeks to capture and interpret participants' lived experiences in depth.

In the first step, familiarization with the data, the researcher transcribed all interview recordings and engaged in repeated reading of the transcripts to develop a thorough understanding of the content. During this stage, initial notes were recorded to capture key ideas, recurring patterns, and significant statements related to the use of movement breaks.

In the second step, generating initial codes, the researcher systematically examined the data and identified meaningful segments, assigning codes to represent important features. These codes reflected various aspects such as perceived benefits of movement breaks, challenges in their implementation, observed changes in student behavior, and contextual factors influencing their use.

In the third step, searching for themes, the researcher organized the codes into broader categories by grouping related ideas together. This process involved identifying patterns across participants' responses and developing preliminary themes that represented shared experiences and perspectives.

In the fourth step, reviewing themes, the preliminary themes were carefully evaluated to ensure they were coherent, consistent, and strongly supported by the data. Themes were refined by merging similar ones, separating overlapping concepts, or

discarding those that lacked sufficient evidence, ensuring alignment with the overall dataset.

In the fifth step, defining and naming themes, each theme was analyzed in depth to determine its central meaning and relevance to the research objectives. Clear and concise names were assigned, supported by detailed descriptions that captured the richness and nuance of the participants' experiences.

In the sixth step, producing the report, the finalized themes were integrated into a comprehensive and interpretive narrative. Direct quotations from participants were included to strengthen credibility and authenticity, ensuring that the findings accurately represented the voices and experiences of the teachers.

The analysis resulted in a set of well-defined themes that captured both the shared and diverse experiences of special education teachers in implementing physical movement breaks. These findings provided meaningful insights into how such strategies influence student engagement and focus, as well as the contextual factors that shape their application in inclusive classroom settings.

Ethical Considerations

The researcher ensured full compliance with ethical standards and UAE data protection regulations, including institutional guidelines and the UAE Personal Data Protection Law. Informed consent was obtained from all participants after clearly explaining the study's purpose, procedures, potential risks, and benefits. Participation was entirely voluntary, and participants were reminded that they could withdraw at any time without consequence. Anonymity and confidentiality were strictly maintained by assigning coded identifiers, removing all personal information, and generalizing contextual details in transcripts and reports.

Data security and privacy were strictly upheld, with digital files stored on encrypted, password-protected devices and physical documents secured in locked storage. Audio recordings were deleted after transcription and verification. The study prioritized participants' well-being and cultural sensitivity, allowing them to skip or decline questions without pressure. All data were used solely for academic and research purposes, ensuring ethical integrity, transparency, and adherence to local and institutional regulations throughout the study.

RESULTS

Research Question 1: What are the overall views of special education teachers about the role of physical movement breaks in improving students' engagement and focus?

Table 1: Summary of Themes for RQ 1

Themes	Sub-themes	Codes/ Meaning units
Theme 1. Tool for Improving Engagement and Focus	Cognitive Refocusing	Refocusing, Increase motivation

Themes	Sub-themes	Codes/ Meaning units
	Readiness and Interest	Learning readiness, Re-ignited motivation
Theme 2. Support for Emotional Regulation and Behavior Management	Proactive Self-Regulation	Self-regulation, Autonomy in well-being
	De-escalation of Aggression	Reduction in behavioral aggression, Elimination of aggression
Themes 3. Humanistic and Professional Validation	Universal Need for Breaks	Comparing students to adults; validating movement breaks as a human need, not just a SEN strategy.
	Reciprocal Teacher Benefit	Teacher happiness; recharge for the instructor; improved teaching instruction.
Theme 4: Increased Motivation and Learning Readiness	Return to Calm and Regulation	Return to calm
	Renewed Motivation and Participation	Re-ignited motivation; Increased willingness and participation
	Cognitive Reset and Learning Readiness	Mental reset; Cognitive recovery; Sustained attention
Theme 5: Reduced Disruptive Behavior	Behavioral Regulation	Management of extreme behaviors; Elimination of aggression
	Prevention behavior of Escalation	Prevention of chaos

Theme 1: Physical Movement Breaks as a Tool for Improving Engagement and Focus

Participants consistently described physical movement breaks as an effective instructional strategy to enhance students' engagement and concentration. These breaks serve as deliberate pauses that allow students to "calm down, relax, and refocus themselves" (P1), facilitating renewed attention to academic tasks. Teachers observed that after these breaks, students returned "listening again" and "more focused, motivated" (P4, P7). The immediacy of this refocusing effect indicates that movement breaks function as a valuable tool to mitigate cognitive fatigue and overstimulation common among students of determination. Similarly, Reyes-Amigo et al. (2025) reported that school-

based active breaks positively influenced classroom behavior and executive functions, particularly inhibitory control and cognitive flexibility. Additionally, a 2023 systematic review by Daly-Smith et al. (2023) also concluded that short classroom movement breaks enhance cognitive engagement without reducing instructional time. Consequently, movement breaks are not merely physical outlets but are intrinsically linked to improving students' readiness and motivation to learn, supporting findings from prior literature on sensory regulation and attention. The convergence of participants' interview responses, the researcher's field notes documenting teachers' descriptions of improved attentional behaviors, and reflections recorded in the reflexive journal collectively support the interpretation that movement breaks help restore students' engagement and focus during classroom learning.

Theme 2: Support for Emotional Regulation and Behavior Management

Movement breaks were also identified as instrumental in promoting emotional self-regulation and reducing behavioral challenges in the classroom. Participants reported that breaks helped students "regulate themselves" and "prevent escalation into aggressive behaviors such as hitting or banging" (P1, P2). The provision of breaks was seen as a proactive strategy that enabled students to manage sensory and emotional overload before problematic behaviors occurred. Importantly, movement breaks also fostered autonomy, giving students "agency over their own well-being" (P8), which contributed to the development of self-awareness and independence in managing their emotional states. This theme aligns with theories of self-regulation in special education, highlighting how structured sensory and movement opportunities can enhance behavioral outcomes. Goh et al. (2022) found that moderate physical activity significantly reduced behavioral disruptions and improved emotional regulation among children with developmental disabilities. Additionally, Muntaner-Mas et al. (2023) found that active breaks were associated with reductions in classroom behavioral incidents in students with attentional difficulties.

Theme 3: Humanistic and Professional Validation

Theme 3 highlights teachers' views and perspectives that movement breaks are not only beneficial for Students of Determination but represent a basic human need that supports both students and teachers. Two subthemes emerged from the data: Universal Need for Breaks and Reciprocal Teacher Benefit.

Participants emphasized that the need for movement and rest is universal rather than limited to students with special educational needs. Teachers often justified the use of movement breaks by comparing students' experiences with their own physical and mental fatigue during long periods of sitting. As one participant shared, "Even us, we need break... imagine you sitting at your desk from the morning until three o'clock. How will you feel?" (P8). This response reflects teachers' recognition that prolonged sedentary learning may affect attention, comfort, and engagement for anyone in the classroom.

Teachers also described movement breaks as supporting holistic child development, extending beyond academic performance. One participant explained, "I truly believe that when we integrate movement... we are not only supporting academic growth, but we are also nurturing the whole being of the child—the mind, the body, and even their hearts." (P3). This perspective aligns with humanistic educational approaches

that emphasize addressing learners' cognitive, emotional, and physical needs to support meaningful learning.

Recent research also supports the integration of physical activity within classroom instruction to enhance attention and reduce fatigue. A review by Daly-Smith et al. (2022) found that classroom-based physical activity breaks positively influence students' cognitive engagement and classroom behavior while also addressing children's natural need for movement during the school day. Additionally, humanistic learning theory suggests that meeting students' basic physiological needs is essential for effective learning to occur (Maslow, 1943). Movement breaks, therefore, help create learning environments that recognize and respond to these fundamental needs.

Another important finding is that teachers perceived movement breaks as mutually beneficial, supporting both student engagement and teacher well-being. Some participants reported that these short breaks allowed them to briefly recharge and physically reset during the school day. As one participant stated, "Beneficial din siya as well, hindi lang ang sa student, sa teacher din... everyone naman needs some time to recharge." (P5). Another teacher similarly noted, "I feel happy because, you know, I see it benefiting the students and myself also... it really helps me also to recharge and, you know, like, stretch my body and stuff."

These responses suggest that movement breaks contribute to positive classroom energy and teacher motivation. When teachers also experience brief moments of movement or pause, they may return to instruction with improved focus and enthusiasm. Across interviews, educators frequently framed movement breaks as a compassionate and responsive teaching strategy. Reflections recorded in the researcher's reflexive journal during data collection also noted teachers' emphasis on addressing students' emotional and developmental needs. Recent research indicates that classroom-based breaks can positively affect teachers themselves, with many reports feeling more focused, energized, and less stressed after implementing classroom breaks (Early Childhood Education Journal, 2025). Therefore, practices such as movement breaks may indirectly enhance teaching effectiveness while promoting a more supportive and engaging classroom climate.

Overall, this theme suggests that teachers view movement breaks as a humanistic and inclusive classroom practice that acknowledges the natural physical and cognitive needs of both students and teachers. Rather than being seen solely as a support strategy for Students of Determination, movement breaks were framed as a shared practice that benefits the entire classroom community.

Theme 4: Increased Motivation and Learning Readiness

Theme 4 reflects participants' shared perceptions that physical movement breaks significantly enhance students' emotional regulation, motivation, and cognitive preparedness for learning. Teachers described movement breaks as short but meaningful pauses that allow students to calm down, recharge, and return to classroom tasks with improved focus and willingness to participate.

One key aspect of this theme is returning to calm and emotional regulation. Participants reported that after engaging in movement breaks, students often re-enter classroom activities in a calmer and more controlled state. As Participant 3 noted, "After the break, they come back calmer and more ready to listen." Teachers also observed that

these breaks reduce stress levels within the classroom for both students and educators, creating a more positive and manageable learning environment.

Another important component is renewed motivation and participation. Teachers consistently reported that students show greater willingness to engage in academic tasks following movement breaks. For instance, Participant 2 observed that students become “more willing to do the task,” while Participant 7 noted that students return to their work “more focused, motivated.” These responses indicate that addressing students’ physical and emotional needs through movement helps restore their interest and engagement in learning activities.

Movement breaks also contribute to cognitive reset and readiness to learn. Participants explained that breaks provide students with an opportunity to mentally pause, reflect, and recover from cognitive fatigue. Participant 1 highlighted this by stating that movement breaks help students “reset their mind.” Similarly, Participant 5 described breaks as moments for students “to think, to rest, to recharge... before pushing to another activity,” emphasizing their role in supporting cognitive recovery and mental readiness. Multiple participants described noticeable improvements in students’ readiness to participate in academic tasks after movement breaks. These observations were also reflected in classroom field notes documenting increased engagement following short activity periods.

These findings are supported by previous research indicating that classroom-based physical activity breaks can improve students’ attention, on-task behavior, and engagement in learning tasks. Studies have shown that short movement activities can help restore cognitive resources and enhance students’ readiness to participate in academic instruction (Ruhland & Lange, 2021). Similarly, research on active classroom breaks suggests that they contribute to improved focus and listening skills, supporting both motivation and learning readiness among students (Larose et al., 2024; Reyes-Amigo et al., 2025).

Overall, this theme highlights that movement breaks function as effective instructional supports that help students regulate emotions, regain motivation, and restore cognitive capacity, ultimately promoting greater readiness to engage in classroom learning activities.

Theme 5: Reduced Disruptive Behavior

Theme 5 reflects participants’ shared experiences and perception that physical movement breaks play an important role in regulating student behavior and preventing the escalation of disruptive actions in the classroom. Teachers described movement breaks as proactive strategies that help maintain classroom order and reduce challenging behaviors among Students of Determination.

One subtheme identified is behavioral regulation, which refers to how movement breaks help students manage their emotions and behaviors more effectively. Participants explained that when students are given opportunities to move, they are better able to release excess energy and return to learning activities with improved control and focus. This suggests that movement breaks function as a supportive strategy for helping students regulate their responses to classroom demands.

Another subtheme that emerged is the prevention of behavioral escalation. Teachers noted that without timely breaks, classroom environments could quickly become

disorganized or overwhelming. Participant 1 emphasized this point by stating, “Without breaks, it becomes chaotic.” This highlights how movement breaks contribute to maintaining structure and stability within the classroom setting.

Movement breaks were also associated with the management of extreme behaviors and the reduction of aggression. Teachers reported that breaks helped de-escalate behaviors such as crying, screaming, or emotional outbursts. Participant 8 explained that “Breaks tend to prevent challenging behavior... some cry, some scream, some throw themselves on the ground. The break helps them manage that.” This indicates that timely breaks may interrupt cycles of distress and support students in regaining emotional control.

In addition, participants observed decreases in aggressive behaviors after implementing movement breaks. One teacher described a change in a student’s behavior over time, stating, “Before, he doesn’t have tolerance in sitting. Now he listens, and there’s no aggressive behavior like hitting or banging” (P2). Teachers consistently connected movement breaks with fewer classroom disruptions. Observational notes taken during classroom visits similarly recorded calmer transitions back to learning activities following these breaks. This suggests that regular opportunities for movement may support the development of self-regulation and increase students’ tolerance for classroom tasks.

These findings are supported by previous research indicating that classroom-based physical activity breaks can reduce disruptive behaviors and improve students’ on-task engagement. For example, Watson et al. (2022) reported that classroom movement activities can reduce behavioral disruptions and support classroom management.

Overall, Theme 4 highlights the role of movement breaks as preventive behavioral supports that help regulate emotions, reduce aggression, and maintain a more structured and conducive learning environment for students.

Summary

Special education teachers consistently view physical movement breaks as a highly effective strategy for enhancing students’ engagement, focus, and overall classroom readiness. These breaks provide opportunities for cognitive refocusing, allowing students to calm down, recharge, and regain motivation to participate in academic tasks. Teachers reported that after breaks, students returned “more focused, motivated, and ready to listen,” demonstrating the immediate impact of movement on attention and learning readiness.

Movement breaks also support emotional regulation and behavioral management, acting as a proactive tool to prevent disruptive behaviors. Teachers observed reductions in aggression, emotional outbursts, and classroom chaos, noting that breaks help students develop self-awareness, autonomy, and the ability to manage sensory or emotional overload.

Beyond student benefits, teachers emphasized the humanistic and professional value of movement breaks. These breaks address the universal need for physical activity and rest, benefiting both students and teachers by supporting well-being, reducing stress, and improving overall classroom energy.

Finally, teachers highlighted the role of movement breaks in enhancing motivation and learning readiness, providing a mental reset that restores cognitive resources, promotes willingness to participate, and sustains attention. By integrating structured

movement opportunities, educators create inclusive, supportive, and engaging learning environments that address students' cognitive, emotional, and physical needs. Physical movement breaks are not merely physical outlets but essential instructional supports that improve engagement, focus, emotional regulation, and classroom climate for both students and teachers.

Research Question 2: How do Special Education (SpEd) teachers implement physical movement breaks for students with determination?

Table 2: Summary of Themes for RQ 2

Themes	Sub-themes	Codes/ Meaning units
Theme 6: Frequency of Movement Breaks	Structured Integration	Scheduled breaks
	Time-Based Intervals	Time-based routine
Theme 7: Individualized and Flexible Duration	Variable Time Allocation	Flexible duration
	Dynamic Duration Adjustment	Duration variability
	Outcome-Based Reduction	Faded support
Theme 8: Timing Based on Behavioral Cues	Proactive Response	Behavioral cues
	Observational Indicators	Signs of restlessness and frustration; Sensory seeking/fiddling
Theme 9: Common Activities Implemented	Kinesthetic & Sensory Input	Sensory activities; Physical movement
	Student-Centered Selection	Individualized interests and preference
Theme 10: Student Involvement and Independence	Internal State Awareness	Self-identification; Sensory-emotional recognition
	Empowered Requesting	Independence; Self-directed initiation

Theme 6: Frequency of Movement Breaks

Theme 6 highlights how teachers intentionally structure the frequency of movement breaks within the school day. Participants described movement breaks as routinely scheduled and embedded into class periods rather than used at irregular intervals. Breaks were often provided once per instructional period or after a fixed duration of learning time, commonly around 45 minutes. As Participant 1 shared, "He is given one-

time movement break for each period,” while Participant 3 and 8 noted that breaks may occur “after every class, after every 45 minutes.” Similar routines were described by several participants, indicating that movement breaks were commonly integrated throughout the school day. These recurring descriptions also emerged clearly during the thematic coding of interview transcripts. These accounts indicate that teachers view consistent and predictable break frequency as essential for maintaining student regulation, engagement, and instructional flow. According to research, movement breaks have been shown to reduce prolonged periods of sedentary behavior and increase students’ overall physical activity levels, even within regular classroom environments (Peiris et al., 2022). Similarly, movement break briefs from public health practice recommend integrating short and frequent movement opportunities into academic time to support both cognitive and physical health outcomes (Harvard T.H. Chan School of Public Health, 2023). Frequent breaks (e.g., several 5–10-minute sessions per day) are considered practical and feasible strategies within classroom settings.

Theme 7: Individualized and Flexible Duration of Movement Breaks

Theme 7 reflects teachers’ recognition that movement breaks must be tailored to individual student needs. Participants emphasized variability in break duration, noting that some students require only brief pauses, while others benefit from longer periods of movement. As Participant 1 stated, “Some only need one minute, others five,” while Participant 6 recommended “ten to fifteen minutes” for certain learners. Importantly, teachers described movement breaks as scaffolded supports that are gradually reduced as students demonstrate improved engagement and self-regulation. Participant 8 explained that break duration is adjusted “based on the outcome and the child engagement in the class,” highlighting the adaptive and developmental nature of movement break implementation. This resonates with research emphasizing teacher agency and contextual adaptation when implementing physical activity in classrooms. Teachers emphasized that the duration of movement breaks often depended on individual student needs. This flexibility appeared repeatedly across participant responses and was evident in the patterns identified during the analysis of the interview data. Chorlton et al. (2022) found that teachers and students prefer movement breaks that are short, simple, and at the teacher’s discretion rather than rigidly structured, indicating the value of flexibility in implementation.

Theme 8: Timing Based on Behavioral Cues

Theme 8 captures teachers’ use of observable behavioral signals to determine when movement breaks are needed. Rather than relying solely on fixed schedules, participants monitored signs of restlessness, frustration, and sensory-seeking behaviors to guide break timing. Indicators such as fidgeting, leg kicking, disengagement, and off-task behaviors signaled the need for intervention. As Participant 1 noted, “When he feels frustrated, that’s when he uses it,” while Participant 3 described students “doing something under the table, not listening.” These findings suggest that movement breaks function as responsive strategies aimed at preventing behavioral escalation and supporting emotional regulation. This aligns with research on classroom physical activity interventions that emphasize responsiveness to student needs rather than purely fixed schedules. For example, classroom movement breaks are often implemented after

extended periods of sedentary behavior, which indirectly responds to students' need for physical movement to sustain attention and reduce fatigue (Peiris et al., 2022).

Additionally, broader physical activity research for children and adolescents with disabilities has demonstrated that school-based activity programs can improve cognitive and mental health outcomes, suggesting that responsive incorporation of physical movement may help with emotional regulation and cognitive engagement in students with special needs (Leahy et al., 2025).

Theme 9: Common Activities Implemented

Theme 9 describes the wide range of activities used during movement breaks, reflecting sensory, physical, and interest-based approaches. Participants reported incorporating simple movements such as walking, stair climbing, running, and trampolining, as well as sensory tools like fidget toys. Creative and expressive activities were also emphasized, including dancing to preferred music and playing musical instruments. As Participant 6 explained, "For some of the other girls, dance works," while Participant 7 highlighted music-based activities. Participants described a range of strategies, including stretching, brief exercises, and movement games. These practices are also widely recommended in the literature on sensory and movement-based support for diverse learners. These varied activities demonstrate that movement breaks are not limited to physical exertion but are designed to align with students' preferences, sensory needs, and motivation. Although research specifically focused on movement breaks for students with ASD remains limited, broader school-based physical activity (PA) literature indicates that varied classroom activities such as aerobics, stretching, and play-based exercises are commonly implemented to interrupt sedentary behavior and promote positive behavioral and motor outcomes (Peiris et al., 2022). This broader evidence base supports the participants' emphasis on diversity and adaptability in movement break implementation.

Furthermore, research on adapted physical activity and movement skill development for students with disabilities underscores the importance of offering diverse forms of movement to address varying motor, cognitive, and engagement needs, particularly in cases where motor skill delays are present (Ben Rakaa et al., 2025).

Theme 10: Student Involvement and Independence

Theme 10 emphasizes the development of student autonomy in recognizing and requesting movement breaks. Participants described teaching students to self-identify early signs of overwhelm and to independently communicate their need for a break. Tools such as break cards were used to support this process. As Participant 1 noted, "He needs to be the one to identify if he needs a movement break," while Participant 8 emphasized that students are taught to ask for breaks "before the behavior starts." These practices highlight movement breaks as not only regulatory tools but also opportunities to foster self-awareness, independence, and self-advocacy. Recent literature strongly supports this interpretation. Several teachers also noted that students gradually learned to recognize when they needed a break. Reflections documented in the researcher's journal during interviews similarly highlighted teachers' efforts to promote student self-awareness and independence. Furthermore, Backers and Van Keer (2025) found that explicit instruction in self-regulatory strategies significantly improves students' independent

strategy use in classroom contexts. Their findings suggest that when teachers model and scaffold regulation strategies, students gradually internalize these skills, supporting the gradual release approach described in your findings. Similarly, Sins et al. (2024) demonstrated that professional development programs that train teachers to explicitly teach SRL strategies significantly increase the frequency and quality of strategy instruction in classrooms. Their findings revealed that when teachers consciously name, model, and explain regulatory processes such as planning, monitoring, and strategy selection, students are better positioned to internalize these processes over time. This gradual internalization aligns closely with the structured teaching of movement break requests described by participants in the present study.

Summary

Overall, Themes 6–10 illustrate that physical movement breaks are implemented through structured frequency, flexible duration, and responsive timing based on behavioral cues. Teachers employ a variety of movement and sensory activities tailored to students' interests and needs, while gradually promoting independence in break initiation. Collectively, these findings demonstrate that movement breaks function as adaptive, student-centered strategies that support regulation, engagement, and autonomy among learners with special educational needs.

Research Question 3: What benefits do special education teachers observe in students of determination after incorporating physical movement breaks?

Table 3: Summary of Themes for RQ 3

Themes	Sub-themes	Codes/ Meaning units
Theme 11: Emotional and Self-Regulation Development	Safe and Supportive Emotional Environment	Psychological safety
	Emotional and Sensory Regulation	Cognitive and sensory grounding; Emotional modulation
	Self-Monitoring and Break Initiation	Emotional awareness
	Student Independence and Agency	Independence
Theme 12: Behavioral Improvement	Reduction in aggressive and disruptive behaviors	Reduced aggression behaviors, Lesser disruptions and tantrums.
	Behavioral stabilization	Positive behavioral change; Calming effect
Theme 13: Positive Classroom Climate	Environmental Manageability	Calm environment; Manageability

Themes	Sub-themes	Codes/ Meaning units
Theme 14: Enhances Instructional and Academic Productivity	Improved Cognitive Stamina Quality of Student Output	Increased productivity; Increased attention span Improved better work output.

Theme 11: Emotional and Self-Regulation Development

Theme 11 reflects teachers' perceptions of how physical movement supports the emotional and self-regulation development of students. Participants described movement breaks as contributing to a safe and supportive emotional environment within the classroom. For instance, Participant 1 shared that movement breaks "have become a safe space for them," suggesting that these structured opportunities allow students to pause, settle themselves, and return to learning tasks in a more regulated emotional state. This perception aligns with the idea that supportive classroom practices can foster psychological safety, enabling students to better manage emotional responses and remain engaged in learning activities.

Teachers also emphasized the role of movement breaks in emotional and sensory regulation. Participants observed that students often appear calmer and more focused after brief opportunities to move. Participant 4 noted that students "appear calmer when they've had that break," while Participant 7 described movement breaks as a way of "keeping the cup full," helping students stay grounded and ready to participate in tasks. These observations are supported by the findings of Chesnais (2023), who reported that classroom physical activity breaks can positively influence students' emotional states and support self-regulatory behaviors, particularly among learners who experience behavioral or attentional challenges. By providing short intervals of movement, students may be able to release excess energy, regulate sensory input, and return to academic tasks with improved emotional readiness.

Another important aspect highlighted by participants is the development of self-monitoring and break initiation. Teachers observed that students gradually learn to recognize internal cues such as heightened emotions or physical restlessness. Participant 4 described how students may verbalize these signals by saying, "My heart is moving fast... It's time for me to have a break," demonstrating increasing emotional awareness. Research supports the role of physical activity in strengthening self-regulation skills. For example, González et al. (2025) found that structured physical activity in educational settings contributes to improvements in executive functions such as inhibitory control and emotional regulation, which are essential for recognizing and managing one's internal states.

Participants also noted that movement breaks encourage student independence and agency. When students are given appropriate opportunities to request a break, they begin to take an active role in managing their emotional well-being and learning readiness. As one participant explained, movement breaks help "give the children agency over their own well-being." This observation reflects findings from Antonio Raiola et al. (2025), who reported that active classroom breaks can reduce disruptive behaviors and support students' ability to regulate attention and behavior independently. By gradually

learning when and how to take a break, students may develop greater ownership of their self-regulation strategies.

Overall, the findings suggest that physical movement breaks serve not only as immediate support for emotional regulation but also as opportunities for developing longer-term self-awareness, independence, and emotional management skills. The participants' experiences reinforce existing research indicating that structured movement opportunities within the classroom can contribute to students' emotional well-being and support the development of self-regulatory capacities.

Theme 12: Behavioral Improvement

Theme 12 reflects teachers' observations of noticeable reductions in challenging behaviors following the implementation of movement breaks. Participants reported decreases in aggression, tantrums, and classroom disruptions, including hitting, throwing objects, crying, and screaming. As Participant 2 stated, "There's no more hitting or throwing things," while Participant 6 noted "less of those disruptions" when breaks were provided regularly. Teachers explained that movement breaks served as calming mechanisms that prevented behavioral escalation and supported students' ability to re-engage productively. Participants commonly linked movement breaks to improvements in students' ability to regulate their emotions. This pattern became evident through repeated references during the coding of interview responses. Overall, participants described a clear positive behavioral shift, marked by improved regulation, attention, and participation. These findings align with systematic reviews reporting that school-based active breaks reduce off-task behavior, improve engagement, and positively influence classroom behavior in children and adolescents (Peiris et al., 2022; Reyes-Amigo et al., 2025). Although research specific to special education populations is limited, available studies indicate that when physical activity interventions are implemented with fidelity, they can positively impact behavior and classroom participation (Reyes-Amigo et al., 2025).

Theme 13: Positive Classroom Climate

Theme 13 reflects teachers' perceptions of how physical movement breaks contribute to a positive classroom climate, particularly in terms of environmental manageability. Participants described that when movement breaks are implemented consistently, the classroom becomes calmer and easier to manage. For example, Participant 2 stated that "the class is more manageable now," suggesting that movement breaks help reduce restlessness and support smoother classroom management.

Teachers also observed that movement breaks contribute to increased productivity and improved learning outcomes. Participant 3 noted that recognizing the importance of physical breaks "actually increases productivity," indicating that brief opportunities for movement may help students re-engage with classroom tasks more effectively. Similarly, Participant 4 shared that after taking a movement break, students return "a lot more settled," which positively influences the quality of their work and their progress in learning. These observations suggest that movement breaks may help students regulate their energy levels and return to academic tasks with greater readiness to learn. Across interviews, teachers described their classrooms as calmer and more manageable when movement breaks were part of the routine. Field observations supported these perceptions by documenting smoother transitions between activities.

These findings are supported by research conducted by Caracuel Cáliz and colleagues (2025), who found that the use of active methodologies in classrooms, including structured movement opportunities and active breaks, can enhance student engagement and promote more positive classroom behavior. Their study also reported that integrating movement into classroom routines can contribute to improved productivity and a more supportive learning environment. This supports participants' observations that movement breaks not only assist individual students but also contribute to creating a calmer and more productive classroom atmosphere.

Overall, the findings indicate that movement breaks may serve as practical strategies that help teachers maintain classroom manageability while supporting students' engagement and learning progress.

Theme 14: Enhances Instructional and Academic Productivity

Theme 14 highlights teachers' perceptions that physical movement breaks contribute to enhanced instructional and academic productivity in the classroom. Specifically, participants described how these breaks support students' cognitive stamina, allowing them to maintain attention and engagement during learning tasks. Although Participant 1 acknowledged that movement breaks may sometimes feel time-constraining, they emphasized that "it will increase productivity," suggesting that the time spent on breaks can ultimately support more effective learning. Similarly, Participant 2 observed that when physical breaks are combined with reinforcement strategies, the student "listens" and demonstrates "more attention span" during tasks such as learning math and reading. These experiences indicate that movement breaks may help students sustain focus and participate more actively in instructional activities.

Participants also highlighted improvements in the quality of student output after students take movement breaks. Teachers noted that when students are allowed to pause and reset, they can return to tasks with greater readiness to learn. Participant 6 reflected that "at the end of the day, you get more done when you have the breaks," suggesting that breaks may support overall instructional efficiency. Likewise, Participant 4 explained that once students "have a break and they reset... they are able actually to produce something quite good," indicating that movement breaks may positively influence the quality of students' academic work and task completion. Participants explained that short movement breaks often helped lessons progress more smoothly. Similar patterns emerged during the analysis of interview transcripts, where teachers repeatedly associated movement breaks with improved learning flow.

These observations are supported by the work of Maria Mavilidi and colleagues (2020), who found that different types of classroom physical activity breaks can increase on-task behavior and student engagement during lessons. Their findings suggest that integrating short movement opportunities into classroom routines can help sustain attention and participation, which in turn supports more productive learning environments. In this way, the participants' experiences reinforce existing evidence that movement breaks may serve as practical strategies for supporting both instructional flow and students' academic engagement.

Summary

Themes 11–14 highlight the benefits of physical movement breaks in supporting students' emotional, behavioral, and academic functioning. Teachers reported that movement breaks help students develop emotional and self-regulation skills, providing safe opportunities to calm themselves, recognize emotional cues, and gain independence in managing their needs. Behavioral improvements were also observed, including reductions in aggressive or disruptive actions, as students could regulate emotions and re-engage in classroom activities more effectively.

Movement breaks were further associated with a more positive classroom climate, creating calmer and more manageable learning environments. Teachers noted that these breaks enhanced instructional and academic productivity, helping students sustain attention, return to tasks more settled, and produce higher-quality work. Overall, these findings suggest that movement breaks function as supportive strategies benefiting both individual student regulation and the broader classroom learning environment.

Research Question 4: What challenges do special education teachers observe in students of determination after incorporating physical movement breaks?

Table 4: Summary of Themes for RQ 4

Theme	Sub-themes	Codes/ Meaning units
Theme 15: Overuse of Movement Breaks	Dependency and Frequency Demands	Excessive requests; Frequency of requests
	Boundary Testing and Extension Seeking	Escape motivated behavior; Requesting extensions
Theme 16: Task Avoidance	Functional Academic Evasion	Task evasion; Work Avoidance
	Instructional Distraction	Avoidance through distraction
Theme 17: Time Constraints	Curricular Pace and Pressure	Time constraint; Schedule pressure
Theme 18: Inconsistency in Implementation	Lack of Inter-disciplinary Coordination	Lack of coordination; Mixed rules
	Standardization Gaps & Protocol Adherence	Need for firmness
Theme 19: Social Stigma and Resistance	Peer-Related Self-Consciousness	Peer perception; Fear of being different
	Intentional non-compliance	Student refusal; Agitation over assistance

Theme 15: Overuse of Movement Breaks

This theme reflects teachers' observations that movement breaks, when excessively requested or extended beyond their intended purpose, may lose their regulatory function. Participants noted that some students asked for breaks at the very beginning of lessons or repeatedly sought extensions, indicating a shift from self-regulation support to escape-motivated behavior. Some teachers expressed concern that excessive use of movement breaks could reduce instructional time. Similar concerns appeared across several interview responses during the coding process. Overuse sometimes resulted in behavioral escalation when limits were enforced, suggesting that unstructured or prolonged breaks may unintentionally reinforce dependence rather than promote engagement. Peiris et al. (2022) noted that while movement breaks improve on-task behavior, unstructured or excessive use may limit academic benefits. Godwin et al. (2025) similarly found that teachers perceive that over-frequent or prolonged breaks can disrupt instructional flow and shift the function of breaks from attentional support to avoidance behavior. These findings confirm that movement breaks must be implemented strategically to maintain their effectiveness.

Theme 16: Task Avoidance

Task avoidance emerged as a related concern, wherein movement breaks were used strategically by some students to evade academic demands. Teachers described students who quickly requested breaks upon encountering challenging tasks or when certain teachers were present, indicating learned patterns of avoidance. Reflections recorded in the researcher's journal during interviews captured similar concerns raised by teachers. This theme highlights how movement breaks, without clear parameters, can function as a means of task evasion rather than as a tool for cognitive or emotional regulation. Mavilidi et al. (2020) also emphasize that the cognitive and academic benefits of movement breaks are maximized when breaks are deliberately structured to support learning; otherwise, they risk becoming opportunities for task avoidance. Additionally, research examining barriers to active break implementation indicates that inconsistent or loosely structured break routines may reduce effectiveness and student engagement (Masini et al., 2024).

Theme 17: Time Constraints

This theme captures the tension between the perceived necessity of movement breaks and the limited instructional time available in mainstream classrooms. Teachers expressed concern that breaks could disrupt lesson flow or reduce academic time, particularly within short class periods. While acknowledging that students might struggle without breaks, participants also noted that allocating break time within fixed schedules posed practical challenges, requiring careful balancing of instructional priorities. Additionally, Teachers explained that limited instructional time sometimes made it difficult to incorporate frequent breaks. This challenge is also widely discussed in existing research on classroom management and instructional pacing. Baumann et al. (2022) corroborate this concern, reporting that teachers perceive time pressure and curriculum demands as major barriers to integrating daily physical activity in classrooms. Hardman et al. (2022) similarly found that while movement breaks are valued, teachers struggle to

balance them with lesson planning and instructional priorities, confirming that time constraints remain a practical limitation to break implementation.

Theme 18: Inconsistency in Implementation

Inconsistency in the implementation of movement breaks was identified as a barrier to their effectiveness. Participants indicated that movement break practices varied across classrooms. This variation was evident in the range of strategies described by teachers during interviews. Participants emphasized the need for shared rules, firm boundaries, and coordinated practices among teachers. Variations in how breaks were granted or timed often led to confusion and increased behavioral issues, emphasizing the importance of consistency and professional alignment in managing break routines. Dugger et al. (2020) showed that inconsistent application of movement integration products due to differences in training, resources, and teacher confidence can reduce student engagement and the intended regulatory benefits of breaks. Furthermore, implementation research indicates that structured professional support and alignment across staff improve sustainability and outcomes of classroom physical activity initiatives (Masini et al., 2024). These findings reinforce the importance of consistent, school-wide approaches to ensure movement breaks function as intended.

Theme 19: Social Stigma and Resistance

This theme highlights social and emotional barriers affecting students' willingness to use movement breaks. Teachers reported that some students, particularly adolescents, resisted breaks due to concerns about peer perception and not wanting to appear different. Others refused support despite visible dysregulation, choosing agitation over assistance. These findings suggest that social stigma and student resistance can limit the accessibility and effectiveness of movement breaks, especially in inclusive or mainstream settings. Some teachers noted that students occasionally felt hesitant to use movement breaks due to peer perceptions. Similar concerns have also been highlighted in literature discussing classroom accommodation and inclusion. Masini et al. (2024) found that older students often perceive active breaks differently from younger students, with peer norms and classroom climate influencing participation. Liu et al. (2025) add that while movement breaks improve short-term on-task behavior, students' willingness to participate can be constrained by social pressures, highlighting the importance of considering classroom social dynamics when implementing breaks.

Summary

Themes 15–19 reveal challenges that may limit the effectiveness of movement breaks when not implemented carefully. Teachers expressed concerns about overuse, where frequent or extended breaks sometimes led to dependency or escape-motivated behaviors. Some students used breaks to avoid challenging academic tasks.

Practical barriers, such as time constraints, were also noted, as incorporating movement breaks within limited instructional periods could disrupt lesson pacing. Inconsistent implementation across teachers created confusion and, at times, increased behavioral difficulties. Additionally, social stigma and resistance were reported,

particularly among older students who were reluctant to participate due to peer perception or a desire for autonomy.

These findings indicate that while movement breaks have significant potential to support emotional regulation, behavior, and learning, their effectiveness depends on structured, consistent, and context-sensitive implementation.

Research Question 5: What coping strategies do special education teachers employ to address these challenges?

Table 5: Summary of Themes for RQ 5

Theme	Subtheme	Codes/ Meaning units
Theme 20: Establishing Clear Rules	Structured Behavioral Boundaries	Structured utilization
	Predictable and Purposeful Implementation	Clear and consistent implementation
Theme 21: Use of Timers and Visuals	Visual Communication Tools	Visual cues
	Time Management Supports	Time awareness
Theme 22. Staff and Stakeholder Consistency	Collaborative Teamwork	Inter-professional coordination
	Environmental Generalization	Home-school alignment
	Skill Capacity Building	Practical modeling
Theme 23. Self-Regulation Training	Student Autonomy Development	Independence building; Gradual release
	Proactive Communication	Self-advocacy skills

Theme 20: Establishing Clear Rules

Theme 20 emphasizes the importance of establishing clear rules to ensure the effective and purposeful implementation of movement breaks in the classroom. Participants highlighted that when movement breaks are guided by structured behavioral boundaries and predictable routines, students are more likely to use them appropriately and benefit from their intended regulatory purpose. Teachers emphasized that clearly defined expectations help prevent misuse and ensure that breaks remain supportive strategies rather than sources of disruption.

The codes under this theme structured utilization and clear and consistent implementation reflect teachers' emphasis on maintaining firm and predictable guidelines. For example, Participant 1 explained that movement breaks "will only be used once per period," illustrating how fixed boundaries can regulate the frequency of breaks and prevent overuse. Other participants also stressed that when movement breaks are implemented consistently and with clear expectations, students are better able to understand when and how breaks should be used within classroom routines.

These findings suggest that structured implementation contributes to a more predictable classroom environment and supports the intended self-regulatory function of movement breaks. When rules are consistently applied, teachers reported fewer behavioral issues and smoother classroom management during break routines.

Existing research supports the importance of structured and predictable classroom practices. For example, Hallez et al. (2025) found that structured timing supports can reduce distractibility and motor instability among elementary students, indicating that clear temporal boundaries contribute to greater behavioral stability. Similarly, Backers and Van Keer (2025) reported that well-defined classroom procedures support students' understanding of expectations and promote more adaptive engagement in learning activities. Teachers emphasized the importance of setting clear expectations so movement breaks remain purposeful. Similar guidance appeared across multiple interview responses during the coding process. These findings reinforce participants' observations that clear rules and consistent implementation are essential for maintaining the effectiveness of movement breaks within classroom routines.

Theme 21: Use of Timers and Visuals

Theme 21 highlights the role of timers and visual supports in helping students manage movement breaks more effectively. Participants described how visual communication tools and time management supports assist students in understanding when breaks begin and end, making routines more predictable and easier to follow. These tools provide clear visual cues and support time awareness, allowing students to better anticipate transitions between movement breaks and instructional activities.

Teachers explained that timers help translate the abstract concept of time into a concrete and observable signal for students. For example, Participant 1 stated, "When the timer goes off, he knows," illustrating how timers provide clear cues that signal the end of a break and prompt students to return to classroom tasks. In addition, Participant 8 described the use of break cards as visual tools that allow students to request movement breaks appropriately, helping them communicate their needs in a structured way.

Participants noted that these visual supports help reduce uncertainty and support smoother transitions, as students can clearly see or anticipate when a break will end. As a result, timers and visual tools contribute to improved self-regulation and independence, enabling students to manage their break routines more effectively within classroom expectations.

These findings are supported by research emphasizing the benefits of visual supports in classroom settings. For instance, Sithara (2026) reported that visual supports can improve classroom engagement and reduce transition-related anxiety in inclusive learning environments. Similarly, Hallez et al. (2025) found that visual timers help reduce inattentive behaviors and support smoother task transitions, particularly for students with attentional or self-regulation difficulties. Together, these studies reinforce participants' observations that timers and visual cues can serve as practical tools for supporting structured and effective movement break routines.

Theme 22: Staff and Stakeholder Consistency

Theme 22 highlights the critical role of staff and stakeholder consistency in supporting the effective implementation of movement breaks. Participants emphasized

that coordinated practices among teachers, learning support assistants (LSAs), and other stakeholders ensure that movement breaks are applied in a structured and predictable manner. The subthemes collaborative teamwork, environmental generalization, and skill capacity building illustrate the importance of shared understanding, aligned practices, and professional support among those involved in students' learning environments.

The codes under this theme, inter-professional coordination, home–school alignment, and practical modeling, demonstrate how consistency across individuals and settings strengthens the effectiveness of movement break routines. For instance, Participant 1 explained that “teachers and assistants follow the same rules... including the LSAs,” highlighting the importance of inter-professional coordination in maintaining consistent expectations. Participant 3 emphasized home–school alignment, noting that involving parents helps reinforce similar routines beyond the classroom. Similarly, Participant 4 described how practical modeling of strategies supports other teachers in implementing movement breaks more effectively, thereby fostering confidence and shared practice among staff.

Participants reported that when movement break strategies are applied consistently across staff members and environments, students benefit from clearer expectations and reduced behavioral difficulties. Consistent implementation also supports the generalization of self-regulation strategies across contexts, contributing to more stable and predictable learning environments.

Research supports the importance of coordinated practices across stakeholders. Consistency among administrators, teachers, and families is essential for the success of school-based behavioral and regulatory interventions, as aligned communication and shared expectations create predictable environments for students (Greenberg et al., 2021). Similarly, variations in teachers' training, confidence, and understanding of movement integration strategies can influence implementation fidelity, with structured routines and clear expectations increasing the likelihood of sustained and effective application across classrooms (Dugger et al., 2020).

Overall, the findings indicate that consistent collaboration among staff and alignment with families are key factors in ensuring that movement breaks are implemented effectively and serve their intended function in supporting students' self-regulation and engagement. Several teachers highlighted the need for consistent practices among staff members to ensure that movement breaks are implemented effectively across classrooms.

Theme 23: Self-Regulation Training

Theme 23 highlights the importance of self-regulation training in fostering student autonomy and promoting proactive management of emotional and cognitive states. The subthemes student autonomy development and proactive communication reflect strategies that encourage students to take responsibility for their own learning and behavioral regulation.

The codes identified under this theme, independence building, gradual release, and self-advocacy skills, illustrate how self-regulation can be systematically developed in the classroom. For example, Participant 1 described integrating strategies that prompt students to recognize their own need to calm down, while Participant 4 emphasized using language to increase student awareness of their behaviors. Participant 8 further explained

that students are taught to observe signs of overwhelm and request breaks appropriately. These practices position movement breaks not solely as reactive measures but as opportunities to build autonomy, self-awareness, and self-regulation capacities within the classroom environment.

Research supports the importance of explicit self-regulation instruction. Perry et al. (2020) argue that self-regulated learning develops most effectively through guided practice, modeling, and structured reflection rather than emerging spontaneously. Their review indicates that classrooms implementing explicit metacognitive instruction demonstrate improvements in student independence and task persistence. Similarly, Backers and Van Keer (2025) found that when teachers explicitly teach and model self-regulated learning strategies, students show measurable growth in reflective thinking and independent task management.

Overall, the findings suggest that structured self-regulation training—through gradual release, explicit modeling, and promotion of self-advocacy—enhances students' autonomy, supports proactive classroom engagement, and maximizes the benefits of movement breaks as a tool for developing self-management skills. Teachers frequently emphasized teaching students when and how to take breaks appropriately. Reflections recorded during the interview process similarly noted the importance educators placed on developing long-term self-regulation skills.

Summary

The analysis of Themes 20-23 illustrates that the effectiveness of movement breaks depends on structured, consistent, and developmentally appropriate practices. Establishing clear rules ensures predictable and purposeful use, while timers and visual aids facilitate student understanding and independence. Collaboration among staff and alignment with parents reinforces consistency and strengthens the support system. Finally, self-regulation training empowers students to recognize and manage their own needs, promoting autonomy and sustainable engagement. Together, these strategies demonstrate that movement breaks can serve as a meaningful tool for enhancing self-regulation, provided that they are implemented within a structured and coherent intervention program

Research Question 6: Based on the findings of this study, what type of program or intervention can be recommended to support the effective use of physical movement breaks in special education settings?

Table 6: Recommended Programs or Interventions

Themes	Key Finding	Recommended Program	Objective	Rationale	Implementation Guidelines
T24. School-Wide Consistency and Collaboration	Inconsistency among teachers and staff was identified as a challenge in implementing movement breaks.	Collaborative Movement Break Policy and Team Alignment Program	To ensure consistent implementation of movement breaks across classrooms and staff members.	School-wide collaboration strengthens implementation consistency and creates predictable routines for students.	- Establish shared rules for movement breaks across staff. - Conduct coordination meetings among teachers, SEN coordinators, and support staff to review practices and ensure alignment.
T25. Professional Development on Movement-Based Strategies	Teachers indicated a need for training and professional support to effectively integrate movement breaks.	Teacher Training Program on Physical Movement Breaks Strategies	To enhance teacher competence and confidence in implementing movement-based interventions.	Professional development strengthens teachers' ability to apply movement breaks strategically and manage potential challenges.	- Conduct workshops on sensory regulation, physical movement-based learning, and classroom management strategies. - Include demonstrations, case studies, and collaborative planning sessions.
T26. Individualized Movement Planning for Students	Movement breaks were often implemented based on teacher intuition rather than structured individualized planning.	Movement Break Integration in Individual Education Plans (IEP)	To ensure movement breaks are tailored to students' sensory and behavioral needs.	Aligning movement strategies with IEP goals ensures that interventions directly support student learning and self-regulation.	- Include movement break strategies in IEP documentation. Identify triggers, preferred activities, and appropriate timing for each student. - Monitor effectiveness through regular IEP reviews.
T27. Self-Regulation and Student	Teachers emphasized the importance of helping students	Student Self-Regulation Skills Program	To develop students' awareness of their emotional and	Teaching self-regulation promotes independence and	Introduce visual cues, self-monitoring checklists, and teacher modeling.

Themes	Key Finding	Recommended Program	Objective	Rationale	Implementation Guidelines
Independence Training	recognize when they need a movement break.		sensory states and encourage appropriate break requests.	reduces disruptive behaviors.	Gradually teach students to identify signs of overstimulation and independently request breaks.
T28. Structured Movement Break Intervention Program	Teachers reported inconsistent implementation of movement breaks across classrooms due to lack of clear structure.	School-Based Movement Break Intervention Program	To standardize the timing, duration, and procedures of movement breaks in special education classrooms.	A structured program ensures consistency while maintaining flexibility for individual student needs.	- Develop school guidelines specifying break frequency (e.g., every 45–60 minutes), duration (5–15 minutes), and approved activities. - Train staff on structured implementation and integrate the intervention program into classroom routines.
T29. Monitoring and Evaluation of Movement Break Practices	Teachers expressed the need to assess whether movement breaks are improving engagement and behavior.	Movement Break Monitoring and Reflection System	To evaluate the effectiveness of movement breaks and guide continuous improvement.	Monitoring ensures that movement breaks remain purposeful and aligned with learning goals.	- Use engagement logs, behavior tracking tools, and teacher reflection forms. - Conduct quarterly reviews to analyze outcomes and adjust strategies accordingly.

This table presents the recommended programs and interventions derived from the themes identified through the thematic analysis. These recommendations are grounded in the experiences and insights of special education teachers and aim to support the systematic and effective implementation of physical movement breaks in special education classrooms. The proposed programs focus on key intervention areas reflected in the themes, including the development of a structured movement break intervention program, teacher professional development, individualized movement planning for students, the promotion of student self-regulation and independence, school-wide collaboration, and the monitoring and evaluation of movement break practices.

The recommendations emphasize the importance of establishing structured yet flexible systems that guide the consistent use of movement breaks while remaining responsive to the diverse sensory and behavioral needs of students of determination. By integrating movement breaks into individualized educational planning, strengthening teacher capacity through targeted training, and promoting coordinated implementation among school staff, these programs aim to enhance classroom engagement, improve behavioral regulation, and support more effective classroom management. Overall, the recommended programs and interventions seek to maximize the benefits of physical movement breaks by fostering self-regulation, strengthening instructional practices, and creating a supportive and productive learning environment in special education settings.

DISCUSSION

This qualitative study employed a phenomenological approach to explore the experiences of special education teachers regarding the use of physical movement breaks for students of determination. Six research questions guided the study, focusing on teachers' perceptions, implementation practices, observed benefits, observed challenges, coping strategies, and recommended programs or interventions. Data were collected through semi-structured interviews, classroom observations, and reflexive journal entries, and analyzed thematically.

Research Question 1: What are the perceptions and overall views of special education teachers about the role of physical movement breaks in improving students' engagement and focus? Teachers consistently viewed physical movement breaks as meaningful practices that enhance students' focus, engagement, emotional regulation, and classroom behavior. Five key themes emerged: (1) Physical Movement Breaks as a Tool for Improving Engagement and Focus; (2) Support for Emotional Regulation and Behavior Management; (3) Humanistic and Professional Validation; (4) Increased Motivation and Learning Readiness; and (5) Reduced Disruptive Behavior. These findings indicate that teachers recognize movement breaks as essential instructional strategies that support both the cognitive and emotional needs of students.

Research Question 2: How are physical movement breaks implemented in special education classrooms? Teachers described structured yet flexible practices to execute movement breaks, resulting in five themes: (1) Frequency of Movement Breaks; (2) Individualized and Flexible Duration; (3) Timing Based on Behavioral Cues; (4) Types of Activities; and (5) Student Involvement and Independence. Findings suggest that

teachers adapt movement breaks responsively to address students' diverse needs while maintaining classroom order and supporting self-regulation.

Research Question 3: What are the observed benefits of physical movement breaks for students of determination? Teachers observed that movement breaks provided substantial benefits for students' emotional, behavioral, and cognitive functioning. Four themes emerged: (1) Emotional Regulation; (2) Behavioral Improvement; (3) Self-Regulation Skills; and (4) Positive Classroom Climate. Students were reported to return calmer, more focused, and motivated to engage in learning activities. Observations and reflexive notes corroborated teachers' perceptions, highlighting movement breaks as effective tools to foster inclusive and supportive learning environments.

Research Question 4: What challenges do teachers experience in implementing physical movement breaks? Participants identified practical difficulties in implementing movement breaks, expressed across five themes: (1) Overuse of Movement Breaks; (2) Task Avoidance; (3) Time Constraints; (4) Inconsistency in Implementation; and (5) Social Stigma and Resistance. These challenges highlight the need for structured, consistent, and context-sensitive approaches to optimize the benefits of movement breaks.

Research Question 5: What coping strategies do teachers use to address these challenges? Teachers employed proactive strategies to manage challenges, which included four themes: (1) Establishing Clear Rules; (2) Use of Timers and Visuals; (3) Staff and Stakeholder Consistency; and (4) Self-Regulation Training. These approaches enabled teachers to maintain classroom management while ensuring that movement breaks effectively supported student engagement and self-regulation.

Research Question 6: What programs or interventions can be recommended to support movement breaks? Findings informed the development of the MOVE to LEARN Intervention Program, a structured program designed to bridge the gap between teachers' perceptions and the practical implementation of movement breaks. Six themes contributed to the program's design, which provides guidance on structured, individualized, and responsive movement breaks to enhance students' focus, motivation, and classroom participation.

Conclusions

Based on the findings of this study, the following conclusions were drawn:

Research Question 1: What are the perceptions and overall views of special education teachers about the role of physical movement breaks in improving students' engagement and focus? Purposeful movement breaks are recognized by teachers as essential instructional support strategies that enhance focus, participation, and accessibility in learning. Teachers consistently described these breaks as helping students "calm down," "relax," and "refocus," enabling them to return to tasks more motivated, attentive, and ready to engage. Movement breaks are viewed as structured supports that reduce sensory and emotional overload while restoring cognitive readiness. Overall, they represent a fundamental classroom need rather than a supplementary activity, supporting student engagement, learning readiness, and overall classroom well-being.

Research Question 2: How are physical movement breaks implemented in special education classrooms? Implementation of movement breaks is guided by professional judgment and responsiveness rather than fixed schedules. Teachers monitor subtle classroom cues such as declining attention, restlessness, or emotional changes, tailoring the timing, duration, and type of activity to students' individual needs. This responsive, student-centered approach allows students to develop independence in managing breaks. The study concludes that the effectiveness of movement breaks lies in teachers' ability to interpret real-time classroom dynamics and adapt practices to students' sensory profiles, behavioral patterns, developmental levels, and classroom context.

Research Question 3: What are the observed benefits of physical movement breaks for students of determination? Movement breaks provide substantial benefits beyond brief pauses, supporting students' emotional, behavioral, and cognitive development. Teachers observed improvements in emotional regulation, behavioral control, and classroom climate. Structured breaks reduce disruptive behaviors, enhance engagement, and improve classroom dynamics, creating a calmer and more manageable learning environment. Students return to academic tasks with renewed focus and energy, indicating that intentional movement breaks support both individual student growth and overall instructional effectiveness.

Research Question 4: What challenges do teachers encounter in implementing physical movement breaks? Despite their benefits, movement breaks present challenges that can limit effectiveness if not carefully managed. Students may overuse breaks or use them to avoid tasks, while time constraints, curriculum pressures, and inconsistent implementation reduce impact. Social factors, including peer perception and resistance, particularly among older students, also affect participation. The study concludes that structured routines, clear boundaries, and consistent implementation are essential to maximize the benefits of movement breaks for engagement, learning readiness, and classroom management.

Research Question 5: What coping strategies do teachers use to address these challenges? Teachers employ structured classroom management and clear behavioral expectations to sustain the effectiveness of movement breaks. Implementing movement within a framework of structured flexibility enables teachers to manage challenges while maintaining the instructional purpose of breaks. The study concludes that intentional, proactive management is key to sustaining the educational impact of movement breaks.

Research Question 6: What programs or interventions can be recommended to support movement breaks? Although teachers demonstrate reflective and adaptive use of movement breaks, implementation remains largely individualized and experience-based, limiting consistency across classrooms. The study concludes that structured professional development and the establishment of a flexible, school-wide intervention aligned with IEP goals and students' sensory needs would strengthen effective implementation. Sustainable use of movement breaks requires systemic support that embeds these practices within coordinated inclusive programs, such as the proposed MOVE to LEARN Intervention Program, to ensure consistency and maximize benefits for all students.

Recommendations

Based on the findings and conclusions of the study, the following recommendations are offered:

School administrators should institutionalize physical movement breaks as a structured instructional strategy to enhance engagement, attention, and emotional regulation among Students of Determination, with adequate support for implementation.

Special education teachers should apply flexible, student-centered movement breaks informed by behavioral cues to address attention, sensory needs, and learning readiness.

Clear routines, rules, and expectations should be established to ensure movement breaks remain purposeful and do not disrupt instructional time.

Collaboration among teachers, learning support assistants, and stakeholders should be strengthened to ensure consistent implementation, supported by strategies such as visual timers and self-regulation techniques.

Schools may adopt structured programs, such as MOVE to LEARN, to standardize practices and improve the effectiveness and sustainability of movement-based interventions.

Future research should utilize quantitative approaches and include multiple stakeholders to further validate the impact of movement breaks on engagement, behavior, and academic outcomes.

Proposed Intervention Program

MOVE to LEARN: A Structured Movement Break Intervention Program for Inclusive Special Education Classrooms

Rationale

The findings of this study revealed that special education teachers perceive physical movement breaks as an essential strategy for enhancing student engagement, improving attention span, and supporting emotional regulation among students with determination. Participants emphasized that movement breaks function not merely as physical activity, but as a regulatory tool that restores cognitive readiness and reduces behavioral escalation. Teachers described improved transitions, increased instructional productivity, and more stable classroom climates when movement breaks were implemented intentionally.

However, the study also identified recurring concerns that affect sustainability. These include inconsistent implementation among staff members, misuse of breaks for task avoidance, limited instructional time, insufficient structured guidelines, and lack of formal professional development. While teachers valued movement breaks, they expressed the need for a more systematic and school-supported intervention program to ensure equitable and effective application.

In response to these findings, the MOVE to LEARN program was developed as a structured, data-informed intervention program. The program is designed to preserve the flexibility valued by teachers while introducing consistency, accountability, and sustainability mechanisms aligned with inclusive education principles.

Objectives of the Program:

1. Improve sustained attention and on-task behavior among students of determination.
2. Strengthen emotional and self-regulation and reduce behavioral escalation.
3. Standardize physical movement break implementation across classrooms.
4. Build teacher capacity in structured, evidence-informed movement strategies.
5. Address teacher-identified challenges related to time constraints and break misuse.
6. Promote inclusive and regulation-centered classroom environments.

MOVE to LEARN Intervention Program

The implementation of the MOVE to LEARN intervention program is guided by structured and systematic procedures that ensure consistency, responsiveness, and sustainability. At the school level, clear policies and shared guidelines are established to standardize movement break practices across classrooms. Teachers are supported through continuous professional development focused on movement integration, behavior management, and self-regulation strategies. Within the classroom, movement breaks are implemented using structured routines that include scheduled and preventive breaks aligned with instructional goals and individual student needs. To ensure effectiveness, monitoring and evaluation mechanisms are employed through observation, data tracking, and reflective practices. Overall, the intervention program emphasizes a balance between structure and flexibility, enabling teachers to implement movement breaks as intentional and data-informed instructional strategies.

Table 7: MOVE to LEARN: Comprehensive Structured Intervention Program Addressing Teacher-Identified Challenges

Objective	Activity	Person Responsible	Resources Needed	Timetable	Success Indicators
To standardize the implementation of physical movement breaks across special education classrooms	Develop and institutionalize a written Movement Break Policy outlining frequency (every 45-60 minutes), duration (5-15 minutes), approved activities, and structured transition procedures. Conduct staff orientation to ensure clarity and shared expectations.	School Leadership, SEN Coordinator	Policy documentation, staff meeting time, digital and printed guidelines	Weeks 1–2 (Preparation Phase)	Documented adherence to structured frequency guidelines; reduction in reported inconsistencies among teachers; increased clarity in implementation practices.
To improve teacher competence and confidence in structured physical movement breaks integration	Conduct professional development workshops focused on neurological foundations of movement, self-regulation strategies, prevention of task avoidance, and effective transition strategies. Include modeling and case-based discussions.	SEN Coordinator, External Trainer, Special Education Lead	Training materials, presentation slides, case studies, reflection forms	Week 3 (Preparation Phase); refresher session quarterly	Post-training surveys indicating increased teacher confidence; improved structured application observed during monitoring reviews.
To prevent misuse of movement breaks and address task avoidance behaviors	Introduce visual break cards, timers, and break request tracking sheets. Establish clear limits (e.g., maximum scheduled breaks per lesson unless regulation needs are documented). Teach explicit return-to-task expectations.	Classroom & SEN Teachers, LSAs	Visual timers, laminated break cards, monitoring logs	Daily during implementation phase	Reduction in excessive break requests; improved return-to-task latency; fewer instances of avoidance behaviors reported.

To promote student independence in emotional regulation and proactive behavior management	Integrate weekly mini lessons on recognizing emotional cues, appropriate break requests, and self-regulation strategies. Model and practice structured transitions back to learning tasks.	Classroom Teachers, School Counselor	Emotion regulation charts, reflection sheets, sensory tools	Weeks 5–10 (Implementation Phase)	Decrease in behavioral escalation incidents; increased student independence in requesting appropriate regulation support.
Address time-management concerns without compromising curriculum pacing	Embed preventive micro-breaks (2-3 mins) into lesson plans at strategic instructional intervals into lesson plans to prevent fatigue without disrupting curriculum pacing. Align breaks with cognitive demand levels to maintain instructional flow.	SEN & Classroom Teachers	Modified lesson plan templates, activity bank	Daily (Implementation Phase)	No significant instructional time loss; increased on-task behavior post-break; smoother lesson transitions.
To ensure consistency among staff members.	Conduct monthly coordination meetings to review implementation challenges and share best practices.	SEN Coordinator, Special Education Team & Classroom Teachers	Meeting agenda templates, implementation monitoring forms	Monthly	Improved staff alignment; reduced inconsistencies in enforcement across classrooms.
To reduce stigma associated with movement breaks among students.	Incorporate whole-class movement activities periodically to ensure movement is perceived as a universal support rather than an individualized intervention.	SEN & Classroom Teachers	Structured activity bank, classroom space	Weekly or as needed	Increased student acceptance of movement participation; reduced embarrassment or reluctance.

Ensure sustainability through systematic monitoring and reflection	Conduct quarterly review meetings to analyze engagement logs, behavior data, and teacher reflections. Revise guidelines based on data trends and feedback.	SEN Coordinator, School Leadership	Engagement checklists, behavior tracking data, reflection summaries	Quarterly (Evaluation Phase)	Measurable improvement in engagement and focus indicators; reduction in behavior referrals; documented program refinement and continuity.
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Implementation Phases

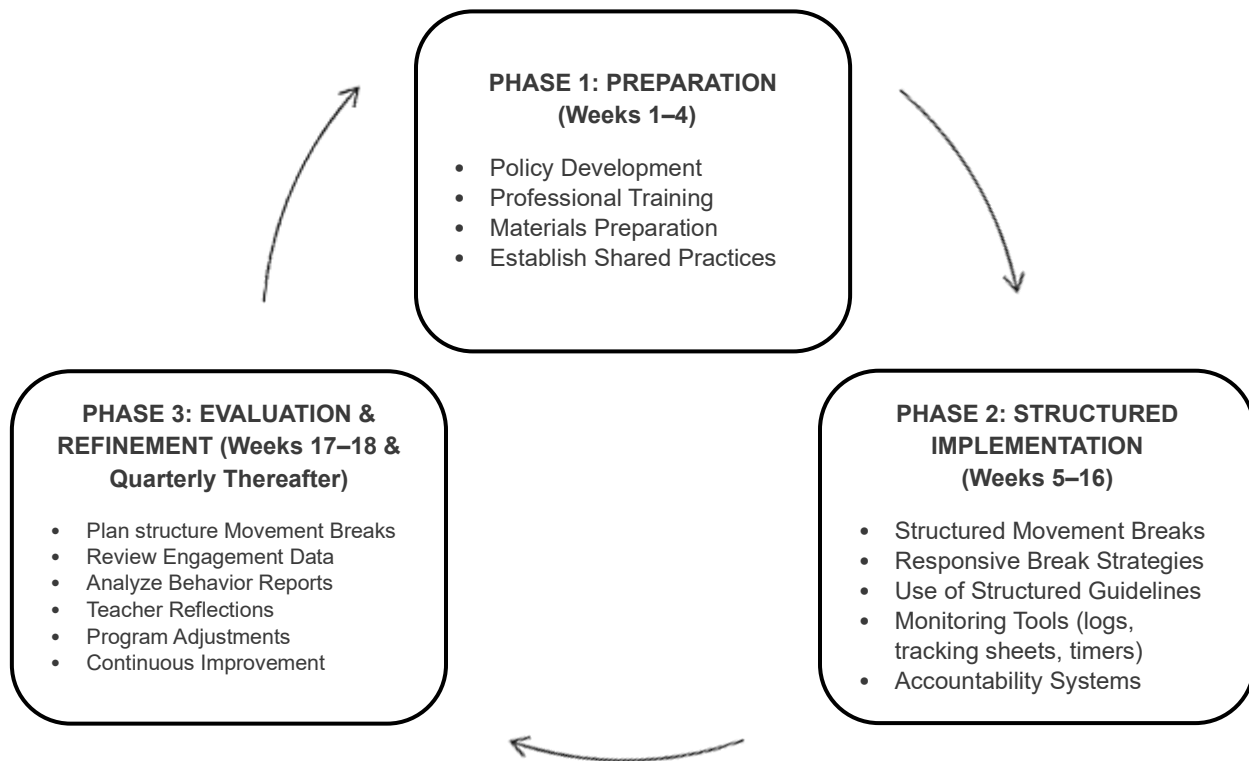


Figure 3: Implementation Phases Diagram for Proposed MOVE to LEARN Intervention Program

Phase 1: Preparation (Weeks 1–4)

This phase includes policy development, professional training, and preparation of classroom materials. Establishing shared understanding during this phase addresses the inconsistency and structural gaps identified in the findings.

Phase 2: Structured Implementation (Weeks 5–15)

Teachers systematically integrate preventive and responsive movement breaks using the structured guidelines. Monitoring tools are implemented to ensure accountability and prevent misuse.

Phase 3: Evaluation and Refinement (Weeks 15–17 and Quarterly Thereafter)

Engagement data, behavioral reports, and teacher reflections are reviewed. Adjustments are made to ensure continued effectiveness and alignment with inclusive practice.

Expected Outcomes

Based on the findings of this study, the MOVE to LEARN intervention program is expected to:

- Increase sustained student attention and academic engagement
- Reduce behavioral escalation and classroom disruptions
- Improve instructional flow and transition efficiency
- Enhance teacher confidence and perceived classroom control
- Promote inclusive, regulation-centered classroom practices
- Provide a sustainable, school-wide structure for movement-based strategies

Program Significance

The MOVE to LEARN intervention program translates the experiences of special education teachers into a structured, research-informed intervention. By directly addressing implementation barriers identified in the study, the program strengthens both pedagogical practice and student outcomes. The integration of policy, professional development, structured monitoring, and reflective evaluation ensures that movement breaks transition from informal strategies to institutionalized inclusive supports.

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