

# Teachers' Experiences of Using Play and AI's Pals to Teach Socio-Emotional Skills through Coaching Support Models

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## Abstract

Interactive teaching strategies provide opportunities for engaging children in discussing difficult concepts such as socio-emotional well-being and a wide range of ideas about their social and personal lives. However, few studies have explored preschool teachers' efficacy of using coaching through Play and puppetry (AI's Pals) programs as approaches to developing children's socio-emotional learning and well-being. This paper reports on a "Labyrinth Project" in which 12 teachers participated. The study aimed to gain an in-depth understanding of preschool teachers' experiences and perspectives on their efficacy of using play and puppetry to promote children's socio-emotional learning and development. A 28-hour professional development involving 10 sociocultural-relevant coaching sessions facilitated a progression from a feeling of inadequacy to confidence to teach social-emotional skills using play and puppetry. Findings indicated that coaching relative to the teachers' sociocultural needs was effective in improving teachers' efficacy in using Play and AI's Pals, resulting in children demonstrating improved cognitive skills in managing their emotions. Practical affordances of the findings are discussed with implications for future research to deepen understanding of the relevance and efficacy of the use of Play and AI's Pals in children's development of cognitive capabilities to regulate their own emotions.

## Keywords

AI's Pals, coaching, emotional regulation, play, puppetry, teacher efficacy

In contemporary times, the teaching of social-emotional skills continues to gain increasing attention in preschools (Blewitt et al., 2021; Dennis & Stockall, 2015). Early childhood

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teachers use diverse play-based teaching approaches to develop children's socio-emotional skills (Ferreira et al., 2021). Socio-emotional learning extends beyond the physical presence of children in early learning environments (Doctoroff et al., 2016; Ferreira et al., 2021; Fung & Cheng, 2017).

Studies have shown that teachers in early learning centers continue to struggle with effective classroom management because of the diversity of learner behaviors (Keung & Cheung, 2019) and the lack of adequate professional skills to support the development of positive behaviors in the classroom (Doctoroff et al., 2016). The lack of support necessitates educators' acquisition of the requisite skills and self-efficacy to successfully employ evidence-based approaches to teach socio-emotional skills.

Approaches such as the use of play and AI's Pals and coaching supports have been described as effective pedagogical strategies to teaching children to develop social-emotional skills (Ahlcrona, 2012; Kirk & MacCallum, 2017).

## **Literature Review**

### **The need for children's emotional regulation skills and intelligence**

Emotional regulation and emotional intelligence are important concepts in early childhood education. Researchers described emotionally intelligent children as having the capability to self-regulate their emotions as well as respond to, influence and manage other children's emotions (Bierman and Motamedi, 2015).

Studies have claimed that children who develop appropriate emotional regulation skills are better prepared for learning, leading to higher academic performance (Durlak et al. 2011; Bavarian et al. 2013). The ability to regulate emotions in a timely manner has been associated with emotional intelligence, which enables children to manage stressful situations in their social and cultural learning spaces (Bavarian et al., 2013; Doctoroff et al., 2016). Managing stressful situations is often demonstrated during transitions and when children work on complex tasks as an individual or in group situations. Researchers argued that emotional intelligence is a strong predictor of self-regulation skills, better attention, problem-solving skills and enhanced cognitive functioning (Durlak et al., 2011; Soutter et al., 2012).

According to Hoffmann and Russ (2012), children who are capable of effectively regulating their emotions have higher distress tolerances because they develop more resilience and positive adaptation when confronted with social situations at home, their social environment and school (Upshur et al., 2017). It is claimed that many childhood disorders such as Oppositional Defiant Disorder (ODD), anxiety disorders, eating disorders and childhood depression have been associated with deficiencies in emotional regulation skills (Soutter et al., 2012; Flook et al., 2015).

It is also argued that children who lack appropriate skills to regulate their emotions are more likely to grow up to have work and family-related problems, poor health, and well-being issues (Hoffmann & Russ, 2012). Against this backdrop, this exploratory study sought to determine the effectiveness of the Play and AI's Pals pedagogical strategies.

### **Improving Socio-emotional skills and well-being through play**

Children's well-being is often associated with their ability to regulate emotions. Well-being is described as comfort, happiness, and a healthy state of being (Ben-Arieh et al., 2014). When children are afforded the opportunity to play with support from adults to structure play with peers, children tend to explore others' points of view and respond positively to the feelings of others, thus promoting their social-emotional learning. Several studies have made strong links between children's well-being and their learning and development through play (National Research Council & Institute of Medicine, 2000; Miller et al., 2013; McLellan & Steward, 2015). Researchers found that the nature of children's socio-cultural environments, institutional settings, and their ability to regulate emotional experiences do contribute to their overall well-being. (Soutter et al., 2012; McLellan & Steward, 2015). This positions educators, families, and capable adults as critical resources in structuring play for children. Children's quality of life can be determined by their emotional well-being (Yamaguchi, 2015). Hascher (2003), for example, claimed that children's well-being " . . . is an emotional experience characterized by the dominance of positive feelings and cognitions towards school, persons in school, and the school context in comparison to negative feelings and cognitions towards school life (p. 129)."

In this sense, there is a need to explore ways that children can be supported to develop core capability skills to regulate their emotions to reap the full benefit of emotional well-being.

Play constitutes an important aspect of children's learning and development as it enables them to engage creatively in their natural environment and learn the necessary social and cultural skills for life (Bodrova & Leong, 2011). Play enables children to develop their social skills with their peers. The value of play is also explained in the ways it offers children the capability to respond to environmental and social situations with a range of emotions in a well-regulated manner (Joseph & Strain, 2003; Panfile & Laible, 2012). According to Vygotsky (1967), learning is a social process and through social interactions in play, children learn and develop important values and practices of their culture. Meaning exposing children to a learning environment that is positive and rich in play resources, adults and other children can contribute greatly to the development of practical emotional regulation skills.

### **Teacher efficacy and roles in teaching emotional regulation skills**

The use of play for teaching emotional regulation skills requires a high level of teacher efficacy for children to reap the full benefit of their learning (Panfile & Liabile, 2012). Teacher efficacy refers to their beliefs in their capability to impact student learning (Bandura, 1997; George et al., 2018; Reyhing & Perren, 2021). Teacher efficacy is a critical factor in the success of schools; high-efficacy teachers are more likely to set goals that are challenging for their students and are more persistent in their effort to improve student learning than teachers with low efficacy (Henson, 2003; Reyhing & Perren, 2021).

Preschool teachers act as role models and support young children's actions in the ways they express or regulate their emotions (Joseph & Strain, 2003; Hoffmann & Russ, 2012; Nix et al., 2013; Reyhing & Perren, 2021). Hunter (2008) argues that, through play, children develop social interaction skills, which is an essential component of emotional regulation. Social interactive skills are commonly exhibited during socio-dramatic play activities where children learn to value and take others' perspectives into consideration (Ashiabi, 2007). Similarly, during pretend play, children build core capabilities for emotional regulation as they interact and work with others within their social, cultural, and institutional settings (Ashiabi 2007; Hoffmann &

Russ, 2012).

The effectiveness of educating children to develop emotional regulation skills depends on preschool teachers' abilities to select an appropriate intervention curriculum, develop, and implement appropriate teaching approaches, and then evaluate their impacts. Selection of appropriate interventions requires staff training and coaching on skills needed to make informed choices regarding which programs can make the best impact on children's socio-emotional learning.

### **Coaching and teacher efficacy**

Coaching is an ongoing professional training in which a professional with expertise work to enhance or change practice and develop skills (Kirk & MacCallum, 2017). Coaching has been used in education to assist teachers in enacting behavior, academic and social interventions and in learning essential skills from adults and peers who have expertise in a particular area (Doctoroff et al., 2016). Coaching acts as a conceptual space where educators develop important skills by keenly observing others' behaviors and actions and or following their guidance (Slot et al., 2017). As a learning conceptual space, keen observation during coaching enables children to perceive adults' and peers' demonstrable actions, study them, internalize them and then replicate them in similar situations (Flook et al. 2015). Therefore, teachers', peers', coaches', and parents' approaches to socio-emotional learning can set the foundation for children to model and develop their own self-regulation skills (Jones et al., 2015).

Hoy (2000) suggests that professional development programs can be effective in enhancing teacher efficacy, as they provide teachers with the requisite skills to improve their teaching practices. Ross and Bruce (2007) argue that feedback that values and respects teacher efforts can increase teacher efficacy. Studies suggest that by cultivating a professional growth mindset in teachers, they would perceive their abilities as limitless, and yield to ongoing coaching, which would increase their self-efficacy (Chen & Luemann, 2018; Tsahannen-Moran & Johnson, 2011).

### **Affordances of AL'S Pals in teaching socio-emotional skills**

AL's Pals is a resiliency-based early childhood curriculum and educator training that develops personal and socio-emotional skills in children ages three to eight years old. AL's Pals teaches young children how to express their feelings appropriately using three puppets namely AL, who is considered the star role model, and his friends Keisha and Ty (Gershon & Pellitteri, 2018). There is a music component that teachers can also implement in a sing-along with children with titles that align with the child's well-being and reinforce lessons.

AL's Pals uses puppetry to teach young children to understand difficult and complex concepts. Studies have shown that AL's Pals positively impacts children's socio-emotional development. For example, in a quantitative study, Fantuzzo et al. (2016) found that children who participated in the AL's Pal's program showed improvements in developing socio-emotional skills, such as problem-solving, relationship building, and self-regulation skills, compared to children who did not participate in the program. Similarly, Pierce et al. (2019) found that children who participated in a program where puppets were used as pedagogic tools showed less troubling behavior. In addition, teachers who fully participated in the program reported

increased confidence in their ability to support children's socio-emotional development.

Izard et al. (2019) suggest that AI's Pals may strongly impact children from low socio-economic backgrounds to learn complex skills. Research indicates that the use of AI's Pals is effective for children's socio-emotional development, particularly in the areas of self-regulation, problem-solving and relationship-building (Ahlcrona, 2012).

The overview of the literature reveals that although there have been reviews in the areas of play and puppetry to improve children's well-being in general, there is a dearth of research in recent years using evidence-based practices to ascertain the impact of play and puppetry on developing children's socio-emotional skills and teacher efficacy. It also reveals that other areas such as the use of coaching can inspire the pedagogical use of play and puppetry in early childhood education.

This study contributes to the literature on developing socio-emotional skills and will enhance teacher preparation programs in the implementation of evidence-based practices. The study aimed to gain an understanding of how professional development and support improve teachers' efficacy in teaching socio-emotional skills through Play and AI's Pals. It focuses on the impact of using coaching for two distinct interventions with early childhood teachers and the children in their classrooms. The first intervention is a play-based pedagogy that incorporated two self-active play sessions per day with children and included specialized training for selected teachers in early childhood centers. The second intervention (AI's Pal's) was designed to promote social and emotional skills with the children and includes specialized training for the teachers. The questions that informed the study are:

- How does ongoing coaching support for teachers during the power of play and "AI's Pals" implementation translate into the development of socio-emotional skills in preschoolers?
- How do teachers describe their experiences of program impacts, challenges and supporting structures regarding the use of Play and AI's Pals in teaching children to develop socio-emotional skills?

The three-year research study was intended to include four teachers per year, with two teachers using play pedagogy and two teachers using AI's Pal's intervention. Over the three-year period, the research included a total of 12 teachers in three cohorts A, B and C. This paper reports on five teachers who have implemented the two interventions because researchers reached a data saturation point where the researchers determined that enough data were collected at the time of writing the study report to draw certain conclusions with only five researchers at the onset of the COVID-19 pandemic.

### **The present study: 'The Labyrinth Project.'**

The Labyrinth project is informed by the socio-constructivist theoretical lens in which meaning and understanding are developed through engaging learning experiences that require the individual to actively participate in their own construction of knowledge (Vygotsky, 1978). Socio-constructivist process of active involvement in constructing knowledge is the foundation for the labyrinth study and is believed to improve theory and practice for preservice teachers, in-service teachers, families, and children.

The study is a three-year labyrinth project to evaluate two forms of approaches to teaching children emotional development skills. According to Webster's dictionary, the

Labyrinth is a path of winding ways, which represents an ancient symbol of wholeness with an imagery of a spiral loop with a meandering but purposeful journey. The project was named Labyrinth to describe the complexity of developing children’s socio-emotional skills and how educators can develop educational pathways that afford opportunities for all children to reach their emotional destinations. The overarching goal of the Labyrinth Project is to assess preschool teachers’ experiences, their self-efficacy, and the impact of Play and AI’s Pals program on preschool children’s socio-emotional development. The two programs build significantly on CHI St. Joseph Children’s Health’s (CHI) long-standing commitment to improving the health and wellness of young children in Lancaster County in Pennsylvania. The institution also provided the needed funding to support the labyrinth project. CHI St. Joseph Children’s Health focuses on providing programs and services to create the structures and opportunities necessary for children and families to live healthy and full lives.

## Method

### Study Participants and Procedures

A qualitative study was used to explore insights into providing coaching support for educators with the use of Play and AI’s Pals that sought to enhance teacher efficacy and children’s socio-emotional learning. Purposeful sampling was used to select 76 children whose parents signed consent forms and submitted assent forms to participate in the study.

Purposeful sampling was used because it helped the researchers to target specific early childhood educators and children and how the teachers used Play and AI’s Pals to afford the children’s socio-emotional learning. It is argued that purposive sampling is a valuable sampling strategy when researchers are interested in specific participants that would provide rich data to answer the research questions and achieve the study aims (Creswell, 2013; Patton, 2015).

School visits were conducted by securing formal approval from the center directors. During the school visits, five teachers were selected out of the 12 because they had reached the data saturation point as opposed to the other seven teachers whose students were out of school most of the time and two of the teachers who were expressing concerns over the content of the AI’s Pal’s curriculum as not developmentally appropriate. (See table below).

Table 1 shows the number of participants in the study and the nature of their participation.

Table 1  
Study participants

Center	Approaches	Teacher	Age of Children	Total Number	Female	Male
Center 1	Play	Julie	4-5	9	4	5
Center 2	AI’s Pals	Amy	3-5	20	10	10
Center	Play	Emily	4-5	19	8	11

3						
Center 3	Al's Pals	Michelle	3-4	15	10	5
Center 3	Al's Pals	Sarah	4-5	13	8	5
		5		76	40	36

**Study Setting**

The study was conducted across three early childhood centers with five classrooms. Teacher efficacy was also explored in the overall process evaluation with preliminary findings. Three different daycare centers, which included five classrooms, utilized the two approaches to support the socio-emotional development of 76 children in Lancaster County. All 76 students were not involved in a particular school year as they rotated during the study period. Two of the classrooms used a 'Power of Play' program with the children, and three other classrooms used the 'Al's Pals' as the approach to promote social and emotional growth in the preschool-aged children.

The play pedagogy was designed with different play materials such as blocks, soft pipes, and rings to increase children's imagination and to guide intentional play. Teachers did not have a play curriculum that they used and were provided training on both play and Al's Pals. All classrooms did not use play and Al's Pals concurrently because researchers wanted to see which had the most impact, which will be determined at the end of the research project. Both approaches were purposefully targeted at promoting and stimulating growth for early childhood-aged children in the areas of social and emotional development with constant coaching from researchers.

**Research Approaches**

The Labyrinth study applied observation, interviews, and surveys as data collection approaches to enrich the research process. Firstly, teachers responded to a 29-item pre-observational survey to ascertain their levels of efficacy related to the power of play and the Al's Pals program. A pre-observational survey provided a baseline of teacher's knowledge about the two programs. After, a full day play workshop was conducted by the researchers at Millersville University for teachers to gain a deeper understanding of how to structure developmentally appropriate play for emotional regulation teaching and learning with intentionality.

Participants were involved in solo play, parallel play, and group play to model it appropriately in their classrooms. The one-day workshop was followed by a two-day Al's Pals training by Wingspan, the Al's Pals program developer. All teachers who participated in the research attended the training as intended by Wingspan Al's Pals in Columbia, PA. Through these workshops and ongoing coaching support during the research process, teachers were equipped with strategies for helping children acquire social and emotional skills.

The Al's Pals workshop included 46 interactive lessons that teach children how to practice positive ways to express children's feelings, brainstorm ideas, problem-solve, self-

determination skills and differentiating between safe and unsafe substances and environments.

The strategy used incorporated read-aloud scripts that shared various opportunities for children in the centers to see social and emotional skills embedded in their curriculum and daily routines.

After the training, three researchers supported by three research assistants conducted twenty non-participant video observations which lasted for 20 minutes each for two terms. The non-participant video observations were used to capture children's participation in play and Al's pals in their natural environment. The observations occurred in all five preschool classrooms. The purpose of the observations was to document teachers' teaching practices using Al's Pals and approaches and to record children's responses to the approaches. The prior training and coaching aided the teachers in furthering their understanding of the power of play and Al's Pals teaching approaches.

Post observations, face-to-face interviews were conducted with five teachers using a pre-determined questionnaire to determine their experiences with using interventions and the impact of the ongoing coaching support provided by early childhood professionals. Teachers' confidence levels in teaching socio-emotional skills were also assessed. Each interview lasted 20 minutes on average, followed by a survey monkey with follow-up questions in each respective teacher's school.

The interviews were to ascertain progress and challenges in implementing the two approaches to the coaching support provided throughout the lessons. Teachers reported their confidence levels as low in the beginning of using play but improved as coaching was received in using more structured play. Low confidence in using the ALs' Pals because of its scripted nature was also reported by two teachers. The direct observations offered the opportunity for anecdotal writing of observable behaviors children and teachers demonstrated throughout the teaching, coaching, and learning process (Loizos, 2008).

In addition, the video observations provided concrete evidence of benchmarks from various developmentally appropriate goals and objectives in terms of the play-based pedagogy and Al's Pals program. Loizos (2008) suggested the use of video recording "whenever any set of human actions is complex and difficult to be comprehensively described by one observer as it unfolds" (p. 149).

Finally, the results were assessed using the GOLD Teaching Strategies program, specifically measuring socio-emotional skills. The Gold Teaching Strategies is an ongoing observational tool for observing children from birth through kindergarten that helps teachers' observation in children's daily interactions. (Lambert et., al 2015). Observational data collection tool was used by the teachers to help them perceive and identify the ongoing growth and development of children across social-emotional domains. Each teacher was provided an iPad to keep during the first year of the project for use to record data into the GOLD assessment system. Teachers collected observational data as they observed and documented children's learning during their engagement in meaningful social exchanges and experiences.

Ten ongoing coaching sessions, which lasted 20 minutes per session, occurred concurrently during the play activities and the Al's Pals lessons. The researchers provided coaching by giving feedback to teachers during play. In addition, the researchers gave instant feedback on structuring play and guided teachers during play to encourage solo play when children were new to their friends and gradually shifted towards cooperative play. The ongoing



support resulted in children having downtime when it was needed and working to develop friendships. Researchers recorded each time feedback was given and modeled some structured play with students. As the ongoing coaching supports were provided, teachers reported building confidence in how structured play yielded positive outcomes in how students regulated their behaviors.

### **Ethical Aspects of the Research**

Permission was obtained from Millersville University's Institute Review Board. Teachers were given a consent form to sign for voluntary participation. Parents consented to the video recording by filling out a parental consent form while the children verbally responded to an assent form. However, there was one parent who was interested in the project but declined photographs of the child because the child was fostered.

### **Data Analysis**

The research team transcribed, coded, and analyzed the data using Braun and Clarke's (2006) six analytical approaches to qualitative data analysis. Each member of the research team coded and analyzed the data separately under the direction of the principal investigator. First, we immersed ourselves in the data through repeated reading and re-reading, noting initial ideas in the complete data set for both play and Al's Pals. We developed initial coding groups when we noted the essential elements in the data from all data sets.

Highlighting segments of the data with additional notes assisted us in the coding process. After collating data relevant for each coding group, we shared our coding groups and explored them to search for potential themes. We then developed thematic groups and later revised these groups to ensure our coded extracts provide sensible interpretations of the data set. The research team refined the thematic groups taking into consideration the research questions and purpose of the study.

We completed our analysis by assigning meanings to the themes, linking them to representative extracts for deeper meanings to be derived from each theme. We then inspected the completed analysis with the extracted themes to ensure representative extracts resonate with the research questions. Credibility was maintained using inter-observer reliability among researchers familiar with the Play and Als' Pals yielding 98% fidelity. These researchers received training in both interventions and using inter-rater reliability.

### **Findings**

Throughout the analysis of the data, researchers found emerging themes that suggest that using coaching supports to enhance teachers' use of pedagogy of play and puppetry not only increases teacher efficacy but also helps in improving the socio-emotional development of children. Through an extensive review of the literature, the researchers analyzed key themes from this study with reference to participant's insights in the following sections.

### **Teachers' Insider Perspectives of Program Impacts**

We present preliminary findings of the first and second year of exploring how coaching on the use of play and Al's Pals improves teacher efficacy and helps improve children's socio-

emotional skills.

Pseudonyms have been used throughout. Analysis of video observations, interviews and questionnaires suggest that generally, the AI's Pals approach proved more efficacious for teachers in teaching emotional regulation skills than the use of play-based pedagogy. We presented the findings under themes supported with representative quotes from participants. At the point of entry to the project, teachers described their own self-efficacy in teaching social-emotional skills to children as low, as evidenced in the baseline data collection that sought to measure teachers' level of confidence in teaching socio-emotional learning. They also described children they were teaching initially as lacking self-determination skills and being uncontrollable. Also, at the time of entry, teachers described having reached a point of crisis in trying to support children in controlling their emotional outbursts when they tried to develop relationships with other children and staff.

However, as the program progressed with constant coaching and modeling, teachers described an improvement in their self-efficacy and relationships with their children in developing their emotional regulation skills. The use of AI's Pals was one of the most memorable and valued aspects of the program and was often cited as bringing about increased teacher efficacy and change in the children's emotional regulation skills. Amy, who was involved in the AI's Pals program, stated:

I have learned the importance of direct social-emotional teaching. AI's Pals has helped create a consistent time for intentionally teaching social-emotional development. Prior to AI's Pals, we tried to incorporate social-emotional development in regular routines, with on-and-off success. Using a set curriculum with ongoing coaching supports has ensured it will be taught.

Michelle also echoed similarly that the use of AI's Pals helped them to create lessons that children actively contributed to:

I have learned that it is important to give the children the opportunities to positively deal with emotions and conflicts with guidance. It is important for the teacher to stand back a little and let the kids handle it.

The changes that teachers began noticing in children's development of social-emotional skills improved teachers' sense of self-efficacy and reinforced the idea that change was possible. Teachers could teach children to develop emotional intelligence, as stated by Sarah: "I have learned that children are capable of ... and actually want to be in control of their own behavior, and we teachers have the capability to teach and support them."

Julie, commenting on the program, stated: "I have seen how important play can be for a young child's development." However, there were more positive comments from teachers who were involved with the AI's Pals intervention program. Sarah, for example, noted, "The AI's Pals program promoted shared learning opportunities for both students and teachers to engage in deep discussions about complex emotional exchanges." The teachers reported that "play was child-centred" (Emily) while "AI's Pals offered more opportunities for adult-led interventions." (Amy). One preschool teacher explains:

One story I want to tell from the AI's Pals intervention is that it benefited children with developmental delays in my classroom because I was in charge as a pedagogical leader; for example, children with developmental delays could wait for their turns when sharing resources (Michelle).

Our observations showed that there was a sense of reassurance that the children were demonstrating real-time control over their emotions rather than relying on teachers to regulate their behaviors. Indeed, it was clear to us as researchers that the Al's Pals intervention played a role in this. Demonstrating a sense of reassurance was corroborated by Michelle claiming that "each child has grown in self-control, and this fueled our continued efforts to better children's lives using the Al's Pals interventions." According to some of the teachers, parents also reported an increase in self-determination skills in children. Sarah noted that a parent told her, "My child is now showing signs of self-regulation and autonomous behavior after going through the program." Evidence was substantiated by Amy, who claimed: "A parent told me her child is demonstrating evidence of self-efficacy of how his own actions may impact consequences for him."

Over the second year of the program, Sarah, who was involved with the Al's Pals intervention program, claimed: "Parents often express how much they loved Al's Pals." Consequently, teachers generally expressed their desire to have other teachers trained to expand the program to other preschools. Thus, most of the students highly benefited from Al's Pals or the Play Pedagogy program. Generally, many of the pre-and post-observational survey responses were very similar in that children were reported as making friends, interacting positively with their teachers and exhibiting fewer problematic behaviors. For example, teachers also reported having increased their skills in observational strategies and reported that because of ongoing coaching, not only have their skills improved in teaching, but they also see increased positive behaviors such as self-regulation and relationship-building in children.

Teachers also reported an increase in children's socio-emotional skills. Ideas on how the programs impacted the children remained the same, with the teachers believing that multiple areas are being through the coaching they received. For instance, one teacher said: "I have seen the children's building skills of growth and change. Their ability to play independently has improved... some are now able to play quietly" (Julie). Children's progress was noted in both surveys, showing how the programs continue to improve student development. Sarah, for example, claimed that "children have used the Al's Pals for calming down...and others have incorporated new language with their emotions..."

### **Adults' and Professionals' Roles in Supporting Children's Socio-emotional Skills**

As mentioned earlier, although both Al Pal's and Play's pedagogy show some potential to support young children, they are similar and different in several ways. On the one hand, Al's Pals appears to be a bit easier for the teachers to implement because it is scripted and is more teacher-centered in its instructional methods. On the other hand, play appears to be more child-centered but requires teachers to structure play sessions and facilitate them in an engaging manner. In Michelle's view, "Al's Pals focuses on socio-emotional growth and decision-making." This view is different from that of Julie, who sees play as "more child-centered and addresses child development in every domain (i.e., cognitive, linguistic, physical, socio-emotional etc.)."

We have learned that all teachers are well intentioned in all centres and working hard to support the overall growth of children. The team has therefore suggested Al's Pals to one centre because they have difficulty implementing play pedagogy.

One of the most notable successes of the project is the recognition of the significant

roles that adults and professionals play in assisting children in regulating their behaviors. Children must learn the skill of self-regulation, and this correlation helps to better define the terms in which they can do so. The teachers claimed that the coaching support received during play pedagogy assisted the children in a variety of areas of growth. During an interview, one teacher relays the student growth that she has witnessed, saying, "Adult involvement in play gives the children opportunities to grow in areas of problem-solving, social interactions, and creative thinking." Emily claimed that:

At the beginning of the year, the children were interested to discover the materials in the bags and what could be done/built with them. Now, there are times when it is a chore to get them to play independently with the materials.

Julie was surprised at how children were deeply involved with the materials by saying: "It is very interesting to observe the children engaging in this type of play. My students this year have shown great creativity." Within a short period of implementing the programs, teachers noticed an improvement in their own teaching skills and children's behavior, which promoted their sense of professional efficacy and engagement in the program. The flexibility afforded by the program was also praised by some participants:

We love the program! We find the lessons easy to implement and developmentally appropriate in delivery and content. The students respond well to the lessons, and family feedback is positive (Amy).

In addition to its flexibility, the introduction of puppets (Al's Pals) made the lessons come alive for the children. These puppets modelled real-life contexts and scenarios for students, facilitating their conceptual understanding.

I feel like the program is very effective with the children. They connect with the puppets. I do think that the concepts should be revisited and repeated later in the year (Michelle)... Our children LOVE all the puppets... and listen and learn from them. Many children incorporate these social skills into their daily life in school (Sarah).

One of the interesting findings of this project is the learning and behavioral changes that the teachers noticed in the children: "I have seen the children's building skills grow and change. Their ability to play independently has improved. Some are now able to play quietly (Emily). Julie reiterates, "I believe that this type of play has helped my students to develop creativity and problem-solving and has challenged them to use their brains and bodies in new ways." Teachers describe how the program is helping them teach children to regulate their emotions.

Students have used Al's Pal for calming down (even suggesting it to parents when upset), and students have incorporated new language with their emotions - feeling frustrated instead of just "sad." The music has been able to be incorporated in the classroom for continual self-esteem building (Sarah).

Ironically, it was not just a one-time occurrence, but a practice built on the holistic development of children in Amy's view: "The children and I can revisit ideas learned and talk about the concepts and songs." She goes on to say,

Children ask to share a toy. Children ask to be incorporated into a group of children who are playing. Children openly identify and express a feeling. Children openly and with confidence say, "I don't like that. Please stop!"..... the friend stops and says, "I'm sorry". "I forgive you" is the response (Amy).

### **Challenges with Family Involvement in Supporting Social-emotional Program**

In this study, teachers shared their experiences regarding parent involvement in the emotional learning program and the challenges faced. Julie, for example, noted, "Not one parent has said anything to me." Similarly, another teacher expressed that

I don't think the families of my students have been impacted much by this project because they have not seen in person how the project affects their students. I have shared pictures with families, and I hope they are impacted by what they see (Emily).

Contrary to these perspectives, Sarah said:

Parents have responded very favourably to AI's Pals. Children are discussing AI's Pals at home, and parents are hearing the results of the curriculum. I am not sure that parents are following at home. However, they have told me many times of unexpected, good social behaviour at home. (Sarah)

### **Challenges with Pedagogical Implementation**

Despite the positive outcomes of this intervention, teachers expressed various views about the challenges of delivering the program. According to the teachers, parent involvement has remained the same, with few parent comments. Another aspect that remained constant in our data is the desire for more materials for the play pedagogy program. One of the main variances, however, regards the assessment methods. Evidence from the data suggests that, unlike the AI's Pals, the play materials made it difficult for the teachers to engage the children. Emily noted that "a wide variety of materials would help to keep the students engaged throughout the year and enhance teacher efficacy." Julie explains this in detail:

The children are "tired" of the materials. Honestly, so am I. They tend to gravitate toward building-type materials, blocks, spools, wooden spools and balls. Most of the other items are not well received.

Alongside these challenges were "finding enough time in... busy schedule for the children to engage in this type of play as well as cleaning and storing of the materials for the play" (Emily). Other teachers refer to the part-time students as missing out on various aspects of the program. Michelle claimed:

Teachers have to revisit most of the previously taught programs to bring students in line with what is happening in the program because when lessons build on one another, it can be difficult for children that are only part-time students.

Another teacher claimed: "Sometimes it is difficult to fit it into our already full curriculum." (Amy). Supporting this opinion was the comment from Michelle: "It is a challenge for me to stop and focus on the child and not the lesson in the curriculum." Teachers also encountered a big challenge in using AI's Pals due to music often being played on a CD, which is now obsolete as most preschools now use technological devices (e.g., iPads, computers, etc.).

## **Discussion**

This study contributes to research on the uses of Play and AI's Pals in teaching children to develop socio-emotional skills. First, it indicated that working with pedagogical approaches with which teachers are comfortable, and children can easily understand may lead to changes in teachers' efficacy and epistemic beliefs, thus improving children's skills to regulate their

emotions. This work supports other works in this field, suggesting that developing complex skills, such as emotional well-being, requires interventions and coaching support (Aksoy, 2019; Zinsser et al., 2014).

Teachers described moving from a feeling of inadequacy in the first year to a place of confidence in the second year of the study. This finding reinforces the idea that coaching and support can increase teacher self-efficacy to help children's development of socio-emotional learning (George et al., 2018). In this case, teacher leadership is important to support teachers through professional learning to develop efficacy for teaching. It is argued that teacher self-efficacy affects pedagogical practice and child development, including teachers' own resilience and well-being (George et al., 2018; Reyhing & Perren, 2021). Thus, the outcomes achieved in this study have implications for improving the classroom atmosphere and teacher and learner engagement through teacher leadership and efficacy.

Findings from the pre-surveys indicated that initially, teachers were not confident in their abilities to implement the intervention of AI Pals because they were unsure of effective strategies to use in their classrooms. They also identified family involvement as somewhat of a struggle. However, the researchers provided training and ongoing coaching support about their sociocultural and contextual needs, resulting in stronger teacher beliefs and self-efficacy to teach social-emotional skills to children using AI's Pals just as they were comfortable with the use of play consistent with previous studies that teachers' professional development in which there is strong leadership, improves teacher efficacy (Yoo, 2016; Nelson, 2020). Likewise, Nelson (2020) provided evidence that professional development in which teachers have a greater opportunity to lead and contribute ideas resulted in stronger teacher efficacy.

With respect to improvements in children's emotional intelligence, parents who commented on the program indicate that their children are beginning to self-regulate their behaviors and are using the language in the AI's Pals program. Teachers referred to increased self-control skills which they linked to the use of AI's Pals. This suggests that as teachers' efficacy increased with interventions, there was a concomitant increase in children's learning outcomes claims. A longitudinal study found that teachers' success in new pedagogical strategies motivates them to explore more options and develop innovative practices (George et al., 2018). This perspective connects to the influential role of coaching in supporting skill acquisition, highlighting its prominence in developing self-determination skills, and particularly improving children's abilities to regulate their emotions and responses to their peers and adults in social situations (Aksoy, 2019; Upshur et al., 2017). Significant contributions of this research include teachers' increased ability to recognize and monitor children's behavioral expectations, guide children to think critically and support them to better respond to difficult social situations. This is an important finding because teachers positioned themselves as capable professionals to lead and support children following the rules. This can enhance their learning and development (Aksoy, 2019).

The findings also reiterate previous research accounts that social-emotional competencies are best developed in children's early learning environment through interactive and play-based teaching (Bodrova & Leong, 2011; Joseph & Strain, 2003). This was visibly observed through the children's enacted behaviors, including increased ability to make friends, listen to instructions, and be more assertive. The findings that children demonstrated persistence on task most of the time, constructed knowledge from their friends and were

becoming more critical in their thinking skills resonate with previous findings that children who are socially and emotionally healthy are confident and friendly, have good peer relationships, approaches and persists at challenging tasks (Blewitt et al., 2021; Dennis & Stockall, 2015; Joseph & Strain, 2003).

The findings also demonstrate that the process and outcomes of Play and AI's Pals in changing behavior were significantly different. AI's Pals facilitated intervention appeared to thrive within adult-modeling teaching environments delivered in a group context and continuous support for students to change their behavior (Morris et al., 2013). According to participants in this study, the researchers provided this support to the teachers, which was particularly useful in assisting the children to develop emotional regulation skills. Given current research interest in the role of adults such as teachers in developing children's emotion regulation skills (Doctoroff, 2016; Ferreira et al., 2021; Slot et al., 2017), future research might seek to explain the advantage of teacher mentoring in the use of AI's Pals over play as an intervention approach in developing children's emotional regulation skills.

We argue that the power of play pedagogy undertaken alongside AI's Pals approaches to teaching social-emotional skills is an important study. Our study makes a unique contribution to the literature by expanding shared learning using AI's Pals, where teachers' efficacy can be observed, and employing various means to collect data and interpret findings pertaining to teacher efficacy in teaching emotional regulation skills. The main results demonstrated that children were most likely to benefit from emotional learning when teachers are trained to deliver the AI's Pals program. This is consistent with prior research demonstrating that teachers tend to feel confident about a teaching methodology when it incorporates a child's perspective (Jones et al., 2015). In this research, we found some evidence of the AI's Pals program as the preferred method by preschool teachers in teaching emotional regulation skills because training and support were provided by the researchers on a regular basis.

### **Limitations of the Study**

We, the researchers, acknowledge that there are limitations to this study. The small sample size of teachers obtained in the study is a limitation. The teacher sample size generated from a small town through purposeful sampling is also a limitation. Therefore, the study cannot be generalizable to a larger population. There could also be a bias in teachers' rating of their student's social-emotional development as the teacher's proximity to students makes this situation unavoidable. The study also failed to unpack teachers' responsiveness across cultures in the use of play for teaching and learning due to a lack of cultural diversity with the target population. Therefore, the study cannot be generalizable across different cultures.

### **Conclusion**

In closing, we, the researchers, affirm that all the children benefit from being involved in both programs play and AI's Pals as evidenced by increased socio-emotional skills observed in the classrooms. Our data collection and collaboration with the centers and CHI St. Joseph's organization is yielding positive outcomes. This project is making a difference in that there continue to be opportunities to extend the knowledge base in this area and therefore impact children in a positive way. Our preliminary findings provide insights into the fact that providing

coaching support for teachers in implementing play and Al's Pals is increasing social-emotional skills and assisting children in developing core skills such as problem-solving skills and reflection to control their behaviors. Al's Pals and Play potentially reflects a changing pedagogical approach and suggests that teacher efficacy is a crucial factor in engaging in effective teaching of social-emotional skills. Thus, both Al's Pals and play may be avenues for interventions aimed at building children's emotional and socio-emotional skills as it enhances theory and practice in teacher preparation programs.

### Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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