THE UNIVERSITY OF CHICAGO

Building Emotionally Resilient Families:

A Parent Education Workshop (PAT)

By

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August 2025

A paper submitted in partial fulfillment of the requirements for the Master of Arts degree in the
Master of Arts Program in the Social Sciences

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Abstract

Emotional resilience in early childhood plays a crucial role in shaping children's long-term wellbeing, self-regulation, and adaptive functioning. While previous research highlights the importance of parent-child interactions in fostering emotional resilience, fewer studies explore how cognitive processes, like pattern recognition, contribute to this development. This study examines how a third-party parenting program—Parents as Teachers (PAT)—supports parents in building children's emotional resilience through structured cognitive tasks. Specifically, the program guides parents in teaching children how to notice differences, form sequences, and build behavioral patterns—skills that parallel the processes involved in emotional regulation. Using a qualitative case study approach, I collected data from five families through a combination of surveys and structured observations during parent-child activity sessions. Findings indicate that parents not only improved their ability to scaffold children's cognitive patterning but also began applying these strategies to coach emotional regulation, such as helping children recognize emotional cues and develop consistent coping behaviors. This study highlights the critical role of third-party interventions in bridging cognitive and emotional development within family systems. The results underscore the value of integrating cognitive learning tasks into parenting support programs to promote emotional resilience in early childhood.

Key words: Emotional resilience, preschoolers, third-party interventions, pattern recognition, parent-child interaction

Building Emotionally Resilient Families: A Parent Education Workshop (PAT)

Emotional resilience, the ability to navigate frustration, recover from setbacks, and manage difficult emotions, is a foundational skill in early childhood. Research has consistently shown that children who develop strong emotional regulation skills are better prepared for school, form healthier peer relationships, and experience greater long-term mental well-being (Eisenberg et al., 1996; Denham et al., 2012). While emotional resilience is often treated as separate from cognitive development, there is growing recognition that the two are deeply interconnected.

One specific type of cognitive activity where this connection becomes especially visible is pattern recognition. Unlike rote memorization or open-ended play, pattern recognition tasks are structured yet challenging, they require children to notice differences, form sequences, and correct mistakes. These tasks place children in a "just-right" learning zone, where success depends not only on logic but also on managing emotions such as frustration, confusion, and disappointment (Denham, 2007). In this way, pattern recognition tasks uniquely mirror the emotional demands of real-world problem-solving. They offer repeated, manageable opportunities for children to practice both cognitive flexibility and emotional regulation within a safe and guided setting. Yet despite their potential, there remains a noticeable gap in research exploring how these tasks can be used intentionally to build emotional resilience. More specifically, how they might help children navigate setbacks, persist through difficulty, and regulate their emotions in the process of learning.

Despite the importance of emotional resilience, many parents report feeling unsure of how to teach these skills effectively. Traditional parenting advice often focuses on discipline or

behavior management but offers limited guidance on how to coach children through the emotional side of learning and problem-solving. Parents may default to either solving problems for the child or reacting emotionally themselves when the child becomes upset, particularly in moments of failure or frustration.

This is where third-party educational interventions can play a critical role. Programs like Parents as Teachers (PAT) offer structured, hands-on learning experiences where parents are not only taught developmental principles but also coached in how to apply them in real time. These programs act as a bridge between developmental theory and everyday parenting practice, helping parents understand how cognitive tasks (e.g., making comparisons and forming sequences) can be leveraged as tools for building emotional resilience in their children.

Therefore, the purpose of this study is to examine how a third-party educational intervention: the PAT workshop, which designed to helps parents foster emotional resilience in preschool-aged children through cognitive learning tasks. Specifically, the workshop focuses on a pattern recognition activity where children are asked to notice differences, form sequences, and correct mistakes. We hypothesized that third-party interventions using pattern recognition tasks will facilitate both (a) improved parental use of emotion-coaching strategies, including emotion labeling, validation, and modeling calm; and (b) enhanced emotional resilience in preschoolaged children, evidenced by greater persistence and coping behaviors during task-related challenges.

Literature Review

The importance of emotional resilience in early childhood

Emotional resilience in early childhood is crucial for social competence, mental health, and academic success (Denham, 2007). Research indicates that maternal sensitivity at 7 months

predicts emotional resilience in preschool, which is negatively associated with anxiety and

depression (Conway & Mcdonough, 2006). Parents play a vital role in developing children's

emotional intelligence through consistent practice of specific skills during emotionally charged

interactions (Wenling et al., 2023). The preschool years are particularly important for developing

emotional competence, as positive peer interactions during this period are strong predictors of

ongoing mental health and school success (Denham et al., 2014). Emotional competence

encompasses skills such as listening, cooperating, and negotiating, which are essential for

effective social interactions (Denham, 2007). As children become more adept at managing

emotions and interacting with others, they are better equipped to navigate their expanding social

worlds (Denham et al., 2014).

The role of cognitive tasks in emotional development

Cognitive tasks that involve pattern recognition, sequencing, and noticing differences

play a particularly critical role in how young children learn to process emotional information.

Zelazo and Carlson (2012) argue that executive function skills, including cognitive flexibility

and working memory, enable children to shift attention, inhibit impulsive reactions, and manage

emotional responses. This cognitive scaffolding allows children to step back from immediate

emotional reactions and instead rely on learned patterns of behavior to guide their responses.

Similarly, Gottman's Emotion Coaching framework (Gottman et al., 1996) emphasizes

that children learn emotional regulation through predictable, patterned interactions with

caregivers. These patterns are not identical to cognitive pattern recognition tasks but are

conceptually related—both rely on the ability to notice regularities, anticipate outcomes, and

respond with consistency. In emotional learning, these patterns might involve recognizing that a

caregiver responds calmly to distress, validates emotions, and guides problem-solving steps in a repeated and reliable way. Over time, children internalize these emotionally patterned interactions and begin to form generalized strategies for regulating their own emotions (Denham, 2007; Morris et al., 2007). Thus, the predictability of caregiver responses helps build a child's emotional script—just as pattern tasks build a child's ability to detect and respond to structured regularities in visual or logical tasks (Zelazo & Carlson, 2012; Diamond & Lee, 2011).

Neuroscientific research further supports this link. Studies show that the neural circuits governing reward prediction, error detection, and pattern learning overlap significantly with those involved in stress regulation and emotional control (Delgado et al., 2005). When children learn to notice differences, form sequences, and anticipate outcomes in structured tasks, they are also strengthening the neural pathways needed to regulate anxiety, manage frustration, and recover from negative emotions.

Furthermore, in early childhood educational research, interventions that incorporate both cognitive and emotional skill-building are shown to be particularly effective. For example, the Tools of the Mind curriculum demonstrates that embedding pattern recognition and sequencing tasks within classroom activities enhances both executive function and emotional regulation (Diamond & Lee, 2011). These findings suggest that cognitive tasks do more than support academic learning; they are integral to developing emotional resilience.

The third-party educational intervention

Third-party educational programs and community-based parenting interventions play an increasingly vital role in promoting early childhood development, particularly in underserved or high-stress communities. These programs serve as bridges between formal education systems

and families, offering parents the tools, knowledge, and strategies to support their children's cognitive, emotional, and social growth (Sweet & Appelbaum, 2004).

A robust body of research demonstrates that high-quality, evidence-based parenting programs significantly contribute to positive child outcomes, including improved emotional regulation, academic readiness, and behavioral adjustment (Knudsen et al., 2006). In fact, thirdparty interventions are particularly effective when they blend cognitive skill-building with socialemotional coaching. For example, meta-analyses suggest that programs that include structured tasks, such as problem-solving activities, guided play, and pattern recognition, are more likely to yield improvements in both child self-regulation and emotional resilience (Wyatt Kaminski et al., 2008). Such programs create structured environments where parents learn to scaffold their child's cognitive learning while also reinforcing predictable patterns that support emotional development.

Furthermore, the credibility and neutrality of third-party organizations often facilitate better engagement from families compared to schools or clinical settings. Parents tend to perceive third-party educators as supportive partners rather than as evaluators or authority figures (Caspe et al., 2007). This relational dynamic foster trust, which is crucial for encouraging parents to adopt and sustain new parenting practices.

Despite extensive evidence of their effectiveness, a continuing challenge in the field is understanding the specific mechanisms through which third-party programs translate cognitive tasks into emotional growth, particularly in home-based interactions. Unlike school- or clinicbased settings, third-party interventions often emphasize collaborative, nonjudgmental relationships between facilitators and caregivers. These programs operate on a model of

empowerment rather than evaluation, positioning parents as capable learners rather than passive recipients of expert advice. Caspe, Lopez, and Wolos (2007) note that such programs often foster trust by providing accessible, family-centered support that feels more personalized and less hierarchical than institutional settings. This relational dynamic is crucial: when parents feel supported rather than judged, they are more likely to adopt and sustain new parenting practices.

Moreover, third-party settings offer emotionally safe spaces where parents can rehearse new strategies, reflect on their interactions, and receive real-time guidance. This echoes Gottman et al.'s (1996) emphasis on emotional responsiveness, where supportive relationships facilitate learning, not only for children but for caregivers as well. Within these low-pressure environments, parents can better regulate their own emotional responses and become more intentional about guiding their children's emotional development (Morris et al., 2007). This study contributes to a growing understanding of how such relational processes unfold by examining how the PAT program uses a cognitively framed task called pattern recognition, to foster both child resilience and parental capacity. By observing how caregivers apply emotion coaching strategies in a trusted third-party context, this research aims to clarify how the structure and relationships within these programs contribute to both cognitive and emotional development in early childhood.

Methods

Study Design

This study employed a qualitative case study design to examine how a third-party educational intervention, named Parents as Teachers (PAT) workshop, supports parents in fostering emotional resilience in preschool-aged children through a cognitive learning task. The

study focused on how the process of making comparisons, forming sequences, and correcting mistakes serves not only as a cognitive learning experience for children but also as an opportunity for parents to practice emotional coaching strategies with the support of a third-party facilitator.

Participants

Six families participated in this study, each consisting of one primary caregiver and one preschool-aged child between the ages of 3 to 5. Unfortunately, one family withdrew from the study, and the other did not cooperate during the in-person session, so both were excluded from the analyses, leaving a total of four valid data points in the study. All participating caregivers identified as mothers. The participants represented diverse ethnic backgrounds, including three identifying as Black or African American and one as biracial. English was the primary language spoken in all households.

The participating mothers ranged in age from 28 to 42 years old and varied in their educational backgrounds. One mother had completed some college coursework, one held an associate's degree, one had a bachelor's degree, and one held an MA or higher degree. None of the participants reported receiving formal professional parenting support at the time of the study, such as parenting classes, home visits, or therapy services.

The number of children in each household ranged from one to two. The target children in this study all between ages 3 and 4 (three girls and one boy) and displayed a range of temperaments. Their temperaments were reported by parents during the pre-survey. One child was described by her mother as very active and energetic, often moving quickly from one task to another. Another child, a boy, was also characterized as high-energy but with a tendency to

become easily frustrated when things didn't go as expected. A third child was described as easygoing and adaptable, rarely becoming upset during transitions or challenges. The fourth child was noted to be highly sensitive to change and emotionally reactive, needing more support to stay engaged when the task became difficult. This variation in temperament provided a meaningful context for examining how parents apply cognitive and emotional scaffolding strategies during the pattern-learning task.

**Procedure**

Recruitment and consent

Participants were invited by Family Focus staff based on their ongoing involvement in the Early Childhood Program. Recruitment occurred through informal conversations during regular visits or check-ins with the families. Interested caregivers received a verbal explanation of the study along with a written consent form. Once consent was obtained, participants proceeded through three phases of data collection: the pre-survey, an in-person PAT session, and two follow-up surveys.

Pre-Survey

Before the workshop, each participant completed a pre-survey designed to gather baseline information. The survey questions concerned challenges parents face in supporting their children's emotional regulation, parents' existing strategies for handling emotional situations, and their expectations and goals for participating in the PAT session. This information helped us understand each family's specific needs in order to tailor guidance during the session accordingly.

In-Person PAT Session: "Making Comparisons and Noticing Patterns"

Each family participated in a triadic (Parent × Child × Facilitator), 10-minute in-person session facilitated by a professional (facilitator) at Family Focus. The session was designed around a hands-on cognitive task aimed at supporting both the child's cognitive development and emotional regulation. The core task involved helping the child construct a three-layered pattern to match a reference picture (see Figure 1). This required the child to: 1) notice differences between their current arrangement and the picture; 2) make comparisons to determine whether the pieces were correct; 3) form a correct sequence by layering or ordering pieces appropriately; 4) correct mistakes when mismatches occurred. From a developmental perspective, this type of task is slightly beyond the expected cognitive capacity of children between the ages of 3 and 5. Therefore, children may require more support from their parents.

Figure 1

Illustration of PAT task
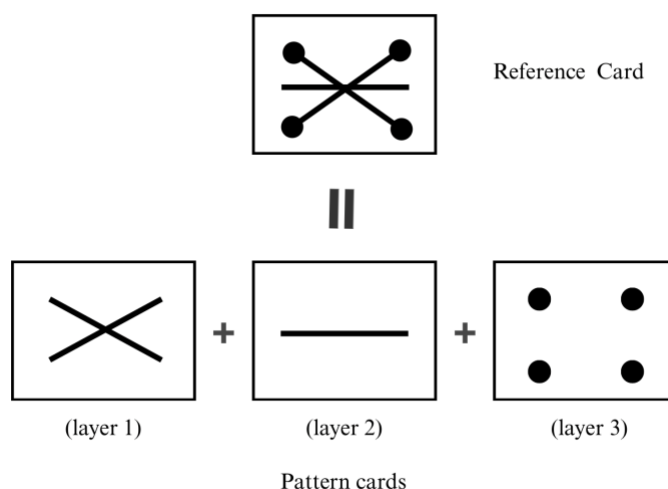
Note: In this task, children are presented with a Reference Card and a set of transparent Pattern Cards. Each Pattern Card contains a component of the complete image displayed on the Reference Card. Children are asked to select and combine the correct Pattern Cards by layering them to accurately replicate the target image.

The parent's role was to guide the child through the process using prompts and emotional support, rather than directly correcting mistakes. The facilitator provided real-time coaching to the parent, modeling language and strategies that support both cognitive thinking and emotional regulation. To provide additional clarity on what occurred during the in-person session, a sample session flow has been included in the Appendix. This outlines the general sequence of activities, the types of prompts used by facilitators, and how the pattern-based task was introduced and supported. While the exact interactions varied based on each parent-child dyad, the Appendix only offers a detailed overview of the structure and tone of the session.

Follow-Up Survey (one week after)

One week after the in-person session, participants were asked to complete a follow-up survey. This survey asked whether parents had the opportunity to apply the strategies at home, what kinds of situations they practiced them in, and whether they encountered any new challenges. The follow-up survey also asked whether parents needed any further support or clarification about the strategies introduced during the session.

Final Survey (two weeks after)

Two weeks after the in-person session, participants completed a final survey to assess how confident they felt in applying the strategies learned, whether they perceived the workshop as effective in helping them support their child's emotional regulation, any new or ongoing challenges, and suggestions for improving the workshop or additional information parents wished to receive if applicable.

Data Analysis

All three surveys were online forms, collected through Google Forms. The responses were analyzed using thematic analysis, in which open-ended responses were coded inductively to identify recurring patterns and key themes related to parents' emotional coaching experiences. Codes were developed by closely reading each response and grouping similar ideas into broader categories such as self-regulation, emotional validation, and strategy implementation. In addition to the survey data, this study incorporated direct observation of parent behaviors during the inperson parent-child activity session. The primary purpose of the observation was to assess how parents engaged with and applied the emotional coaching strategies introduced in the workshop, particularly within the context of the hands-on activity, "Making Comparisons and Noticing Patterns." The observation framework was grounded in Gottman's Emotion Coaching Theory (1996), which emphasizes the importance of parents recognizing, validating, and guiding children through emotional experiences. The focus was on whether parents were able to implement these strategies when presented with a mildly challenging task alongside their child.

During the session, I observed several key parent behaviors that aligned with the emotion coaching strategies introduced by the facilitator during the workshop. The goal of the observation was to assess how well parents were able to apply these strategies in real-time, rather than to evaluate their general parenting style. Specifically, I looked for: 1) whether the parent noticed and responded to low-intensity emotional cues from the child, such as signs of confusion, frustration, or disengagement; 2) whether the parent labeled or acknowledged the child's emotions verbally (e.g., "I can see this is a little tricky for you"); 3) whether the parent offered validation and comfort (e.g., "It's okay to feel frustrated when something is hard"), creating space for emotional acceptance rather than dismissing the emotion; 4) whether the parent

engaged in problem-solving alongside the child, offering step-by-step guidance or modeling how to approach the task calmly and effectively; 5) instances where the parent overlooked, dismissed, or invalidated the child's emotional cues were also recorded, as this is considered a non-coaching behavior under Gottman's framework.

All observations were recorded using a structured coding sheet developed for this study, based on Gottman's emotion coaching principles (Gottman et al., 1996). The coding sheet served as the primary framework for analyzing parent behavior during the in-person session. It included five key emotion coaching dimensions: (1) noticing and responding to low-intensity emotional cues; (2) verbal labeling of the child's emotions; (3) validating and normalizing the child's feelings; (4) collaborative problem-solving; and (5) non-coaching responses, such as dismissing or ignoring emotional signals. For each dimension, observers marked whether the behavior was present, absent, or partially demonstrated.

As the primary analytic tool, this coding framework allowed for a focused yet nuanced assessment of how parents adopted and enacted emotion coaching strategies within a short, structured learning environment. No video or audio recordings were used, and all data were collected through written notes.

Results

This study was intentionally designed as a small-scale qualitative case study, aiming not to produce generalizable conclusions but to explore how individual parents engage with emotional coaching strategies in real-life contexts. Each family's data offers a meaningful and unique perspective.

Survey Data Analysis

Met Expectations

Overall, participants reported that the workshop was a positive and meaningful experience. Despite differences in background, confidence levels, and parenting styles, all participants indicated that the workshop either met or exceeded their expectations. A common theme was appreciation for how simple, clear, and hands-on the strategies were. One parent shared, "Yes, it gave me simple, concrete tools to try at home," highlighting the accessibility of the approach compared to more formal or information-heavy parenting programs.

The structure and tone of the workshop also seemed to make the strategies approachable. Two participants specifically noted that the workshop introduced them to a new way of supporting their child, not just through correcting behavior or completing tasks, but through helping their child recognize, express, and work through emotions. As one parent reflected, "I always didn't know what to say before I started trying this. The strategy gave me a starting point." Another added, "I had no expectations coming into the workshop," but still, "found it engaging and easy to apply." Overall, the combination of the interactive activity and the followup resources seemed to resonate particularly well with parents looking for practical, real-world strategies.

Common Challenges among Parents

Despite overall enthusiasm for the workshop, several parents highlighted challenges when trying to apply the strategy at home. A recurring challenge reported was the difficulty of remembering and applying the strategy in emotionally charged moments, especially when the child became upset or frustrated in public settings or during daily routines like dressing or

transitions.Parents reflected that while they understood the strategy in the calm environment of the workshop, putting it into practice during real-life stressors was significantly harder. One parent explained, "it was pretty easy once I remembered to do it. But sometimes I forget in the moment when she's crying to melting down."

Time constraints and distractions at home were also mentioned as barriers to consistently practicing the strategy. One parent reflected that they tended to default to task-focused corrections rather than emotional guidance, simply out of habit: "I'm used to just getting through the task, like 'let's finish this.' I didn't think about her emotions until this workshop." This insight underscores how deeply ingrained behavioral correction habits can make emotion coaching feel unfamiliar, even when the parent is well-intentioned.

These challenges emphasize the need for more structured support and practice opportunities, particularly under real-world conditions where emotional regulation can be most difficult to model and guide.

Growth in Parental Self-regulation and Awareness

One of the most meaningful outcomes reported by participants was a greater sense of emotional awareness and self-regulation in their own parenting. Rather than focusing exclusively on their child's behavior, many parents reflected on how the session helped them pause, take a breath, and shift from automatic reactions to more intentional responses. This internal shift, which is moving from "fixing" to noticing and guiding, emerged as a central theme across the data.

Two parents expressed pride in their ability to stay calm when their child became frustrated or emotionally overwhelmed. One participant shared, "I'm proud that I stayed calm

even when my daughter was frustrated. That's new for me." This kind of reflection suggests that emotion coaching is not only a strategy directed at children but also a practice that transforms the adult's own emotional patterns.

Parents described success in moments where they were able to pause and name the emotion, or when they resisted the urge to jump in with corrections. One parent explained, "I slowed down and encouraged him instead of just telling him the right answer. I think that helped him stay calm too." These shifts were seen as meaningful "wins," especially when parents recognized the difference it made in their child's emotional regulation.

Across the board, parents highlighted how their own emotional posture during a moment of challenge shaped the quality of the interaction. By practicing patience and presence, they began to see themselves not just as task managers, but as emotional guides. This suggests that part of building children's emotional resilience begins with parents first learning to recognize and regulate their own emotional responses, even in small, everyday moments.

Suggestions and Additional Support Needs

While parents appreciated the simplicity and clarity of the workshop, several also offered constructive suggestions for improvement. A recurring theme was the desire for more concrete examples that could help them feel more confident applying the strategies across a variety of real-life situations. One parent recommended, "Maybe more examples of how to use the strategies in different situations would help." Another added, "It would be helpful to have a little handout or reminders of the things we learned, so I can go back and look."

Some participants noted that additional visual or scenario-based guidance would improve recall during emotionally charged moments. As one parent expressed, "The activity wasn't

completely explained to us, so we were a little confused at first." This suggests that even slight

ambiguities in instruction can create uncertainty that may hinder implementation later.

Observational Data Analysis

Observational data from the in-person activity session further enriched the understanding

of how parents engaged with the strategy in real time.

Noticing Emotions Varied Widely

In this small case study of four parent-child dyads, parents demonstrated varying levels of

sensitivity to their children's emotional cues during the structured activity. This variability was

not random but revealed meaningful differences in attentional focus, interactional style, and

perhaps prior exposure to emotional guidance frameworks.

Two parents showed high sensitivity to their child's low-intensity emotional signals. They

were quick to notice subtle signs of frustration or hesitation, such as pauses, facial expressions,

or changes in tone. In these moments, they responded with validating language (e.g., "It's okay,

take your time" or "I see you're stuck, let's figure it out together"), often before the child became

visibly upset. These parents also used more eye contact and mirrored their child's emotional

tone, signaling emotional attunement. This suggests they may have prior experience recognizing

early emotional cues, possibly through past parenting experience, training, or supportive social

models in their own upbringing.

In contrast, the other two parents were more task-focused, attending primarily to the

cognitive demands of the activity. Their responses to their child's emotions tended to emerge

only after clear expressions of distress, such as crying or disengagement. For example, one

parent only paused to offer support after the child verbally said, "I can't do it," while another

continued prompting task completion without acknowledging emotional cues until the child

stopped participating. This pattern may reflect a focus on achievement or performance over

process or emotional regulation. It could also indicate less familiarity with emotion-labeling

strategies or uncertainty about how to interpret subtle child behavior.

Importantly, the difference in emotion noticing did not appear to be due to parental care

or engagement, but rather to their interpretive frameworks and habits of attention. One parent

even noted in the follow-up survey, "I'm used to just getting through the task… I didn't think

about her emotions until this workshop." This suggests that awareness of emotions is a skill that

can be strengthened, not a fixed attribute.

Self-Regulation as a Pivotal Skill

Parents' own emotional self-regulation emerged as key influence on how effectively they

applied emotion coaching strategies. Parents who were able to regulate their own emotions (e.g.,

taking a breath, staying calm, and avoiding reacting impulsively) were more likely to effectively

apply the emotion coaching strategy. One parent was observed taking deep breaths and visibly

pausing before responding when their child became frustrated. This parent later shared in the

follow-up survey, "I'm proud that I stayed calm even when my daughter was frustrated. That's

new for me." During the session, she gently encouraged her child to persist, using phrases like

"You can try again. Let's take it slow," and maintained a calm tone even when the child struggled

with the task. This moment reflected how the parent's own regulation created space for

coregulation, allowing emotional support to accompany problem-solving.

In contrast, when parents became flustered or unsure themselves, they tended to skip

emotional validation and jump straight to task correction or disengage; "Just try this one. Come

on, just do it." While well-intentioned, these responses bypassed opportunities for emotional

validation In the final survey, this parent reflected, "I always don't know what to say before I

start trying this. The strategy gave me a starting point."

Labeling and Validating Were Often the Weakest Steps

Even when parents noticed that their child was frustrated or struggling, fewer naturally

moved into verbalizing or validating the emotion. Instead, most parents offered supportive

comments like "You've got this" or "Let's figure it out" , which did not name the child's emotion

or signal acceptance of it.

In one session, a parent observed their child becoming visibly upset and said, "Just try

again, you can do it," without directly acknowledging the frustration. Another parent described a

similar moment in the follow-up survey: "I encouraged her to keep trying and gave two solutions

she could try. After she did, she was proud of herself and continued." While this demonstrates

positive coaching and problem-solving, it also reflects the tendency to jump to solutions without

emotional labeling.

Shift Toward Problem-Solving Was Generally Stronger

Once emotions were acknowledged, or sometimes even when they weren't, most parents

were able to move into collaborative problem-solving with their child. This often involved

offering guidance like pointing to the reference pattern, asking questions like "What do you

notice is different?", or gently helping the child reconsider the placement of objects. The

taskoriented nature of the activity made this step relatively accessible for most parents.

Varied Levels of Facilitator Dependence

Observation showed clear differences in how much support parents needed from facilitators. In two cases, parents demonstrated relatively high confidence and independence during the activity. They engaged directly with their child, offering encouragement and occasional emotional prompts without waiting for facilitator input. These parents tended to remain calm and responsive, using a blend of verbal and non-verbal cues to guide their children. When asked later how they applied the strategy, one parent shared, "I felt proud that I stayed calm and let her figure it out with a little help from me." These parents occasionally glanced at facilitators for reassurance but generally led the session on their own.

In contrast, the other two parents appeared more reliant on facilitator modeling, especially during emotionally charged moments. For example, one parent hesitated when their child became upset and seemed unsure how to respond until the facilitator gently modeled a validating statement. Another parent required multiple prompts to engage with the child when the task became difficult. In the follow-up survey, this parent reflected, "Sometimes I just forget what to say when she gets emotional. Seeing examples helped a lot.".

Discussion

Cognitive Learning as a Pathway to Emotional Growth for Children

In nearly all sessions, children encountered moments where a pattern did not fit or a block was placed incorrectly. These moments typically triggered emotional responses such as hesitation, frustration, or disengagement. Like what one parent described in the follow-up survey, "the part where she got stuck and frowned, and then just looked at me for help." This supports

the notion that cognitive challenge naturally brings about emotional arousal, especially in early childhood when tolerance for uncertainty is still developing.

Importantly, when children were supported to persist through the difficulty and eventually solve the problem, either by their parent or facilitator, their emotional state visibly shifted. Smiles, laughter, and pride often followed success. As one parent noted, "She got so excited when she found the right piece. You could see how proud she was." These moments highlight how cognitive mastery can serve as an intrinsic source of emotional reinforcement, aligning with Self-Determination Theory's concept of competence as a driver of motivation (Deci & Ryan, 2000).

Rather than separating cognitive and emotional development, this activity illustrates how they are deeply intertwined. The cycle of challenge → emotional discomfort → problem-solving → emotional reward was repeated across families, creating what Vygotsky (1978) would describe as a zone of proximal development, where tasks stretched children just enough to create learning opportunities. The mild frustration that emerged acted as a signal that the task was at the edge of their current ability, while the eventual success signaled growth and mastery.

This dynamic is also supported by resilience theory, which emphasizes the role of tolerable stress, manageable challenges paired with supportive relationships, in building adaptive capacity (Van Breda, 2001). Here, the role of the parent as emotional coach was crucial. In sessions where parents paused to validate the child's feelings or encouraged them without stepping in too quickly, children appeared more willing to re-engage after moments of difficulty. One child, after a brief meltdown, calmed when her parent said, "It's okay to feel stuck. We can figure it out together," and then returned to the task with renewed focus.

Over time, this type of learning appears to help children build a basic understanding that emotions are signals, not roadblocks. This idea mirrors the development of a growth mindset (Dweck, 2006), where children begin to see struggle not as failure, but as part of learning. While we did not measure this formally, one parent reflected in the final survey, "She stayed calmer the second time we tried the game at home. I think she remembered that she could figure it out." Such reflections suggest that children may begin to internalize these cycles, using past success as a reference point for emotional regulation in future challenges.

In sum, the results suggest that pattern-based cognitive tasks, when scaffolded with parental support, can serve as powerful tools not only for skill-building but also for emotional development. By working through structured cognitive challenges with the help of a caregiver, children are not only learning how to compare and sequence but also learning how to manage emotions, persist through difficulty, and recognize their own growth.

Shifting Parenting from Problem-Solving to Coaching Thinking Patterns

One of the most noticeable outcomes of this study was the shift in how parents engaged with their children during moments of challenge. Prior to the workshop, most parents demonstrated a default approach best described as problem-fixing. This pattern involved stepping in quickly to correct mistakes, directly solve the problem, or redirect the child's frustration, often bypassing the emotional process altogether. While well-intentioned, this taskfocused strategy often prioritized immediate task completion over long-term skill building, both cognitively and emotionally. This approach aligns with what Gottman et al. (1996) describe as dismissive or disapproving parenting styles, where emotions are viewed as obstacles to be managed rather than opportunities for teaching and connection.

This problem-fixing tendency is not uncommon. It often reflects broader cultural norms that value efficiency, compliance, and quick resolutions, particularly in parent-child interactions (Rogoff, 2003). It can also be an understandable response to the discomfort many parents feel when their child becomes emotionally dysregulated. In the absence of concrete tools for emotional coaching, parents may instinctively focus on resolving the surface problem while unintentionally missing the emotional learning opportunity embedded in the struggle.

However, following participation in the "Making Comparisons and Noticing Patterns" workshop, both survey feedback and observational data reflected a notable shift toward a coaching mindset. Rather than rushing to correct, parents began to pause, notice emotional cues, and guide their child through the cognitive process. This included helping the child identify what was mismatched, encouraging them to try alternative strategies, and labeling and validating the emotions that surfaced during moments of difficulty.

This shift closely mirrors the principles outlined in Gottman's Emotion Coaching Theory (Gottman et al., 1996), which emphasizes that emotions are essential opportunities for teaching, even negative ones like frustration. Effective emotion coaching involves five steps: (1) becoming aware of the child's emotions, (2) recognizing emotion as an opportunity for intimacy and teaching, (3) listening empathetically and validating the child's feelings, (4) helping the child label emotions, and (5) setting limits while helping solve problems. Observationally, parents who adopted this framework moved from focusing purely on the outcome (correcting the pattern) to supporting the process (navigating confusion, tolerating frustration, and figuring it out together). When parents slowed down and scaffolded their child's problem-solving, rather than doing the task for them, the parent became a co-regulator, offering both cognitive guidance ("What looks

different here?") and emotional scaffolding ("It's okay to feel stuck when it's tricky."), allowing the child to stretch beyond their independent capabilities (Vygotsky, 1978).

Ultimately, this transition from problem-fixing to process coaching reflects a deeper understanding that the goal is not simply to complete the task but to help the child develop transferable thinking patterns and emotional resilience. Parents who embraced this shift were not only supporting their child's ability to recognize patterns in the immediate activity but were also equipping them with lifelong skills for managing frustration, persisting through difficulty, and approaching challenges with confidence.

The Role of Third-Party Education as a Cognitive-Emotional Scaffolding Environment

Findings from this study highlight the critical role that third-party educational programs play in supporting parents' development of both cognitive and emotional scaffolding skills for their children. Specifically, the workshop functioned as a cognitive-emotional scaffolding environment, offering parents a structured space where they could learn how to support their child's cognitive growth, while simultaneously developing skills for emotional coaching, particularly pattern recognition.

Drawing on Vygotsky's sociocultural theory (Vygotsky, 1978), scaffolding refers to the process by which a more knowledgeable other, such as a teacher, facilitator, or even the learning environment itself, provides temporary support to learners as they develop new skills. Traditionally applied to cognitive learning, this concept also extends to emotional development (Morris et al., 2007). In this context, the third-party setting serves as scaffolding not only for the child's cognitive learning but equally for the parent's learning of emotion coaching skills (Gottman et al., 1996). Facilitators act as co-regulators for both the parent and the child,

modeling how to navigate emotional moments and providing parents with concrete strategies that they may struggle to generate independently during emotionally heightened situations.

A key strength of this third-party environment is that it offers a "low-stakes" practice ground for parents, a space where mistakes, hesitations, or imperfect attempts at emotion coaching are not tied to the pressures of family routines, discipline, or pre-existing parent-child dynamics. In typical home settings, when children escalate emotionally, many parents experience cognitive overload, and their cognitive resources for problem-solving and emotional guidance are significantly reduced (McRae et al., 2010). In these moments, parents often report that they "forget what to say," struggle to find the right words to label emotions or abandon emotion coaching altogether in favor of immediate problem-solving or discipline (Katz et al., 1998).

Moreover, the presence of facilitators and structured activities acts as an external regulator for the parent themselves. The facilitators provide parents with scripted language, realtime examples, and gentle prompts that help parents shift from reactive problem-solving to reflective emotional coaching. This aligns with the concept of co-regulation (Morris et al., 2007), wherein parents develop their regulatory capacities in partnership with a supportive guide, before transferring those skills to independent parent-child interactions at home.

In this way, the third-party educational setting acts not just as an intervention for children, but as a crucial accelerator for parental skill acquisition. It offers an environment that reduces emotional load, lowers the perceived risk of failure, and provides concrete tools that parents can carry forward, particularly emotion language. Parents are not merely taught about emotional coaching in theory; they are given the chance to experience it in practice, within a manageable, supportive, and emotionally contained context.

This suggests that third-party programs are particularly effective when they embed emotional coaching into cognitive tasks. This design mirrors real-life learning moments and reflects how emotional regulation and cognitive problem-solving are deeply interconnected processes in child development (Blair & Raver, 2015). For parents, the workshop bridges the gap between knowing and doing, transforming abstract concepts about emotion into practical strategies that feel both achievable and meaningful.

Implications

Implications for Parents

Findings from this study highlight that parents are highly capable of learning and applying emotional coaching strategies when these are delivered in accessible, hands-on formats. Parents frequently reported that the workshop helped them feel more confident in staying calm, offering encouragement, and guiding their children through frustrating tasks. However, a common barrier parents reported was that during moments of emotional escalation, they often forget what to say, or struggle to apply the strategy they intellectually understand.

To address this, parent education efforts should go beyond one-time instruction and include practical memory aids such as visual cue cards, emotion-labeling charts, and brief scripts that guide parents' step by step through the emotional coaching sequence—such as noticing, labeling, validating, and problem-solving. Additionally, parents benefit from recognizing that their own emotional regulation is the foundation for supporting their child. Teaching quick, actionable self-regulation strategies (e.g., deep breathing or reframing thoughts) should be a core element of any future intervention.

Implications for Educators and Practitioners

Survey feedback emphasized that real-time facilitator guidance was one of the most helpful aspects of the workshop. Parents expressed that watching facilitators model emotion coaching or being prompted in the moment was significantly more helpful than passive advice.

However, several parents also recommended more concrete examples, such as videos or live demonstrations, especially for handling common challenges like public tantrums or transitions.

Additionally, practitioners should be trained not only in child development strategies but also in how to scaffold adult learning, which is recognizing that parents benefit from the same kinds of support as their children: modeling, co-regulation, and hands-on practice. As Morris et al. (2007) and Vygotsky (1978) remind us, learning is most effective when it is collaborative and supported within a structured environment that meets the learner where they are.

Implications for Third-Party Educational Programs

The third-party setting emerged as a uniquely effective environment because it created a low-pressure, emotionally safe space for parents to practice emotional coaching without the typical stressors of home life. All parents noted that this "neutral zone" helped them feel more open to learning and less reactive. However, parents pointed out that the benefits could fade without follow-up, especially when they return to emotionally overwhelming situations at home.

To maintain momentum, third-party programs should consider developing follow-up supports such as printable tip sheets, email reminders, or short video refreshers that summarize key strategies. Booster sessions could also help parents return to reflect on their practice, troubleshoot emerging challenges, and continue building skills over time. Emotional coaching should not be taught in isolation but rather embedded into structured cognitive tasks that

naturally elicit emotions, so parents can practice responding in the moment. These programs should also integrate reflection opportunities for parents to check in with their own emotions, further strengthening their self-awareness and ability to model regulation for their children.

Policy and System-Level Implications

At the systems level, this study reinforces the critical need for policies that integrate emotional coaching into cognitive learning supports for families. Emotional regulation is not an add-on to academic or cognitive development; it is a foundational skill that supports school readiness, family wellbeing, and long-term mental health (Blair & Raver, 2015).

Policymakers can help close the gap for families who lack access to emotional coaching tools by funding integrated programs that serve both parents and children, embedding emotionfocused guidance within public preschools, family resource centers, and early intervention services. Publicly accessible resources, such as multilingual toolkits, video libraries, and local workshops, would help normalize emotional coaching and make strategies more visible and culturally adaptable. Moreover, training pathways for early childhood practitioners should include competencies in coaching parents, ensuring that professionals are equipped not only to support children's development, but also to foster meaningful adult learning. When thoughtfully designed, short, skills-based interventions like the one studied here can have outsized impact, empowering parents, supporting child development, and strengthening systems that promote emotional resilience across generations.

Limitations and Future Directions

While this study provides meaningful insights into how parents adopt emotion coaching strategies within a structured cognitive learning environment, several limitations should be noted.

The most immediate limitation is the small sample size, which consisted of only four families. This aligns with the qualitative, case-based approach of the study but limits the generalizability of the findings to broader populations. Furthermore, the participant group consisted exclusively of female primary caregivers, which means the study does not reflect how fathers, grandparents, or other family members might engage with or respond to the same strategies.

Additionally, the workshop was designed as a single-session intervention, offering only a snapshot of how parents engaged with the material in a supportive, structured setting. The study did not include any long-term follow-up, making it difficult to determine whether the coaching strategies were sustained over time or generalized to different, more emotionally demanding contexts beyond the activity itself.

Another limitation is that the session focused on only one type of cognitive task: a pattern-building exercise, designed to foster comparison-making and sequencing skills. While effective for eliciting manageable emotional challenges such as frustration or confusion, this task does not fully capture the complexity of more emotionally intense real-world scenarios, such as public tantrums, transitions between home and school, or conflicts among siblings. These moments often involve higher emotional stakes, less predictability, and less structure than the controlled setting of the workshop.

That said, this limitation is also tied to the study's intentional design. The low-stakes nature of the task and setting was critical for helping parents learn and apply emotional coaching strategies without feeling overwhelmed. It offered a practice ground where new behaviors could be modeled, tried out, and refined, just like what Vygotsky (1978) would describe as a scaffolded learning environment. However, future studies will need to examine whether these strategies

transfer effectively to more chaotic or emotionally intense situations outside the structured environment, and if so, under what conditions. Including higher-stakes scenarios or longitudinal follow-ups could help address this gap and better assess real-world applicability.

A particularly important consideration that emerged from both observation and reflection is the role of the broader family system in supporting or hindering emotional coaching practices. One key challenge faced by many families is the inconsistency of educational approaches among different caregivers within the household. When one parent adopts an emotion coaching approach, but another caregiver continues using dismissive, punitive, or problem-solving-only strategies, it can lead to confusion for the child and reduce the overall effectiveness of the coaching model. This inconsistency created confusion for both the parent and the child and sometimes made it harder for parents to reinforce what they had learned. When I chat with one parent after the workshop, she expressed this tension by saying, "It's hard when I try to say things like, 'It's okay to feel upset,' but someone else in the house just says, 'Stop crying and finish it'… It feels like I'm undoing what I just tried to teach."

This aligns with findings from Morris et al. (2007), who emphasize that children's emotional development is shaped not only by isolated parent behaviors but also by the overall emotional climate of the caregiving system. When inconsistent emotional messages are delivered across caregivers, it can undermine children's ability to form stable emotional expectations and strategies. This inconsistency may also affect parents' confidence and follow-through, particularly when they feel unsupported in their approach. Future iterations of this intervention might consider including other family members to help establish a consistent and emotionally supportive learning environment across the household. For example, through shared sessions, family-based activities, or follow-up guidance. Future research should also explore how emotion

coaching strategies can be applied in more emotionally charged, high-stress situations, such as public meltdowns, sibling conflicts, or bedtime struggles. Developing workshops that include scenario-based role-plays or video modeling of these real-life challenges may equip parents and family members with the tools they need to apply emotion coaching under pressure.

Another vital next step is to conduct longitudinal research that follows families over time, allowing for examination of whether parents retain and adapt these strategies beyond the initial session. Longitudinal studies would also help assess whether consistent application of emotion coaching leads to improvements in children's emotional regulation, resilience, and learning outcomes over months or years.

Ultimately, this study underscores the value of third-party educational programs in equipping parents with practical, emotionally attuned strategies to support their child's development. By introducing a low-stakes, cognitively stimulating task within a structured and supportive environment, the program helped parents practice emotional coaching in real time, which bridges the often-separate domains of cognitive learning and emotional growth. Although the findings are based on a small sample and focused on a single session, the insights offer a compelling case for the importance of scaffolding both parent and child learning together. As families continue to navigate the complex demands of early childhood, third-party programs like this can serve as powerful allies, which helps caregivers move beyond managing behavior to building lasting patterns of resilience, emotional awareness, and connection.

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Appendix Session

Flow

1. Introduction (1–2 minutes):

   The facilitator explained the task to the child:

   "Your job is to build this picture by putting the pieces in the same order."

   The facilitator also introduced the parent's role:

   "You'll help them figure it out—not by giving the answer, but by noticing, thinking, and

   trying together."

2. Task Execution (5–6 minutes):

   The child worked on assembling the pattern.

   When the child made a mistake or expressed frustration, the facilitator guided the parent to

   use supportive prompts such as:

   "What do you notice here?", "Does this part match the picture?", "It's okay to feel frustrated,

   this is tricky sometimes."

   Parents practiced balancing cognitive scaffolding (helping the child solve the problem) with

   emotional coaching (helping the child manage feelings of confusion, frustration, or

   disappointment).

3. Task execution (continued): Managing Emotional Reactions

   If the child became upset due to a mismatch or mistake, the parent was coached to use

   emotion-coaching techniques include:

   - Emotion labeling: "You're frustrated because it's not matching yet."

   - Validation: "It's okay to feel upset; this is a little tricky."

- Modeling calm: Speaking softly, using supportive gestures, maintaining a relaxed tone.

4. Completion and Reflection (2–3 minutes):

After the task was completed—or after sufficient attempts—the facilitator engaged the parent in a short reflection, include questions like:

"What worked?", "What felt challenging?", "How did the child respond to mistakes or corrections?", etc.