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Aligning Classroom Management Strategies with a Social Emotional Learning Curriculum in Early Childhood

Jessica M. Kemp and Sara A. Whitcomb

Abstract

Traditionally, school-based preventative frameworks have been implemented in isolation with little consideration of alignment and integration of practices throughout the school day. The present study aims to address this gap by increasing school psychologists' preventative involvement with consultation in early childhood school settings. Using an integrated approach through a multiple baseline design, four Head Start educators were trained in classroom management practices, to increase opportunities throughout the day for teaching, prompting, and reinforcing key skills taught through the *Second Step Early Learning (SSEL)* social emotional learning curriculum. Findings suggest that a brief professional development session (1-hour) followed by weekly performance feedback (15 minutes) largely increased educator use of aligning classroom management strategies with weekly *SSEL* lessons ($ES = .94$, $p\text{-value} = <.000$). Effects on challenging behavior were limited, although two classrooms demonstrated an overall decrease in challenging behavior ($ES = -.20$). Results further indicate this intervention increased feelings of teacher self-efficacy and was a socially valid approach; educators reported the aligned strategies were acceptable, sustainable, and beneficial to children. Limitations and implications of this study are further discussed with suggested directions for future research.

Keywords: *Childhood, Classroom Management, Social-Emotional Learning, Consultation, Performance Feedback*

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A Need for Prevention in Early Childhood

Effective early childhood school settings include preventative systems of support, enabling educators to foster positive learning environments ripe for developing child social-emotional competencies (Hemmeter et al., 2015; McLeod et al., 2017). By strengthening the implementation of universal prevention programs, schools have the potential to cultivate resiliency and decrease the number of children requiring more intensive services (Durlak et al., 2011). Moreover, prosocial interactions between children and educators have been identified as a catalyst for facilitating the connection between instruction and optimized learning, rendering development of social competencies relevant for all children (Elias & Haynes, 2008). Children with under-developed social and emotional competencies tend to demonstrate challenges connecting with educators and peers, often resulting in a negative perception of self and a failure to develop prerequisite skills needed to navigate a school environment (Gunter et al., 2012). Further, research estimates that roughly 10-20% of children have at least one diagnosable mental health disorder and that nearly half of all of children will display symptoms or be diagnosed with a disorder by the age of 21 (Kessler et al., 2005; O'Connell et al., 2009).

Social Emotional Learning and Second Step

Social and Emotional Learning (SEL) refers to a child-centered strengths-based approach aiming to foster a core set of competencies including self-management, self-awareness, relationship skills, social awareness, and responsible decision making (Collaborative for Academic, Social, and Emotional Learning [CASEL], 2008; Durlak et al., 2011). Recognized as one of the most

popular SEL curriculums, *Second Step* is a universal intervention aimed at increasing social emotional competencies for students in Pre-K-12th grade (Committee for Children, 1991; 1992a; 1992b; 1997). In a meta-analysis of the *Second Step* curriculum (Moy & Hazen, 2018), 5 of the 24 studies involved a Pre-K population, with outcomes including medium effect sizes for increasing prosocial behaviors (Beisly, 2011) and small effect sizes for reductions in antisocial behavior (McCabe, 2000; McMahon & Washburn, 2003) and increases in social-emotional knowledge (Neace & Muñoz, 2012).

Attempting to further bolster early childhood outcomes, a new version of *Second Step*, *Second Step Early Learning (SSEL)* (Committee for Children, 2011) was developed. This SEL curriculum includes short Pre-K SEL lessons designed to be implemented daily, additionally targeting executive functioning competencies. In a two-year randomized trial with 31 Head Start and community preschool classrooms, results suggested significant improvements in children's executive functioning skills for those in the *SSEL* condition as compared to the *Creative Curriculum*, as well as smaller but significant effect sizes indicated for children's prosocial problem solving and emotion knowledge (Upshur et al., 2017). Supplemental follow-up studies with the *SSEL* curriculum found that the program continued to have significant and direct impact on executive functioning but no significant impact on social emotional skills (Upshur et al., 2019; Wenz-Gross et al., 2018). Although the *SSEL* curriculum is widely used, it has not been extensively studied and its effects on challenging behavior are unclear.

Proactive Classroom Management in Early Childhood

In addition to promoting children's social-emotional competencies, educators are charged with creating healthy classroom environments. Primary prevention strategies targeted at the classroom level can be utilized to support all children in the facilitation of prosocial interactions and reduction of challenging

behaviors (Hemmeter et al., 2006). While SEL curricula tend to be child-centered, proactive classroom management practices implemented within a positive behavioral support model are often educator-centered with a focus on teaching skills, prompting, and acknowledging behaviors. Prosocial behaviors are taught and reinforced, while maladaptive behaviors are responded to consistently and preventatively (Sugai & Horner, 2006). Proactive classroom management strategies are described as effective and evidence-based for students with and without disabilities (Collins et al., 2018; Myers et al., 2017). Strategies such as modeling, multiple opportunities to respond, error corrections, behavior specific praise, and tangible reinforcement are successfully implemented in inclusive early childhood classrooms to decrease disruptive behaviors and increase prosocial skills (McLeod et al., 2017).

Facilitating Integration of SEL and Classroom Management Strategies

A growing body of research suggests that when SEL and positive behavioral classroom management strategies are implemented in combination, student mental health outcomes are bolstered, as compared to implementing one framework alone (Bradshaw et. al., 2014; Cook et. al., 2015; Reinke et. al., 2012). In an early childhood context, the Pyramid Model is a prominent framework that has provided an avenue for the integration of proactive classroom management practices and SEL (Fox, et al., 2003; Hemmeter, et al., 2006). The Pyramid Model largely aligns with the three-tiered Positive Behavior Interventions and Supports (PBIS) framework, utilizing evidence-based practices to promote social and emotional competencies for children 0-5 years. The Pyramid Model organizes evidence-based practices that include universal interventions for all children, more focused strategies for children who need targeted social-emotional supports, and individualized behavior support strategies for children with significant social skill deficits or persistent challenging behavior (Hemmeter, et al., 2006).

In classrooms where the Pyramid Model has been implemented, research has found significant improvements in the overall social skills of children with persistent behavioral challenges, as well as decreases in challenging behavior (Hemmeter, Fox, & Snyder, 2013; Hemmeter, et al., 2016). While the Pyramid Model framework is often utilized in early childhood settings, the framework itself does not include a specific social-emotional learning curriculum, and dozens of suggested evidence-based practices can leave some teachers feeling overwhelmed. In general, educators in Pre-K-12 classrooms tend to report inadequate preparation in classroom management and behavior in their college coursework and prior training (Hemmeter et al., 2015; Reinke et al., 2012; Simonsen et al., 2014). Moreover, an abundance of studies articulate the importance of extending past the time-limited professional development session to include a form of on-going follow-up support with educators (Fallon et al., 2015; Hemmeter et al., 2016). To enhance implementation, behavioral consultation with performance feedback has been shown to expedite educator behavior change and increase implementation fidelity of social-emotional and behavior practices in early childhood settings (Baughan, et al., 2019; Dufrene et al., 2012; Hemmeter et al., 2015). Moreover, the added benefits of graphic visual representation of performance feedback coupled with verbal feedback have been consistently documented (Collins et al., 2018; Fox et al., 2014; Simonson et al., 2010).

Current Study

The current study adds to the literature by conceptualizing outcomes of a brief educator training and weekly performance feedback, designed to align relevant SSEL lessons with specific positive behavioral classroom management strategies. This study focuses on the effects of this intervention on educator aligned intervention, social validity, and levels of children's challenging behavior. This research further aims to support implementation

of primary practices of the Pyramid Model, drawing from research integrating SEL and PBIS at the elementary level with on-going consultation and performance feedback (Bradshaw, 2014; Cook et al., 2015; Reinke et al., 2012).

Method

Setting and Participants

Educator Participants

Participants included full-day Head Start educators (n = 4) and their classrooms from an urban setting in Western Massachusetts. Educator 1 was 39 years old, Caucasian, had 21 years of teaching experience, and had 6 students with Individualized Education Programs (IEPs). Educator 2 was 30 years old, Caucasian, had 5 years of teaching experience, and had 1 student with an IEP. Educator 3 was 23 years old, identified as Hispanic/Latina, had 3 years of teaching experience, and 6 students with IEPs. Educator 4 was 42 years old, also identified as Hispanic/Latina, had 17 years teaching of experience, and 10 students with IEPs. Of note, all the educators had less than 3 years experience in the current Head Start setting. While educators had some exposure implementing *SSEL*, implementation and alignment of the *SSEL* curriculum with other preventative classroom management practices had been identified as a need by the program director for these four classrooms in particular. All educators were provided \$200 in compensation for their participation in the study.

Child Participants

Children (n = 73) included those in the four full-day low-income Head Start classrooms with educators participating in the current intervention. The four classrooms were comprised of approximately 17-20 children ages 3-5 years. These full-day classrooms have been determined to have the highest level of need within the Head Start program either due to a higher number of children with special education classification or higher reported

problem behaviors. Children's ethnicity was 56% Hispanic, 22% African American, 14% biracial, and 8% Caucasian.

Design

The current study employed a multiple-baseline design (MBL) over four months. The first three educators in the study were introduced concurrently, while the fourth educator was non-concurrent and entered the baseline phase four weeks behind the others. Baseline data collection occurred twice per week with at least five baseline data points used to conduct a within-phase analysis. To begin the intervention phase, at least three consecutive baseline data points related to teacher behavior needed to remain stable or demonstrate a downward trend (Kratochwill et al., 2010). In the intervention phase, when at least three data points indicated a clear alteration in level, trend, or variability for educator behavior, the next educator with the lowest stable baseline data began the intervention phase. Given the nature of the MBL design, each educator received the intervention phase for a slightly shorter period than the prior educator. Due to the study timeframe, educator baseline stability of aligned classroom management was used to determine introduction of the intervention phase, rather than also requiring maintenance of stability for child behavior.

Dependent Variables

Aligned SSEL Classroom Management Strategies

As a primary dependent variable, the six specified classroom management strategies were operationally defined and listed under one of three categories: Anticipate, Remind, or Reinforce. This framework is consistent with another current early childhood SEL curriculum for promoting generalization of social emotional competencies (Whitcomb & Damico, 2016). In particular, aligned classroom management strategies were defined as strategies specifically related to the current SSEL skill of the week, or the SSEL skill from the previous week. For instance, if "Identification of happy and sad feelings" was the skill of the week, and "Asking for what you need or want" was the skill from the previous week,

any classroom management strategies related to these two skills were considered to be aligned.

Aligned SSEL Anticipate strategies included:

1. Modeling: Educator demonstrates or has a peer demonstrate, a skill to promote learning aligned with relevant *SSEL* skill.
2. Precorrections: Educator makes statement explaining desired behavior before starting a task or entering a new setting related to relevant *SSEL* skill.

Aligned SSEL Remind strategies included:

3. Opportunity to Respond: Educator provides opportunity and prompts child to attend and practice relevant *SSEL* skill.
4. Validation and redirection: Educator conveys understanding of emotion and states expected behavior after challenging behavior has occurred related to relevant *SSEL* skill.

Aligned SSEL Reinforce strategies included:

5. Behavior specific praise: Educator provides verbal comment indicating approval of relevant *SSEL* skill.
6. Tangible reinforcement: Educator provides tangible reward as a result of child demonstrating relevant *SSEL* skill.

Examples of aligned classroom management strategies with *SSEL* lessons were sent to educators ahead of time via email. One practice example included: "Show me a thumbs up if you think the girl in the story is feeling happy, or a thumbs down if you think she is feeling sad" while reading a story (Opportunity to Respond). The way to create a group contingency for children practicing the relevant *SSEL* skill was also shared with educators as an example (tangible reinforcement).

Challenging Behaviors

The presence of challenging behaviors within the entire classroom was assessed with the classroom observation form.

To maintain consistency in comparison of challenging behaviors, each educator was observed at the same time each day, primarily during a part of the school day identified by the educator as most challenging. The observers collecting data positioned themselves in an area where all children could be seen and heard in the classroom, moving as necessary to ensure consistent observation. Specific challenging behaviors coded included (a) taking materials from another child; (b) yelling; (c) hitting; (d) refusing to comply with head teacher direction after 2 requests; (e) spitting; (f) teasing; (g) swearing; (h) throwing objects; (i) kicking; (j) crying; (k) refusing to let another child play with them; (l) running around classroom; (m) putting hands on another child and/or pushing; (n) blurting out during a lesson. Operational definitions of each challenging behavior were given to observers during a 1-hour training where observers practiced coding videos of children, as well as during the actual observations.

Measures

Classroom Observation Form

The classroom observation form was specifically designed for this study to assess the occurrence of classroom management strategies aligned with *SSEL* lessons, as well as challenging child behaviors. Over a 30-minute time period, this study used a combined recording method of partial interval with a frequency count during 1-minute intervals to indicate the frequency of children's challenging behaviors. For aligned classroom management strategies, a similar frequency count within partial interval was employed using 1-minute intervals. This form tracked the activity, as well as the current and previous week's *SSEL* lesson. In addition, educator use of strategies related to *SSEL* lessons in general (beyond the current lessons) was also accounted for via frequency count, with qualitative indication of the referenced lesson. Classroom observations were conducted twice a week for 30 minutes during a predetermined time period in each classroom, and were

modeled after procedures utilized in a similar early childhood study (Stormont, 2007).

Inter-Observer Agreement (IOA)

Inter-observer agreement (IOA) was calculated using Cohen's Kappa (Uebersax, 1982) to discern the level of agreement between raters. Surpassing the guidelines suggested by What Works Clearinghouse (Kratochwill, et. al., 2010), interobserver observations were conducted by graduate students trained in study observation procedures for approximately 33 percent of observations in each educator's baseline and intervention phase. When rating educators' use of aligned strategies, Cohen's Kappa (κ) ranged from 0.73 to 0.86 across all classrooms, indicating substantial agreement between raters. Regarding observation of challenging behaviors, Kappa ranged from 0.62 to 0.78, also falling in the substantial range of rater agreement. These results suggest that interpretations drawn from the data collected can be discerned with a substantial level of certainty (Viera & Garrett, 2005).

Educator Self-Efficacy and Social Validity

To assess educator self-efficacy and general social validity, questions were administered with response options on a five-point Likert scale from (1) strongly disagree to (5) strongly agree and included questions targeting the following: Does consultation and performance feedback increase feelings of educator efficacy for classroom management? Do educators believe alignment and increased implementation will promote positive child outcomes as compared to implementing *Second Step* alone? Do educators believe these aligned practices are sustainable? At the end of all weekly performance feedback sessions, educators also rated their sense of self-efficacy on the same five-point Likert scale related to the following question, "This performance feedback session made me feel increased efficacy around my classroom management skills."

Intervention Components

Selection of SSEL Lessons

Eight *SSEL* lessons were chosen for the current intervention based on general relevance to the majority classroom population, the likelihood of ability to use/reinforce skills multiple times per day, and their breadth across the multiple domains of the SEL curriculum. All four educators implemented the selected *SSEL* lessons in the following order: focusing attention; following directions; asking for what you need; identifying happy and sad feelings; caring and helping; managing anger; managing waiting; fair ways to play. Educators were asked to implement the *SSEL* lessons, intended to be implemented daily, starting at the beginning of the week to ensure that at least one lesson had been taught before the first weekly observation was conducted.

Educator Professional Development Session

Following at least three stable baseline observations and prior to beginning weekly performance feedback consultation sessions, educators participated in a 1-hour, one-on-one professional development session with the primary investigator. At the beginning of the training session, educators were asked to report on their current implementation of *SSEL* lessons and any perceived barriers to implementation. The primary investigator then provided explicit instruction on how to align behaviorally oriented classroom management strategies with *SSEL* lessons. Given the current Head Start program's endorsement of the Pyramid Model and previous educator trainings, all educators had some familiarity with the given strategies. Using an Anticipate, Remind, Reinforce framework, the following aligned classroom strategies were described and demonstrated: (a) modeling; (b) pre-correction; (c) opportunities to respond; (d) validation and redirection; (e) behavior specific praise; (f) tangible reinforcers. These classroom management strategies have been commonly identified in the early childhood literature and rated by experts in the field as either useful or essential for improving social, emotional, and behavioral

outcomes in the classroom (Fox et al., 2003; McLeod, et al., 2017). The training session included (a) an overview of study purpose and procedures; (b) description of Anticipate, Remind, Reinforce framework; (c) definition of classroom management strategies; (e) skill steps; (f) multiple examples and non-examples including videos of strategies shown aligned with *SSEL* lessons; (g) numerous practice opportunities for teachers to identify aligned strategies in classroom videos with corrective feedback provided as necessary.

Performance Feedback Sessions

Derived from a behavioral consultation framework, performance feedback sessions began shortly after the professional development session had occurred (2-5 days). Performance feedback sessions were conducted weekly for approximately 15 minutes immediately following one of the two weekly classroom observations. Sessions were structured as follows:

1. Problem identification: visual feedback reviewing graph of aligned classroom management implementation and challenging behavior.
2. Verbal feedback on progress toward goals: identifying three specific strengths and three areas for improvement.
3. Problem analysis: discussing rationale for low skill implementation and strategies to increase implementation.
4. Plan development: weekly goal setting and modeling of strategies.
5. Answering any questions.
6. Completing fidelity checklist for consultation session.
7. Rating of self-efficacy regarding classroom management skills.

This format is relatively consistent with a recent study that used educator consultation to facilitate delivery of *SSEL* in a Head Start setting (Upshur, et al., 2017). Prior to the next observation, educators were sent an email with the current and previous week's *SSEL* lesson, their individualized goal, and several example scripts

of how they could align all six classroom management strategies with the weekly *SSEL* lessons.

Results

Visual analysis indicates that for all four educators, the training plus performance feedback intervention was successful in increasing use of aligned classroom management strategies with weekly *SSEL* lessons. Data suggest this intervention had limited effects on challenging classroom behaviors. Visual analysis included acknowledging changes in level, trend, and variability as well as immediacy of effect, consistency, and overlap of data across phases. Tau-U analysis was further applied to demonstrate effect sizes between study phases, allowing for supplemental objectivity and precision beyond visual analysis. Results pertaining to each of the four educators follows, below.

Educator 1

During baseline, educator 1 demonstrated aligned classroom management strategies at a significantly low level with a few instances of aligned strategy use (non-significant), approaching the intervention phase. Regarding challenging behaviors for educator 1, while the trend of behaviors is generally stable in the baseline phase, there was an insignificant increase in trend mid-way through baseline observations.

In the intervention phase, educator 1's use of aligned classroom management strategies showed an immediate yet gradual increase in trend, followed by a pattern of decreasing and then increasing trend. The percentage of intervals, as well as the frequency in which aligned strategies were observed, increased during the intervention phase with no overlap between phases. Challenging behaviors indicated a gradual decrease in trend and level with increases in trend mid-intervention. Of note, although challenging behaviors showed a large amount of variability over the intervention phase, these increases in behavior were generally seen when aligned

strategy use was low. Lowest levels of challenging behaviors were observed during times the teacher implemented the largest amount of aligned classroom management strategies. Overall, educator 1 exhibited a significant increase in their use of aligned classroom management strategies and a significant reduction was observed in classroom behaviors (Aligned strategy use Tau-U phase contrast = 1; Challenging behaviors Tau-U phase contrast = -0.70). See Figure 1, *Percent of Intervals Observed with Aligned Classroom Management Strategies and Challenging Behaviors*, for data on all four educators.

Educator 2

Observations from implementation of aligned classroom management strategies in baseline for educator 2 indicated some variability during the first few weeks of data collection. However, approaching the intervention phase, educator use of aligned strategies demonstrated more of a flat and consistent trend. Challenging behaviors showed a general increase in trend throughout baseline.

In intervention phase, educator 2 demonstrated an immediate positive trend in aligned strategy use with a notable increase in level. Although variability is rather high regarding aligned strategy use in the intervention condition, all intervention observations indicated higher aligned strategy use as compared to the baseline phase with no overlapping data points. Of note, the observed routine for educator 2 often included direct instruction, perhaps providing increased opportunities to facilitate child responses, as compared to routines observed with the other educators. Challenging behaviors observed in the intervention condition were highly variable with significant increases and decreases in trend. Although there was a slight increase in challenging behaviors, this is not considered significant as it was equal to one challenging behavior across a 30-minute observation period. Overall, this educator demonstrated a large significant increase in aligned strategy use with no observed decrease in children's challenging behaviors (Aligned strategy use

Tau-U phase contrast = 0.98; Challenging behaviors Tau-U phase contrast= 0.10).

Educator 3

Baseline data indicate that educator 3 demonstrated low aligned strategy use overall, with some variability in the beginning of baseline data collection. However, prior to approaching the intervention phase, the level of strategy use was more consistent with less variability. The level of challenging behaviors during baseline observations was high with large amounts of variability throughout and no apparent trend.

In the intervention phase, aligned strategy use showed an immediate increase in trend followed by a period of stability. This then decreased to near baseline levels at the end of intervention. Of note, average increase in trend regarding aligned strategy use throughout the intervention phase is significant. Challenging behaviors during the intervention phase showed high variability with no apparent trend. The frequency of challenging behaviors observed during intervention were similar to those observed during the baseline phase (e.g. high overlap in data) with a minor decrease in overall level. Overall, educator 3 demonstrated an increase in aligned strategy use. Although challenging behaviors did show a slight increase, this was not considered clinically significant (Aligned strategy use Tau-U phase contrast = .80; Challenging behaviors Tau-U phase contrast = .11).

Educator 4

During educator 4's baseline observations, data indicate generally low levels of aligned classroom management implementation with one observed instance of higher strategy use on the second observation. Level of challenging behaviors was high during baseline and indicates a large amount of variability throughout the initial phase. Given this variability, baseline data were corrected with Tau-U analysis.

When the intervention was introduced, data demonstrate a clear and immediate increase in trend and level for aligned strategy use. Challenging behaviors generally show a gradual decrease in trend and nearly half the level observed during baseline. Two instances of overlap in baseline and intervention phase data are indicated. Overall, educator four demonstrated a significant increase in aligned strategy implementation, indicating a large effect size, and a moderate reduction in challenging behaviors (Aligned strategy use Tau-U phase contrast = 1; Challenging behaviors Tau-U phase contrast = -.39).

Treatment Integrity

Fidelity of professional development and performance feedback sessions were evaluated using self-report integrity checklists completed by the school consultant. All professional development sessions were rated with 100% implementation fidelity, with minor adjustments made to the level of skill description based on the teacher's familiarity with the skill. Fidelity of individual teacher performance feedback sessions ranged from 94-97% implementation, with overall 95% implementation. At times, only one or two areas of educator strength or improvement were identified during performance feedback sessions, instead of the designated three. Moreover, in the few instances where visual feedback was not immediately reviewed due to the context of the environment (i.e., outside) these graphs were emailed to the educator with a brief description for interpretation. In general, visual, and verbal feedback were consistently provided in addition to problem analysis and plan development.

Social Validity

Employing formative measurement, during each performance feedback session in the intervention phase, all educators reported that they "agreed" or "strongly agreed" that the current intervention made them feel increased self-efficacy regarding their classroom

management skills every week. Educators also completed a self-report social validity scale at the conclusion of the study regarding their belief that their classroom benefited from receiving the intervention. All educators indicated they “agreed” or “strongly agreed” with questions related to the current intervention’s significance for positive child outcomes, feasibility, and sustainability. All educators also indicated they “agreed” or “strongly agreed” that they liked the procedures used in the intervention, that it was beneficial, and that alignment and increased implementation of classroom management strategies with the *SSEL* lessons would promote more positive student outcomes, as compared to implementing *SSEL* lessons alone. Moreover, three of the four educators reported they “strongly agreed” aligning classroom management strategies to *SSEL* lessons reduced challenging behaviors. When asked for suggestions for future improvements, some educators indicated a desire for additional lessons and a few acknowledged that certain lessons were dense with information.

Discussion

There is a critical need to support young children at-risk for early school failure due to behavioral and emotional challenges. Although the menu of evidence-based interventions for SEL and proactive classroom management continues to grow, a notable gap exists regarding the factors that ensure sufficient training and implementation fidelity (Hemmeter et al., 2015). The current study adds to the literature by using consultation with performance feedback to align classroom management strategies with the *SSEL* curriculum in a Head Start program. In addition, it aims to expand the role of the school psychologist to facilitate integrated preventative practices in preschool settings. The purpose of this research was to understand the effects of a brief professional development session and weekly performance feedback on educator implementation of aligned *SSEL* lessons and classroom management practices, on children’s challenging behaviors, as well as its social validity.

Figure 1

Percent of Intervals Observed with Aligned Classroom Management Strategies and Challenging Behaviors

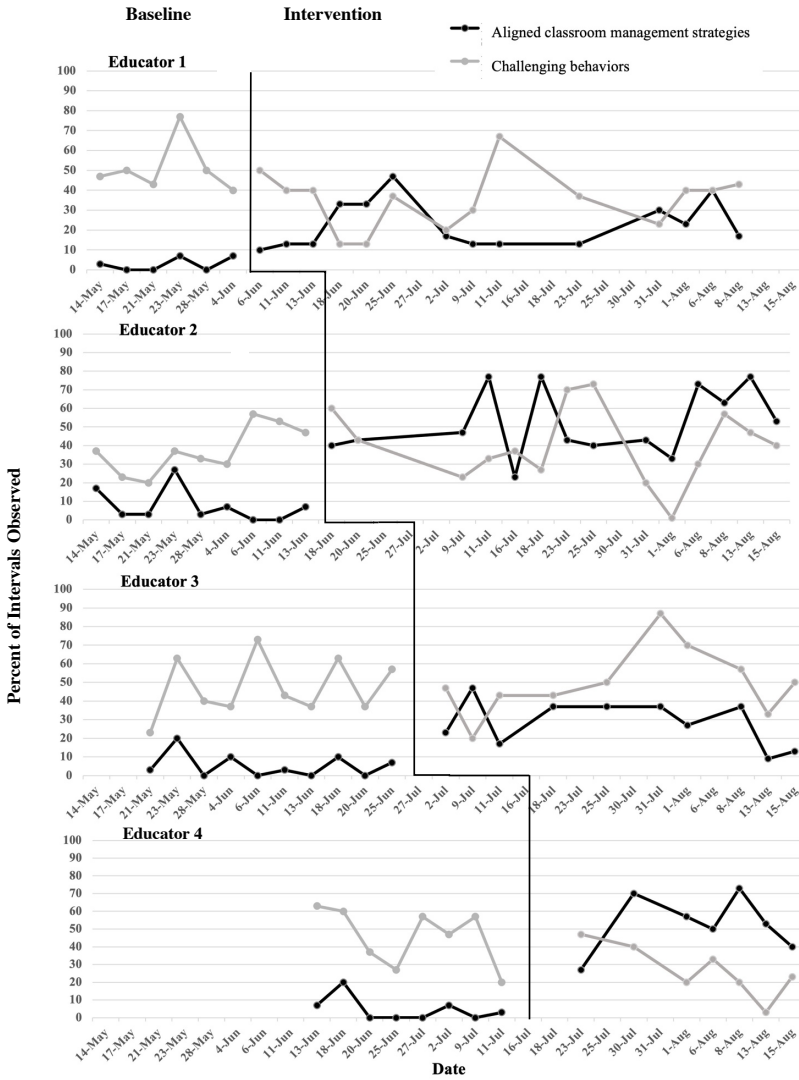


Table 1*Frequency of Second Step Early Learning (SSEL) Strategy Use*

	Pre - Average frequency (#) of aligned strategies implemented per 30-minute observation	Post - Average frequency (#) of aligned strategies implemented per 30-minute observation	Pre – Average frequency of other SSEL lessons referred to outside of current week's lessons per 30-minute observation	Post - Average frequency of other SSEL lessons referred to outside of current week's lessons per 30-minute observation
Educator 1	0.83	10.36	6.67	11.57
Educator 2	3.22	34.36	7.33	18.21
Educator 3	1.90	13.00	2.70	6.56
Educator 4	2.00	36.86	3.13	15.00

Table 2*Tau-U Analysis*

	Within phase aligned strategy use	Phase contrast aligned strategy use	Within phase challenging behaviors	Phase contrast Challenging behaviors
Educator 1	0.20	1.00	-0.13	-0.70
Educator 2	-0.25	.98	0.36	0.10
Educator 3	-0.11	0.80	0.11	0.11
Educator 4	-0.18	1.00	-0.46	-0.39
Tau-U effect size		0.94*		-0.20
Confidence Interval (95%)		.67 – 1.00		.48 - .07

**p < .01

Table 3
Social Validity Results

1 = Strongly disagree, 2=Disagree, 3=Neither agree nor disagree, 4=Agree, 5= Strongly agree					
	Educator 1	Educator 2	Educator 3	Educator 4	Mean
This consultation model (professional development session and performance feedback) was an acceptable intervention for aligning classroom management skills with <i>SSEL</i> lessons.	5	5	5	5	5
This consultation model made me feel increased efficacy around my classroom management skills.	5	5	5	4	4.75
Integrating prevention efforts, such as aligning classroom management strategies with <i>SSEL</i> lessons, is important.	5	5	5	5	5
I liked the procedures used in the consultation model.	5	5	5	5	5
Aligning classroom management strategies with <i>SSEL</i> lessons increases children's generalization of social emotional competencies.	5	5	4	5	4.75
Aligning classroom management strategies to <i>SSEL</i> lessons reduced challenging behaviors in my classroom.	5	5	3	5	4.5
I believe alignment and increased implementation of classroom management strategies with the <i>SSEL</i> lessons will promote more positive child outcomes as compared to implementing <i>SSEL</i> lessons alone.	5	5	4	5	4.75
This invention was meaningful for the children in my classroom.	5	5	4	5	4.75
I believe these aligned classroom management strategies are sustainable.	5	4	4	5	4.5
Overall, the consultation model was beneficial.	5	5	5	5	5

Interpretation of Findings

Overall findings suggest that a 1-hour professional development session followed by weekly consultative support with performance feedback significantly increased educator use

of classroom management strategies aligned with the relevant *SSEL* social emotional learning lessons of the week. This functional relationship between direct observation and performance feedback on educator strategy use further indicated a relatively immediate impact with aligned strategy use, increasing within two weeks after the intervention was introduced. It was observed that children received explicit *SSEL* lessons and were also encouraged to practice, were redirected, and were praised for using recently learned social emotional skills multiple times throughout the week. Results further suggest that educators increased their use of language related to all *SSEL* lessons in general. Recognizing implementation barriers associated with the larger Pyramid Model framework (Hemmeter et al., 2016), increasing implementation of key preventative practices within this model may be most efficient and advantageous to facilitate teacher behavior change. Many early childhood educators have also expressed desire to receive implementation support of preventative practices (Fox et al., 2003; Hemmeter, 2006). Acknowledging the importance of educator self-efficacy in the reduction of burn-out (Reinke, 2012), the current educators' formative and summative reports of increased self-efficacy around their classroom management skills is encouraging.

Regarding the intervention's effectiveness on children's challenging behaviors, two out of four classrooms had an average reduction in challenging behavior, although this change was not at the level of significance to establish that the intervention was effective in reducing student challenging behaviors. Moreover, variability during baseline allows for limited conclusion of results. Reasons for this finding of minimal effects on challenging behaviors could vary. Although there are numerous benefits to conducting research in preschool settings for children with and without disabilities, this universal intervention was not intended to provide support to remediate all challenging behaviors, such as those for which individualized education plans may be needed. In addition, given the measurement of classroom behaviors as a

whole, it is difficult to discern if classroom behaviors would have decreased more significantly if behaviors were calculated based on a selection of a few children in the classroom, rather than the classroom in its entirety. Of note, although visual and Tau-U analysis imply minimal reductions in behaviors, social validity data from three educators conversely suggests that the educators' believed the current intervention did lead to a reduction in challenging behaviors in their classroom. This could be a reflection of increased efficacy regarding their classroom management skills.

Limitations

While these outcomes suggest several promising implications, they are not without limitations. A first limitation involves reactive experimental arrangements. Although direct observation and performance feedback are often salient methods to facilitate increased implementation, serious consideration must be given to reactivity that occurs in educator behavior as a result of being observed and provided feedback on a regular schedule. Selection bias may also be present in this study due to a few educators being increasingly familiar with *SSEL* lessons or classroom management strategies over others.

A second limitation of the current study is the use of only one dependent variable related to aligned classroom management strategies in determining stability in trend or level prior to beginning the intervention phase. Due to the limited timeframe of the study that often exists in school settings, it was not feasible to also require stability in both challenging behaviors and aligned classroom management strategies. This limitation impacts the interpretation of changes in challenging behaviors as a result of the current intervention, as two of the educators' classrooms were exhibiting a downward trend in the frequency of challenging behaviors just prior to the intervention.

A third limitation involves ambiguity around the amount of classroom management skill use needed to observe a change

in challenging behaviors. There is minimal research and lack of professional standards on the optimal rate of using each behavioral skill to measure meaningful child behavior change (Simonsen et al., 2010). Likewise, variability may exist among the *SSEL* lessons to be incorporated into the general classroom context. Although all educators followed the same lesson sequence, each educator began receiving the intervention phase during a different *SSEL* lesson.

Future Research

Given the preliminary nature of this study, additional research should investigate similar questions while ensuring implementation fidelity of all lessons in the *SSEL* curriculum. A comparable study with a longer duration of intervention may further facilitate positive changes in child challenging behavior, as a result of increased exposure to the social emotional curriculum and aligned classroom management strategies. Moreover, for long-term feasibility purposes, after educators have achieved a consistently high rate of aligned classroom management practices with the weekly *SSEL* lessons, it may be beneficial to fade on-going consultative support. Supplemental research is also needed regarding the type of measure that may be most appropriate for measuring short-term and long-term prevention outcomes associated with many SEL curriculums. Current standardized measures of behavior may not fully capture all intended outcomes over time and the extent of the effectiveness of the program; for instance, many SEL curricula do not have their own assessment measures beyond that of emotion knowledge (Greenberg & Abenavoli, 2017).

Additional research is further warranted to assess the effectiveness of each component of the training session and performance feedback. Lastly, supplemental studies should investigate for whom this intervention is most effective. Research is needed to determine if this intervention may be more effective for new educators who are still developing their classroom management strategies, or for more experienced educators who

may have already internalized several classroom management strategies and could find it more feasible to integrate daily classroom management strategies with an SEL curriculum. While most classroom management strategies tend to be simple in nature, the consistent and purposeful implementation of strategies aligned with an SEL curriculum often requires forethought and follow-through.

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Appendix

Social Validity Questionnaire

1. This consultation model (professional development session and performance feedback) was an acceptable intervention for aligning classroom management skills with *SSEL* lessons.
 1. Strongly disagree
 2. Disagree
 3. Neither agree nor disagree
 4. Agree
 5. Strongly agree

2. This consultation model made me feel increased efficacy around my classroom management skills.
 1. Strongly disagree
 2. Disagree
 3. Neither agree nor disagree
 4. Agree
 5. Strongly agree

3. Integrating prevention efforts, such as aligning classroom management strategies with *SSEL* lessons, is important.
 1. Strongly disagree
 2. Disagree
 3. Neither agree nor disagree
 4. Agree
 5. Strongly agree

4. I liked the procedures used in the consultation model.
 1. Strongly disagree
 2. Disagree
 3. Neither agree nor disagree
 4. Agree
 5. Strongly agree

5. Aligning classroom management strategies with *Second Step* lessons increases children's generalization of social emotional competencies.
 1. Strongly disagree
 2. Disagree
 3. Neither agree nor disagree
 4. Agree
 5. Strongly agree

6. Aligning classroom management strategies to *sSEL* lessons reduced challenging behaviors in my classroom.
 1. Strongly disagree
 2. Disagree
 3. Neither agree nor disagree
 4. Agree
 5. Strongly agree

7. I believe alignment and increased implementation of classroom management strategies with the *sSEL* lessons will promote more positive child outcomes as compared to implementing *sSEL* lessons alone.
 1. Strongly disagree
 2. Disagree
 3. Neither agree nor disagree
 4. Agree
 5. Strongly agree

8. This invention was meaningful for the children in my classroom.
 1. Strongly disagree
 2. Disagree
 3. Neither agree nor disagree
 4. Agree
 5. Strongly agree

9. I believe these aligned classroom management strategies are sustainable.
1. Strongly disagree
 2. Disagree
 3. Neither agree nor disagree
 4. Agree
 5. Strongly agree
10. Overall, the consultation model was beneficial.
1. Strongly disagree
 2. Disagree
 3. Neither agree nor disagree
 4. Agree
 5. Strongly agree
11. What suggestions do you have for improvement for the future?