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Co-Teaching Social Emotional Learning to Improve Regulation and Mental Health: Implications for School Based Practice

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Co-Teaching Social Emotional Learning to Improve Regulation and Mental Health:
Implications for School Based Practice

Jennifer Brady-Johnson

A doctoral project submitted in partial fulfillment of the requirements for

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Dr. Darla Coss, OTD, OTR/L, CHT

Doctoral Committee Members: Carol Conway, MS, OTR/L

Dr. Stephanie de Sam Lazaro, OTD, OTR/L

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Abstract

Addressing sensory processing and integration difficulties is a primary area of assessment and intervention for school-based occupational therapists. School-based occupational therapists support students with these difficulties through interventions that target self-regulation, motor development, teacher and educator training, and accommodations. In an effort to better meet these student's needs, this knowledge translation doctoral project reviewed evidence in self-regulation interventions which considered student mental health needs. Although there are meta-analyses on interventions to support self-regulation in occupational therapy (Battin, et al., 2020; Bodison, et al., 2018; Miller-Kuhaneck, et al., 2018; Pfeirffer, et al., 2018) many of these studies lacked a large subject size, randomization, developing student lifelong skills development, and mental health considerations. To fill this gap in school based practice, a database search for an intervention that met these missing criteria was completed. This database search led to an intervention with level 1 and 2 evidence, Social Emotional Learning (SEL), a mental health intervention that supports student self-regulation, teaches emotional skills and allows student to practice these skills in a culture that fosters student well-being (Durlak, et al., 2011; Payton, et al., 2008).

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Chapter 1: Introduction and Background

Background

My interest in working with students with mental health problems that have difficulty with their emotions, behaviors, and self-regulation comes from my experience growing up with a brother with these problems. I grew up with a brother with mental health problems and I saw firsthand that having professional care from mental health providers was what my family of origin needed in order to feel a sense of control. This was at a time when many of the traditional occupational therapy practices were being developed (e.g. Sensory Integration Theory), and neuropsychiatry, and neurophysiology were not well understood. It was also a time when teachers and schools were not equipped to support student differences or understood the importance of teaching social emotional skills. My parents knew that my brother needed help, but there were limited choices for improving his ability to go to school and not be seen or treated differently (e.g., feeling stigmatized). Self-regulation and social emotional skills were skills that my brother would have benefited from.

My career in pediatric occupational therapy has been drawn to seeking knowledge and intervention that support children and youth with sensory integration (SI) and processing difficulties (SP), with an understanding that sensory modulation and motor planning intervention improve the quality of life for a variety of children and families, including those with mental health problems. Self-regulation intervention needs to address self-regulation and mental health. These interventions need to include:

1. Teaching skills and knowledge in sensory processing and self-regulation to educators and students (Miller-Kuhaneck, et al., 2018).

2. Developing an environment with an optimal P-E-O fit; the person's skills, the features of the environment, and demands of the activity, support participation (Bayzk, et al., 2022; Brown, et al., 2011).
3. Development of mental health protective factors through learning in social emotional skills (CASEL, n.d.).
4. Strategies and learning that encourage student autonomy, internal motivation, and self-determination.

After working in school-based practice in different schools and districts, it became evident that the priorities of the classroom teachers are of great importance, and this is where occupational therapists should foster a collaborative relationship working with students. Teachers are interested in interventions and strategies that they believe would make an impact on "behavior problems". Occupational therapists' knowledge in sensory sensitivities, sensory modulation, motor planning problems, and the lack of interoception awareness of these students are the knowledge base for addressing behavior problems, from a traditional occupational therapy "lens". Teachers benefit from collaboration with the occupational therapist to discuss the environment, transitions, and classroom routines that encourage student success and counteract student behavior problems. Although collaboration time between the teacher and occupational therapist is needed, oftentimes finding the time for collaboration does not occur. This barrier to practice is due to reduced time that teachers have without students during the school day.

In addition to lack of collaboration time, occupational therapists trying to meet the needs of students and teachers are often at the mercy of the school district's budgetary decisions. The priorities of school districts and special education's investment in occupational therapy services can vary greatly between districts. School districts have been known to reduce the amount of

occupational therapy representation in the classroom with high caseload numbers and district policies that encourage less face to face student contact, which further distances the impact that self-regulation knowledge can have on student outcomes. Occupational therapy interventions need to be clear about the evidence they bring to intervention and connect intervention to changes in student outcomes (e.g., changes in student participation, performance, and behavior). Fortunately, teachers have become more aware of occupational therapist's skills and now ask for assessments and strategies in self-regulation and see these impacting "behavior problems". In addition, occupational therapists need to set priorities in providing face to face interventions within the classroom as an interdisciplinary intervention to advocate how they can improve student behavior problems and include key student and teacher learning.

Face to face regulation interventions can help administrators and teachers understand how occupational therapists work improves behavior problems and other student outcomes, as well as create times in the school day that teachers and occupational therapists work together and collaborate on student needs. Currently there are differences in how occupational therapy services are accountable for student outcomes, based on school district preferences. Occupational therapists need to have direct links to student outcomes to help others see the value in services. When there is a lack of connection with student outcomes, it becomes easier for administrators to decrease the representation of occupational therapists in classrooms. Occupational therapists are in a position to prove their value by providing innovative evidence based practice that improves student outcomes. Finding occupational therapy's role in mental health and self-regulation are excellent places to start. Both of these roles in student outcomes already have research and practices that support occupational therapy work, but could greatly improve if practices based on higher level evidence were used.

Special and general education laws also influence how occupational therapy services are provided. Under the 2004 reauthorization of the Individuals with Disability Act (IDEA), only students with mental health needs with difficulties in academic achievement receive mental health and educational services (IDEA, 2004). Simply stated, this means that if a student has mental health needs but does not have learning needs they are not required to receive support for their mental health at school under IDEA (2004). To receive occupational therapy services students must have learning needs and an Individual Educational Program (IEP). Occupational therapy is not a standalone special education service and must relate to learning objectives identified in a formal assessment. A more recent law, the Every Student Succeeds Act (ESSA) (U.S. Department of Education, 2015), includes occupational therapy as a Specialized Instructional Support Personnel (SISP). The role of SISP is to provide support using the Multi Tier System of Support (MTSS) to improve physical and health outcomes and create a school environment that cultivates success for all students. ESSA legislation and occupational therapy's role as SISP also gives occupational therapists more opportunities to cultivate student and staff mental health through the law's focus on physical and health outcomes and attention to the school culture (Bayzk, et al., 2022).

Occupational therapists as SISP in the MTSS framework can provide intervention at all three levels of support using the MTSS framework. The MTSS framework is depicted in a three layer pyramid, with the base of the pyramid representing universal mental health promotion and prevention services. At this level, occupational therapists work collaboratively with a wide range of individuals (Every Moment Counts, n.d.-a). Occupational therapy services include: contributing to school wide initiatives outside of the profession (e.g. SEL, Positive Behavior Support Plans and Intervention); leading occupational therapy developed universal programs

such as regulation; and embedding mental health promotion and prevention activities at the individual and group level (Bayzk, 2019). The next layer of the pyramid is tier 2 occupational therapy services, which are for students who have learning, emotional, or life experiences that place them at risk for developing mental health challenges (Bazyk, 2019). At this level, occupational therapists collaborate with teachers, social workers, and other mental health providers to co-facilitate targeted interventions (Bayzk, 2019). Examples of this intervention are having students learn about mental health disorder and how symptoms affect school functioning; and evaluate social participation with peers during all school activities, including recess and the cafeteria. The top of the pyramid is tier 3 occupational therapy services, which provide intervention to students with identified needs that limit participation in needed occupations (Bayzk, 2019). Examples of occupational therapy services in this level of mental health support include: provide ways to modify or enhance school routines to reduce stress and improve well-being; and provide tips to promote successful functioning throughout the school day, including transitioning into classes, handling stress, and developing strategies for organization (Bayzk, 2019).

The effectiveness of mental health interventions in the MTSS framework, is based on embedded strategies in the school day and throughout the school environments. These embedded strategies are created to improve the interactions between teachers and students while engaging in activities that make people feel better emotionally and improve their functioning (Every Moment Counts, n.d.-b). Embedded strategies can be delivered by all school personnel based on positive psychology, the mental health continuum, mental health literacy, and formulated based on the MTSS tier that strategies are being provided in (Every Moment Counts, n.d.-b). Embedded strategies are also well placed in hallways, study halls, and times during the school

day that social participation can be taught and supported. Occupational therapy services embedded in the cafeteria and recess time support positive mental health for students with disabilities while encouraging their classmates to include them in natural contexts.

In addition to becoming part of embedded strategies, occupational therapists can also provide evidence based intervention in the classroom in face to face co-teaching opportunities, or using integrated services. Integrated services are provided in the classroom and provide learning opportunities that are seamless with school curriculum and provided in the least restrictive environment (LRE). There are many benefits to the co-teaching model, including allowing students with disabilities to stay in the classroom, provide students at risk with needed learning, as well as evidence that suggests that co-teaching increases fine motor and health literacy for all students (Bayzk, et al., 2009). There are several forms of co-teaching that can occur in the classroom. These include: one teaching on assisting, station teaching, parallel teaching, alternative teaching, and team teaching. Co-teaching involves teachers and related service providers to work together to design, plan, implement, and evaluate the program within these teaching forms (Every Moment Counts, n.d.-d).

Co-teaching within the MTSS framework includes several mental health practices, including Social Emotional Learning (SEL) to develop social emotional skills and regulation. The innovative use of SEL to teach regulation within the MTSS will be explored in this doctoral project, as an evidence based approach that can target many of the obstacles that occur in school based practice and includes the key components of regulation intervention.

In occupational therapy practice, positive student outcomes in social emotional skills and regulation relate to improved student participation and performance. Participation is at the heart of occupational therapy and mental health (Brown, et al., 2011). It is through participation in

occupations and roles that mental health is achieved and well-being can be experienced. Social participation is also part of participation outcomes for school aged students. Social participation requires students to engage and relate to their peers and teachers. A level of student regulation and mental health must be achieved in order for students to participate in the classroom and engage with their peers during other parts of their school day.

Performance challenges are well documented in sensory processing and mental health literature (Bazyk, et al., 2013; Koenig, et al., 2010). There are many sensory processing and mental health performance factors that take away from performance at school (e.g., anxiety, depression, over responsiveness to tactile input). According to the Occupational Therapy Framework: Domain and Process 4th ed. (2020), performance skills are goal-directed behavior that are frequently evaluated by an occupational therapist. The development of performance skills must consider how performance patterns impact student success (AOTA, 2020). Mental health and regulation can negatively impact the routines and habits of students, decreasing the availability of the student to learn. If performance patterns are impacted then students have a more difficult time learning. Performance challenges in occupations such as activities of daily living (ADL), school routines, peer relationships, and academics can be affected by mental health and sensory processing and can benefit from student learning that teaches social emotional and self-regulation skills (Bazyk, et al., 2013; Koenig, et al., 2010). To assure that performance skills and patterns are addressed in school based occupational therapy, both self-regulation and mental health must be considered during intervention.

Review of Evidence

Evidence-Based Sensory Processing and Self-Regulation within the Multi Tier System of Support (MTTS).

In school-based practice, the MTSS offers three tiers of self-regulation support, in addition to mental health support. Tier 1 support offers a universal mental health intervention to educate children, youth, families, and professionals about sensory processing and the impact on behavior and learning. School environments are evaluated for a wider range of student sensory processing experiences (Bazyk, et al., 2013). Tier 2 support provides targeted and selected interventions that screen at-risk children and youth for possible sensory processing challenges. Modifications of environments are done to meet a range of sensory needs (Bazyk, et al., 2013). Tier 3 support offers intensive intervention for children and youth with identified sensory processing challenges. Evaluation of individual sensory patterns, setting up a sensory diet, and teacher and student education are done to enhance the understanding about behavior from a sensory perspective (Bazyk, et al., 2013). Self-regulation needs can be found in all tiers of support, but they are provided differently based on whether sensory processing needs have been identified and what types of mental health support the student requires (Bazyk, 2019). The evidence encourages occupational therapy services within the MTSS framework to support student well-being and social participation needs, which is achieved through addressing sensory processing (Arbesman, et al., 2013; AOTA, 2020; Bazyk, 2007; Bazyk, et al., 2013; Bazyk, 2019; Every Moment counts, n.d.-c).

A current barrier for school based occupational therapy is to factor in the mental health needs of students that cause dysregulation, often called emotional regulation, and provide the student with learning experiences and intervention that can make an impact. Mental health needs that cause dysregulation can occur in all of the tiers of MTSS, not just tier 3. Factors that contribute to dysregulation may include environmental triggers, changing emotional states, and trauma responses. To provide self-regulation learning, occupational therapists need to factor in

mental health, emotional distress and teaching students needed coping and problem-solving skills.

This barrier has created a gap in school-based service because many occupational therapists are not seeking to meet mental health needs specifically. The gap in providing services in the MTSS can be attributed to both occupational therapists not advocating for their role and because interdisciplinary team members have not included occupational therapists in meeting these mental health needs. Advocacy about the role of occupational therapy in the MTSS is needed to advance the practices of mental health in schools (AOTA, 2021).

Evidence-Based Sensory Processing Sensory Processing and Self-Regulation Practice

Sensory processing practices have a long history in occupational therapy assessment and interventions in addressing self-regulation (Dunn, 2014; Parham, et al., 2021). On one hand this is encouraging. School based occupational therapists have professional competence and resources that support their work in self-regulation. However, at times this may provide occupational therapists with false confidence that their current interventions are effective for students. This may discourage self-regulation interventions from evolving and becoming more effective, or addressing current practice dilemmas in schools. Using the MTSS to address mental health with sensory processing challenges will help interventions evolve and include high level evidence.

In tier 3 interventions in the MTSS framework, there is a large amount of evidence in sensory processing assessments (Dunn, 2014; Parham, et al., 2021). In addition, it is recommended that sensory processing difficulties be formally assessed with standardized questionnaires and occupational therapist observation prior to intervention (AOTA, 2020a; Parham, et al., 2021). Current evidence based interventions include an assortment of approaches

and conceptual practices (Bodison et al., 2018; Cahill, et al., 2018; Kuypers, 2011; Mahler, 2019; Miller-Kuhaneck, et al., 2018; Pfeiffer, et al., 2018; Reynold, et al., 2017; Williams, et al., 1996).

There is moderate to high evidence for interventions for self-regulation that are addressed through a sensory processing framework (Dunn, 2014), use of environmental strategies (Bodison, et al., 2018), use of cognitive and occupational based approaches (Pfeiffer, et al., 2018), through the teaching and coaching of teachers and caregivers (Miller-Kuhaneck, et al, 2018), with promising evidence in the use of sensory diets (Battin, et al., 2020). Sensory processing intervention also requires a multifaceted approach (Reynolds, et al., 2018), be based on developmental and neuroscience concepts, consider self-regulatory behavior in a sensory processing framework, and be based on strengths-based models that encourage internal motivation and self-determination (Dunn, 2014). However, the current practice dilemma in self-regulation require mental health also to also be considered.

Cognitive-Behavioral Approaches to Self-Regulation that include Sensory Processing and Emotional Control

Current occupational therapy practice in cognitive behavioral approaches often utilize student check-ins with the concept of “engine speed” and/or colors and emotions to help students identify their state of regulation (Kuypers, 2011; Williams, et al., 1996). *The Zones of Regulation: A Curriculum Designed To Foster Self-Regulation and Emotional Control* is a self-regulation curriculum developed to help students connect emotional and regulation states. Use of the cognitive behavioral strategies in the *Zones of Regulation* and *The How Does Your Engine Run: The Leader’s Guide to Self-Regulation* (e.g. Alert Program) foster positive mental health and have been found to be effective in lower level five and six research (Kuyper, 2011; Williams, et al., 1996). Although this strategy for developing student awareness in self-

regulation has great merit, it currently does not have large scale studies or randomized controls that determine its effectiveness.

Interoception Awareness (IA)

A more recent assessment and intervention approach to self-regulation is based on interoception awareness (IA) (Mahler, 2019). Interoception is defined as the eighth sense that gives an awareness of internal feelings in our body (e.g., hunger, urination, heart rate, how our skin feels, and how our bodies feel our emotions). In the interoception framework, students learn to mindfully identify how their body feels during different activities. According to this approach, a student's ability to feel their body through mindfulness varies between students and ranges from low awareness to high awareness which can be expressed in an interoception awareness (IA) score (Mahler, 2019). Students learn to become more aware of their body, identify when they experience dysregulation, and learn to find actions that support their self-regulation experience. Although this is a new area of study, it offers a way for students to be intrinsically motivated and self-determined to change their state of regulation because they dynamically experience how their body responds which gives them higher agency in wanting to meet their needs (Mahler, 2019). This self-regulation approach was developed based on research and still in its infancy. Currently, there are not listed research studies on the professional website (kelly-mahler.com) or identified by the author on this intervention approach (Mahler, 2019). This new area of intervention in self-regulation has limited literature in its use in school-based practice. Experts in school-based mental health list interoception as an upcoming area that will support mental health outcomes, but currently is in need of research studies (Every Moment Counts, n.d.-c).

Social Emotional Learning (SEL) a Mental Health Promotion and Prevention Practice

SEL is a strong evidence-based practice that has proven to reduce aggressive behaviors, decrease anxiety and depression, and increase students' connection to school (Domitrovich, et al., 2016; Durlak, et al., 2011; Payton, et al., 2008; Skeen, et al., 2019).

Social and emotional learning (SEL) is the process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions (CASEL, n.d.).

SEL learning content to be developed based on individual development and learning needs within the classroom. SEL teaches students how to process, integrate, and selectively apply social and emotional skills in developmental, contextual, and culturally appropriate ways (Durlak, et al., 2011). Secondly, SEL fosters students' social-emotional development through establishing safe, caring learning environments that improve teaching methods and classroom management (Domitrovich, et al., 2016; Durlak, et al., 2011).

Implementation of SEL has been studied to determine the ways SEL should be taught to children and youth (Durlak, et al, 2011; Payton, et al., 2008; Skeen, et al., 2019). Educational lessons that follow SAFE principles (sequenced, active, focused, and explicit lessons) are the framework for developing SEL educational content. Using these principles and practices increases the number of student outcomes achieved in academic, social, and emotional skills (Durlak, et al., 2011). In addition, the use of the 3 signature practices are also supported in literature as improving student outcomes. These signature practices include: A Welcoming Activity, Engaging Strategies, Brain Breaks and Transitions, and An Optimistic Closure.

In a meta-analysis by Skeen et al, (2019), universally delivered SEL interventions taught consistently improved mental health and reduced risk behaviors when interpersonal skills, emotional regulation, and alcohol and drug education were taught. The evidence indicates that SEL provides a way to teach these needed mental health skills to students (e.g., emotional literacy, and practicing skills at school in a safe environment). Combining SEL with occupational therapy self-regulation knowledge and sensory processing framework is thought to provide a deeply rich learning experience for students and better support the involvement of the teacher (Kirschenbaum, 2016). SEL also benefits the teacher by improving classroom management and teacher's sense of self-efficacy that decreases teacher burnout (Domitrovich, et al., 2016). With the teacher present during the teaching of self-regulation content, teachers also become part of the conversations with students about how to manage sensory input and sensory preferences during the school day and how this affects student learning.

Self-Regulation Learning That Includes Using a Strengths-Based Approach for Self-Determination

A current drawback to student learning in self-regulation is that not all students are internally motivated, or self-determined, to use action to manage their regulation. To address this current practice dilemma, literature in positive psychology, use of a strengths based approach, and teaching that encourages internal motivation were reviewed for evidence on how to change this missing link in practice.

Dunn (2013) uses a strengths based approach to collaborate with families. Dunn's (2013) work found that using a strengths based approach allowed the strengths and abilities of individuals (e.g., including children and parents) to be used to help make informed decisions about how an individual can support their own sensory preference (e.g., and stay regulated)

(Dunn, 2007a). According to Dunn (2013), families had a more positive view of their child when the strengths of the child were presented. This offered families hope and a way to navigate some of the adversity they experienced.

In a similar fashion, in the field of educational psychology, teachers were encouraged to teach through instructional practices that helped students be more intrinsically motivated and become more autonomous. Principles in this new instructional practice were guided by the idea that teachers need to have a student-focused attitude. In randomized control studies, when this new instruction practice (e.g., autonomy-supportive teaching) was provided during classroom instruction, students learned through their own curiosity and self-discovery process (Reeve, et al., 2021). When students were asked what learning was important to them and they were given a choice on how their learning occurred, they experienced a greater sense of motivation and were able to work through challenges with self-determination (Reeve, et al., 2021). Instructional practices and teaching in regulation need to incorporate the use of student centered intervention, which will likely encourage students to internalize their learning.

Significance and Innovation

Redefining Current School Based Occupational Therapy in Self-Regulation

In current school based occupational therapy practice, occupational therapists have become known for their skills and expertise in sensory processing and self-regulation and how school environments and routines impact students' sensory needs at school (Dunn, 2007b). Current practice encourages occupational therapists to work with educational staff to understand the needs of the student, develop a learning environment that helps the student attend, manage student responses to sensation, and manage motor planning problems (AOTA, 2015). School-based occupational therapists also teach students to become aware of how they experience

sensation and develop strategies to manage these sensations through self-regulation skills (Clark, et al., 2019).

While using the sensory processing and self-regulation approach, occupational therapists look at the performance of the student's self-regulation across school environments (e.g., at recess, in the cafeteria, and during transition times) as well as having evidence based intervention methods to support participation (Clark, et al., 2019). These evidence based self-regulation interventions include "targeted social stories, daily yoga and exercise, video modeling, instruction on self-management, reinforcement for effective self-regulation, and education to the teacher and educational staff on these strategies (Clark, et. al, 2019, p. 5)."

Another reason to include a mental health intervention in current practice is that students with identified mental health needs or at risk for mental health difficulties also benefit from self-regulation strategies, but are not likely to receive occupational therapy (e.g., sometimes because of their educational label). In school based occupational therapy intervention students with mental health needs are underserved (Bayzk, et al., 2013). Students with mental health needs often have less access to occupational therapy services. This is due to educational staff not having clarity about occupational therapy's work with mental health. There is merit in this lack of clarity because frequently occupational therapists themselves do not understand best practice for these students.

This doctoral project will address student access to mental health intervention and the lack of clarity that occupational therapists have about their role in mental health. My knowledge translation work will include helping occupational therapists advocate for their role in mental health and improve student utilization of mental health and regulation intervention. Occupational therapists must also seek out working collaboratively with mental health providers to understand

the intersection of mental health difficulties and self-regulation, especially with students in tier 3 (Bazyk, 2019) (i.e., factoring in mood swings, and neurochemical differences), which requires team members to share their interdisciplinary scope of practice.

Meeting Student's Mental Health and Self-Regulation Needs in Practice

School based occupational therapists need to see themselves as mental health providers and advocate for their role in mental health. This is currently becoming more common as communities of practice are being developed to encourage occupational therapy's role in the MTSS. Unlike the traditional occupational therapy process that starts with an assessment that determines intervention needs, the MTSS is challenging occupational therapists to use their skills differently for Tier 1 and 2 interventions as outlined in the Every Child Succeeds Act (ESSA) and described in detail in occupational therapy practice guidelines (Bazyk, et al., 2013; U.S Department of Education, 2015). In the ESSA, occupational therapists have a new role as Specialized Instructional Support Personnel (SISP), which allows occupational therapists to be promoters of mental health at a universal and targeted level of intervention when physical and mental health and the school climate is the focus.

As mentioned previously, becoming part of the interdisciplinary team is essential to providing mental health services. To become part of this team, occupational therapists need to be recognized for their skills in mental health. However, currently there are barriers at the state level that dampen the impact that occupational therapists have in mental health. The first barrier is that the Occupational and Physical Therapy in Educational Settings: A Manual for Minnesota Practitioners does not state mental health as an area of practice for school-based therapists (MDE, 2014). The subcommittee that develops this manual has not updated the manual since the ESSA law came into effect. Another barrier at the state level is that occupational therapists are

not recognized as mental health providers. In the state of Minnesota, mental health providers are identified through Medicaid and Medicare Guidelines (MDH, n.d.) and include social workers, psychiatrists, psychologists, and counselors. These guidelines are believed to be due to the lack of advocacy and lack of representation of occupational therapists on the subcommittee that determine these guidelines. The state barriers to providing mental health services are not reflected in federal special education guidelines that allow occupational therapist to provide intervention in mental health using the MTSS (U. S. Department of Education, 2015). In ESSA, occupational therapists as Specialized Instructional Support Personnel (SISP) are funded to provide intervention and support using the MTSS framework (Bayzk, et al., 2022; U.S. Department of Education, 2015)

Using current occupational therapy intervention in self-regulation and combining it with a high level evidence based practice in mental health (e.g., SEL) can solve the many of the current problems in helping students participate and perform at school by supporting their regulation. The person environment occupation fit (P-E-O) in SEL establishes rich connections among the adults and students and tailors the environment to support student participation and performance. Students become more willing to share and become part of their classroom. This better P-E-O fit is very similar to how mental health literature defines co-regulation's role in regulation (Rosanbalm, et al., 2017). The strategic use of co-regulation to support regulation is describes in literature as being provided at developmentally appropriate times in a child or youth's life when calm, supportive, quieting, co-regulation is needed from adults (Rosanbalm, et al., 2017; Utter, 2020).

Another innovation in the proposed mental health intervention is that occupational therapists become co-teachers developing integrated services in the classroom environment

(Every Moment Counts, n.d.-c; Kirschenbaum, 2016). By co-teaching, the occupational therapist helps students learn about their sensory preferences, develop coping strategies, adapt the classroom to support sensory sensitivities, identify triggers, and how emotions are felt in the body. This learning in regulation is then connected to students taking care of their regulation needs which is required for positive mental health. While co-teaching, teachers and paraprofessionals also participate and learn how to support these student skills.

Aims

1. The first knowledge translation project aimed to educate current and future occupational therapists, and occupational therapy educators about evidence in Social Emotional Learning (SEL), a mental health promotion and prevention intervention. The audience learned about the knowledge translation process beginning with developing a practice dilemma, using database searches, developing themes from evidence, and application of research to current practice. The presentation was delivered via the Minnesota Occupational Therapy Association, in an online (virtual) professional development format and participants received CEUs for their attendance. The professional development was a one hour continuing education event with this presentation and another presentation both on topics in school based occupational therapy. The presentation *Evidence on How SEL Practices Improve Regulation* was presented in a 25 minute time period followed by a 5 minute Q & A session. The presentation included an 18 slide PowerPoint presentation, and a Google survey link for voluntary participant evaluation in the chat feature of the Zoom based presentation.
2. The second knowledge translation project informed current and future occupational therapists, and occupational therapy educators about principles discovered in research about SEL that encouraged regulation. The professional development presentation also

shared the research in sensory processing that has been found to make changes in self-regulation. It was a continuing education session through the Minnesota Occupational Therapy Association Annual Conference (MOTA) 2022 and was presented virtually in Zoom with three other presentations on different knowledge translation topics and practice areas. It contained seven slides and was delivered in a 10 minutes time period, followed by 5 minutes of facilitated discussion. Participants were asked to voluntarily complete a Google survey that was placed in the chat feature of Zoom.

3. The third knowledge translation project will be a one-and a half hour workshop at the Minnesota Educational Association Summer Session (MEA) on August 2, 2022. This workshop will include research findings on the benefits of using SEL to teach regulation, sensory processing and self-regulation learning content, how to co-teach with an occupational therapist, and case examples of SEL and regulation integrated in the classroom. This workshop will be in person to an audience of educators and administrators that choose the session as a continuing education session during a professional conference. The workshop will include 75 minutes of narrated slide presentation, and active learning, followed by 15 minutes of Q & A time. A Google Form survey will be sent to participants that provides an email address, for feedback on the presenter and workshop to be voluntarily completed.

Chapter 2. Using Social Emotional Learning to Teach Regulation Skills: A Virtual Minnesota Occupational Therapy Association Professional Development

Aim

The aim of this knowledge translation project was to increase awareness to occupational therapists about the knowledge translation process. Awareness and interest were developed by starting with identifying a practice dilemma, results of database searches, how themes were developed from Social Emotional Learning (SEL) literature, and finally how current practices in self-regulation could be integrated into SEL.

Description

This knowledge translation project was accepted, presented, and evaluated for an audience of occupational therapists at a professional development event. The presentation focused on Social Emotional Learning (SEL) research and four themes that emerged from the research studies. The themes were about the effectiveness of SEL intervention:

1. Who benefits from SEL
2. When SEL improves student outcomes
3. What components in SEL improve student outcome
4. Why does SEL improve student outcomes?

Student outcomes of SEL were then combined with school based occupational therapy evidence in sensory processing and self-regulation to illustrate how these evidence based practices could be combined to teach students with mental health and sensory processing needs. The presentation advocated for occupational therapy's role in teaching and developing lessons in SEL that taught regulation and positive mental health.

This presentation proposal was submitted to the Minnesota Occupational Therapy Association (MOTA) professional development series as part of their ongoing efforts in professional development to occupational therapists.

Audience and Venue

The audience was future and current occupational therapists, and occupational therapy educators interested in knowledge translation and receiving CEU credits. This virtual Zoom platform professional development series provided eight presentations over a four week period of time, with two presentations per evening. This MOTA presentation was offered with another presentation also based on school-based occupational therapy.

Learning Objectives

After completion of the presentation, participants will:

Objectives:

1. Describe research supporting the use of SEL with students at risk or with mental health needs.
2. Critique levels of evidence for student outcomes for SEL.
3. Examine recommendations for occupational therapy practice that will further support student regulation and learning.

Approach

The completed call for submission outlines the presentation via Zoom (Appendix A.1). An 18 slide Power Point slide presentation that was narrated live in the screen share mode of Zoom (Appendix A.2). Participants were made aware that the presentation was recorded and not to be distributed to the public. The fee for MOTA members was \$5 and \$40 for non-members. A

Google Form survey link was put in the Zoom chat feature for participants to voluntarily complete an evaluation of the presentation.

Evaluation Method

This knowledge translation project was evaluated by the participants of the MOTA presentation attending the event on February 15, 2022. Participants were asked to complete a Google Form survey containing four Likert scale questions based on a scale from 1 (not at all) to 5 (very well). The first three questions asked how well the presentation met the learning objectives. The final Likert question asked if the content was presented in an organized format. The last question was a short answer question asking if participants had any further questions or comments about the presentation content or would like additional information. Completion of this survey was voluntary. The survey can be found in Appendix A.3 and results in Appendix A.4. Responses to the open-ended question on the Google Form survey and questions asked during the live presentation can be found in Appendix A.5.

Chapter 3. Social Emotional Learning Improves Regulation: A Virtual Minnesota Occupational Therapy Association Annual Conference

Aim

This knowledge translation project's aim was to increase awareness to current and future occupational therapists and occupational therapy educators how the mental health intervention, Social Emotional Learning (SEL), teaches regulation and positive mental health. Participants were informed about the high level evidence in SEL, and how the use of CASEL principles in the creation of SEL lessons improve student outcomes.

Description

This knowledge translation project was accepted, presented, and evaluated at virtual MOTA Annual Conference 2022 professional development presentation. The audience of the continuing education presentation were future and current occupational therapists and occupational therapy educators. This presentation was 10 minutes long, followed by a 5 minute discussion and answer session facilitated by Dr. Coss. The title of the session was *Using Regulation to Teach Regulation*. This knowledge translation project was a live narrated Zoom presentation, presented alongside three of my classmates with different knowledge translation projects and practice areas. The presentation was from 6:15pm – 6:30 pm, the second of four presentations, on April 20th, 2022.

This presentation was on the evidence in social emotional learning (SEL) that supports regulation and positive mental health, how current practices in sensory processing and self-regulation can be integrated into SEL, and the use of Collaborative for Academic and Social Emotional Learning (CASEL) standards to develop a SEL lesson. A philosophy of developing autonomy in students was also discussed to encourage student lifelong learning in regulation (Reynolds, et al., 2018).

Approach

The approach for this knowledge translation project was a virtual live annual conference presentation with continuing education for the audience. A poster was used to develop a slide show (see Appendix B.6.) presentation. Due to the COVID-19 pandemic the in person poster session was adapted to a virtual live Zoom presentation. The presentation was a 7-slide narrated PowerPoint presentation that can be found in Appendix B.2. The PowerPoint presentation was proctored by Dr. Coss to forward slides and facilitate a discussion after the presentation.

Participants were made aware that the event was recorded and later posted on the MOTA website for viewing. Participants were provided a link in the Zoom chat box at the end of the presentation to voluntarily complete a 5 question Google form survey having them state if learning objectives had been met, if the content was organized, the quality of the presentation, and one open ended question to share questions and comments (see Appendix B.4.). In addition, participants asked questions and commented in the 5 minute discussion time (see Appendix B.5).

Audience and Venue

The audience was future and current occupational therapists, as well as occupational therapy educators attending the 2022 Annual Minnesota Occupational Association Annual Conference. The presentation was virtual due to the current restrictions of the COVID-19 pandemic to ensure the audience's safety. This presentation had 35 people in attendance, including presenters and Dr. Coss. The audience of MOTA members paid \$5 and non-MOTA members paid \$40 to attend the continuing education knowledge translation presentations. Participants registered for this presentation through the MOTA website and earned two continuing education units.

Learning Objectives

The MOTA Poster Presentation titled *Using SEL to Teach Regulation* had two learning objectives. The participants will:

1. State the themes of SEL that make it valuable in teaching regulation.
2. Understand how to make a regulation lesson for SEL based on the Collaborative for Academic and Social Emotional Learning (CASEL) standards of practice.

Evidence of Approach Used

Three other OTD students and I completed a short biography, a short description of our session, and learning objectives that were submitted to MOTA. Dr. Coss and the class of 2022 OTD students collaborated on the collective slide show presentation, how the facilitated discussion and answer sessions would be organized, and how the Google Form surveys would be distributed after the presentation. The PowerPoint presentation for this event was created during the spring of 2022 under the guidance of Dr. Coss. A copy of my individual proposal can be found in Appendix B.1.

Evaluation Method

To evaluate the audience learning and satisfaction with my knowledge translation project, participants were asked to voluntarily complete a 5-question survey via Google Forms. Four of the questions utilized a five-point Likert scale (e.g. 1 Strongly Disagree through 5 Strongly Agree). The first two questions had participants rate how well the presentation met the learning objectives. The next two questions had participants rate how well the presentation's content was organized and the presenter's delivery of the presentation. The final question asked participants to provide any further comments or suggestions on the presentation topic or if they wanted additional information. A link to this Google Forms survey was provided to participants in the

Zoom chat box and in the PowerPoint slide presentation after the presentation. Eleven participants completed the voluntary Google form survey. Participants receive CEU credit for their attendance. The survey can be found in Appendix A.3., results in Appendix A.4., and responses to the open ended question and in person question questions in A.5.

Chapter 4. Co-Teaching Social Emotional Learning to Teach Regulation: A State Interdisciplinary Conference

Aim

The aim of this knowledge translation project is to generate awareness, share knowledge, and inform educators and policy makers about the benefits of using Social Emotional Learning (SEL) to teach regulation and positive mental health

Description

This knowledge translation project was accepted at an interdisciplinary conference with educators, administrators, and other school professionals. The acceptance to the MEA Summer Institute can be found in Appendix C. 1. The workshop is a one hour live narrated slideshow presentation in a room that can hold up to 32 people. Pre-COVID-19, the average attendance at workshops was 20 participants. Workshop participants choose between different continuing education content and *Co-Teaching SEL to Teach Regulation* is in the ‘creative strategies for classrooms’ category of content. The intent of this workshop is to disseminate the scholarly evidence in the use of SEL, review current practice in occupational therapy sensory processing and self-regulation that can be applied to SEL, and illustrate how an adapted SEL curriculum supports student regulation and positive mental health in a case-study format. Through the use of a case-study, the workshop will present adapted SEL lessons to illustrate how student learning and interdisciplinary co-teaching occur in different classrooms. Content of the presentation articulates how SEL and sensory processing taught to support regulation can be used in the public health model of mental health promotion and prevention.

Approach

The approach for this knowledge translation project was to prepare an interdisciplinary workshop following guidelines by MEA Summer Institute in developing a workshop for creative solutions for classrooms. The 75 minute PowerPoint slide presentation with approximately 40

slides will include times for active learning with participants, and an additional 15 minutes at the end of the presentation for question and discussion time (see Appendix C.2.).

Description of Audience and Venue

The workshop proposal was submitted and accepted for the August 1-3, 2022 Minnesota Educational Association Conference available to educators for a conference fee and obtaining continuing education credit for maintaining their license. The application to present at this workshop identified key areas of learning that Minnesota Educational Association (MEA) was targeting. This state conference will be held in-person. Attendees sign up for workshops starting in June through the state association website. Submissions of workshop proposals were due on March 25, 2022. The topics of the 2021 conference included: creative strategies for the classroom, equity or racial/social justice, curriculum and assessments, organizing and engaging members, school climate and learning communities, student engagement, technology integration, and trauma informed instruction (MEA, n.d).

Learning Objectives

Upon completion of the workshop, participants will:

1. Identify the practices in Social Emotional Learning (SEL) that support regulation for students.
2. Understand how students respond to sensation and have sensory preferences that can impact their mental health.
3. Explain how students experience triggers and develop strategies they can use to change their regulation state.
4. List practices that encourage student internal motivation and self-determination in managing their regulation.

5. Understand the interdisciplinary co-teaching benefits of SEL and regulation.

Evidence of Approach Used

Acceptance of the proposal to the Minnesota Educational Association's Summer Summit 2022 was received on April 8, 2022 (see Appendix C.1.). This proposal submission was through a Google survey form link on the MEA website which is not available. The proposal included a short abstract describing the presentation and workshop learning objectives. The live narrated presentation will share knowledge about the evidence in SEL and current sensory processing practices that also support mental health. The audience will increase their awareness of the unmet mental health needs that occur with students and the benefits of SEL learning in regulation. The participant's interest in this topic will be developed through active learning, content learning in SEL, self-regulation, and mental health, and a case study that illustrates SEL lesson implementation and the interdisciplinary work between the occupational therapist and educators. Quantitative findings will be collected from Likert scale questions on a Google survey form completed voluntarily by participants (see Appendix C. 3.).

Evaluation Method

This knowledge translation project was initially evaluated through the Minnesota Educational Association peer review process in the acceptance process to present at the Summer Institute workshop. Proposal acceptance of this workshop was given by MEA on 4/6/2022 and confirmed on 4/8/2022.

The workshop will be evaluated through participant completion of voluntary Google Forms survey (see Appendix C.3.). Completion of the Google forms survey was not mandatory for receiving CEUs. The survey will include 8 questions, including 7 Likert scale questions (1-strongly disagree to 5-strongly agree). Of these, five questions will be on whether learning

objectives were met and two will be on if the presentation was clearly organized and if the presenter conveyed the intended message of the workshop. A final question will be an open ended question asking for additional questions and comments about the presentation. During the 15 minute question and discussion time, participant questions will be addressed.

Chapter 5: Outcomes and Analysis

The Knowledge Translation Planning Template was to evaluate outcomes and analyze findings (Barwick, 2008, 2013, 2019).

Evaluation Outcomes

Knowledge Translation Project One: Using Social Emotional Learning to Teach Regulation

Skills: A Virtual Minnesota Occupational Therapy Association Professional

Development

Knowledge Users. The knowledge users (KU) for this knowledge translation project were current and future occupational therapists, and occupational therapy educators that attended a Minnesota Occupational Therapy Association continuing education presentation on February 15, 2022. The KU were occupational therapists seeking continuing education in the practice area of school-based practice.

Main Messages. The bottom line actionable message (BLAM) from this presentation *Using Social Emotional Learning (SEL) to Improve Regulation* was to increase the evidence in an intervention that teaches students regulation and positive mental health. The following are the overarching messages for the presentation. (Barwick, 2008, 2013, 2019):

1. How to create and use a practice question to guide a database literature search to find level 1 and 2 evidence.
2. Critically appraising level 1 and 2 evidence by looking at inclusion/exclusion criteria, randomization, bias in methods, and limitations.
3. How to categorize and use themes from research in SEL and make connections to current occupational therapy practice.

Knowledge Translation Goals. The intended goals of this project were to:

1. Generate awareness of the knowledge translation process that bridges research into practice in an effort to present these skills as achievable and desirable for occupational therapists in practice.
2. Share knowledge in the research results from SEL studies that describe student outcomes in academic achievement, social competency, and emotional skills.
3. Get buy-in from occupational therapists on applying mental health intervention and adapting current practices in sensory processing and self-regulation into a SEL intervention.

Knowledge Translation Strategies. This project generated awareness, interest, and shared knowledge of using the knowledge translation process to answer a clinical question in a 30- minute live narrated slide presentation. This educational project generated awareness with audience members about the process of developing a clinical question, and using database searches to find critically appraised evidence to answer the question. Interest and sharing knowledge to the KU was done through explaining the themes from the evidence in SEL, a mental health intervention for school based practice. The evidence in occupational therapy research related to regulation was then reviewed to compare SEL high level evidence to lower levels of evidence currently in practice.

Knowledge Translation Evaluation. The initial evaluation method for this presentation consisted of the initial review of the presentation for acceptance into a MOTA Professional Development Presentation on February 15, 2022. This project was analyzed using reach, usefulness, and program indicators (Barwick, 2008, 2013, 2019). To evaluate reach, I counted attendance of 22 attendees. Usefulness and program indicators were collected using voluntarily answered Google forms surveys. A link to a Google form survey was placed in the chat feature

of Zoom during and after the presentation. The usefulness indicators of the presentation were based on evaluation results from 11 Google form surveys completed. Participants agreed or strongly agreed that learning objectives were met, with the exception of two participants on the first learning objective and three participants on the second learning objective; these receiving neutral responses. The program indicators were determined by questions asked in real time after the presentation and the optional comment and suggestion question on the Google survey completed voluntarily. The survey, survey results, and voluntary questions, and comments can be found in Appendix A.3, A. 4. and A.5.

The strengths of this knowledge translation project was that it provided the KT process in a step by step fashion with details that supported the work that was completed. A weakness of this knowledge translation process was that the audience commented that they would prefer to learn more about practical application of mental health intervention in school based practice. Due to the goal of this presentation to share the knowledge translation process and not application to practice, the application was reduced to two slides at the end of the presentation which may have affected the audience ratings. The learning that occurred from this project was that the audience was not prepared for the objective of the presentation, learning the KT process. Content on the KT process and the importance to practice would have been better delivered with background information on how KT is used to improve evidence in the profession.

Knowledge Translation Project 2: Social Emotional Learning Improves Regulation: A Virtual Minnesota Occupational Therapy Association Annual Conference

Knowledge Users. The knowledge users of this knowledge translation project were current and future occupational therapists, occupational therapy educators, attending the Minnesota Occupational Therapy Annual Conference, virtually on April 20, 2022. The audience

were participants in a continuing education series on knowledge translation projects by Post Professional Occupational Therapy Doctoral Students at St. Catherine University. This presentation was recorded and made available afterwards on the MOTA website. The participants listened to four ten minute knowledge translation projects that varied in subject matter and practice areas, each followed by a five minute facilitated discussion and answer session.

Main Messages. The SMIT statement (single most important thing) was the use of SEL to improve the level of evidence in regulation intervention that supports mental health for students (Barwick, 2008, 2013, 2018). The overarching main messages to the knowledge users presented were:

1. How current occupational therapy sensory processing and regulation practices can be integrated in SEL.
2. Use of Collaboration for Academic and Social Emotional Learning (CASEL) SEL fidelity standards to guide SEL practice in regulation curriculum and instructional development.

Knowledge Translation Goals. The intended goals of the project were to:

1. Develop awareness, interest, and share knowledge in Social Emotional Learning (SEL) as a regulation intervention.
2. Share knowledge of the research in SEL, and research in school based sensory processing and integration.
3. Get buy-in on the use of a strengths-based approach.
4. Share knowledge of the CASEL practices and principles that provide fidelity to SEL lessons.

Knowledge Translation Strategies. This project used principles of generating awareness, sharing knowledge, and developing interest to help users understand the practice dilemma for students with mental health difficulties. Awareness was generated by reviewing the level of evidence in SEL and current practices in self-regulation. Knowledge was shared on the themes of SEL that support regulation within the classroom. Interest was developed by identifying the current gaps in regulation intervention: use of high level evidence, supporting student's mental health needs, and use of a strengths-based approach to foster student autonomy.

Knowledge Translation Evaluation. To evaluate reach, usefulness, and program indicators. Reach indicators were the number of participants that attended. Usefulness was evaluated on the Likert scale questions on a Google Survey that asked how well learning objectives were achieved. Program indicators were based on open ended question responses and questions asked during the presentation. The reach of the educational presentation was 32 participants. A link to the Google Forms survey was provided to participants in the Zoom chat box after my presentation. The usefulness of the presentation was based on evaluation results from 11 Google surveys completed. Participants agreed or strongly agreed that learning objectives were met, with the exception of one participant on the second learning objective. Participants agreed and strongly agreed that the presentation was presented in an organized manner, with the exception of one participant. Participants agreed and strongly agreed that the presentation generated interest in the topic. The program indicators were determined by questions asked in real time and on an open ended Google form survey question. The survey, results, and program indicators can be found in Appendix B. 3, B. 4. and B.5.

The strength of this knowledge translation process was the emphasis on application of SEL in teaching regulation in the classroom. Other content that strengthened the message of this

KT project was the themes from the database searches highlighted how regulation is developed using SEL. Content was also developed to connect mental health and regulation, as well as the interdisciplinary collaboration that occurs in SEL. A weakness of this KT project was that it was only 10 minutes long, which was a short amount of time to develop a topic and deliver a message. The learning that happened with this KT project was that the learning objectives need to more clearly align with the learning content. This misalignment reduced the strength of my evaluation results on the Google Survey.

Knowledge Translation Project 3: Co-Teaching Social Emotional Learning to Teach

Regulation: A State Interdisciplinary Conference

Knowledge Translation Users. The knowledge translation users of this one and a half hour educational workshop will be attendees at a Minnesota Educational Association (MEA) Summer Summit in St. Joseph, Minnesota on August 2, 2022. Educators, educational assistance, and administrators will choose professional development from a selection of topics in education. The topics that are offered at the MEA Summer Summit are grouped into the following content areas: creative strategies for the classroom, equity or racial/social justice, curriculum and assessments, organizing and engaging members, school climate and learning communities, student engagement, technology integration, and trauma informed instruction. This presentation is grouped in the content area of creative strategies for classrooms.

Main Messages. The bottom line actionable message (BLAM) from this workshop will be informing participants about how educators and occupational therapists can work interdisciplinary to teach SEL and regulation (Barwick, 2008, 2013, 2019). This BLAM statement follows the application guidelines of the MEA Summer Summit, which is creative

strategies for the classroom. The overarching main messages for this workshop will be (Barwick, 2008, 2013, 2019):

1. Sharing the SEL themes with level 1 and 2 evidence that make it a strong evidence based practice that supports regulation.
2. Review current sensory processing and self-regulation interventions and how regulation impacts mental health.
3. Explain how triggers impact regulation and explore strategies to support when a student experiences a trigger.
4. Inform participants about how co-teaching SEL happens in the classroom.
5. Give case examples that demonstrate student learning and interdisciplinary work of the educator and occupational therapist.

Knowledge Translation Goals. The intended goals for this project are to:

1. Review and evaluate current regulation practices and how to support mental health.
2. Generate awareness and interest in SEL and regulation using a partnership between the classroom staff and occupational therapist.
3. Facilitate change in practice by informing educators and administrators on how SEL and regulation intervention can impact behavior problems and support mental health at school.

Knowledge Translation Strategies. The strategy for this knowledge translation project will be to develop awareness and interest, sharing knowledge, and change current practice in using SEL to teach regulation and support mental health. This information will be presented through a visually appealing live narrated slide presentation, active learning strategies, and case study examples to encourage interdisciplinary work.

Knowledge Translation Evaluation. To evaluate reach, usefulness, and program indicators I will count attendance and quantify responses that are voluntarily answered on an eight question survey in Google Forms (Barwick, 2008, 2013, 2018). The reach indicator will be the number of participants that join the workshop session. The usefulness indicator will be collected using a voluntary Google Form survey. The Google Form survey will include eight Likert scale questions that ask the participants whether learning goals have been met, if the presentation content was organized, and if it was presented in a quality manner. The program indicators for this presentation topic will be based on the qualitative information from questions that the audience asked voluntarily and responds to an open ended question asking for additional questions or comments. Additionally, the audience will be invited to participate in a live question and discussion time at the end of the workshop, which will be used as a program indicator. The survey can be found in Appendix C.3.

The strength of this knowledge translation project is that it will be to educators and administrators that are essential for the mental health and regulation intervention to become part of the classroom. Having the audience of the main stakeholders in the audience allows me to inform, explain, and help develop their interest in SEL and occupational therapy's role. The weakness of the workshop is that the audience may not have an occupational therapist in their building supporting SEL. Providing background information in SEL and regulation to educators and administrators is hoped to encourage their participation in seeking or providing these mental health interventions in the classroom and school wide.

Evaluation Analysis

The Knowledge Translation Appraisal Tool was used to complete a formative assessment on the three knowledge translation projects to analyze comprehensiveness, aims, and feasibility (Barwick, 2018).

Comprehensiveness

When analyzing the comprehensiveness of the three knowledge translation projects as a whole, there were definite strengths and weaknesses. The strengths of these projects were that they were given to different knowledge users. The two virtual MOTA presentations were to current and future occupational therapists and occupational therapy educators. However, the MEA workshop will be given to an interdisciplinary audience with educators and decision-makers. The educators will be educational assistants and teachers of students ranging from early childhood to high schools. Administrators, and local and state decision makers will also range in the grades they represent and the location of their district; whether urban, suburban, or rural Minnesota. Another strength was that each project had different learning objectives emphasizing different parts of this work. The first project was informative on the KT process. The second project focused on how to develop SEL fidelity in regulation. The third KT project targets learning about SEL implementation and co-teaching.

Weaknesses of these knowledge translation projects were that they were and will be disseminated only through a presentation or workshop format. Two of the presentations were completed through a live virtual Zoom presentation. This was due to the ongoing COVID-19 pandemic and how conference safety, attendance, and financially backing changed during this time period. The final knowledge translation project will be a live workshop presentation. Dissemination through presentations made several of the evaluation methods the same, including

the acceptance of the conference proposal, use of a Likert and open-ended questions on a Google form survey, and facilitated questions and discussion. Another weakness of these knowledge translation projects was that two of the presentations were completed with current and future occupational therapists, and occupational therapy educators, without other professions represented.

Alignment

The alignment of the three knowledge translation projects with the learning objectives and knowledge translation goals are known for the first two projects.

The first knowledge translation project has been completed and had good alignment. The user rate was considered moderately high (e.g. eleven participants). In total, the usefulness indicators from the Google surveys had one “not well”, five “neutral” responses (e.g. 3 of 5), and twenty eight “well” or “very well” responses. The questions that evaluated presentation learning objectives had one “not well” response, six neutral responses, and twenty-eight “well” and “very well” responses. The questions asking about the presentation and presenter had four neutral responses, and sixteen “well” and “very well” responses. Two participants had specific comments and questions about the presentation, and six discussion questions were asked during the discussion time. This can be found in Appendix A. 5.

The second knowledge translation knowledge project was also completed. The user rate was 32 for the ten minute virtual continuing education presentation. The learning objectives and knowledge translation goals were reduced due to the short length of the presentation. Eleven participants completed the Google Survey. The responses to the evaluation of the two learning objective on a 5-pt Likert scale had two neutral responses (e.g. 3 of 5), four “well” or nine “very well” responses. The questions that evaluated the quality of the presentation and the presenter

were high, with one neutral response, six “agreed”, and 15 “strongly agreed” responses. Eight participants responded to the open ended comments, and three discussion questions were asked during the discussion time. This can be found in Appendix B. 5.

The third knowledge translation project, a professional interdisciplinary workshop presentation appears to have good alignment to the stated learning objectives. The Minnesota Educational Association Summer Summit accepted the proposal on the SEL and Regulation topic, but required the content to be adjusted to the priorities of the conference (e.g., creative strategies for the classroom).

The learning objectives for this workshop are:

1. Identify the evidence in Social Emotional Learning (SEL) that supports regulation for students.
2. Describe how sensory events during the day make it difficult for students to process additional sensory information and maintain mental health.
3. Understand how sensory learning, sensory strategies, co-regulating relationships, and routines support students with sensory processing difficulties
4. Use teaching pedagogy in SEL that fosters student internal motivation through a strengths-based approach.
5. Understand the interdisciplinary co-teaching benefits of SEL and regulation.

This workshop has an expected audience of 20 participants. This one and a half hour workshop will include content learning, active learning, case study, and discussion time.

Evaluation of the alignment will be collected through a Google Form survey and Q & A session.

Feasibility

The feasibility of these three knowledge translation projects are excellent. The first knowledge translation project was completed on February 15, 2022. The continuing education was supported by MOTA and support of St. Catherine University faculty (Dr. Kathleen Matuska and Dr. Darla Coss). Due to the COVID-19 pandemic, the presentations were presented virtually from many states across the county by students and participants were from Minnesota. The impact of this knowledge translation project to knowledge users was that it generated awareness, shared knowledge, and developed interest in the knowledge translation process on a current practice dilemmas occurring in our profession.

The second knowledge translation project also had excellent feasibility. It was completed on April 20, 2022 at an Annual MOTA Conference as a virtual poster presentation for professional development. Due to the COVID-19 pandemic, the presentation was given virtually by Post Professional Occupational Therapy Students in different states. Dr. Darla Coss facilitated the application process, was the proctor of the presentation, and assisted with facilitation of the questions and discussion at the end of the presentation. The impact of the knowledge translation process was to generate awareness and interest, and share knowledge about an intervention with level 1 and 2 evidence that teaches regulation and mental health.

The third knowledge translation project has excellent feasibility. The submitted proposal to the MEA Summer Summit was accepted and the conference expenses were part of the benefit to the presenter (e.g., conference cost, housing, gas, and meals). It is also located within an hour of my residence. The attendance at the MEA Summer Summit is unknown at this time, but past in-person sessions pre-COVID-19 were up to 32 participants. The impact of this knowledge translation project is to share knowledge, foster an interest, and get buy-in from interdisciplinary

professionals and educational leadership on valuing SEL to teach regulation and mental health promotion and prevention.

Chapter 6. Reflection and Recommendations

Reflection

Reflection on Mission and Vision Statements

AOTA'S 2025 Vision.

My doctoral project aligns strongly with the AOTA Vision 2025 by maximizing health, well-being, and quality of life for students with mental health and sensory processing needs. Teaching these students social emotional skills to help with regulation is a critical need for their development and future success. My project also aligns strongly with the five pillars of Vision 2025 that communicates occupational therapy priorities to stakeholders. These five pillars are:

- **Effective:** Occupational therapy is evidence based, client centered, and cost-effective.
- **Leaders:** Occupational therapy is influential in changing policies, environments, and complex systems.
- **Collaborative:** Occupational therapy excels in working with clients and within systems to produce effective outcomes.
- **Accessible:** Occupational therapy provides culturally responsive and customized services.
- **Equity, Inclusion, and Diversity:** We are intentionally inclusive and equitable and embrace diversity in all its forms (AOTA, 2021b, para 1).

Aligning with effective occupational therapy in Vision 2025, this knowledge translation project is evidence based, client-centered, and a cost effective intervention. The knowledge translation critical appraisal of research in SEL research found that SEL is an evidence based intervention. Additionally, SEL lessons are client-centered by being based on the learning and developmental needs of individual students. Discussions within

the lessons encourage students to share their experiences and concerns and are paced to encourage students to share and listen to one another. SEL is provided to all students within the classroom during the school day. SEL becomes part of the daily schedule, making it cost-effective and convenient for student and educator participation and learning.

The two pillars of Vision 2025, leadership and collaborative, are also aligned in this doctoral project. As an occupational therapist leading this work, I have become a leader at the building level and within the school district in changing the way students are learning and the way in which teams are meeting the regulation needs of students. My role implementing this intervention also includes teaching educators about how to support regulation for their students and how regulation impacts behavior and learning in the classroom. Co-teaching SEL in the classroom makes this a collaborative intervention. Occupational therapy and educators work together to encourage student social emotional growth and regulation during SEL lessons, which helps staff embed SEL lessons throughout the school day. The power of SEL is when the concepts and language are embedded through the school day.

The final pillars of Vision 2025, equitable and accessible, are also aligned in this doctoral project. The learning developed within the SEL pedagogy is respectful of student differences in learning and in the way students choose to participate in the lessons. Students and staff are greeted by name, recognized for their attendance in the lesson and encouraged to use an authentic voice, making SEL an equitable, inclusive, and embracing intervention for all students and staff.

St. Catherine University Henrietta Schmoll School of Health.

This doctoral project strongly aligns with the mission and vision of the Henrietta Schmoll School of Health, as stated:

The Henrietta Schmoll School of Health educates diverse learners and engages clinical and community partners to influence health, health systems, and health policy. The School is distinguished by an emphasis on relationship-centered care, socially responsible leadership and interdisciplinary initiatives (St. Catherine University, 2019, p. 7).

This project is aligned with the Henrietta Schmoll School of Health in forming interdisciplinary partnerships with educators. The interdisciplinary partnerships with teachers, educational assistants, and the occupational therapist, utilize each profession's strengths and resources to facilitate student learning in regulation. This interdisciplinary work is best observed in student evaluation periods and implementing specific lessons (e.g., intervention) that target student learning.

This doctoral project further supports the mission and vision of the Henrietta Schmoll School of Health in the emphasis on relationship centered care between the occupational therapist, educators, and students. The relationship of the occupational therapist and teacher facilitates improved student learning. Teachers inform the occupational therapist about student behaviors, which directs the content of the learning in SEL developed by the occupational therapist. The occupational therapist to educator relationship is one of listening and responding to the concerns of the educator on student behavior and learning needs. Student social emotional and regulation needs are the center of the SEL learning, which is cultivated by focusing on student strengths.

Additional alignment of this project with the Henrietta Schmoll School of Health mission and vision statement are that occupational therapy provides socially responsible leadership. This leadership can be witnessed by the use of level 1 and 2 evidence, and developing SEL lessons that meet the needs and preferences of the classroom. These leadership skills also include using group dynamics principles and skills implementing SEL practices. Educators are encouraged to support this classroom learning community and share their own needs and preference to model how they stay regulated during the school day.

St Catherine University Department of Occupational Therapy.

The mission and vision statement of the Department of Occupational Therapy is as follows:

The Department of Occupational Therapy provides an excellent education in occupational therapy to students from diverse backgrounds, conducts scholarly inquiry on human occupation, and serves the broader community by promoting occupational health and well-being. We prepare students to respect the dignity of every individual, value humans as occupational beings, understand the development of occupational competence, apply ethical, spiritual and social justice principles, engage in a healthy balance of life occupations, and lead and influence the advancement of occupational therapy (St. Catherine University, 2019, p. 7).

In alignment with the mission and vision of the Department of Occupational Therapy, this doctoral project values children and youth's occupational competency and them as occupational beings. Being a student is the primary occupation of children and youth, and success in this occupation becomes a trajectory for later social determinants of health and

measures of well-being for youth (Skeen, et al., 2019). This project reflects in depth scholarly inquiry in this human occupation on improving occupational performance patterns, including behavioral performance, that impact student performance, participation and learning.

There is also alignment of this project with ethical, spiritual, and social justice principles in the mission and vision statement of the Department of Occupational Therapy. This project supports diversity in race, gender, and income level by using an evidence based practice foundational to all development, that of developing emotional competency, developing empathy for others, growing in a healthy identity (CASEL, n.d.), and regulation. All students in a classroom are welcomed, encouraged to participate, and valued.

This doctoral project is in alignment with the mission and vision of the Department of Occupational Therapy in leading and influencing the advancement of occupational therapy within a school district. This knowledge translation project has helped question the current practices in teaching regulation to students, as well as consider student's mental health needs. With knowledge translation research in school based mental health literature being applied to current sensory processing and integration evidence, changes in practice are occurring and under evaluation. Leading and advancing practice in sensory processing and integration and mental health, will improve the engagement of students and educators in sensory processing and integration practices and mental health promotion and prevention.

Reflection on Knowledge Translation as a Focus for Advanced Practice

Admittedly, before starting this doctoral program, I knew that due to barriers in past occupational therapy preparation and in lack of immediate gains experienced in occupational therapy practice make it challenging to use evidence to inform practice. Lack of course work in asking practice questions, lack of course work in critiquing evidence, and full work days that

focus on the number of clients treated prevent practicing therapists from using research. At the beginning of the PP-OTD degree I did not understand how knowledge translation would impact how I used evidence or inform practice. The term knowledge translation was new to me and I was not sure how this process and method would support me in advancing practice skills.

Completing the evidence based proposal and project courses and going through the steps from evidence to application in the three knowledge translation projects has changed my ability to use evidence in my practice.

To be an advanced practice practitioner one must use evidence, set goals for practice and professional learning, and work interdisciplinary. The PP-OTD curriculum and instruction in knowledge translation taught me how to use evidence in the Doctoral Project Proposal course. The processes of developing a question, learning database searches, critiquing research, and communicating these findings professionally are at the center of being an advanced practice practitioner. Searching for current literature helped me formulate a path for reaching out to experts that could help me include needed material in my practice dilemma. Setting practice goals happened in the PP-OTD program through formulating a practice dilemma in a PICO format (e.g., person, intervention, comparison, and outcome). The course work in program development and evaluation taught me how to use stakeholders to evaluate results to help with collaboration. For occupational therapy practice to be meaningful, recipients of service (e.g., in this case children, youth, and educators) and other interdisciplinary team members must find the intervention to be meaningful. In several of the courses in the PP-OTD program leadership, interdisciplinary work, and communication were emphasized. Professional development can take on several forms, from content learning to learning presentation skills. Professional development

learning happened throughout the PP-OTD course work in the learning content with the support of the PP-OTD faculty.

The knowledge translation learning transformed me into an advanced practice occupational therapist. Completing the knowledge translation projects improved my ability to answer a current practice dilemma. Identifying and developing the answer to the practice dilemma grew my expertise in my focus area and developed expertise that will build over time.

The first knowledge translation project was a professional development presentation that described the process of using research in the knowledge translation process. This professional development encouraged occupational therapists already in practice to engage in advanced evidence based practice themselves. This knowledge translation project advanced my practice in SEL and regulation and has helped me lead and influence occupational therapists in the benefit of using research to inform practice.

The second knowledge translation project was a professional development presentation advocating for the use of a research based and mental health informed regulation intervention to occupational therapists. This continuing education course presented SEL research and the themes that support regulation. SEL pedagogy and practices as defined by CASEL explained how new curriculum could be developed. This knowledge translation project advanced my practice by requiring me to develop interest in SEL and regulation in other occupational therapists.

The third knowledge translation project will be a professional development presentation to educators and administrators describing SEL research, the implementation of a new practice, and encouraging their participation in this intervention. This continuing education course will be primarily interdisciplinary sharing of knowledge and getting buy-in to using this intervention.

This knowledge translation project will advance my practice by requiring me to teach the participants how to implement an SEL lesson.

Reflection on Professional Development

St. Catherine University's mission is to "Educate Women to Lead and Influence (St. Catherine University, n.d). The PP-OTD degree has changed the way I practice and developed me not only as a practitioner, but as a leader and fellow colleague. The PP-OTD degree learning has broadened how I viewed my work impacting many systems, including professionals that I work closely with as well as other departments. I have also learned how to deepen the impact of my work with clients, populations, communities, and considering social determinants of health.

While uncovering research in mental health, I have developed a deeper appreciation for mental health for our clients and what role I can play to support them. This appreciation has led me to some additional resources in my work, in joining two communities of practice on the subject of mental health. One community of practice is for Mental Health Promotion in Tier 1 supports with the MTSS Framework. Being part of this new mental health movement will improve my work with students, classrooms, and within the profession. The second community of practice is led by the author of the Mental Health Promotion and Prevention Practice Guidelines, Dr. Susan Bayzk. She is leading efforts for school-based occupational therapists to find their voice as specialized instructional support personnel under the Every Child Succeeds Act of 2015 (Bayzk, et al., 2022; U.S. Department of Education, 2015). Other benefits of the PP-OTD degree work have been the knowledge translation projects, which have taught me how to move into action after research and inquiry.

Although the topics of sensory processing and self-regulation have an abundant amount of literature on intervention, it became evident to me that addressing mental health is lacking in

current practice. Completing this doctoral program has allowed me to navigate this gap with scholarly work. This has already changed my practice and captured the attention of a supervisor and several members of the occupational therapy department I am part of. I believe developing the SEL and regulation curriculum will launch me into new places working with students and in training other professionals in mental health and regulation.

This doctoral project has also opened the door for school-based occupational therapy to be part of mental health interventions. The opportunity to develop a vision of mental health intervention in school-based practice is also exciting for me. If this new vision can be shared with other occupational therapists, then I believe their work can make true changes with students and teachers within the classroom. School based occupational therapists have not used developing and sustaining mental health to target the occupation of school for children, which is demonstrated in literature as making significant gains in this occupational (Durlak, et al., 2015) and with students may also use interventions that make long term changes with students.

Recommendations

Summary of Needs for Future Knowledge Translation Project

A weakness that I identified in my doctoral project is that I did not open the proposed SEL and regulation intervention information up to a wider audience base, other than three professional development presentations regionally. The first two knowledge translation projects were to occupational therapists. The third knowledge translation project is planned for August 2, 2022. It will be presented to educators at the Minnesota Educational Association Summer Summit. Dissemination to a wider audience base (e.g., less regional) about occupational therapists' use of SEL to teach regulation would improve the likelihood that therapists will try this intervention, and consider becoming

involved in co-teaching. A KT project at a state conference or in an academic setting outside of the state of Minnesota would provide me with a larger audience base with school based occupational therapists that follow different service delivery models, and located in different types of locations, such as rural and urban settings.

Many school based occupational therapists currently do not advocate for their role in mental health. Advocating for a role in the MTSS framework will take education, professional development, and a commitment to changing the way mental health needs are addressed by occupational therapists. A knowledge translation project that outlines some of the key learning and steps, paired with success stories, would benefit this work and move occupational therapists to engage in this work moving forward. This KT project would be well presented in an OT Practice or Special Interest Section article, in the Children and Youth section; both publications of the American Occupational Therapy Association.

A knowledge translation project that helps break down the barriers to current policies preventing school based and other occupational therapists from addressing mental health interventions is also needed. Currently, the *Occupational and Physical Therapy in Educational Settings: A Manual for Minnesota Practitioners* does not include mental health intervention in the scope of practice (MDE, 2014). These guidelines do not match current federal special education law or occupational therapy guidelines (AOTA, 2020; U.S. Department of Education, 2015). Additionally, Medicare and Medicaid guidelines do not include occupational therapy as mental health providers (MDE, n.d.). Without recognition of being a mental health provider using mental health interventions, occupational therapy is severely limited as an interdisciplinary leader and partner.

A KT project that educates the role of occupational therapists in mental health is needed in order for state agencies to include occupational therapy as a mental health provider. Becoming involved in the Minnesota Department of Education, Special Education division to rewrite the Occupational and Physical Therapy in Educational Settings Manual would ensure that mental health is included in school based practice. Also, a KT project that works with the Minnesota Department of Health in the area of Medicare and Medicaid guidelines would also encourage the current mental health providers to understand the contributions of occupational therapy and what they can bring to this work.

A knowledge translation project that helps school based occupational therapists learn SEL is an excellent way to encourage mental health interventions in classrooms. Co-teaching students to identify their emotions, share triggers, and learn sensory preferences are key areas to support SEL teaching. Co-teaching helps students' mental health and develops collaborative work with teachers to help embed classroom learning. A KT project that outlines a curriculum in mental health learning in SEL that includes principles of regulation, will make this intervention more accessible to occupational therapists. This KT project could be delivered as a large public presentation to occupational therapists at the state and national level. In addition, communities of practice in school based mental health also support his need for occupational therapy advocacy. Other ways that this KT project could be carried out is to present to current educators and social workers at district in-services in SEL.

One Proposed Future Knowledge Translation Project: SEL Lessons for a Curriculum in Regulation and Mental Health

Knowledge Users. The knowledge users of SEL lessons in regulation will be primarily occupational therapists and teachers invested in regulation and mental health. In addition, handouts for parents will be created to inform them about their child's current learning.

Main Messages. The SEL lessons in regulation will develop student's awareness of their sensory and regulation needs and experiment with what they may need at school to get these needs met. The content areas will contain information about experiencing triggers, moods, and emotions in your body, how sensations impact their bodies, and how to develop and use strategies to regulate as part of mental health.

Knowledge Translation Goal. To develop a sequence of SEL learning based in CASEL practices, have students identify the benefits of mental health and regulation, and principles that encourage student's self-determination to regulate.

Knowledge Translation Strategy. Generate awareness of differences in sensory preferences and responding to emotional triggers. Share knowledge about the importance of listening to our emotions and bodies. Develop an interest in students and staff on learning the importance of mental health, regulation and regulation strategies.

Knowledge Translation Evaluation. To evaluate improvement in mental health and regulation, SEL research encourages student to identify the goals they have in managing their emotions and behavior so that they are more self-directed. Students complete a pre test identifying what learning they would like to have. In a post test, students report their learning in mental health and regulation and reflect on their learning. Research states that if students express what learning is important to them that they are more likely to make progress in mental health (Reeves, et al., 2021).

Progress in behavior and regulation can also be reported based in SEL goals in Individual Educational Programs (IEP). Progress is usually reported in decreased frequency of behavior, and/or improvements on identified SEL learning. IEP progress is reported quarterly. Affect charts are also used to identify regulated behavior, which is measured every 30 minutes of the school day. Decreases in high intensity affect can also be improved with SEL and reported at annual IEP meetings.

Teachers can complete a pre test on a student's emotional skills, coping skills, and regulation to help measure progress. Completed post tests on student mental health is reported on the same skills to see if needed emotional learning is achieved. In addition, having teachers complete satisfaction surveys on co-teaching with the occupational therapists helps point out strengths, weaknesses, and benefits of interdisciplinary work.

Reflecting on COVID-19 during the Doctoral Program

The PP-OTD program began May of 2020, two months after the global COVID-19 pandemic started. The OTD program was based on a virtual learning platform, with two in-person requirements at the beginning and end of the program. Starting the virtual PP-OTD program in a "shutdown" seemed at the time to be a good idea since the program itself would not change. The pandemic did change things. The experiences of the cohort members may not have changed their work in the courses, but each of us experienced the effects of the isolation that occurred and the uncertainty it created. Our knowledge translation projects switched to virtual presentations. This did make the knowledge translation projects more accessible, but maybe not as rich in receiving participant feedback and interaction. Now, hopefully at the tail end of the pandemic, the healthcare system, schools, and frontline workers are being recognized as taking on the

burden that the pandemic created. As a school-based occupational therapist I see the effects of the last two years on the students, staff, and administration, not to mention parents of young children in the background. I hope the work that I have developed in this knowledge translation project is used and the mental health and regulation needs that have been exacerbated by the pandemic see some benefit to this work.

Appendix A.1. MOTA Continuing Education Session Application

MOTA Virtual Presentation Application MOTA Course Application

Event Name/Course Title: Evidence-based practice for school therapists

Date of Event: (some time in February?)

Start Time: 6:00pm **End Time:** 7:00 pm

Category: Presentation – Webinar (virtual but presenters are live)

Timed Agenda:

6:00-6:25 Presentation - Evidence on How Social Emotional Learning Programs Support Regulation in School-Based Practice

6:25-6:30 questions

6:30-6:55 Presentation – EBP for OT and visual-perceptual training in schools

6:55-7:00 Questions

Event Description:

- Presenters will share the evidence found for the topics above, including the search strategy, level 1 and level 2 evidence, summary of themes and recommendations.
- It will be a 25 minute powerpoint presentation

References for Evidence-based Practice & Social Emotional Learning (SEL)

- Fishbein, D. H., Domitrovich, C., Williams, J., Gitukui, S., Guthrie, C., Shapiro, D., & Greenberg, M. (2016). Short-term intervention effects of the PATHS curriculum in young low-income children: capitalizing on plasticity. *Journal Primary Prevention*. 27, 493-511.
- Lochman, J., E., & Well, K. C. (2002). The Coping power program at the middle-school transition: Universal and indicated prevention effects. *Psychology of Addictive Behavior* 16 (45), 40-54.
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Speaker Credentials and Biographies:

1. Jennifer Brady-Johnson, OTD/S, MAOT, OTR/L I currently work in a federal setting IV school with students that have high emotional and behavioral needs. As a school-based therapist I have spent a career understanding the importance of linking sensory processing to self-regulation, but with setting IV students, building mental health capacity for self-regulation may be more foundation. Social Emotional Learning (SEL) offers the opportunity to build mental health capacity in our students.

References for Evidence-based Practice & Social Emotional Learning (SEL)

- Fishbein, D. H., Domitrovich, C., Williams, J., Gitukui, S., Guthrie, C., Shapiro, D., & Greenberg, M. (2016). Short-term intervention effects of the PATHS curriculum in young low-income children: capitalizing on plasticity. *Journal Primary Prevention*. 27, 493-511.
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Learning Objectives:

Participants will:

1. Describe research supporting the use of Social Emotional Learning (SEL) with students at risk or with mental health needs.
 2. Critique levels of evidence for student outcomes of Social Emotional Learning.
3. Examine recommendations for OT practice related to Occupational Therapy's contributions to Social Emotional Learning (SEL) that will further support regulation and learning.

Target Audience: All

Level of Content: Advanced

AOTA Practice Area Children & Youth
CEUs presentation – 1 hr

MOTA Members only? No

Primary Speaker #1 Contact information

- Jennifer Brady-Johnson OTR/L
- Phone: 763 639-0578
- Email: jjbradyjohnson@stkate.edu

Appendix A.2. MOTA Continuing Education Session Narrated Slide Presentation

Slide 1

EVIDENCE ON HOW SOCIAL EMOTIONAL LEARNING PROGRAMS SUPPORT REGULATION IN SCHOOL-BASED PRACTICE

Jennifer Brady-Johnson, MA, OTD/S, OTR/L
Dr. Kathleen Matuska, Advisor

This slide features a dark teal background. In the center, there is a white rectangular box with a thin black border containing the title text. Below the box, the names and credentials of the presenters are listed in a smaller, white font.

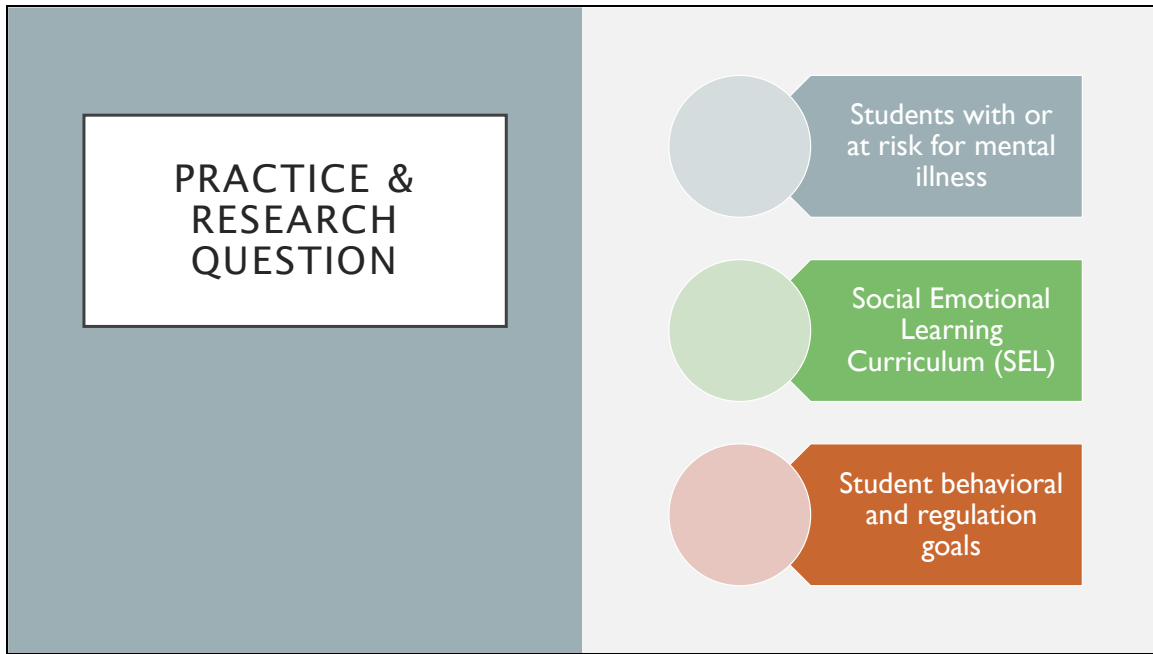
Slide 2

ADDRESSING THE MENTAL HEALTH NEEDS OF CHILDREN AND ADOLESCENTS

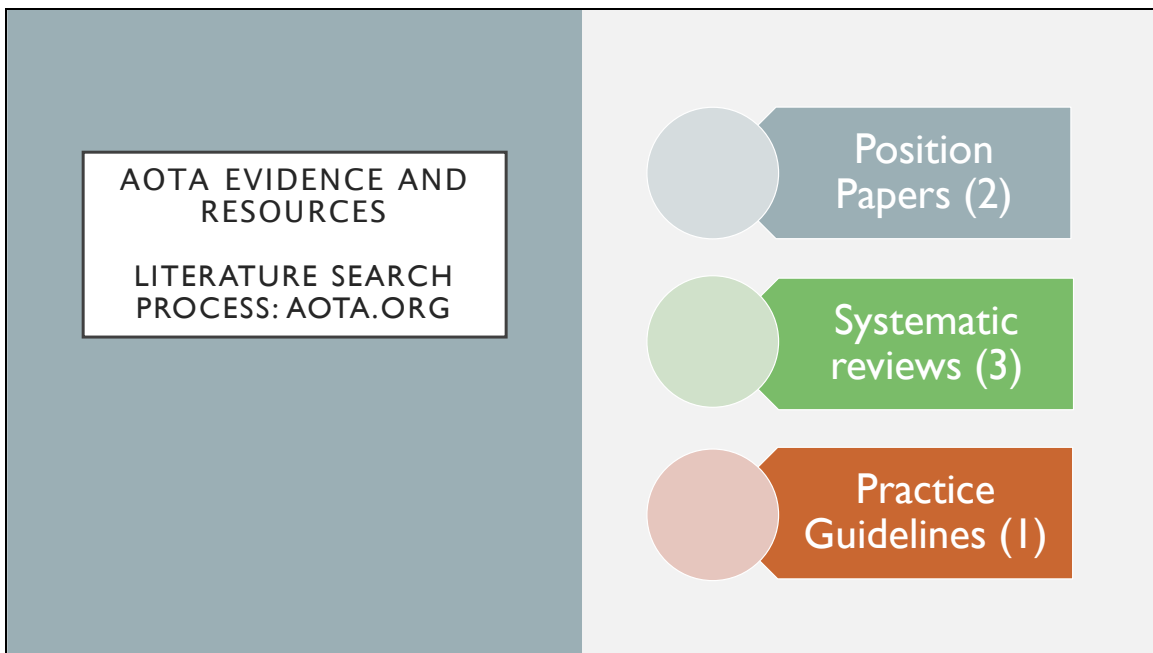
- The Mental Health Movement developed in the early 2000's to start addressing the growing concern for the number of children and adolescents with a mental health diagnosis, both mild and severe.
- All agency that provided services to youth were asked to provide a tiered level of mental health intervention in a public health model.
- Schools developed the Multi-Tier System of Support or MTSS.

This slide has a dark teal background on the left side and a light gray background on the right side. A white rectangular box with a thin black border is positioned on the teal side, containing the title text. On the gray side, there is a bulleted list of three points in black text.

Slide 3



Slide 4



Slide 5

PRIMARY SEARCH AND RESULTS

ProQuest search: 63 results, 2 that were relevant for SEL and my PICO question

PubMed search: 14 results, 2 that were relevant for SEL and my PICO question

Slide 6

META-ANALYSES

Adolescent mental health program components and behavior risk reduction: A meta-analysis.

The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions.

Slide 7

SECONDARY SEARCH & RESULTS

- ProQuest 84 articles found with SEL, school intervention, mental health, randomized control studies, English, 1/1/11-9/1/2021, peer review, scholarly articles, evidence-based healthcare. 2 were done in foreign countries and not considered. 4 were relevant to the PICO and EBP question
- PubMed 156 articles found SEL, school based intervention, randomized control studies, randomized control studies, 5 articles were relevant and related articles listed were also relevant; totaling 7 articles related to my PICO and EBP question.
- CINAHL 29 articles found, social emotional learning, limiters English, randomized control study, peer review article. 5 were relevant to my PICO and EBP question.

Slide 8

CRITICALLY APPRAISED ARTICLES

- A cluster randomized-control trial of the MindOut social and emotional learning program for disadvantaged post-primary school students
- Findings from a randomized trial of an integrate classroom management and social-emotional program.
- The mediational role of neurocognition in the behavioral outcomes of a social-emotional prevention program in elementary school students: Effects of the PATHS curriculum.
- Cluster-randomized trail demonstrating impact on academic achievement of elementary social-emotional learning.

Slide 9

**SUMMARY OF EVIDENCE MATRIX
MENTAL HEALTH
PROMOTION SEL**

Acts of kindness improve well-being and personal well-being if students enacted kindness acts three a week.

Use of SEL to teach Kindergarten students conflict resolution improved friendship skills and their ability to resolve conflict.

Slide 10

**SUMMARY OF EVIDENCE MATRIX
MENTAL HEALTH
PREVENTION
PROGRAMS**

Inconsistent and spotty use of dosage as a factor in the effectiveness of SEL implementation.

The use of SEL improved executive functioning and social problem solving skills for students with fetal alcohol syndrome.

Improved emotional and behavioral outcomes for low income kindergarten students.

Social emotional learning and self-regulation decreased preschoolers externalizing behaviors.

Inconsistent reporting on the effectiveness of school-wide and parent involvement in SEL on student outcomes.

One study stated that SEL was not cost effective (Berry, et. al., 2015)

Slide 11

THEME 1:
HOW IS SEL
EFFECTIVELY TAUGHT?

- Teachers and support staff teaching the curriculum
- Teachers received training in SEL
- Ongoing coaching is provided to teachers to support for SEL implementation
- Use of active learning strategies to teach content.

This slide features a central white box with the title 'THEME 1: HOW IS SEL EFFECTIVELY TAUGHT?' on a dark blue background. To the right, four colored circles (grey, green, light green, and orange) are connected to text boxes containing the following points: 'Teachers and support staff teaching the curriculum', 'Teachers received training in SEL', 'Ongoing coaching is provided to teachers to support for SEL implementation', and 'Use of active learning strategies to teach content.'

Slide 12

THEME 2:
WHEN IS SEL
CURRICULUM IS
EFFECTIVE?

- Inconsistent content on the right amount of dosage for SEL curriculum
- When should SEL student outcomes be measured post intervention to determine whether their have been student gains?
- Multicomponent SEL- Use of classroom, school-wide integration, and home integration
- Multicomponent SEL- Promotion and Prevention SEL

This slide features a central white box with the title 'THEME 2: WHEN IS SEL CURRICULUM IS EFFECTIVE?' on a dark blue background. To the right, four colored circles (grey, green, light green, and orange) are connected to text boxes containing the following points: 'Inconsistent content on the right amount of dosage for SEL curriculum', 'When should SEL student outcomes be measured post intervention to determine whether their have been student gains?', 'Multicomponent SEL- Use of classroom, school-wide integration, and home integration', and 'Multicomponent SEL- Promotion and Prevention SEL'.

Slide 13

THEME 3:
WHAT SEL
CURRICULUM IS
EFFECTIVE?

- What programs are effective for students
- Preschool
- Elementary School
- Middle and High School

This slide features a dark blue background on the left with a white box containing the theme title. On the right, a light grey background contains a vertical list of four items, each preceded by a colored circle: a grey circle for the main question, a green circle for 'Preschool', a light green circle for 'Elementary School', and a red circle for 'Middle and High School'.

Slide 14

THEME 4:
WHO BENEFITS FROM
SEL INTERVENTION?

- All Ages- Preschool-High School Age
- Students with or at risk for mental health problems
- low income students , students transitioning between schools, students with externalizing behaviors
- Students developing well-being and positive mental health

This slide features a dark blue background on the left with a white box containing the theme title. On the right, a light grey background contains a vertical list of four items, each preceded by a colored circle: a grey circle for 'All Ages- Preschool-High School Age', a green circle for 'Students with or at risk for mental health problems', a light green circle for 'low income students , students transitioning between schools, students with externalizing behaviors', and a red circle for 'Students developing well-being and positive mental health'.

Slide 15

<p>RECOMMENDATIONS FOR PRACTICE</p>	<p>School-based occupational therapist need to learn about the opportunities they have in providing students mental health intervention.</p>
	<p>Occupational therapists need to be able to offer their skills in teaching students and teachers the relationship between large emotions and regulation and what strategies to try.</p>
	<p>Use Zones of Regulation and/or How Does Your Engine Run, sensory strategies that ground/focus & calm, teaching yoga & mindfulness and other calming strategies, matching the sensory environment with the student needs including communication patterns.</p>

Slide 16

<p>WHAT OCCUPATIONAL THERAPISTS NEEDS TO DO:</p>	<p>School-based OTs need to advocate for their role in supporting mental health needs of children and adolescents</p>
	<p>Work within the OT Department to acquire psychosocial assessments to be used pre and post SEL intervention. Assessment should include a standard measure, student report, teacher report, a baseline behavioral goal as a target.</p>
	<p>Join SEL classroom based and school-wide intervention</p>

Slide 17

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Slide 18

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Slide 19

The slide features a central title box at the top with the word "ACKNOWLEDGEMENTS" in bold, uppercase letters. Below the title are five rectangular text boxes arranged in two rows. The top row contains three boxes, and the bottom row contains two boxes. Each box contains a short paragraph of text expressing appreciation to various individuals and groups.

ACKNOWLEDGEMENTS

A huge thanks to my husband Bob and my children for sharing me with my this project and other work that has led up to this point.

I am thankful for all of the ground work that has been done in the occupational therapy profession that has made it possible to be part of school based mental health practice.

I greatly appreciate my OTD Cohort: Amy Carrier, Elizabeth Campbell, Claire Dolislager, Emily Peterson, Deb McKernan-Ace, Jessica McGuiire, and last but not least Paula Stommes; you are all rock stars. Thanks to my advisor Dr. Matuska supporting me in this journey.

I look forward to my future work with Dr. Paula Raboey and Dr. Stephanie de Sam Lazzaro as I continue this journey.

The SEL research is unending and a strongly supported intervention that helps our children and adolescents, this is amazing.

Appendix A.3. MOTA Continuing Education Session Google Form Survey

Evidence on How Social Emotional Learning (SEL) Programs Support Regulation in School-Based Practice

Please provide feedback on your learning about SEL programs and how they support regulation for students with or at risk for mental health difficulties.

Email *

Valid email

This form is collecting emails. [Change settings](#)

Please indicate how well the presentation met the stated learning objective: Describe research supporting the use of SEL with students at risk or with mental health needs. *

	1	2	3	4	5	
Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very well

Please indicate how well the presentation met the stated learning objectives: Critique levels of evidence for student outcomes for SEL. *

	1	2	3	4	5	
Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very well



Please indicate how well the presentation met the stated learning objective: Examine recommendations for Occupational Therapy Practice that will further support student regulation and learning. *

	1	2	3	4	5	
Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Well

Please indicate if the organization of the presentation supported your understanding of SEL *

	1	2	3	4	5	
Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Well

Please indicate how well the presenter communicated the connection between SEL and how occupational therapy can be included in this intervention *

	1	2	3	4	5
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

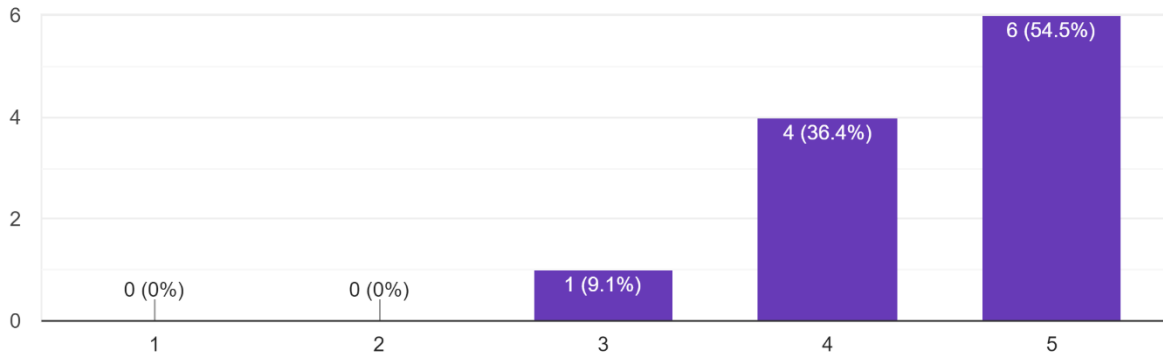
Do you have any comments or questions that you would like to share? Please elaborate *

Long answer text

Appendix A.4. MOTA Continuing Education Session Google Form Survey Results

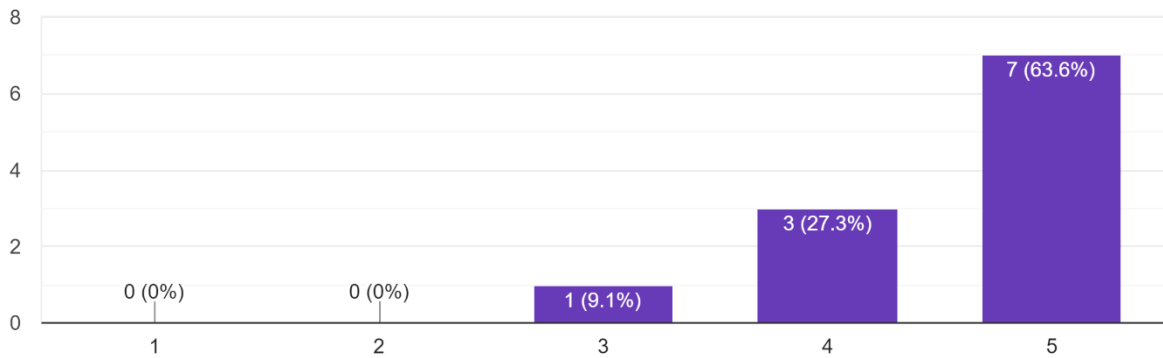
Please indicate how well the presentation met the stated learning objective: Describe research supporting the use of SEL with students at risk or with mental health needs.

11 responses



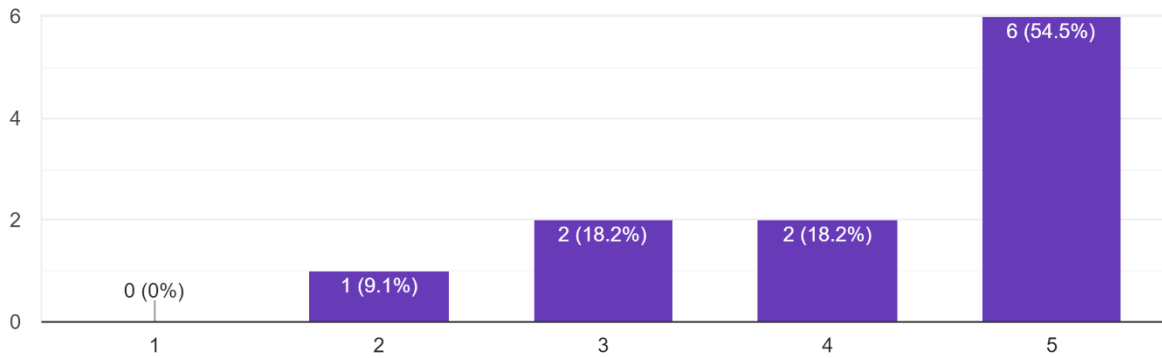
Please indicate how well the presentation met the stated learning objectives: Critique levels of evidence for student outcomes for SEL.

11 responses



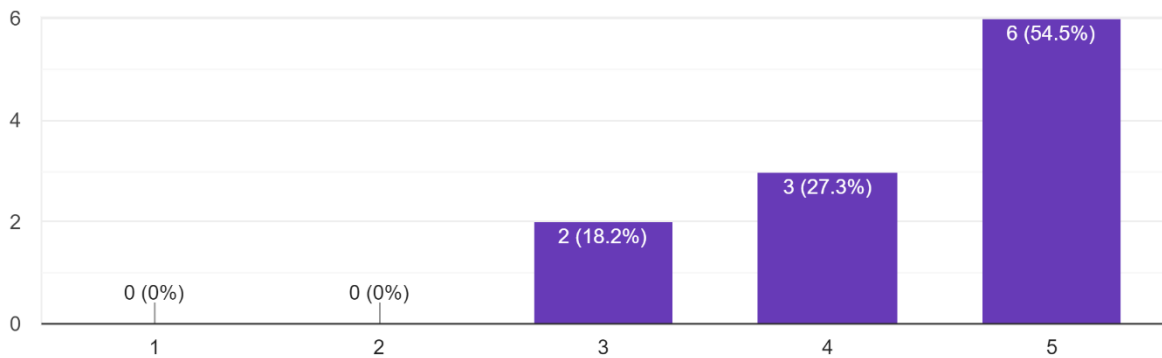
Please indicate how well the presentation met the stated learning objective: Examine recommendations for Occupational Therapy Practic...further support student regulation and learning.

11 responses



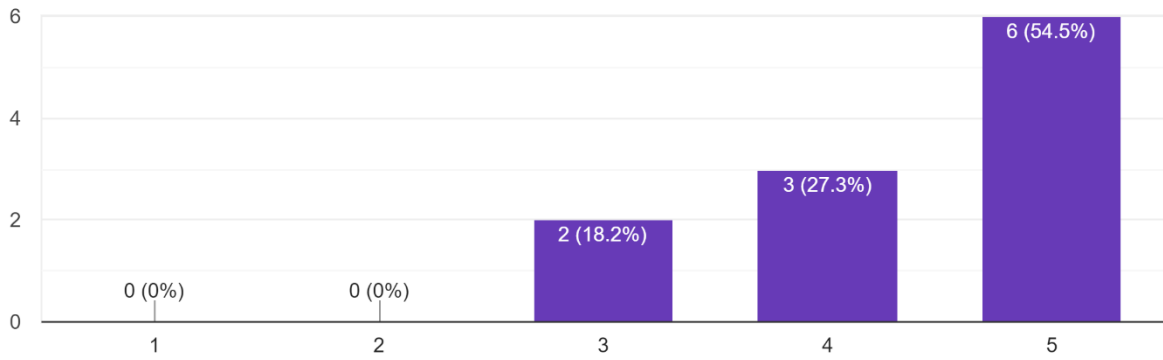
Please indicate if the organization of the presentation supported your understanding of SEL

11 responses



Please indicate how well the presenter communicated the connection between SEL and how occupational therapy can be included in this intervention

11 responses



Appendix A.5. MOTA Comments and Survey Open-Ended Comments made Voluntarily

The questions asked in real time were:

- 1) How did you come up with this idea?
- 2) Would you use Zones of Regulation for SEL?
- 3) Why are school OT's slow to come around to Mental Health Interventions when we have such a good background in mental health?
- 4) What SEL and Mental Health Interventions have you done?
- 5) Have you been able to use your findings?
- 6) Have you used "conscious discipline" as an SEL curriculum?

The Goggle form survey had feedback such as:

- 1) More specific and practical information about the recommended SEL programs, as well as how to embed interventions in schools would be helpful. I'd like to know significantly more detail about what we're topics and goals of the SEL programs.
- 2) Thank you for your research and information tonight!
- 3) Could we get the resources listed?
- 4) Presenter was fabulous
- 5) Great presentation

Appendix B.1. Application to a Presentation on Using SEL to Teach Regulation

Minnesota Occupational Therapy Association- Annual Conference (Virtual) 2022

Speaker Bio:

Jennifer Brady-Johnson is a pediatric occupational therapist that currently works in school-based practice in a setting IV school. Her background includes working in rural, urban, suburban, and charter schools. She has also been an administrator, program director, and occupational therapist in an outpatient clinic. Her main interest area has been working with children and youth to address self-regulation and motor planning needs. Her current interest is in developing self-determination in students as they learn self-regulation within social emotional learning programs. Jennifer also enjoys the outdoors, being with her family and friends, and being a lifelong learner.

Title of Poster: Use of Social Emotional Learning to Teach Regulation

Description of Poster: The contents of the poster include: the four themes from Social Emotional Literature (SEL) that were important to the development of a program in regulation. Finally, a regulation lesson to be used in SEL will be reviewed to illustrate how occupational therapy can be involved in this practice.

After the poster presentation, the participants will be able to:

1. State the themes of SEL that make it valuable in teaching regulation.
2. Understand how to make a regulation lesson for SEL (e.g., welcoming activity, routine, or ritual, use of engaging strategies, optimistic closure, develop self-determination through choice of activities, and how collaboration between teacher and occupational therapist occurs).

Appendix B.2. MOTA Presentation: Using Social Emotional Learning to Teach Regulation

Slide 1

St. Catherine University
Poster Presentations
April 20, 2022

Paula M. Stommes, MA, OTR/L, ATP
Jennifer Brady-Johnson, OTR/L
Emily Petersen, MA, OTR/L
Elizabeth Campbell, MOT, OTR/L

ST. CATHERINE UNIVERSITY

Slide 2

St. Catherine University
Poster Presentations
April 20, 2022

The Use of Social Emotional Learning to Teach Regulation

Jennifer Brady-Johnson, OTD/S, MA, OTR/L


ST. CATHERINE UNIVERSITY

Slide 3

Use of Social Emotional Learning to Teach Regulation

The Practice Question:

What evidence based school intervention improves regulation for students with mental health concerns?




ST. CATHERINE UNIVERSITY

Slide 4

Learning Objectives

1. State the themes of Social Emotional Learning (SEL) that make it valuable in teaching regulation
2. Understand how to make an SEL Lesson using Collaborative for Academic and Social Emotional Learning (CASEL) standards.




ST. CATHERINE UNIVERSITY

Slide 5

Background Evidence in Social Emotional Learning

1. SEL can create classrooms that are psychologically safe.
2. SEL develops student's social emotional skills.




ST. CATHERINE UNIVERSITY

Slide 6

Background Evidence in Social Emotional Learning

- 3. SEL teaches students social emotional problem-solving skills.
- 4. SEL improves teacher's experience of teaching and ability to manage the classroom.



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Slide 7

Findings and Analysis Based on Evidence

- Social Emotional Learning has two decades of randomized control studies that demonstrate that it improves student academic, social and emotional learning.
- In the field of occupational therapy, the strength of research in school based sensory processing interventions vary.



ST. CATHERINE UNIVERSITY

Slide 8

Purpose on my Knowledge Translation Project

- To develop an intervention that supported student learning in emotional regulation and sensory processing, for students that also have mental health concerns.
- Offer an intervention that allowed for student, teacher, educational assistant, and OT dynamic collaboration and learning.

[SURVEY](#)

ST. CATHERINE UNIVERSITY

Slide 9

Recommendation

- School-based occupational therapist develop skills and competencies in mental health.
- Use student pre and post tests to track whether students believe they have made changes in learning at school.
- Have teachers rate the frequency of student behavior pre and post intervention.
- Use teacher satisfaction surveys post intervention on the use of SEL to teach regulation.

ST. CATHERINE UNIVERSITY

Slide 10

References

Available on request

Email: jjbradyjohnson@stkate.edu

ST. CATHERINE UNIVERSITY

Slide 11

Thank you for attending

Facilitated Discussion & Questions

Please completed the Google Survey Below
[Survey](#)

ST. CATHERINE UNIVERSITY

Slide 12

Appendix A: School-Based Occupational Therapy Self-Regulation Resources

- [The Alert Program](#) (Williams, et al., 1996): Uses engine speeds to describe regulation. Teaches strategies to change engine speeds.
- [The Interoception Curriculum](#) (Mahler, 2019)- Teaches students Interoceptive Awareness by mindfully becoming aware of body signals.
- [Occupational Therapy Meta-Analysis' in Sensory Processing](#) (Bodison, et al., 2018; Cahill, et al., 2020; Miller-Kuhaneck, et al., 2018; Pfeiffer, et al., 2018)
- [Sensory Profile-2](#) (Dunn, 2014)
- [Sensory Processing Measure 2nd ed.](#) (Parham, et al., 2021)
- [Tool Chest for TEENS: Strategies to Promote Sensory Processing](#) (Henry, et al., 2004).
- [EveryMoment Counts.org](#) - Website for School-Based Occupational Therapy Mental Health

ST. CATHERINE UNIVERSITY

Appendix B.3. MOTA Presentation Google Survey Form

Using Social Emotional Learning to Teach Regulation- Minnesota Occupational Therapy 2022 Annual Conference

* Required

1. 1. Learning Objective 1 was met. State the SEL themes that support regulation. *

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

2. 2. Learning Objective #2 was met. Understand how to make a regulation lesson for SEL using CASEL principles (Collaborative for Academic and Emotional Learning) *

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

3. 3. The organization of the presentation supported understanding the content. *

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

4. 4. The presentation was presented in a manner that supported interest in the use of regulation in Social Emotional Learning. *

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

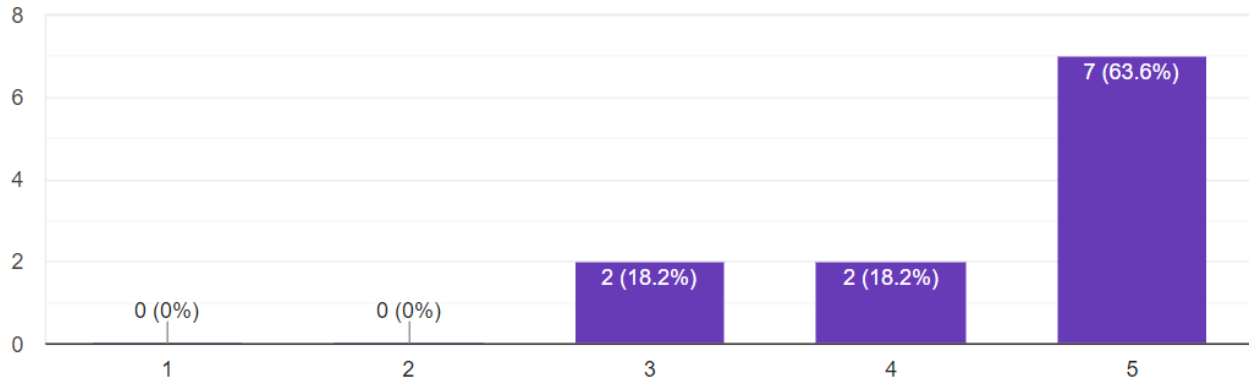
5. What questions or comments do you have about teaching regulation in social emotional learning? Please specify *

This content is neither created nor endorsed by Google.

Google Forms

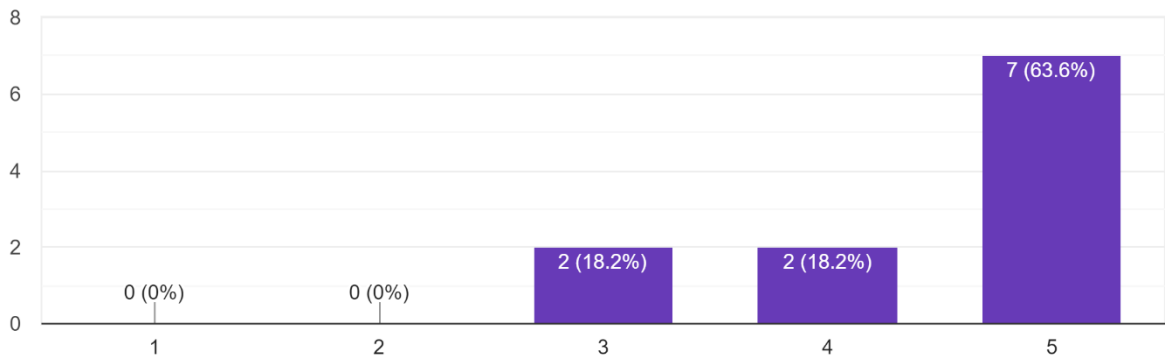
Appendix B.4. MOTA Presentation Google Survey Form Survey Results

1. Learning Objective 1 was met. State the SEL themes that support regulation. *



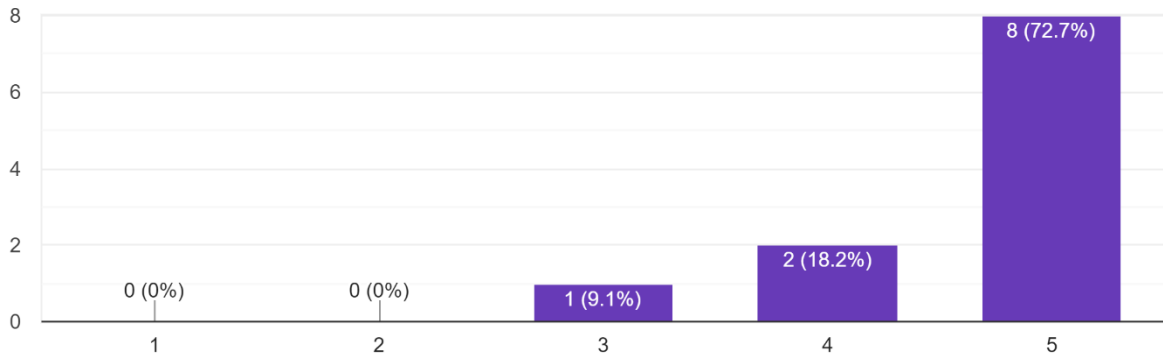
2. Learning Objective #2 was met. Understand how to make a regulation lesson for SEL using CASEL principles (Collaborative for Academic and Emotional Learning)

11 responses



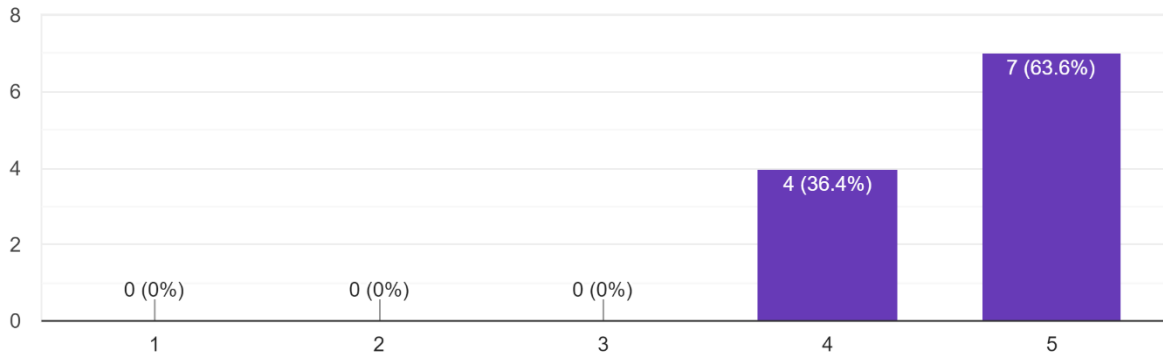
3. The organization of the presentation supported understanding the content.

11 responses



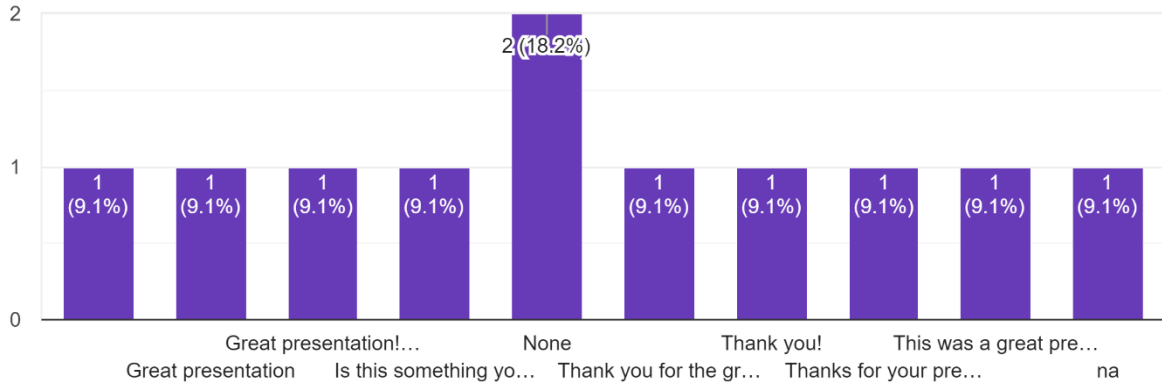
4. The presentation was presented in a manner that supported interest in the use of regulation in Social Emotional Learning.

11 responses



What questions or comments do you have about teaching regulation in social emotional learning?
Please specify

11 responses



Appendix B.5. MOTA Voluntary Real-Time Questions and Open Ended Comments


The questions asked in real time were:

- How would you/could you apply this to college students? Obviously, there might be a difference in intervention considerations? I am interested to know if the RCTs include older ages even though they are not “traditional” school-aged students.
- How does this approach vary based on the age group receiving intervention?
- My school district doesn’t have SEL, how would I go about getting in?

The Goggle form survey had feedback such as:

- Great presentation
- This was a great presentation
- Is this something you have to be trained in? How would you learn specific techniques for SEL?
- That was a great presentation, Jennifer, from personal experience, I know how important SEL was for my daughter and helping to manage her feelings.
- Great work and so important!!
- Thanks for your presentation!

Appendix B.6. MOTA Poster on Social Emotional Learning for Regulation



Social Emotional Learning (SEL) for Regulation

Jennifer Brady-Johnson, OTD/S, MA, OTR/L
St. Catherine University

<p>Background</p> <p>SEL can create classrooms that are psychologically safe.</p> <p>SEL develops students social emotional skills.</p> <p>SEL teaches students emotional problem solving skills</p> <p>SEL improves teacher's experience of teaching and ability to manage the classroom.</p> <p>Purpose</p> <p>Clinical Question: What evidence-based practice improves self-regulation for students with mental health concerns? Using SEL and Sensory Processing Evidence.</p> <p>Database searches: Two decades of randomized control studies in the effectiveness of SEL to improve student's academic, social, and emotional learning</p>	<p>Findings</p> <p>Proposed development of SEL curriculum in SEL and Regulation</p> <p>Follows Collaborative for Academic and Social Emotional Learning (CASEL) guidelines and implementation.</p> <p>Use of CASEL Signature Practices: Welcoming/Inclusion Activities, Engaging Strategies, Brain Breaks & Transitions.</p> <p>Use of EvidenceBased and Current Practices in Sensory Processing and Self Regulation in the field of Occupational Therapy.</p>	<p>Results</p> <p>Expert reviews to look at SEL and Regulation Curriculum</p> <p>Initial findings demonstrate easy ways to scaffold learning and deliver in a flexible way.</p> <p>Conclusions</p> <p>Schoolbased occupational therapist have role in mental health services, including mental health.</p> <p>Teaching regulation in SEL strengthens the whole multidisciplinary teams.</p> <p>Reference</p> <p>Available Upon Request</p>
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Appendix C.1. Acceptance to the MEA Summer Summit

Appendix C.1 ¶

Dear Jennifer,

Congratulations! Your workshop proposal How Social Emotional Programs Support Regulation for Education Minnesota's 2022 Summer Seminar has been accepted.

We are pleased to be able to include your session in the conference program.

We will send more information to you by May 1st, including what time you are set to present. So, for now, please reserve August 1st-3rd on your calendar.

Please reply to this email by Friday, April 8th, so that we know you have received this message and will reserve this day to present at the conference.

Thanks and we look forward to seeing you this fall!

Sincerely,

Jessica Wilson and Leah Vaughn
Summer Seminar Event Organizers
Education Minnesota

¶

Appendix C.2. PowerPoint Slide Presentation for MEA Summer Summit


Slide 1



Co-Teaching Social Emotional Learning to Improve Regulation

Jennifer Brady-Johnson, OTD, MA,
OTR/L

Slide 2



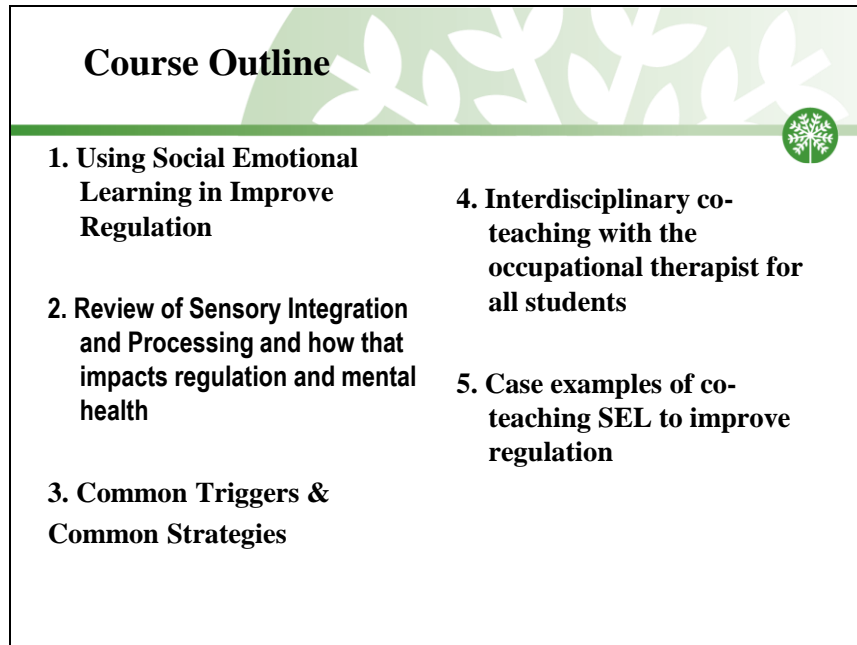
Course Objectives

The learner will be able to...

1. Identify the practices in Social Emotional Learning (SEL) that support regulation for students.
2. Understand how students respond to sensation and have sensory preferences that can impact their mental health.
3. Explain how students experience triggers and develop strategies they can use to change their regulation state.
4. List practices that encourage student internal motivation and self-determination in managing their regulation.
5. Understand the interdisciplinary co-teaching benefits of SEL and regulation.

Slide 3

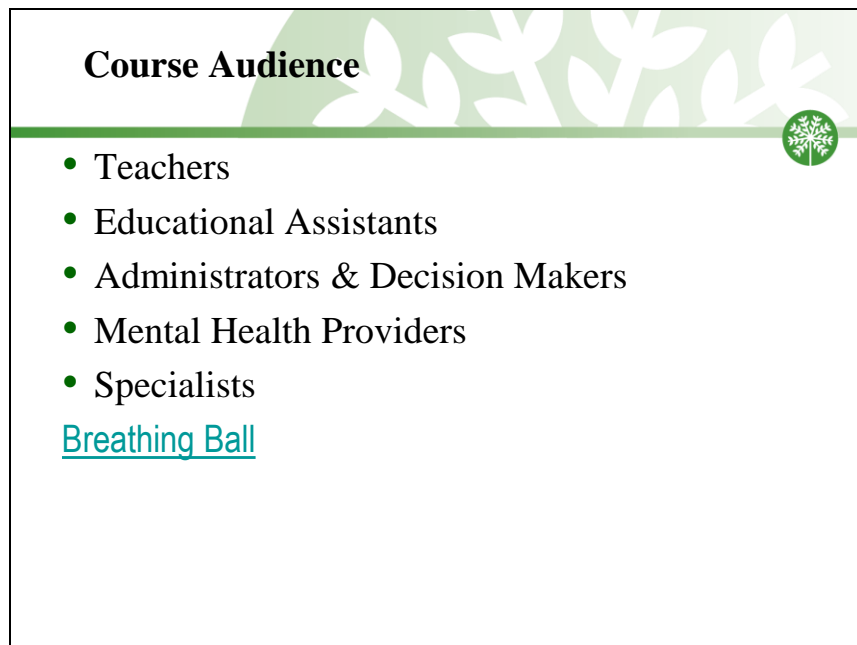
Course Outline



- 1. Using Social Emotional Learning in Improve Regulation**
- 2. Review of Sensory Integration and Processing and how that impacts regulation and mental health**
- 3. Common Triggers & Common Strategies**
- 4. Interdisciplinary co-teaching with the occupational therapist for all students**
- 5. Case examples of co-teaching SEL to improve regulation**

Slide 4

Course Audience



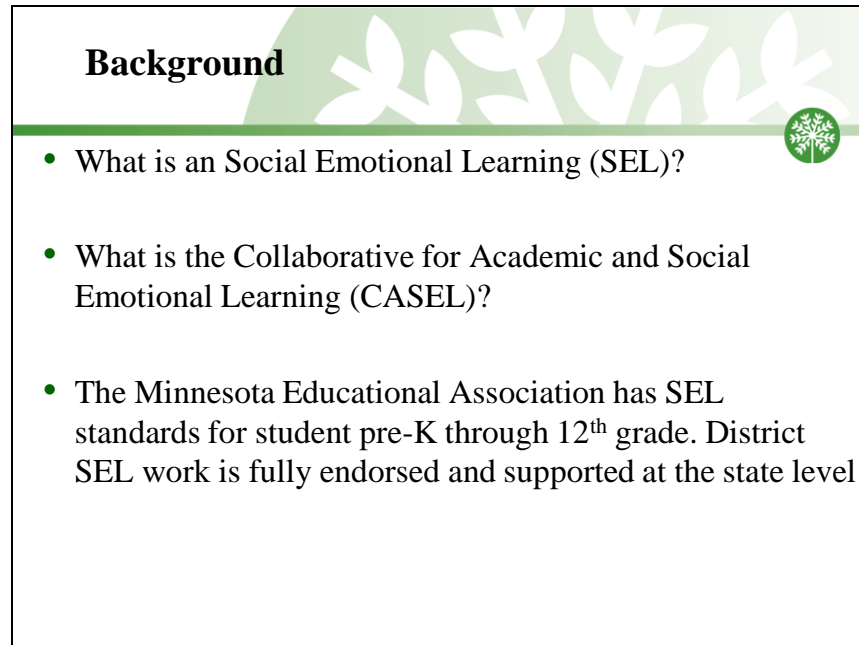
- Teachers
- Educational Assistants
- Administrators & Decision Makers
- Mental Health Providers
- Specialists

[Breathing Ball](#)

Slide 5

Background

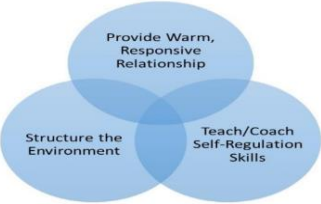
- What is an Social Emotional Learning (SEL)?
- What is the Collaborative for Academic and Social Emotional Learning (CASEL)?
- The Minnesota Educational Association has SEL standards for student pre-K through 12th grade. District SEL work is fully endorsed and supported at the state level



Slide 6

Using Social Emotional Learning to Improve Regulation

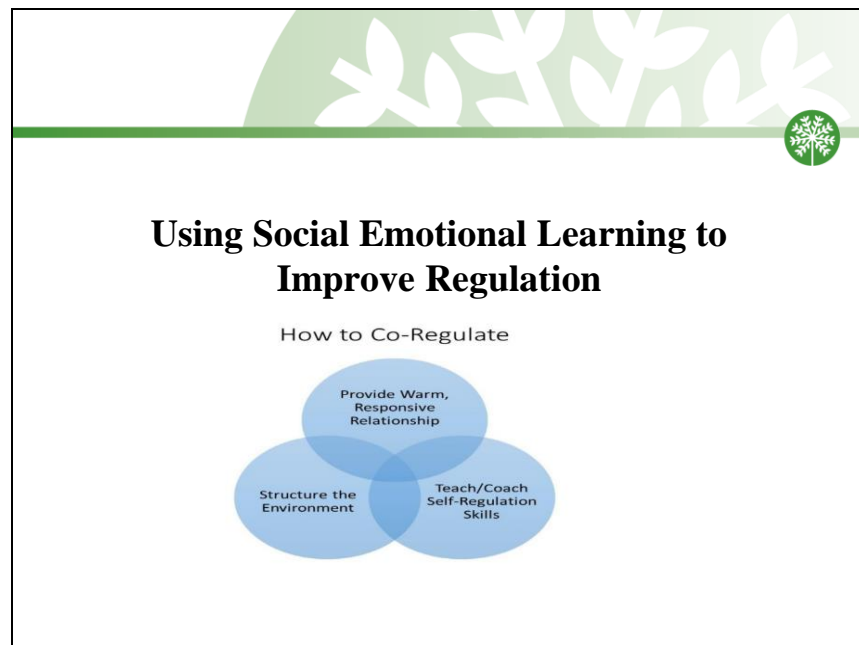
How to Co-Regulate




Provide Warm, Responsive Relationship

Structure the Environment

Teach/Coach Self-Regulation Skills




Slide 7



Using Social Emotional Learning to Improve Regulation

1. SEL develops classrooms that are psychologically safe.
2. SEL develops student's social emotional skills


Slide 8



Using Social Emotional Learning in Improve Regulation

3. SEL Teaches students social-emotional problem-solving skills.
4. SEL improves teachers experience of her teaching and classroom management skills.


Slide 9



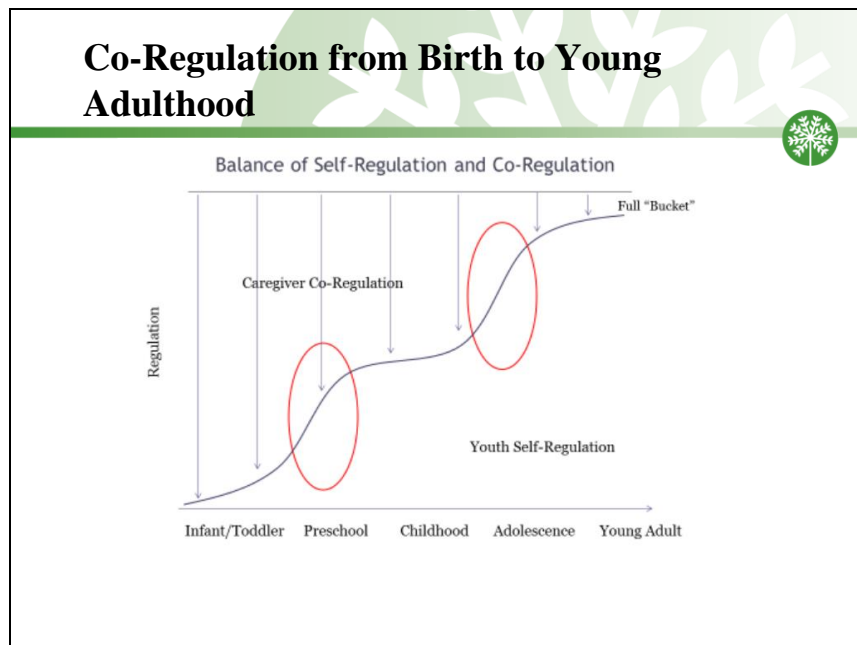
- Co- Regulation-Self-regulation develops through interactions with caregivers and is dependent on predictable, responsive, and supportive environments. Co-regulation is an interactive process of regulatory support that occurs across the lifespan.

Co-Regulation

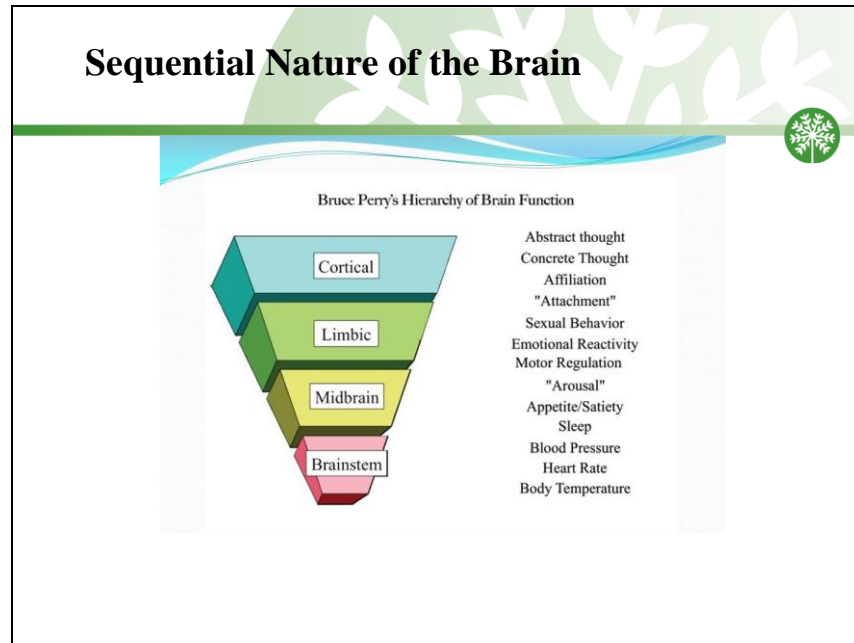
- Self-Regulation- The act of managing thoughts and feelings to enable goal-directed actions.



Slide 10



Slide 11



Slide 12


Review of Sensory Integration and Processing and the Impact on Regulation and Mental Health

- A traffic jam in the brain that stops the ability of the brain to process other things, namely cognitive processing, emotional processing, etc.

- **Sensory sensitivities**
- **Sensory seeking**
- **Sensory registration**
- **Sensory avoiding**

Slide 13

What does this tell us about supporting students with sensory integration/processing difficulties



Movement needs

Predictability and routine


Interactions with staff and peers

Teaching students about their sensory patterns and preferences.

Develop problem-solving skills

Slide 14

Importance of Self-Regulation



- To feel successful in life and have positive mental health.
- To be able to adjust to the current demands and feel positive mental health.
- [Breathing Ball](#)

Slide 15

Common Triggers & Common Strategies


- Active Learning: Common Triggers & Strategies
- https://docs.google.com/document/d/1c3X9ieRfKRz320AO_N1H5sqKpm7X8XiqdXqCPhAyGIQ/edit?usp=sharing



Slide 16

Self-Regulation of Triggers

- Using executive functioning to anticipate and make meaning of triggers.
- Develop problem-solving skills
- [Breathing Ball](#)



Slide 17

Using Anywhere Body Breaks


- A “small movement” exercise that you can do using your own body.
- Arm Pretzel
- Bubble Breath
- Give Myself a Hug
- Arm Message
- Hand Message
- Finger Pull
- Palm Push
- Seat Push
- Count to 10



Slide 18

What does an Occupational Therapist do?

- Using the Public Health Model of Mental Health for Regulation and connecting it back to how regulation is essential for mental health promotion and prevention.
- Tier 1
- Tier 2
- Tier 3



Slide 19

• Occupational Therapy

Occupational Therapy's Contribution and Professional Lens.

Background in Sensory Processing and Integration:

Use evidence based interventions using a strengths-based approach. All sensory processing experiences are validated.


- **Use a Person, Environment, Occupation Fit:**
- Example: Student with Trauma, Sensory Friendly Environment with Trained Staff, Takes breaks for Specials such as culinary to stay regulated.
- **Inclusion of Mental Health Factors:** Awareness of emotions, understanding emotions in others, feeling emotions inside ones body and being aware of what this means (interoception), state of well-being and happiness

Slide 20

Placing Regulation & Emotions in the Body


- [Body Chart](#)
- Using the body chart, identify where you feel the emotions provoked in these pictures.

Happiness
Sad
Disgust
Surprise



Slide 21

Overview of Regulation and Mental Health Lessons



Using the Occupational Therapist to Guide Lessons in Regulation and Mental Health Promotion and Prevention


Unit 1: Identifying Triggers & Self-Regulating Strategies

Unit 2: Identifying Sensory Sensitivities, Sensory Preferences and Self-Regulating Strategies

Unit 3: Checking in with the Mood Meter and connecting how these feeling are felt in the body. Problem solving if you would like a shift to occur in your mood or energy level.

Slide 22


Interdisciplinary Co-Teaching



	Supports Learning Concepts	Other
Teacher	Co Teach knows the students learning styles and preferences.	Expands learning
Occupational Therapist	Develops Lessons and provides activity and strategies for autonomy	Takes cues from other team members
Educational Assistant	Participates and shares in the learning to model for students.	Co-Teach
Students	Participates, can choose to pass	Active vs Passive
Speech Therapist	Co-Teach Supports Social Comm.	Reinforces

Slide 23

How to Utilize Everyone's Strengths

Use Professional Development at the beginning of the school year to teach content, and develop a system to have on-going collaboration 


Use follow up emails to support communication on the lesson, student responses, thoughts and comments.

Review basics of SEL at times to recenter learning on what developmental issues should be brought up to support regulation and mental health. For example, bullying.

- [Breathing Ball](#)

Slide 24

Case examples of co-teaching SEL to improve regulation

Sensory responses and preferences that can impact school 

Slide 25

Case Examples



- Student learning in their preferences for movement
- Using movement during your day to stretch, walk, or exercise as you need it to feel good supports positive mental health.



Slide 26

Case Example


- Students learning their preferences for noise & sound
- Being aware of the noises that distract you, the noises that help you focus, and when you need to be in a quiet space (or use headphones) helps you feel good.



Slide 27

Case Example

- Students learning their preferences for touch




- Not wanting other people to unexpectedly touch you, or get your hands messy can cause anxiety. Preferences for long sleeve and having difficulty holding a pencil can also happen with people who don't like light touch. Managing these things at school improve your well-being.

Slide 28

Case Example

- Students learning their preferences for what they look at




- If things catch your eye and you forget what you were doing, if too much information is on a page and the writing blurs together, if crowded places are overwhelming, it is helpful to manage these things. Your well-being and stress level are important to pay attention to and managing your visual world can help.

Slide 29

Case Example

- Students learning about what transitions during the day are difficult for them



Moving between activities, changing from something you like to do to something you don't like to do, changing classes, coming and leaving school are all times that can cause dysregulation. Understanding difficulties with transitions is important for your mental health. Feeling dysregulated is uncomfortable and having strategies that support transition is important.

Slide 30

Summary Review

- SEL provides an evidence based intervention to regulation intervention
- In addition to teaching sensory processing intervention, teaching about triggers and other emotional factors including mental health is inclusive of factors impacting student's regulation (and well-being).
- Co-teaching SEL in the classroom also supports teacher and educational assistants involvement, ability to collaborate with the OT, and connection with the students.

Slide 31


Closure

- What did you learn (or were reminded of) today that you will use tomorrow when working with students?
- Write on Post-It
- Share with a neighbor
- Place next to our “Brain” Poster

- [Breathing Ball](#)


Slide 32

Questions and Discussion
THANK YOU FOR COMING!



Slide 33

Knowledge Translation Contributors



Slide 34

References



- Arbesman, M., Bazyk, S., & Nochajski, S. M. (2013). Systematic review of occupational therapy and mental health promotion, prevention, and intervention for children and youth. *The American Journal of Occupational Therapy* 67 (6).
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Google Form Survey Link



https://docs.google.com/forms/d/1_n59XD313eRwHEvzWWSdVnbvX0DsZSvkorYLwwB0U0Y/edit?usp=sharing

Appendix C.3. Google Form Survey for MEA Summer Summit

Co-Teaching Social Emotional Learning to Teach Regulation

* Required

1. Learning Objective #1 has been met: Identify the practices in Social Emotional Learning (SEL) that support regulation for students. *

1 2 3 4 5

Strongly Disagree Strongly Agree

2. Learning Objective #2 has been met: Understand how students with sensory processing/integration experience shut downs in their ability to process what happens during their day. *

1 2 3 4 5

Strongly Disagree Strongly Agree

3. Learning Objective #3 has been met: Explain how students experience triggers that change their regulation state. *

1 2 3 4 5

Strongly Disagree Strongly Agree

4. Learning Objective #4 has been met: List practices that encourage student internal motivation and self-determination in managing their regulation. *

1 2 3 4 5

Strongly Disagree Strongly Agree

5. Learning Objective #5 has been met: Understand the interdisciplinary co-teaching benefits of SEL and regulation. *

1 2 3 4 5

Strongly Agree Strongly Disagree

6. Learning was presented in an organized fashion *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

7. The presenter communicated the learning material in a clear manner that supported learning *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

8. Any additional comments or questions? *

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