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The Impact of Coaching to Support Professional Development in a Preschool Classroom

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The Impact of Coaching to Support Professional Development in a Preschool Classroom

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in Partial Fulfillment of the Requirements
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Abstract

The purpose of this action research study was to determine the effect that the combination of coaching and professional development have on teachers' confidence levels and number of classroom practices carried out compared with teachers who only attend professional development. The participants included six female caucasian teachers who all teach preschool in public elementary schools in southern Iowa. Data was collected through the use of a rating scale and checklist of practices that were completed by the participants prior to and following the intervention. The results of the study indicated that there was not a large enough difference in the scores to determine if the coaching intervention led to higher levels of classroom teaching practices or a higher confidence rating. This conclusion could be due to the small sample size. The researcher suggests further studies be conducted with regards to number of participants, data collection tools, and participants with varying ethnicities, genders, and socioeconomic status.

The Impact of Coaching to Support Professional Development in a Preschool Classroom

The skills a child learns during their early childhood years can greatly affect outcomes of the child later on in their education. Research shows that a child whose social emotional challenges are not resolved in the early childhood years can go on to have social, academic, and behavioral challenges later on (Hemmeter, Snyder, Fox, & Algina, 2016). Early childhood teachers need to feel equipped with the skills to support their students' social emotional growth. This currently does not seem to be the case as research has shown that preschool children are being expelled three times more than school-aged children (Hemmeter et al., 2016). In order to provide teachers with the information and the skills necessary to support their students' in their social-emotional development, additional professional development may be needed.

Professional development is offered to early childhood educators in many forms, most commonly by workshops, coursework, coaching, or any combination of those components (Rezzonico et al., 2015). Workshops are typically large group instruction that happens over a short period of time and coursework is generally large group instruction occurring over a longer period of time. Coaching is a support that is sometimes provided in addition to a workshop or coursework to teachers (Rezzonico et al., 2015). Coaching can occur individually or in a group, in person, electronically over video and email, having a coach make suggestions during a classroom observation, or take data and provide it at a later time (Rakap, 2017; Snyder, Hemmeter, & Fox, 2015). Coaching has been shown to be effective in supporting early childhood educators when it is offered in addition to a workshop or coursework (Rezzonico et al., 2015; Hemmeter et al., 2016; Rakap, 2017; Hemmeter, Hardy, Schnitz, Adams, & Kinder, 2015), however the amount of coaching, delivery of coaching, content that was coached around,

and data measures vary. It cannot be determined that when coaching is provided in any capacity in addition to a workshop or coursework that the results will be favorable in all measures for teachers and students in comparison to teachers only attending a workshop or a course.

Review of the Literature

Social emotional professional development in preschool

The social-emotional skills of young children are very important as they can affect a child's social and academic outcomes in the future (Hemmeter, Snyder, Fox, & Algina, 2016). Alarming statistics show that teachers do not feel equipped to handle the daily challenges that arise in preschool students (Hemmeter et al., 2016). Overall, the instructional quality in most preschool programs is persistently low and the quality of instruction is the aspect of preschool that most impacts student school readiness (Weiland, McCormick, Mattera, Maier, & Morris, 2018). Early childhood educators have regularly reported that one specific area they feel they need additional support and training around due to it being a major challenge of their job is knowing how to respond to student challenging behavior (Hemmeter, Hardy, Schnitz, Adams, & Kinder, 2015). Survey results from early childhood educators have shown that there is frustration with knowing how to intervene when children have persistent challenging behaviors. Teachers would like additional support in implementation practices that will lead to students having healthy social-emotional skills and that will address how to handle challenging behavior (Hemmeter et al., 2016). In one study, professional development (PD) in the social-emotional domain was provided to preschool teachers and the results showed that there were higher quality interactions between adults and children, child behaviors overall, and the classroom environment (Hamre, Partee, & Mulcahy, 2017).

Specifics of Professional Development

When looking at early childhood professional development from a broad perspective, it could be concluded that teachers who are involved with high-quality PD that is designed with

intention can make changes that lead to better outcomes for their students. However, it is also known that many PD opportunities do not lead to these results (Hamre, Pardee, & Mulcahy, 2017). This may be due to the fact that until lately, there hasn't been a lot of research about the kinds of PD that are consistently leading to teacher's implementing best practice and that are achieving improved student outcomes (Snyder et al, 2018). There is now more research being completed on what makes a professional development opportunity effective. Research with state preschool classrooms and Head Start classrooms has shown that effective professional development includes specific and focused teaching practices, is provided with intense enough duration and follow-up practices (coaching), and uses practices that promote changes in teacher behavior. PD is best when the topic is decided based on data, when effective approaches to support teacher learning are selected, and the expectations and desired results of the PD are communicated to the participants (Hamre et al., 2017). Approaches that have a better chance of leading to a teacher carrying out practices with fidelity include in person or online training that provides participants with materials and high-quality examples, coaching, implementation feedback, and evidence that the practices will lead to positive child outcomes (Hemmeter et al., 2016).

Another factor to be considered is teacher involvement and opinion. It is rare that teachers have a say in the types of professional development offered and some evidence has shown that the topics being focused on during PD may be decided based on the presenter's beliefs rather than the teacher's needs. (Hamre et al., 2017). It has also been found that when it comes to formal PD, one study showed that the form that received the highest percentage by teachers in terms of usefulness was lectures or workshops that lasted more than three hours

(Munez, Bautista, Khiu, Keh & Bull, 2017). Teachers' opinions being included when developing professional development is likely to improve overall teacher compliance and participation. A teacher's participation and compliance with the elements of the practices taught during professional development can affect the outcomes for their students. (Diamond & Powell, 2011).

While some generalizations can be made about PD overall, there has been research on the important aspects of PD provided to early childhood teachers. It has been found that early childhood PD can create positive outcomes. A common finding in literature around PD is that the classroom or teacher outcomes see larger effects as a result of PD than the child outcomes do (Hamre et al., 2017). Early childhood PD that has resulted in positive change in teacher practice and student outcomes has features that may make it successful. These features include multiple connected training opportunities, a specific focus rather than a general topic, explicit examples of what is expected to be learned, and in context support with feedback and reflection (Snyder, Hemmeter & Fox, 2015). It has been recognized that in order to improve early childhood PD, it needs to be better defined, structural and substantive features of PD that are most likely to lead to teacher implementation and student outcomes need to be determined, and studies need to be analyzed to determine if improved teacher implementation of practices lead to child outcomes. (Snyder et al, 2018).

According to Powell & Diamond (2013), when the goal of professional development is to improve child outcomes by increasing high-quality teacher practices, PD should include continuous opportunities for teachers to learn specific strategies, active learning opportunities and the realities of the classroom should be recognized. Research also shows that embedded

instruction practices in the preschool classroom are usually not implemented with fidelity without very direct training and support on an individual level (Snyder et al, 2018).

Coaching

A body of support around providing coaching to teachers has been found in recent research. Research suggests that the individualized support offered by coaching in combination with professional development makes a larger impact on teacher outcomes than providing training or coursework alone (Hamre, 2017; Pas et al., 2016). Coaching is often included with professional development training to help build the competence and confidence of teachers in implementing evidence-based practices as they were designed (Snyder et al., 2015).

Multiple studies have found that teachers are more likely to implement classroom teaching practices when coaching is embedded. Coaching is a way teachers can experience ongoing learning which is valuable due to the changes that are made in education. Teachers are expected to teach in ways that they themselves were not taught and coaching allows them to reflect on their beliefs and practices and assimilate new research (Heineke, 2013). In one study, informal coaching that guided teachers was seen as more useful overall than the formal coaching that was part of a school initiative (Munez et al., 2017). A cyclical style of coaching, practice-based coaching (PBC), including goal setting, opportunities to practice within the classroom, and feedback around implementation has been found to be effective for increasing teacher implementation around social-emotional teaching practices, literacy practices, and positive behavior support strategies (Snyder et al., 2015). The underlying support for coaching comes from the adult learning theory which says that adults prefer learning when it relates to their job, learn from reflecting on applying new information, and that adults want to have a say

in what they are learning. Coaching provided in addition to a workshop or training is becoming more common (Weiland et al., 2018).

Benefits of Coaching

One reason coaching may be helpful to teachers is that it is individualized, allows teachers to receive immediate feedback, and it is more concrete and relevant to a teacher's classroom and students than PD alone (Kretlow, Wood, & Cooke, 2011). Positive relationships were indicated by participants in one study as the most important element necessary in coaching (Heineke, 2013). Having a two-way relationship between a coach and teacher has also been found to facilitate relationships that respected the teacher's goals and views and led teachers to be more receptive to changing their practices (Weiland et al., 2018). Elements of being responsive have been found to contribute to how engaged the teacher is with coaching. These elements include the coach responding to the teacher's questions and comments, showing sensitivity to the teacher's needs and feelings, and giving affirmations verbally. It was also found that teachers and coaches had positive experiences when coaching was included with professional development but that it was also difficult to create meaningful relationships between the coach and the teacher.

One aspect that made a difference was if the teacher felt the coach was being evaluative or only finding the deficits, the teacher was less likely to be open to feedback (Heineke, 2013). There have been cases in which teachers were asked to provide videotapes of themselves teaching a literacy lesson to a coach so that the coach could provide feedback and the teachers all attended a workshop. The coach gave feedback on the submitted lessons and the teacher was asked to video another lesson of them applying the feedback. The teachers reacted positively to this experience

and felt that this experience helped to enhance their professional development experience. Teachers enjoyed hearing positive feedback prior to suggestions from their coach. Teachers reported preferring feedback to be organized in small paragraphs or bullet points so they could more easily read and apply it (Diamond & Powell, 2011).

Research studies on coaching

There are studies that support coaching in education broadly. Data was collected on the outcomes of having coaches train teachers in school-wide positive behavioral interventions and supports (SWPBIS). SWPBIS is a framework that is used to support students in behavior in the school setting. The results showed that through training coaches and having them work with the teachers, the program was better implemented and there were fewer unwanted behaviors in the district (Cavanaugh & Swan, 2015). Results from another study indicated that teachers showed improvements in classroom management, improvement in student behavior, an increase in providing opportunities to respond, and many of the skills gained were sustained following an intervention of professional development and coaching when supporting students with Autism (Pas et al., 2016). A study with kindergarten teachers showed that receiving professional development increased the accuracy of delivering instruction. When coaching was offered in addition to PD, the teachers were all able to reach high levels of implementation fidelity. This could be due to coaching being individualized, more relevant to a teacher's students, and that it provides immediate feedback (Kretlow et al., 2011).

Studies supporting coaching in preschool classrooms

There is a large body of research in support of providing coaching to preschool teachers in addition to a professional development workshop or course. There are many studies that prove

coaching can positively affect teacher practices. A study completed in Chile evaluated the effects of workshops and in-classroom coaching in preschool classrooms. A preschool program called “Un Buen Comienzo” (UBC) (A Good Start) was implemented in Chile to help increase the quality of preschool. It evaluated the program that included professional development modules and coaching. The results of the study indicated that this support for teacher increased classroom practices that promote teacher-child interactions, increased emotional support, and classroom organization (Yoshikawa et al, 2015). In another study, research was completed comparing teachers who received onsite coaching, self-coaching, or business as usual (BAU) attending the district professional development (PD). The results showed that the teachers in the on-site coaching group were more effective at improving their accuracy and rate of providing embedded instruction learning opportunities and made greater growth during the intervention than either of the other two groups. Teachers who were in either of the coaching groups improved their quality of goals written for students than the BAU group (Snyder et al., 2018). There was a group of preschool teachers trained in classroom-wide implementation of the Pyramid Model practices. An intervention group who received both PD and coaching sessions made steady growth in improving their practices whereas the group only receiving PD made little growth or improvements. (Hemmeter et al., 2016). In Singapore, a study was completed with preschool teachers around PD and coaching. The results of this study showed that teachers who were engaged with PD and coaching that allowed them to learn collaboratively and individually about instructional strategies and student engagement improved the teachers’ self-efficacy (Munez et al., 2017).

Coaching leading to positive student outcomes

There are studies in which the results show that coaching can be effective in changing both teacher practices and lead to positive outcomes for students. Research was completed in which coaches worked with preschool teachers of three and four year old students. Coaches collected pre-intervention data and progress monitoring data on student outcomes. The results of coaching showed that students increased their literacy outcomes and teachers both set and achieved a large percentage of their goals (Crawford, Zucker, Williams, Bhavsar, & Landry, 2013). Another study completed with preschool teachers looked into the effect PD and coaching would have on teacher and student language behaviors. The results showed that the teachers who received coaching asked more experiential reasoning questions. The students responded more often to questions asked and used more words in their responses (Rezzonico et al., 2015). A study conducted in 2015 examined the effects of training and coaching in the Pyramid Model practices with early childhood special education teachers. The teachers each attended a training on the Pyramid Model practices followed by intensive coaching. With general reminders to continue using the practices, all teachers maintained use of the practices. Challenging behavior decreased for two teachers and increased for one teacher with the addition of a new student with challenging behaviors. All of the participants increased the Pyramid Model practices after receiving coaching (Hemmeter et al., 2015). Early childhood special education teachers showed more progress in a study when coaching was involved when working with students with autism spectrum disorder. After teachers received a training and were provided with coaching, the results indicated that the intervention group receiving coaching and training was able to reach a higher level of fidelity of the model, the students with ASD made more progress in the

intervention than the control group, and data systems were put in place by the teachers to help determine future instruction in the intervention group.

Research has also been completed with preservice teachers to evaluate the impact of coaching on teacher and students outcomes. Often times preservice teachers learn about teaching practices in a course but do not receive follow-up support in the classroom. A study was completed that measured the impact that coaching had on their implementation of embedding instruction throughout the school day in inclusive classrooms. The results showed that training and coaching lead to teachers being more accurate when embedding instruction, better generalization to other settings, and maintenance of embedding after the coaching was completed. Teacher increases in accurate implementation also lead to student skills also being improved (Rakap, 2017).

Unknowns of coaching

There are some aspects of coaching that are still unknown. The amount of coaching necessary to make a difference is one aspect. Characteristics of the teacher including their experience, previous knowledge of the teaching practices, or motivation may all affect the amount of coaching that is needed to lead to fidelity (Snyder et al., 2015). One study found that teachers made more growth in their teaching practices with more cycles of coaching being completed. It was also found that more coaching was needed for teachers to make changes in their instruction than classroom management strategies (Hamre et al., 2017). More information also needs to be collected on fidelity of coaching being delivered to know the amount of coaching that is needed and at what fidelity level (Snyder et al, 2018). One coaching framework, practice-based coaching (PBC), has been used in several studies with preschool teachers whose

students have or are at risk for having disabilities. Practice-based coaching is “job-embedded” coaching that supports teachers in carrying out evidence-based practices in their classroom. After analyzing three studies in which PBC was carried out, the results were inconclusive about which approach to coaching (self-coaching, peer coaching, or expert-coaching) and which format (face-to-face, web mediated, etc) have the greatest impact on practice implementation and child outcomes. It is also unknown the amount of coaching necessary to reach fidelity of implementation (Snyder et al., 2015). A study was completed in 2013 that researched the implementation fidelity of coaching sessions, the differences between remote and onsite coaching and the feedback given to teachers, and the teacher’s use of media resources that teachers were given access to. The results were somewhat inconclusive due to the small sample size however it could be concluded that teachers were more responsive to onsite coaching in comparison to remote coaching. It was also noticed that teachers who are already carrying out many evidence-based practices will likely need less or a different type of coaching than teachers with less skills to implement practices (Powell & Diamond, 2013).

Other research presents additional areas of coaching that more information is needed around or that are barriers to coaching. One study found that general coaching not tied to a curriculum is unsuccessful at improving teacher practices around instruction (Weiland et al., 2018). Making time to schedule additional tasks in the day can be a challenge. For some teachers, it is hard to find 30 minutes in their schedule to set aside to meet with a coach (Powell & Diamond, 2013). There are some studies that did not have results that could support coaching versus PD alone. A study conducted in Santiago, Chile examined if the preschool teachers in an intervention group receiving PD and coaching had a difference in fidelity than the control group.

Intervention fidelity was measured in dosage and adherence. The results indicated that there was an increase for the intervention group in dosage but there wasn't a statistical difference in the measures of adherence. Overall, there were not substantial increases in language and literacy instruction in either the control or the intervention group (Mendive, Weiland, Yoshikawa & Snow, 2016). A literature review of promising interventions for teaching social and emotional learning (SEL) to early childhood teachers concluded from their research that effective SEL interventions include PD for teachers, embedding instruction throughout the daily routine, and that families are also engaged so skills are practiced in both home and school. The PD opportunities in the studies examined included teachers attending a training and in some cases receiving coaching to follow the training. The results of their study were inconclusive and found that more research needs to be completed in order to distinguish the effect that professional development and coaching has on teacher practices (McClelland, Tominey, Schmitt & Duncan, 2017).

Methods

Participants

Control group

The participants in the study are six caucasian female preschool teachers who teach in school districts located in southern Iowa. There are three teachers in the control group. Teacher 1 has been teaching for a total of twenty years and has taught preschool for fourteen years. The teacher has an early childhood education degree and the classroom follows Head Start standards. The students in the classroom are all in their four year old preschool year. The program has two half day sessions that meet four days a week. Teacher 2 has been teaching for a total of eleven years, seven of those years as a preschool teacher. The teacher has an early childhood special education degree, the classroom follows Head Start standards, and the students are all in their four year old preschool year. The program meets five days a week and is an all day session. Teacher 3 has been teaching for a total of twenty nine years, all of which have been in preschool. The teacher has an early childhood special education degree and the classroom follows the Iowa Quality Preschool Program Standards (IQPPS). The students in the classroom are in their four year old preschool year or three year old students on Individualized Education Plans (IEPs). The program has half day sessions that meet four days a week.

Intervention group

There are three preschool teachers in the group that received coaching. Teacher 4 has been teaching for thirty-two years and is in her first year of teaching in a preschool classroom. She is currently obtaining her early childhood education endorsement and her classroom follows Head Start standards. The students in the classroom are three, four, or five years old. The

program meets four days a week and is an all day program. Teacher 5 has been teaching for fifteen years, all of which have been in a preschool classroom. The teacher has an early childhood special education degree and the classroom follows the IQPPS. The students in the classroom are in their four year old preschool year or three year old students on Individualized Education Plans (IEPs). The program meets for half day sessions four days a week. Teacher 6 has been teaching for sixteen years and ten of those have been in a preschool classroom. The teacher has an early childhood special education degree and the classroom follows Head Start standards. The students in the classroom are all in their three year old preschool year. The program meets for a three hour session four days a week.

Measures

The instruments used to collect data were designed to reflect what was taught during the professional development course. A confidence rating scale was designed by the coach with seven items on it. Each item asked participants to indicate their level of confidence about the topic or practice listed. The scale was from one to five. A one indicated that the teacher agreed with the statement “I do not know anything about this topic.” A five indicated that the teacher agreed with the statement “I feel very confident and could teach someone about this topic/model it for others.” The topics and practices were: embedding social opportunities throughout the day, explicitly teaching social skills, creating and using visuals to promote independence, supporting children in their social-emotional learning throughout the day, planning routines within routines, planning and using reinforcers with students, and providing positive feedback to students in a ratio of 5:1 positive to negative.

A checklist of classroom practices was also designed for teachers to complete. Teachers were asked to check the boxes of the practices they felt they were doing in their classroom. There were a total number of thirty-two practices listed that fell under six categories. The six categories included: teaches social skills to all children using direct group instruction daily, provides natural opportunities to practice the targeted skill, prompts children to use the targeted skill, reinforces behavior when it happens, routines within routines, and preventing challenging behavior. Both of these instruments were filled out by the control and intervention participants prior to the intervention and post-intervention.

Procedures

The purpose of the action research was to determine the effect of coaching along with PD on teacher confidence levels and classroom teaching practices. The participants included six different teachers who all taught in southern Iowa who were all attending the same professional development course taught by the researcher. Three teachers were a control group that did not receive coaching and three teachers in an intervention group received coaching from the researcher in addition to the professional development course.

To gather baseline data, the teachers in both the control and intervention groups were asked to complete the confidence rating scale and classroom practices checklist. The instruments were completed by teachers on January 23. The data for all participants was recorded on Google sheets for both instruments.

On January 24, the participants all attended the in person preschool professional development course. The course titled “Nurturing Social Skills in the Inclusive Classroom” was a six day course taught throughout the school year. PD sessions were held in September,

October, November, January, February, and April. The session held in January was the participants fourth face-to-face day of instruction. The day's instruction included direct instruction, activities to integrate the information into planning, time to brainstorm with other teachers, work time to create visuals, video examples, and time to write steps to take between this session and the following session.

The researcher contacted the teachers in the intervention group following the PD session. The teachers were asked which of the classroom practices or areas listed on the confidence survey, all content covered in the PD course, that they would like to focus on. The teachers were also asked to specify a day and time that worked best for the researcher to observe in the classroom and meet with the teacher. Teacher 4 asked to have her social skills time observed to get feedback on how to engage the students more. Teacher 5 asked for her free play time to be observed for ideas on how to assist her students struggling with social interactions. Teacher 6 asked to have her free play time to be observed for ideas on how to use peer models to teach the social skills. Classroom observations and coaching sessions were held starting on January 29 and concluded on February 13.

All participants in both the control and intervention group attended the professional development in-person session held on February 21. Similar to the January session, the day's instruction included direct instruction, activities to integrate the information into planning, time to brainstorm with other teachers, work time to create visuals, video examples, and time to write steps to take between this session and the following session. Following the PD session, all participants in the study were asked to complete both the classroom practices checklist and

confidence rating scale. The data for all the participants was recorded on Google sheets for both instruments, providing the researcher with data prior to and following the intervention.

Results

In order to determine if there was an impact that coaching had on classroom teaching practices and teacher's confidence levels of the content taught during professional development, data was collected prior to and following the intervention from all participants. The researcher had each participant complete a rating scale in which teachers indicated their level of confidence on seven different areas and a checklist in which the participants indicated the practices they were currently completing in their classrooms prior to when professional development was delivered and coaching was provided.

The rating scale total could be between 5 points, a score representative of not feeling confident in any of the seven areas, and 35 points, a score indicating that the participant felt very confident in their knowledge of and use of the topic or practice listed. Each participant's score on the rating scale increased between the two data collection periods, however the amount of increase varied.

A dependent group *t* test revealed that there was not a statistical significant difference in the change in confidence levels of teachers when only receiving PD ($M = 1.33$, $SD = 1.15$, $n = 3$) as compared to teachers receiving PD and coaching ($M = 3.33$, $SD = 2.00$, $n = 3$) following a coaching intervention with a weak effect size, $t(5) = -1.5$, $p = .18$, $d = 1.12$. Due to the small sample size in the study, the results are inconclusive as to if coaching leads to increased confidence levels in teachers.

A checklist of classroom teaching practices was given to teachers prior to attending PD for the study or to attending PD and receiving coaching. The checklist had a total of 32 classroom practices listed.

A dependent group t test revealed that there was not a statistical significant difference in the increase of classroom teaching practices used by teachers when only receiving PD ($M = 4.00$, $SD = 1.00$, $n = 3$) as compared to teachers receiving PD and coaching ($M = 5.00$, $SD = 2.10$, $n = 3$) following a coaching intervention with a weak effect size, $t(5) = -1.22$, $p = .18$, $d = 1.00$. Due to the small sample size of this study, the results are inconclusive as to if coaching leads to increased classroom teaching practices.

Discussion

Summary of Major Findings

The average increase in the confidence level score for the control group was 1.33 points with a standard deviation of 1.15 and the average increase on the same test for the intervention group was 3.33 with a standard deviation of 2. While there was a slightly larger increase between scores for the intervention group, the standard deviation shows that scores varied.

The average increase in the classroom practices carried out by teachers was 4 points for the control group with a standard deviation of 1 and the average increase on the same test for the intervention group that received coaching was 5 points with a standard deviation of 2.1. There was an increase in scores for both the control and the intervention group for this instrument and the scores varied.

The results of the study indicated that there was not a large enough difference in the scores to determine if the coaching intervention led to higher levels of classroom teaching practices or a higher confidence rating. This conclusion could be due to the small sample size.

Limitations of the Study

Some limitations of the study became evident as the study was implemented. The implementation of some of the practices was not as easily achieved by teachers who did not have the same resources as others. For example, teachers who did not have access to color printing, cardstock, or lamination could not provide students with as detailed or as many visuals as other participants. Classrooms with fewer materials that lead to social opportunities (games, enough materials for two or more students, etc) or classrooms that had fewer students with strong

communication skills may not have been able to arrange activities and lessons that promoted interactions as easily.

Another limitation was the amount of time that the teachers had to train their staff that did not attend professional development. In some classrooms, the paraprofessionals in the classroom attended the PD session however this was not the case in all the classrooms. The instruments were completed by the teachers prior to and following the study however the teachers may not have felt that their classroom was carrying out a practice if all the adults in the room were not engaging in the practices.

One limitation that may have had a large impact on this study was the variance in teachers' years of teaching preschool, previous exposure to similar content, and the experience of the teachers providing instruction, accommodations, or modifications to students with IEPs. There was a wide range in teaching experience in a preschool classroom ranging from it being a teacher's first year in a preschool classroom to another teacher's twenty-ninth year teaching preschool. A teacher's general knowledge of common practices in a preschool classroom such as the visuals and hands on materials in a preschool classroom may cause a discrepancy in the practices put in place and in a teacher's confidence level. The familiarity with the content could have affected the level to which teachers felt comfortable implementing the practices. If some teachers have prior knowledge about teaching social skills, creating an inclusive classroom, or general best practices in preschool, scores could be affected by this knowledge. Similarly, if a teacher was hearing some of the information for the first time, they may not be as likely or it may be more difficult for them to apply it to their classroom. The experience of the teachers could also be a limitation when it comes to their knowledge of how to support students who need

additional support or students who are on IEPs. Creating and using visuals with students or teaching social skills in a very explicit way may not be as comfortable for teachers who are not familiar with those strategies. This could lower the likelihood of those teachers feeling confident or carrying out certain practices.

A limitation could be that teachers were very subjective in their responses as to which practices they felt they should be completing in their classrooms rather than which ones they truly are completing. While it was stated that the data collected would be used for research purposes only, teachers also could have been thinking the instruments were evaluative in some sense of the professional development course offered.

Further Study

In the future, the researcher hopes to complete further research and expand on the study in multiple ways. Increasing the number of participants in the study would create a larger set of data on which the effects could be observed. More data points could be analyzed to determine if teachers who have been teaching preschool for a longer period of time versus a shorter period of time show more or less of a change before the intervention compared to following it. A change that could be made to a future study is to use an observation tool completed by an objective outside observer to give each teacher a score so that the results are objective and based on what is observed in the classroom. The researcher suggests that a similar study be completed by other professionals who provide coaching to preschool teachers in other areas of the state or in other states. Ethnicity, gender, culture, and socioeconomic status could impact the study results.

Conducting further research may help gather more data that can further explain if coaching provided to teachers can increase teacher confidence levels and the use of classroom practices.

Conclusion

Preschool teachers play an important role in setting young children up for success in later grades. Teachers can improve their practices to do what is best for their students through continuously learning while in the profession. One way that teachers learn about recent research and stay up to date on the best practices for children is by attending professional development courses or workshops. While professional development can inform teachers, research indicates that teachers are able to implement the changes more easily and create a higher chance of increased student outcomes when coaching is provided in addition to professional development.

This study examined the effect that coaching in addition to professional development could have on the number of classroom practices being carried out in the classroom and the confidence of the teachers in applying the content taught during the PD course. This study had a small number of participants and the results could not determine if coaching had a positive effect on the areas in which data was collected. Additional research would be beneficial with a larger number of participants and possibly participants who vary in gender, ethnicity, and socioeconomic status. While this study's results were inconclusive, there is a body of research that indicates that coaching benefits teacher and students outcomes in a positive way.

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