

Interprofessional Collaboration: School-Based Occupational Therapy's Role in Utilizing Movement/Physical Activity to Impact Social Emotional Learning Outcomes

Julie B. Kornbluth, MA, OTR/L; Linda Okonsky, MS, OTR/L; Tricia Castellan, OTR/L

Rationale

Occupational Therapy Practitioners (OTPs) focus on movement and physical activities to enhance motor function, self-regulation skills, and social emotional learning (SEL). Research supports the benefits of physical activities in enhancing SEL and academic performance. Through interprofessional collaboration, we leverage our expertise to advocate for and educate school teams on why movement and physical activities are important to enhance SEL. Our aim is to deepen our understanding of how OTs and teachers implement movement and physical activities to address SEL outcomes across school environments, emphasizing collaborative efforts.

“SEL is the process through which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel and show empathy for others, establish and maintain supportive relationships, and make responsible and caring decisions.” Fundamentals of SEL - CASEL

SEL is defined as managing emotions, setting goals, empathy, relationships, and responsible decision-making (CASEL, n.d.).

Study Objective

This study examines students' engagement in movement and physical activities during the school day, along with OTPs advocacy and collaborative practices for SEL outcomes. A comparative analysis of OTP and teacher perspectives on efficacy and utilization was also investigated. Results will identify interprofessional collaboration strategies for school-based practice. The findings will inform OTP practices in optimizing movement/physical activity and SEL integration, contributing to the well-being and academic success of all students.

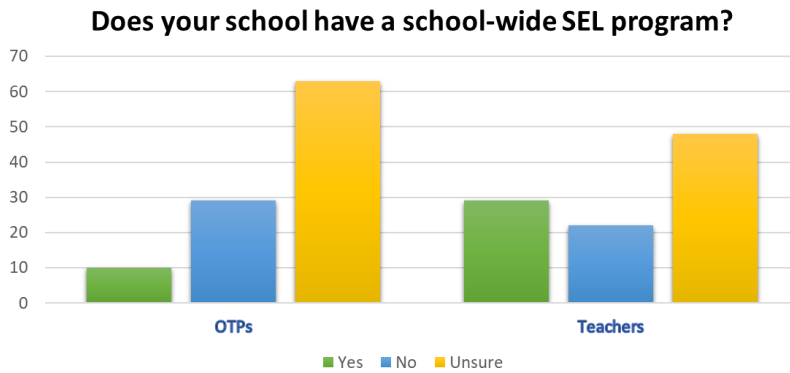
Methods and Demographics

159 OTPs and 89 teachers (SPED, 95%) participated voluntarily in an online survey. Of these, 96% of OTPs and 70% of teachers reported incorporating movement and physical activities within their OT sessions or classrooms, with pre-school to high school students.

Results

Does your school have a school wide SEL program?

	OTPs	Teachers
Yes	10%	29%
No	27%	22%
I don't know	63%	48%



Programs reported: Zones of Regulation, Second Step, Social Thinking, Unique Learning Systems, STARS, Mindfulness

Top reasons for incorporating movement and physical activities (listed in order with first being top reason):

- **OTPs:** Sensory Processing, Fine & Gross Motor Skills, Behavior, SEL
- **Teachers:** Behavior and then a tie for SEL, Fine & Gross Motor Skills, Academic Performance, and Well-Being

Top SEL components/outcomes (CASEL) addressed when incorporating movement and physical activities:

- **OTPs & Teachers:** Self-Awareness, Self-Management, & Social Awareness

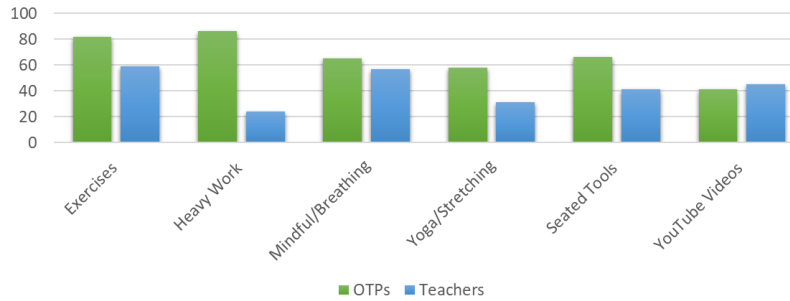
Top ways movement strategies are incorporated to support SEL outcomes:

- **OTPs:** Sensory-based movement activities (88%), Mindful movement or breathing exercises (73%), Integrate movement into lesson plans or activities (65%)
- **Teachers:** Short movement breaks during lessons (82%), Mindfulness or breathing exercises (57%), Integrate movement into transitions between activities or in/out of the classroom (51%)

Types of current movement and physical activities incorporated or suggested to foster SEL outcomes:

- **OTPs:** Heavy Work (86%), Exercises (82%), Seated Tools (66%), Mindful Breathing Exercises (65%), Yoga or Stretching Routines (58%), YouTube Videos (41%)
- **Teachers:** Exercises (59%), Mindful Breathing Exercises (57%), YouTube Videos (45%), Seated Tools (41%)

Top ways movement strategies are incorporated to support SEL outcomes



Time spent on movement activities:

- **OTPs:** 89% incorporate movement for up to 10 mins in a 30 min session. Barriers included: Limited space or facilities (79%), time constraints (69%), and disruption concerns (40%)
- **Teachers:** Majority of SPED teachers implement movement 1-15 min daily (59%); 16-30 min daily (22%), in addition to mandated Recess/Playground and PE

Outcome Measurements

Positive impacts on students' social-emotional well-being:

- Improved self-regulation (OTPs 95%, Teachers 76%), Increased focus and attention (OTPs 93%, Teachers 75%), Positive effects on moods and emotions (OTPs 76%, Teachers 65%), Improved classroom behavior (OTPs 59%; Teachers 67%)

Implementation

School staff collaboration to promote movement and physical activities for supporting SEL outcomes:

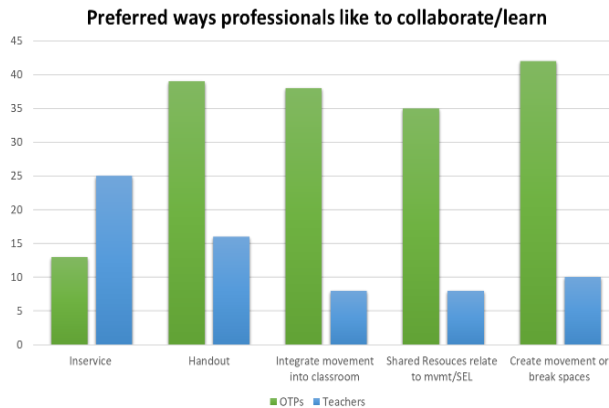
- **OTPs:** Collaboration with SPED Teachers (83%), General Education Teachers (58%), Paraprofessionals (51%), SLPs (41%), School Psychologists/Counselors (32%)
- **Teachers:** Collaboration with SPED Teachers (55%), Psychologists/Counselors (42%) General Education Teachers (37%), Physical Education Teachers & Paraprofessionals (35%), OTPs (29%)

Preferred ways professionals like to collaborate/learn:

- **OTPs:** Coordinated efforts to create dedicated movement spaces or breaks (42%), Handout or email on the benefits and strategies of movement on SEL (39%), Integrating movement and SEL activities into the classroom (38%), Shared resources related to movement and SEL activities (35%)
- **Teachers Preferred Method for Collaboration:** Inservice on movement based SEL practices (e.g., collaborative workshop, training session, at faculty meeting) (25%), Handout or email on the benefits and strategies of movement on SEL (16%)

Specific training received on incorporating movement and physical activities for SEL:

- **OTPs:** 54% reported no training; 30% somewhat.
- **Teachers:** 86% reported no training.



Conclusions

While there are promising outcomes associated with incorporating movement for SEL, there is room for improvement in terms of collaboration, training, and implementation. Addressing these areas could lead to more comprehensive and effective support for students' social-emotional development.

- **Collaborative Opportunities Missed:** Despite the evident benefits of movement and physical activities for SEL, there is a notable gap in collaboration between OTPs and teachers. This missed opportunity could hinder the optimization of SEL outcomes.
- **Varied Implementation:** While both OTPs and teachers recognize the importance of movement and physical activities for SEL, there are discrepancies in implementation approaches. OTPs primarily focus on sensory-based activities, while teachers often incorporate short movement breaks and mindfulness exercises (using YouTube videos).
- **Training Deficiencies:** The majority of both teachers and OTPs lack specific training in incorporating movement and physical activities for SEL.
- **Positive Impact on Student Well-being:** Despite training gaps and varied implementation, both OTPs and teachers observe positive impacts on students' social-emotional well-being resulting from movement and physical activities. These include improvements in self-regulation, focus, attention, mood, and classroom behavior.

Action Plan

- **Facilitate Collaboration:** Organize regular meetings or workshops to foster collaboration between OTPs and teachers, promoting knowledge sharing and joint planning for movement integration.
- **Professional Development:** Offer targeted training sessions for educators on incorporating movement for SEL, covering specific strategies and techniques to enhance implementation.
- **Resource Sharing:** Develop movement-based activities and resources accessible to school teams, facilitating easy integration into daily practices.
- **Evaluation and Feedback:** Implement a system for ongoing evaluation and feedback to assess the effectiveness of movement integration for SEL and make necessary adjustments based on outcomes.
- **Promote Awareness:** Raise awareness among school staff about the importance of movement for SEL through informational sessions or newsletters, emphasizing its positive impacts on student well-being.
- **Encourage Innovation:** Encourage educators to explore creative approaches to incorporate movement into their practices.

Selected & Additional References

- American Occupational Therapy Association. (2012). *Occupational therapy's role in mental health promotion, prevention, & intervention with children & youth: Recess promotion*. [Recess Promotion.pdf \(aota.org\)](#)
- Anderson, M. & Grinder, S. (2017). Occupational Therapy's Role in Social Emotional Development Throughout Childhood. *OT PRACTICE*, 22(7).
- Bai, P., Johnson, S., Trost, S.G., Lester, L., Nathan, A., & Christian, H. (2021). The relationship between physical activity, self-regulation and cognitive school readiness in preschool children. *International Journal of Environmental Research and Public Health*, 18(22), 11797. <https://doi.org/10.3390/ijerph182211797>
- Center for Disease Control and Prevention (CDC). [Physical Activity Facts | Healthy Schools | CDC](#)
- Collaborative for Academics, Social, and Emotional Learning (CASEL). (n.d.). *The Case For Social and Emotional Learning: Customizable presentation*. [The-Case-for-SEL-CASEL-ppt-deck - Google Slides](#)
- Jensen, E. & McConchie, L. (2020). *Brain-based learning: Teaching the way students really learn* (3rd ed.). Corwin.
- Laverdure, P., Cosbey, J., Gaylord, H., & LeCompte, B. (2017). Providing collaborative and contextual service in school contexts and environments. *OT Practice*, 22(15), CE1–CE8.
- National Physical Activity Plan Alliance (NPAP). (2018). *The 2018 United States Report Card on Physical Activity for Children and Youth*. [2018 USReportCard UPDATE 12062018.pdf \(physicalactivityplan.org\)](#)
- Peiris, D., Duan, Y., Vandelanotte, C, Liang, W., Yang, M. & Baker, J.S. (2022). Effects of In-Classroom Physical Activity Breaks on Children's Academic Performance, Cognition, Health Behaviours and Health Outcomes: A Systematic Review and Meta-Analysis of Randomised Controlled Trials. *International Journal of Environmental Research and Public Health* 19(15): .doi: [10.3390/ijerph19159479](https://doi.org/10.3390/ijerph19159479)
- Stanish, H., Ross, S.M, Lai, B., et. al. (2023). U.S. Physical Activity Para Report Card for Children and Adolescents With Disabilities. *Adapted Physical Activity Quarterly*, (Ahead of Print). Human Kinetics, Inc. [U.S. Physical Activity Para Report Card for Children and Adolescents With Disabilities in: Adapted Physical Activity Quarterly - Ahead of print \(humankinetics.com\)](#)
- UNC School of Medicine. [Movement-Based Instruction Resources | NC School-Based Physical Therapy \(unc.edu\)](#)
- U.S. Department of Health and Human Services. (2018). *Physical Activity Guidelines for Americans* (2nd ed.). [Physical Activity Guidelines for Americans, 2nd edition \(health.gov\)](#)