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The Forgotten Tier

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Abstract

Early childhood educators are often overworked, underpaid, stressed, and at risk for burnout (Wells, 2015). In addition to teaching early academic skills, early childhood educators are also tasked with teaching and supporting students' social-emotional learning (SEL) in the classroom. Given the aforementioned limitations, it is imperative to examine how the social-emotional needs of early childhood educators are supported as they implement and sustain SEL. Multi-Tiered Systems of Support (MTSS) are often implemented to promote SEL and meet the social-emotional needs of young children; however, MTSS is only effective if all components are implemented with fidelity. In contrast to school-aged MTSS, where there are often several stakeholders involved, the implementation of MTSS often falls on early childhood educators, as mental health consultants are not readily available or affordable to early childhood centers. Given the heavy load placed upon early childhood educators, it is critical to shift the focus of MTSS to include the social-emotional needs of the teacher. We argue that teachers' social-emotional needs should be considered and supported within MTSS to prevent burnout and promote the fidelity of SEL programs. Teacher focused interventions such as mindfulness (Chin et al., 2019) and the Circle of Security (Cooper et al., 2017; Gray, 2015) may increase teacher's feelings of well-being, reduce teacher stress and burnout, increase positive teacher-child interactions, and, therefore increase the effectiveness of the MTSS process. Ultimately, by supporting the social-emotional growth of early childhood educators, we are building their capacity to effectively support the SEL of young children.

Keywords: *early childhood mental health, MTSS, teacher stress*

Early Childhood Educators: The Forgotten Tier

Multi-Tiered Systems of Support (MTSS) are effective in promoting both early academic skills and social-emotional learning in the early childhood years. Academic MTSS in the early childhood setting is a framework to ensure that all students have access to high quality early academic skill instruction and to target and remediate early academic skill deficits when necessary. Likewise, behavioral MTSS is an organizational framework that can be applied to universally teach social-emotional skills, identify young children at-risk for developing social and emotional problems, and implement interventions to support struggling students (Shepley & Grisham-Brown, 2019). When practical, MTSS can provide a system-wide approach to preventing problems and supporting mental health in the early childhood center. However, MTSS is only effective if all components (e.g., universal screening, research-based universal social-emotional and behavioral instruction, tiered interventions responsive to needs, and progress monitoring) are implemented with fidelity.

In contrast to school-aged MTSS, where there are often several stakeholders involved in the systems-level organizational framework, the implementation of MTSS often falls on early childhood educators, because mental health consultants such as school psychologists are not readily available or affordable to early childhood centers. Early childhood educators often receive in-service training to implement a universal social-emotional curriculum as well as training on secondary and tertiary interventions that target skills deficits and needs. However, little support is provided to the teachers to ensure that the MTSS is implemented with fidelity. When supporting the social-emotional needs of young children, it is critical to shift the focus of MTSS to include the needs of the early education teacher.

It is well established that early childhood educators are overworked, underpaid, stressed, and are at risk for burnout. Nearly

one-third of those employed in early childhood education leave the workforce each year, citing high stress levels as a critical contributor (Wells, 2015). Teachers employed in early childhood education are among workforce groups reporting the highest levels of stress and depression (Substance Abuse and Mental Health Services Administration [SAMHSA], Office of Applied Studies, 2007). Increased focus on student outcomes (Hall-Kenyon et al., 2014), high emotional demands (Jeon et al., 2016), and poor school climate (Zinsser et al., 2013) have been shown to increase teacher stress. In addition, the early educator role is often characterized by unacknowledged professionalism (Charles & Bellinson, 2019) low wages (U.S. Bureau of Labor Statistics, 2021) insufficient provision of resources (Hall-Kenyon et al., 2014), and lack of control in program decision making (Hur et al., 2015). It is important to note that all of these statistics were compiled before the COVID-19 pandemic and the ensuing trauma encountered by teachers. We hypothesize that early childhood educators' overall stress and burnout levels are even higher.

It is also well documented that teacher stress highly affects job performance, the quality of care, and the teacher-student relationship (Hamre & Pianta, 2001). The early childhood educator-student relationship has predicted high-quality care and positive academic and behavioral outcomes through 8th grade (Biglan et al., 2008). Thus, to promote the social-emotional, positive well-being, and mental health needs of young children, it is critical to shift the focus of MTSS to include the needs of the early education teacher.

This paper will discuss the theoretical and evidence base for establishing a framework within the MTSS model to support teachers in their social-emotional growth and learning. The authors propose that implementing these interventions will increase teachers' feelings of efficacy, reduce teacher stress and burnout, and, therefore, increase the effectiveness of the entire MTSS process. Ultimately, by supporting the social-emo-

tional growth of early childhood educators, we are building the capacity to effectively promote young children's mental health and positive well-being.

Early Childhood Multi-Tiered Systems of Supports

Multi-Tiered Systems of Support (MTSS) is an organizational framework that assists systems in effectively promoting both early academic skills, prosocial behavior, and social-emotional learning in the early childhood years. MTSS, when implemented with fidelity, facilitates early identification of students in need of academic or behavioral intervention, minimizes special education referrals, and remediates potential delays impacting school readiness (Greenwood et al., 2019).

Early childhood MTSS consists of the usage of a research-based core academic and behavioral curriculum, screening all students' academic and behavioral skills, implementing targeted interventions that increase in intensity and individualization based on need, monitoring progress towards identified academic and behavioral outcomes, utilizing data to inform instruction and intervention, and making data-based decisions through a problem-solving model (VanDerHeyden & Snyder, 2006). Importantly, this delivery model is underpinned by the collaboration of the early intervention multidisciplinary team comprised of educators, specialists, and caregivers. The multidisciplinary team engages in ongoing and routine problem solving with an eye toward continuous improvement and positive impact on student outcomes.

Inherent to the MTSS model are tiered, or leveled, supports that increase in intensity as a function of student need. Tier I involves the implementation of a research-based core academic and behavioral curriculum, and universal screening to inform instructional practices and identify children needing additional intervention. In Tier II, students receive targeted instruction and intervention to more specifically address their area(s) of need. Increasingly focused and small group or individualized interventions are provided at

Tier III. It is important to note that MTSS is only effective if all components (e.g., universal screening, research-based universal social-emotional and behavioral instruction, tiered interventions responsive to needs, and progress monitoring) are implemented with fidelity. Implementation fidelity is key for the success of MTSS. Implementation fidelity is often described as a multidimensional concept involving five dimensions including adherence to the intervention protocol, dosage, quality of intervention delivery, participant responsiveness, and program differentiation (Knoche, Sheridan, Edwards & Osborn, 2010). Three of these dimensions, adherence to the protocol, dosage, and quality of intervention delivery are dependent on early childhood teachers. Lack of training, funding, time, or administrative support, coupled with increased teacher demands and stress may adversely impact the implementation fidelity of MTSS.

While MTSS as an organizational framework is increasingly adopted in the early childhood education setting, there is still significant room for growth. VanDerHeyden & Snyder (2006) cite several reasons for this gap in MTSS implementation and research, including an emphasis on Child Find obligations, limited research-based methods for progress monitoring, and movement away from diagnostic decision making in young children. The relative success of the organizational framework has prompted interest among early childhood educators to extend the development of MTSS-based programming down to younger populations in hopes of more proactively identifying younger students who are at heightened risk of adverse outcomes. However, findings regarding the utility and/or effectiveness of MTSS frameworks among the early childhood population have been more equivocal. For example, Shepley and Grisham-Brown (2019) conducted a meta-analysis of 16 studies that focused on MTSS implementation at the preschool level. Their findings indicated that MTSS frameworks targeting social-emotional outcomes showed stronger evidence of effectiveness for preschool-aged children whereas programs emphasizing language

and/or literacy-based outcomes were more variable. Despite a relative lack of robust empirical evidence of their effectiveness, MTSS frameworks continue to hold promise for conveying positive impact on students' overall well-being. In summary, MTSS is a systematic method of identifying students with potential learning or behavior needs and, in preschool, provides opportunities to remediate delays before entering kindergarten.

The implementation of MTSS for behavior, also known as Positive Behavioral Interventions and Supports (PBIS), is associated with many positive outcomes, including improvement in teacher efficacy (e.g., Colvin & Fernandez, 2000; Ross & Horner, 2007) and improved school climate (e.g., Bradshaw et al., 2008; Horner et al., 2009). Behavioral MTSS in the early childhood setting is an organizational framework utilized to foster a positive and prosocial climate. In the early education setting, MTSS is applied to universally teach social-emotional skills, identify young children at-risk for developing social and emotional problems, and implement interventions to support struggling students (Shepley & Grisham-Brown, 2019). A primary theory behind behavioral MTSS is that educators can create an environment that can foster prosocial behavior in children by applying research-based practices and interventions in a supportive and systematic way (Sailor, 2009). This model is delivered systematically and supports all children, providing additional instruction depending on need.

Similar to implementation in the K-12 school setting, Tier I universal behavioral instruction and a positive school climate are critical. More specifically, nurturing and responsive relationships and high-quality supportive environments are provided to all students. Safe and predictable environments are created through predictable routines and structure. Clear behavioral expectations are explicitly and consistently taught and reinforced. Acknowledgment and praise are used to positively reinforce socially desired behaviors. Early education settings may adopt social-emotional curricula to help with teachers' instructional needs and the needs of their young

students. Tier II supports may involve targeted social skill instruction to address areas of need. Similar to Tier I, specific curricula may be utilized to teach social-emotional skills such as self-regulation, impulse control, initiating friendships, social interactions, and problem-solving (Stanton-Chapman, et al., 2016). Tier III supports often include identifying the function of the student's behavior as well as environmental factors that may be maintaining the behavior. The involvement of caregivers, community mental health agencies, and related service providers is also essential when supporting children with a high level of social, emotional, and behavioral needs. Caregiver engagement and frequent home-school communication are critical at all levels (Powell et al., 2006).

Several factors increase the sustainability and efficacy of behavioral MTSS. Steed et al. (2013) note that these factors include a multi-year commitment, ongoing professional development, administrative leadership and support, teacher support, and program evaluation. However, educators often report a lack of preparation, knowledge, and training in utilizing evidence-based strategies to support children with social, emotional, and behavioral needs (Stormont et al., 2011). This may be particularly pronounced in early childhood settings, as teachers have varied training, credentials, and experiences. Stormont et al. (2011) found that early education teachers with graduate degrees rated positive behavioral supports as more important compared to their colleagues with high school diplomas. In addition, the high levels of stress and burnout reported in early educators add to the risks of implementing MTSS with fidelity. Given these barriers, it is critical to support early educators through training and ongoing support. Early childhood education centers often do not have mental health consultants to help teachers implement MTSS; thus, implementation falls solely on the early educator.

Early childhood centers and schools must begin to support the early childhood educator, whom we refer to here as "the forgotten tier". Interventions and supports provided to teachers within an MTSS model should focus on decreasing teacher stress and burnout

and increasing self-efficacy. Teacher focused interventions such as mindfulness (Chin et al., 2019) have been found to decrease stress and increase self-efficacy. In addition, training in child development and the importance of attachment has increased teachers' self-efficacy and positive relationships in the classroom. Thus, we believe that implementing a digital mindfulness-based intervention and training in the Circle of Security curriculum (Gray, 2015; Cooper et al., 2017) may address teachers stress, burnout, and increase educators' self-efficacy surrounding the implementation of MTSS. Ultimately, this can increase the fidelity of MTSS and promote the mental health and well-being of preschool children.

Mindfulness-Based Stress Reduction

To be mindful is to maintain present-moment awareness of thoughts, emotions, bodily sensations, and the surrounding environment without judgment (Bishop et al., 2004). Mindfulness-Based Stress Reduction (MBSR) has been discussed within the literature for approximately the last 40 years. Since the inception of MBSR, many derivatives of the original, standardized intervention have been conducted and scientifically examined. MBSR and Mindfulness-Based Cognitive Therapy (MBCT) present the greatest amount of empirical evidence (Crane et al., 2017). Although MBSR was first utilized to reduce chronic pain (Kabat-Zinn, 1982), it may also benefit people with various mental health and medical conditions. For instance, the implementation of MBSR has shown a decrease in depression symptoms in adolescents and young adults (Chi et al., 2018) and an improvement of a myriad of psychological and health-related symptoms in breast cancer patients (Zhang et al., 2019).

Overview of Mindfulness Intervention

The MBSR programs include teaching and practicing formal and informal techniques, education about stress, and group discussions. Some of the formal methods involve sitting meditation, body scan, and yoga, which are intended to help decrease the

emotional reactivity commonly experienced during moments of stress. Informal techniques, such as momentary awareness, eating meditation, and mindful listening and speaking, are taught with the same purpose; however, informal practices target the application of mindfulness throughout daily experiences.

Participants are prompted to draw awareness to their breathing which is central to the meditative experience. When thoughts stray from their breath, participants are taught to accept these thoughts and gently guide their focus back to their breathing. In addition to group sessions, participants are expected to engage in mindfulness home practice for one hour at least six days a week. Home practices include meditations guided by recordings and other exercises and activities. Participants also join in a retreat between sessions six and eight that generally lasts for 8 hours (Santorelli et al., 2017). The time required to complete an MBSR program may not be feasible for early childhood educators, which is substantiated by MBSR's high attrition rates (Strohmaier, 2020).

Mindfulness-based interventions (MBIs), derivatives of MBSR, utilize the same techniques as MBSR but are specifically designed to be easier to learn and apply. MBIs for teachers have been created to provide teachers with skills in managing stress. MBIs have proven effective in reducing the stress of teachers in high school (Beshai et al., 2016), elementary school (de Carvalho, 2021; Jennings et al., 2013), and preschool (Singh et al., 2013) settings. Research on MBIs has evidenced positive effects aside from stress reduction. MBIs with teachers have been shown to improve classroom climate (Jennings et al., 2013), teacher efficacy (Klingbeil & Renshaw, 2018), and well-being (Crain et al., 2017). The results of Singh and colleagues (2013) single-subject study showed how these interventions might positively impact the relationship between the teachers—the only ones to receive the MBI—and their students. Implementing MBIs for teachers within the early childhood education setting may be pivotal in reducing the high stress and burnout level of early childhood educators.

Mindfulness Based Intervention Implementation

Many organizations have produced mindfulness-based curricula for students and other programs that teach educators mindfulness, such as Mindful Schools, Learning to Breathe, Inner Explorer, and Still Quiet Place, to help reduce teacher stress and emotional reactivity while working in the classroom. However, implementing these programs can be costly and time-consuming (Semple et al., 2017). Additionally, the time and funding required for these programs may be futile given the high turnover rate observed in early childhood education centers (Wells, 2015).

Digital Mindfulness-Based Interventions (d-MBIs), such as Headspace, Calm, MyLife, and Smiling Mind, deliver accessibility and are often free to educators. D-MBIs provide a guided structure to learn about mindfulness, start a mindful practice, and maintain that practice. For example, Headspace offers a training mode on the app that allows an individual to gradually increase their mindful practices. In addition, the app allows users to choose different mindfulness modalities such as stress reduction, exercise, relaxation, increased focus, or daily meditation. Simply by downloading an app, an early childhood educator can follow explicit instructions on reducing stress and calming their mind.

Evidence indicates that d-MBIs effectively reduce teaching anxiety and burnout symptoms in teachers (Bull-Beddows, 2020). Now, more than ever before, due to the ongoing COVID-19 pandemic, early childhood centers need to actively plan and allow for the implementation of strategies to buffer teacher stress (Haag et al., 2020). Mindfulness apps can be seen as a cost-effective and convenient component to reducing educator stress. The reduction in stress provided by MBIs is essential for early childhood educators to be effective teachers and to implement MTSS with fidelity. Mindfulness skills are powerful tools that can help decrease stress and, in turn, educator emotional reactivity to challenging behaviors exhibited by their students. This increases the educators' ability to implement systematic, evidence-based interventions. Therefore,

promoting educators' emotion regulation skills, as exercised through mindfulness apps, is crucial for promoting preschool children's mental health and well-being.

Circle of Security - Classroom

Circle of Security (CoS) is an attachment-based, reflective caregiving intervention. CoS supports secure attachments between children and their caregivers by improving caregiver reflective capacity, specifically when confronted with challenging behaviors from the child (The Circle of Security International, 2019). The primary focus of CoS is on parent-child dyads; however, alternative applications have been developed to address educator-child dyads. This adaptation is meant to improve the teacher's ability to create secure classrooms, ultimately leading to increases in cooperative classroom behavior (Cooper et al., 2017). Given the importance of attachment security to a host of outcomes, including educational and social-emotional outcomes, the Circle of Security - Classroom (CoS-C) may be a valuable tool to increase early childhood educators' ability, increase their self-efficacy, and thus, decrease their levels of stress and burnout.

The Circle of Security (CoS) intervention utilizes a reflective caregiving model rooted in attachment theory. Attachment formation occurs between children and their caregivers. While all children naturally form attachments, the security of attachments may vary depending on the quality of care a child receives (Ainsworth et al., 1978). In secure attachment relationships, the caregiver serves as a secure base for the child to safely explore their environment, which supports their development and learning (Bowlby, 1988). Secure attachment relationships also lay the foundation for relationships children will experience throughout their lives (Bowlby, 1988). While attachment and related psychological outcomes have been well-studied within the context of primary caregiving relationships with parents, educational staff also serve as essential caregivers and potential attachment figures during early childhood.

Children who experience insecure attachment to their preschool teachers may be less likely to engage spontaneously in learning opportunities presented in the classroom, potentially impacting their school readiness and contributing to future learning difficulty (Commodari, 2013). Thus, interventions focused on attachment security can potentially improve outcomes across various domains, including developmental and educational outcomes. By increasing early childhood educators' knowledge of attachment theory and its importance to child development, we can improve the teacher-student relationship, which will promote preschool students' well-being and mental health.

Overview of CoS Intervention

The focus of CoS is to support secure attachments between children and their caregivers by improving caregiver reflective capacity. Specifically, CoS aims to improve caregiver reflective ability when confronted with challenging behaviors from the child (The Circle of Security International, 2019). The CoS model capitalizes on caregiver insight and couples it with education and guidance to assist caregivers in increasing awareness of their own feelings and behaviors that are activated in response to a child's behavior. This awareness increases a caregiver's ability to choose a response to the more adaptive behavior, thereby increasing the security of the attachment relationship. In essence, children communicate their needs through behavior, so when a child's underlying need is met, problem behaviors begin to diminish. Attempts to manage or meet a need can vary depending on the nature of the unmet need. Caregivers identify what a child is attempting to communicate through behavior, and all caregivers will have areas of relative strength and weakness in doing so, depending on their personal experiences. CoS increases the caregiver's ability to interpret children's behavior, identify children's needs, manage their own reactions, and respond in a manner that effectively meets that need. Overall, CoS focuses on creating positive growth for children

by first eliciting positive growth in the caregiver. When caregivers participate in this intervention, they change feelings and patterns of thinking and behavior. Ultimately, this will translate into changes in attachment and the caregiver-child relationship (The Circle of Security International, 2019).

CoS Implementation

The CoS intervention occurs across eight weekly sessions, which may be completed individually or in groups. There are man-ualized activities with accompanying video and caregiver handouts, and homework associated with each week of the intervention. The intervention begins by introducing the program and attachment theory. Initially, caregivers identify attachment development and needs. Weeks three and four are devoted to identifying behavioral needs. Specifically, the caregiver begins to identify the child's needs, determine which needs they are already comfortable addressing, and understand which needs they may be less comfortable with based on their past experiences. Starting in week five, the caregiver identifies and interprets child miscues, reflects on recognition of caregiver discomfort, and addresses what that discomfort means. Week six focuses on an examination of what a child's circle looks like with limited caregiver availability. Next, caregivers learn to mend and re-enter the circle when the caregiver or child is upset. During the final week, participants summarize what they've learned (The Circle of Security International, 2019).

Hoffman, et al. (2006) found a statistically significant change in attachment style post-CoS intervention. The study implemented CoS with parents or primary caregivers whose children were enrolled in Head Start programs. The caregiver-child dyad was evaluated pre-and post-intervention using the Strange Situation Procedure. Results indicated significant shifts in the percentage of dyads that were classified as disorganized and insecure. Pre-intervention, 60% of dyads were classified as having a disorganized attachment style, whereas only 25% of dyads were classified as disorganized post-

intervention. Similarly, pre-intervention, 80% of dyads were classified as having an insecure attachment style. This decreased to 46% post-intervention (Hoffman et al., 2006).

CoS - Child Care

Circle of Security has primarily focused on parent-child dyads; however, alternative applications have recently been developed to address educator-child dyads. Many childcare providers and early childhood educators are aware of the importance of a secure attachment.However, they typically do not have guidance on fostering secure attachments with the children in their classrooms. Therefore, Circle of Security Child Care (CoS-C) may be an effective tool in early childhood learning settings. This adaptation is meant to specifically improve teachers' ability to cultivate secure relationships with children, help overcome child barriers to engagement in secure attachments, and create secure classrooms, which will ultimately lead to increases in cooperative classroom behavior and potentially increased school achievement (Cooper et al., 2017). The adaptation of CoS to classrooms may allow early childhood educators to increase their efficacy in the classroom, reducing their stress and burnout.

In the early childhood education setting, the CoS-C program operates through three components: teaching the theory of attachment to educators, developing strategies to identify children who would benefit/writing an action plan, and creating classrooms where relationships can be formed (Cooper et al., 2017). While attachment security is the primary outcome measured in the literature on CoS, with reductions of challenging behaviors being a secondary outcome, there has yet to be a formal assessment of caregiver outcomes. However, reducing challenging behavior from children leads to reductions in caregiver stress. In particular, regarding early childhood educators, we believe that implementation of CoS-C to create secure classrooms and reduce problematic behavior may also lead to indirect, associated changes in educator stress, self-efficacy, and professional quality of life.

Conclusion

The MTSS model, when implemented with fidelity, can significantly impact early academic skills and SEL in the early childhood years. SEL is the foundation for building resiliency and promoting well-being in young children. In the early education setting, the implementation and sustainability of MTSS at all tiers often falls on early childhood educators. Early childhood educators are stressed, overworked, underpaid, and under-valued. Expecting them to implement MTSS without support for their own emotional needs creates a system that is ready to fail from its outset. Without ample support, teachers must rely on their own social-emotional skills to facilitate SEL in the classroom. But the same teachers' social-emotional skills are stretched to the limit due to burnout. As such, to comprehensively support the social-emotional needs of young children, it is critical to shift the focus to include the needs of the early education teacher.

Teacher-focused interventions such as teaching and supporting mindfulness (Chin et al., 2019) and Circle of Security (Gray, 2015; Cooper et al., 2017) may benefit teachers' own social and emotional needs. These interventions can increase teacher self-efficacy, increase positive teacher-student interactions, and decrease stress and burnout levels. When teachers are less stressed, they are more likely to accept new practices or interventions and implement them with fidelity. While Circle of Security will require training and time for implementation, digital mindfulness based interventions are often free, time efficient, readily available, and user friendly. These interventions can be readily adopted and used without extensive training, time, or effort. Thus, we propose that addressing the Forgotten Tier of MTSS will increase teachers' feelings of efficacy, reduce teacher stress and burnout, and, therefore, increase the effectiveness of the entire MTSS process. Ultimately, by supporting the social-emotional growth of early childhood educators, we are building the capacity to effectively support young children's social-emotional development, mental health, and well-being.

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