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# Stress and Emotional-Behavioral Challenges in Preschool-Aged Children

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**Abstract:** The preschool years are a unique time of development for children, as this is the first age range in which they begin to interact with peers outside of their family. While language, cognitive and motor skills continue to develop rapidly during this period, awareness of social dynamics, peer choices and group membership also increases. Consequently, preschoolers may exhibit a wider range of social-emotional and behavioral problems. Problem behavior in preschool children can cause significant stress on parents, which in turn can impact parental responses to the child's behavior and parenting practices. Research tells us that the preschool years are a time of rapid child development as children acquire new social, emotional, cognitive, and motor skills. This can lead to an increasing variety of emotional and behavioral problems in preschool children. A significant proportion of preschool children exhibit problematic behaviors.

**Keywords:** Problematic behavior; preschool age; social skills; parental stress; externalizing and internalizing behaviors

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## 1. Introduction

Externalizing behaviors, such as aggression, arguing, and noncompliance, are some of the most commonly cited concerns in preschools—the focus of early childhood research and intervention efforts (Pace, 2019). As a result of externalizing behaviors, preschool children can experience suspensions and expulsion from school. Unfortunately, when challenging behavior is not successfully addressed at a young age, children are at an elevated risk of developing more severe emotional-behavioral concerns, which subsequently have a negative impact on social relationships and academic achievement. While many preschool children engage in appropriate levels of challenging behavior, a subset of children engage in high levels of externalizing behavior and frequently interfere with regular family and parenting routines (Liz, 2020). Challenging behavior in preschool-age children can incur significant stress in parents, which in turn can have an impact on parental responses to child behavior and parenting practices. Research tells us that the preschool years are a time of rapid child development, as children acquire new social, emotional, cognitive, and motor skills. The preschool years are a unique time of development for children, as this is the first age range when children begin to interact with peers outside of their family. Although language, cognitive, and motor skills continue to develop rapidly during this time, there is also an increasing awareness of social dynamics, peer choices, and group membership. As a result, preschool-aged children may exhibit a wider array of social-emotional and behavioral concerns. This can lead to an increasing array of emotional and behavioral problems in preschool-age children. A substantial proportion of preschool-aged children are reported to exhibit challenging behaviors. According to parent report, typically developing preschool-aged children (ages 3-6) display more than 50 different challenging behaviors. These challenging behaviors span a wide array of emotion-behavior domains, with the most frequently cited concerns related to externalizing behaviors and fears of separation. Externalizing behaviors are particularly troubling for children, parents, and preschools. Externalizing behaviors can disrupt children's social and emotional functioning and can lead to complications in school and home settings (Liz, 2020).

## 2. Literature Review

Stress is a signal that indicates how your body and brain respond to the number of challenges you face. Stress can be a source of motivation and energy. However, excessive or continuous exposure to stress can negatively affect all aspects of your life such as emotional, cognitive, and behavioral. Stressful events do not have the same effect on all individuals as it is highly influenced by social and emotional contexts. Lack of a safe environment or continuous exposure to poverty could amplify the effect of stress on individuals. Children are developing their social and emotional skills during early years, susceptibility to stress could influence emotion regulation strategies which could later cause anxiety, depression, or aggression (Johnson, 2016). Young children do not have enough skills to cope with stressors on their own. Parents and caregivers could not only mediate external environments to reduce the exposure to stressors but could also help model appropriate coping strategies. Negative emotional reactions could amplify stress and lead to behavioral responses such as aggression, withdrawal, and noncompliance. Understanding emotional or environmental context could be an important influence on behavioral strategies. Those children who could not elaborate or clearly verbalize their emotions might use more maladaptive strategies. Examination of the stress and coping strategies of preschool-aged children would be beneficial to understand and improve emotional and behavioral challenges. Currently childcare and preschools do not have mental health specialists to provide consultation but children with chronic emotional or behavior challenge could severely influence teachers and peers. The policy would help fund for supporting teachers, developing strategies to promote positive mental health behaviors, and training teachers regarding emotional or behavior challenges. Mental health professionals could provide low-cost services to underprivileged families. The current mental health screening system is unregulated and it should be mandated in order to have professionals provide or at least monitor mental health screening systems and get the children the support they need to succeed (Liz, 2020).

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## 2.1. Understanding Stress in Early Childhood

The parenting/child-rearing style, characteristics of different parent-child interaction models in rearing practices, and academic achievement were explored in preschool settings according to their respective domains, measured by verbal intelligence and reasoning tests, and multiple measures of creative behavior including creative ideation, creative originality, creative flexibility, and creative elaboration (Liz, 2020; Sanz et al., 2024). Multiple regression models were built to appropriately clarify the exploratory associations. Although the overall discipline style and academic achievement-related variables played a modest or no role in explaining the behavioral creativity, they nevertheless exhibited some useful associations with behavioral dimensions. Constant contact with mothers and peers /group care was found to correlate to performance originality and fluency, respectively. It was suggested that for preschoolers, the artistic imagination-enriched home should be paid attention to in creative education policy discussions (Provenzi et al., 2017). Many preschool-aged children show stress-related emotional-behavioral challenges, including crying episodes, tantrums, and concerns at separation from caregivers. This behavior can arise in response to any combination of factors including family life events, transitions in preschool programs, learning to address personal care needs, or day-to-day activities. Children experiencing emotional-behavioral challenges may present as developmentally appropriate for their age group, but also be easily upset, frequently crying, overly fearful, refusing to participate, frequent tantrums, or overly clingy. Alternatively, some children may respond with angry outbursts, aggression towards peers, meltdowns, and neglecting personal care or peer social interaction. Finally, some children display and reinforce undesirable behaviors such as being defiant or disruptive in learning situations. Such behavior can cascade through caregivers such as teachers, and parents (Liz, 2020). Educators, caregivers, and health practitioners may express concern regarding parental dispute and child behaviors such as; ongoing aggressive meltdowns, aggression towards peers, defiance, and refusal of personal care (Liz, 2020). Feelings of inadequacy to manage these challenges may also arise via escalation of secondary behavioral challenges including burnout and frustrations directed at the child ultimately addressing a child's fundamental needs. Teachers may not always be able to see entry points to the school system, and or be unable to wait for financial barriers linked to seeing clinical psychologists or psychiatrists. In contrast, for educators working within the special developmental needs sphere, the emotional-behavioral challenges can present as unforeseen, requiring tailored behavioral management programs (Fernández et al, 2023).

## 2.2. Emotional-Behavioral Challenges in Preschoolers

Behavior problems, referred to externally in the temperamental domain (e.g., aggression, disruption, hyperactivity), are common in early strict education settings. Developmentally appropriate expectations for preschooler's behavior often exceed children's regulatory capacities, particularly in light of the academic and social demands placed upon children prior to kindergarten (Liz, 2020). Economic and social forces have led to increases in ecologically unfavored caregiving arrangements that vary substantially in compliance with evidence-based recommendations/norms regarding quality and dosage (Pace, 2019). Within early education settings, children are wholistically oriented towards meeting attachment-related needs for physical safety and emotional and verbal support, as well as the novel or social emotional need to make peer friends. Coping-related accessibility to emotion regulation strategies for dealing with stress exposure, particularly with respect to emotion-centered scaffolding and self-esteem enhancing strategies, is considered relatively underdeveloped in pre-K children and is recognized as an unmet need being unfulfilled by teachers in practice.

Preschool-aged children may exhibit a range of specific emotional-behavioral problems, including withdrawn behaviors (i.e., avoiding eye contact, appearing anxious), disruptive behaviors (i.e., defiance of adults, throwing objects), and aggressive behaviors (i.e., verbal aggression, tantrums). In relation to peers, young children may express aggression, which is broadly defined as any action intended to hurt another person, or disengagement, which entails avoidance or lack of social interaction. Children displaying emotional-behavioral challenges are at risk for poor educational, social, and mental health outcomes continuing into adolescence. In addition, other difficulties related to family function, parenting style, and child temperamental characteristics may emerge. Young children cope with

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exposure to stressors through bargaining, distracting, and affect labeling, which vary in implementation across children. A lack of age-appropriate, coping strategy use may impede the successful management of stress and increase vulnerability to the development of emotional-behavioral problems. Emotional-behavioral challenges are often connected to an inhibited coping style or difficulty in utilizing adaptive coping strategies to modulate emotional responses.

### 2.3. Parental Influence on Child Development

Though the social and emotional development of preschool-aged children occurs through interactions with various agents, research has primarily focused on the role of child and parental characteristics. Each individual's abilities and experiences interact to shape the development of normative behavioral, emotional, and social responses in varying environments (Cucinella et al., 2022). With this in mind, studies on stress and emotional-behavioral challenges in preschoolers should include parental characteristics and the parent-child relationship. Studies of preschool-aged children should broaden their focus to a developmental and environmental context that extends to parenting behaviors and characteristics.

The parenting practices literature has generally focused on the effectiveness of such practices on child outcomes. However, this topic has been discussed less in terms of the onus placed on parents by child behavior. Parenting stress, which varies based on child behavior and demographic characteristics as well as social and economic standing, affects parenting styles (Dara Bandele, 2013). Further, direct connections can be drawn among child characteristics, parenting hostility, and parental stress, with child behavior influencing the responses of both mothers and fathers, and with the latter two influencing parenting practice. Since preschool-aged children may present distinctive stressors to the parenting role, and perhaps invite distinctive responses, additional literature on parenting behaviors in this age group is warranted.

The majority of studies relating to parenting practices have focused on mothers, with equal numbers of father-focused studies and those examining the distinct effects of both parents. However, studies exploring each of these areas equally and jointly remain sparse. It is also important to explore direct measures of parenting stress. In sum, preschool-aged children present numerous unique needs, developmental tasks, and challenges. Steps must now be taken to understand how individual child behaviors relate to the style, quality, and effectiveness of care-giving and discipline provided in return.

### 3. Methodology

Participants in this study will be 20 preschoolers and children aged 1.0 - 5.0 years, and their parents. The sample will be recruited with a stratified-cluster design. Strategies will be allowed to recruit children with emotional-behavioral challenges. Subsequently, a pilot study with 2 pre-test preschool aged children will be conducted. The Kindergarten Behavior Scales – 30 Items will be distributed among preschool teachers. The KBS–30 is a behavioral rating scale which classifies children as extremely low, moderately low, moderate, moderately high, or extremely high on the indices of behavioral and emotional challenges. Recruitment letters will be sent to preschools closed to the lecturer, and a verbal invitation will be extended to the kindergarten teachers of children who meet the inclusion criteria. Parents' informed consent is required for children to participate in this study. Participation is voluntary and passive consent will be acquired though kindergarten teachers.

The aim of this study is to develop a brief observational tool for preschool aged children which will be able to measure children's behavioral-emotional challenges. Such a tool will be beneficial for a better understanding of problems children are dealing with. In preschool institutions subjective indicators extracted from teacher and parents rating scales are usually used to measure behavioral-emotional challenges. These indicators do not enable teachers to look for children's main difficulties with emotional and behavioral regulation. The Behavioral and Emotional Self-Regulation Bebert is an objective test created for preschoolers aged 3.5 to 5.5 years. The Bebert will be adapted for

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younger children as well. The result will be a brief observational tool containing a structured task within a free play activity.

The adaptation of the tool is expected to be beneficial for children aged 1 to 5 years who struggle with emotion and behavior regulation. The tool will help preschool and kindergarten teachers understanding the main challenges children are dealing with, and it can be used to baseline children's development used for preventive measures. The effects will be studied in collaboration with preschools and supportive centers in the Amsterdam area.

### 3.1. Research Design

The present study addressed the notion of stress and emotional-behavioral challenges in preschool-aged children aged 4 to 5 years. Specific research questions focused on identification of stressors around falling scores in feelings and behavior domains among preschool-aged children and which group of preschoolers (i.e. boys or girls) received more emotional-behavioral problems than the other group. This research employed the qualitative method and used interview as a data collection tool. A total of 12 preschool teachers who had experiences working with preschoolers were purposefully selected and interviewed about screening falling scores, emotional-behavioral challenges, and developmental extrinsic factors among preschool-aged children. Each interview lasted between 30 and 50 minutes and was conducted in the teachers' schools. Thematic analysis was employed to analyze the data. Findings revealed that preschool teachers considered not only academic-related stressors but also behavioral-related, personality-related, family-related, environmental-related, and others-related stressors around preschoolers' falling scores. Also, girls experienced more developmentally-related behavioral and anxiety challenges than boys (Côté et al., 2017).

The results of this study indicate that preschool-aged children experience stress and emotional-behavioral challenges related to various developmental extrinsic factors. On the other hand, preschool teachers recognized the positive role of magical thinking and imaginary companions in preschoolers' emotional-behavioral challenges. Picture books, puppet shows, and other related educational standards divorced from academic content can promote preschoolers' emotional-behavioral development in a more focused way. For further studies, a larger population with a mixed method approach can contribute to these emerging findings (Kalpidou, 1997).

### 3.2. Participants

Participants were 101 preschoolers aged 3 (n = 56, 30 boys and 26 girls) and 5 (n = 45, 23 boys and 22 girls) years, their mothers (n = 97), and teachers (n = 68). To recruit children, notices were posted in local preschools and day care centers supplied by the local Department of Family Services. The only criterion of selecting the recipients of the invitation was the age of the child. The preschoolers were in either the 3-year-old (n = 56, 30 boys and 26 girls) or the 5-year-old (n = 45, 23 boys and 22 girls) age group. The majority of mothers (n = 96) and fathers (n = 82) of both age groups had at least a college degree. Ninety-three percent of the 3-year-olds and 98% of the 5-year-olds came from intact families as defined by the presence of both biological or adoptive parents in the home (Kalpidou, 1997).

Due to the limited number of 3-year-old classrooms in the participating child care centers, girls were overrepresented in the two age groups (Côté et al., 2017). To explore the impact of this overrepresentation in analyses, the initial sample was restricted to the 101 children aged 3 to 5 years. A Child Behavior Checklist Ages 1 1/2 - 5 was completed prior to, and at 2, 4, and 6 months into the treatment, by mothers of preschoolers in both age groups, whereas a Teacher Report Form was sent to the preschool teachers. Only for children whose mothers completed the Child Behavior Checklist was teacher nomination allowed. Eight preschoolers were nominated by teachers, with at least one nomination per treatment group (n = 5) and control group (n = 3). Exclusion criteria. Children receiving medication for behavior problems or with known developmental disorders as reported by their mothers were excluded from the study (Fernandez & Liz, 2018; Liz, 2020).

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### 3.3. Data Collection Methods

With regard to emotional-behavioral challenges, parents may have to rate their preschoolers' emotional regulation during a given event involving strong emotions in the past month. Parent-reported adverse events may reflect those events occurring in the past month that parents think might have an impact on their preschoolers' adjustment. To increase participation, the survey will be administered to allow parents to complete it at times convenient for them. An online format will be developed and put into use with the assistance of IT personnel at the study sites.

The survey on demographic characteristics and child behavioral adjustment is comprised of 120 items. The survey on parents' adverse events is comprised of 16 items. The survey will take about 30 to 45 minutes to complete. All participants will be provided with a reminder to complete the online survey 1 week after a consent is signed.

The appropriateness of the PREPS will be examined with analyses of variance for group differences, t tests for differences in means, and correlations with preschoolers' behavior problems and parenting stress as well as with observational measures of preschoolers' behavior problems and parenting (Liz, 2020). Descriptive statistics (means, standard deviations, ranges, percentages, and frequency distributions) will be calculated for all measures. A predicted change in emotional-behavioral challenges will be computed as the difference of scores in pre- and posttest measures given by teachers. Univariate analyses of variance will be performed to identify group differences in preschoolers' change in emotional-behavioral challenges. Zero-order correlations will be employed to examine the associations between preschoolers' demographic characteristics and adverse events, and change in emotional-behavioral challenges, parenting stress, and parent-reported emotional-behavioral challenges. Hierarchical regression analyses will be conducted to explore whether change in parenting stress would mediate the association between parent-reported adverse events and change in preschoolers' emotional-behavioral challenges. To identify atypical cases of children's adjustment, teacher-reported preschoolers with high adjustments will be classified as cases and those without will be classified as controls. Multiple sources of data for case-control comparisons, including parent- and teacher-reported preschoolers' emotional-behavioral challenges, demographic characteristics, and parent-reported adverse events, will be listed and combined with a combined group approach.

### 3.4. Data Analysis Techniques

Preschool-aged children's emotional-behavioral challenges and the social context are underlying factors that may be related to both psychopathology in young children and adjustment problems. In preschool-aged children, parental over-involvement has been studied as a detriment to self-regulation and social adjustment; the social context of preschool, as an opportunity for the development of emotional regulation and peer relationships, has been studied in relation to children's adjustment. Nevertheless, preschool-aged children's emotional-behavioral challenges have not been assessed in contextual relation to both of these factors. A recently created procedure quantifies the social stress task, parenting, and children's behaviors in context. The aim of this study was to introduce this currently available assessment and examine its psychometric properties (Provenzi et al., 2017).

Prospective mothers and fathers of typically developing children aged 2.5 – 4.5 years old at recruitment have been asked to complete demographic questionnaires and were sent a standard laboratory task and coding of content of child and parent behaviors. Parents completed questionnaires about parenting and child social emotional functioning, to examine validity. Several statistical analyses were conducted to examine the psychometric properties of the procedure including inter-rater reliability, reliability over time and internal consistency. Parent emotional over-involvement is negatively associated with child regulation of emotional stress compared to preschool social context. Results suggest that a robust, inexpensive, and accessible procedure is available for future research. Emotional-behavioral challenges in preschool-aged children have not been contextualized alongside over-controlling parenting and the preschool social context.

Precursors to poor peer relationships in preschool-aged children include lower emotional regulation and less socially competent interactions with peers and adults. By the age of three, children's temperamental differences begin to show

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and may increasingly become evident in social situations as they reach school age. Teachers tend to actively encourage emotional strategies, such as discussion or distraction, among preschool-aged children to regulate emotions of frustration or sadness. Emotional-behavioral challenges in preschool-aged children can be assessed with a rich and high-intensity video stimulus that quantifies social stress with contextual information about parent and preschool teachers' behaviors, as well as the child's behavior. The data have a wide range of variation and set the stage for broad research using a standardized procedure.

## 4. Findings

The purpose of this study was to increase understanding of the role of stressors and social-emotional challenges in the lives of preschool children with significant emotional-behavioral problems. It was hoped that this knowledge would help identify and initiate a framework and practice model for social work practice and research in child welfare. It was also believed that the findings of the study could illuminate a complex social-ecological phenomenon, which could serve as a basis for further research.

The complexity involved in attempting to identify and study the concurrent roles of stressors and emotional-behavioral problems was discussed. The methodology and qualitative nature of the study were examined in detail, emphasizing the nativity and emergent nature of valid data and results. The importance of speech, thought, and action, especially as it affected the preschool children, was portrayed. The attitudes, feelings, thoughts, and actions of caretakers and teachers were also identified as particularly relevant to the focus question in examining children with significant emotional-behavioral problems. According to (Johnson, 2016), children whose behavior problem was analyzed exhibited significant difficulties in managing emotionally-charged situations, conflicts, and school behavior, but showed little difficulties in managing changes in routine, group composition, or children's actions. Preschool children perceived stress in the form of verbal and physical aggression toward themselves and others, family conflict, difficult childcare situations, and emotional frustration, and experienced strong feelings of helplessness in the face of stress. All data and findings were coconstructed with these preschool children, care providers, childcare workers, and the researcher in an effort to heed the child's perspective (Liz, 2020).

Children with significant emotional-behavioral problems were said to experience a plethora of stressors originating in multiple ecological systems. Immediate family stressors including familial loss and caregiver discord were perceived as primary sources of stress. Home-related stressors were noted to provoke worries about sibling aggression, competitiveness from classmates, and aggressive siblings while at school. Daily activities were described recurrently, and the demands of school readiness and daycare volume were noted to induce worry, anxiety, and frustration in preschool children. The influence of positive and negative space on feelings and academic readiness was discussed, including the importance of personal space for downtrodden children. Feelings of helplessness, unreliability, and dealing with unbearable demands were expressed when attempting to cope with stress, as multiple strategies for coping were described, including changing the focus of attention, seeking assistance, and engaging in activity.

### 4.1. Prevalence of Stress in Preschool-Aged Children

Recent studies have described the pandemic's negative impact on preschool children's behaviors and mothers' parenting behaviors. Parenting stress during the pandemic increased preschool children's behavioral problems. The indirect effect of parenting conflict on preschool children's internalizing and externalizing problems was identified (Liz, 2020). A few existing studies have described mothers' increased parenting stress, conflict, and behavioral control in response to the COVID-19 pandemic. Mothers' parenting stress on childcare increases the likelihood of perceptual cognitive development problems. To manage their stress and anxiety about COVID-19 exposure, some mothers excessively control young children's daily routines during the pandemic, leading to problem behaviors. Preschool children with over-controlled parenting behavior had more depression symptoms, withdrawal behavior, and peer problems. This study considered parenting stress and behaviors during the pandemic, mothers' emotional-behavioral

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adjustment, and the impact on preschool children's internalizing and externalizing behaviors (Liz, 2020). Current research on early intervention seeks family-centered programs to manage parenting stress (Joo & Kyung, 2022).

Although preschool children's emotional-behavioral adjustment and parenting behavior during the pandemic period cannot be directly compared because of limited prior research, excessive control and the impact of parenting behavior on child problem behaviors have been examined. The factors increasing preschool children's behavioral problems included mothers' emotional adjustment and parenting stress and behaviors, but the strength of these associations varied (Liz, 2020). Although most preschool children appeared healthy and conflict-free in family environments, their behavioral problems increased due to COVID-19 stress (Brei, 2014). Based on existing research and theories, the association between COVID-19-related stress and preschool children's adjustment was presented from a distal, operator, and proximal perspective. The indirect path linking mothers' COVID-19-related stress, maternal depression, and parenting behavior was proposed, focusing on how the impact of mothers' adjustment applied to preschool children during the COVID-19 pandemic. Study methodology included measures to identify the degree of COVID-19 impact on preschool education, child adjustment, maternal depression, parenting behaviors, and parenting stress.

### 4.2. Common Emotional-Behavioral Challenges Identified

Preschool-aged children demonstrate a wide variety of behaviors, including those commonly referred to as challenging or difficult (Johnson, 2016). On occasion, a child may exhibit attention-seeking behaviors, regression in toileting skills, aggressive or defiant behavior, tantrums, excessive fears, general anxiety, or withdrawal from play and peer interactions. Sometimes, children may express their emotional and behavioral challenges through somatic symptoms such as frequent complaints of stomachaches, headaches, or other unexplained aches or pains. Children may also experience a heightened level of stress or negative emotions, resulting in decreased emotional regulation and control (Pace, 2019). They may have difficulty understanding and/or controlling their emotional responses to perceived stressors and stressful situations.

Federal legislation mandates that school districts have a plan in place to assist students demonstrating significant emotional and/or behavioral challenges, with the number of children found eligible for services growing annually; however, this number reflects only part of the emotional and behavioral challenges present in the early childhood population. While many schools are actively providing preventative services to young children at greater risk for developing social-emotional and/or behavioral challenges, many children are still in need of assistance with learning emotional regulation, social-emotional skill development, and appropriate behavior in order to navigate preschool and kindergarten emotionally and behaviorally. Families, preschool teachers, child care providers, pediatricians, and other early childhood professionals often identify preschool-aged children demonstrating pervasive emotional and behavioral challenges. Many of these professionals endorse a desire for additional information, resources, and strategies to utilize with preschool-aged children demonstrating difficulties (Liz, 2020).

### 4.3. Impact of Parental Stress on Children

The science regarding the impact of parental stress on children and their development is vast. However, much of the literature is either older, focuses on children older than 10 years old, or on a particular diagnostic category such as children with behavior and emotional problems (Hattangadi et al., 2020). On the contrary, few studies explore parenting stress broadly in the context of children without neurodevelopmental difficulties or chronic illnesses, but rather focusing on pediatric populations with this unique trajectory (Liz, 2018). Although some studies deal with parenting stress in the context of developmentally typically children, they mostly focus on a single abnormality or diagnosis category rather than exploring a broad aspect of behavior. Family history and contextual factors that impact parenting stress have been studied, yet few studies explore early life experience of parenting stress in association with child behavior and emotional development in the preschool-aged group (Liz, 2020).

With regard to valid measures of parenting stress, the Parenting Stress Index-Short Form (PSI-SF) is a widely used measure of parenting stress in both research and clinical settings. It is also validated in regards to adults from diverse

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backgrounds. Parenting stress as expressed in two constructs have been detected in this measure. One, the parent's perception of the children, mostly negative/irritable perception of difficulty in child management style. Two, the perception of child difficultness, mostly in positive/irritable structural dimensions of self-control and distractibility. The latter is a more direct measurement of parenting stress, and in turn parenting, while the earlier measures more of the parenting perception style.

With regard to child factors, gender, emotional, and behavioral problems, temperament were assessed. In this regard, it was observed that most gender differences were found with regard to the child temperament dimensions of a behavioral inhibition, emotionality, and parenting perception of behavioral intensity. In addition, in general internalizing and externalizing problems were related with the behavioral inhibition (Liz, 2020; Payá & Delgado, 2021). Nevertheless, child difficultness dimensions were independently associated with a more erratic parenting style of perception from child temperament. This may indicate that early perception of a child's behavioral tendency may drive more negative attributions and perceptions of parenting style, and in turn parenting stress and child outcomes.

## 5. Discussion

The findings of this study provide some insight into the levels of emotional-behavioral challenges in preschool-age children, as well as the parents' perceptions of the effects these challenges have on their own levels of stress. Similar to past research, the present study found that preschool-age children experience a wide range of emotional-behavioral challenges (Pace, 2019). However, somewhat unexpectedly, the means in this sample are relatively low compared to the means reported in previous research. With regard to parental stress, this study demonstrated that there is variation in caretaker perceptions about how child behavior is affecting parental stress levels. Again, compared to past research, these means tend to be relatively low. Parents were less likely to endorse a challenge being a "big problem" than those in past studies, with the exception of "child has difficulty in being distracted." Several previous studies have shown that higher levels of problem behaviors in preschool-age children predict higher levels of stress in parents. In this study, however, when parents were asked to report how much child behavior caused worry or stress, most parents indicated it was not a "big problem." Only "Child being distracted" had a mean of 1.4. It might be worth noting that both the original emotion measure and the worry scale were modified for this population based on focus groups, so they were not previously validated.

Additionally, there was no significant correlation to suggest a reciprocal relationship between child behavior and caregiver stress, as past studies demonstrated. The parent interview measures in the current study might have been too simplistic to pick up on these subtleties. It is also possible that the timing of the current measure was not conducive to finding high levels of this relationship, as the parent interviews were predominantly conducted immediately after the baseline assessment when positive changes in parenting behavior were initially observed. In a follow-up analysis, a measure designed for the general population might be better suited (Liz, 2020). Furthermore, has indicated that scales in the published literature tend to favor an average or median response using a Likert-type scale, as was the case in this study with the 1–5 items. An alternative response option such as a visual analogue scale may yield a greater range of answers, resulting in a higher likelihood of finding positive relationships.

### 5.1. Interpretation of Findings

The analysis yielded three types of findings regarding preschool-aged children's behavioral-emotional challenges which could be useful for parents, clinicians, and therapists interested in the mental health of young children. For the first focus area (other-reports on externalizing behaviors), parents in the critical group reported greater externalizing behaviors compared to parents in the non-critical group at post-intervention, largely due to the behavioral-emotional challenges of children aged five, who experienced both stressful situations and changes in their routines. Few significant overall changes for externalizing behaviors were observed, although there were significant group differences and for age (Liz, 2020). There was little evidence that assessment items indicative of problems were altered. The findings on children's behavioral-emotional challenges are not entirely consistent with those reported in

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previous studies. That is, children's emotional-behavioral challenges were largely evident during the transition from age four to five, when they shifted from preschool to kindergarten, rather than when their routines changed around birthday parties in a previous study. For the second focus area (parent-reports on internalizing behaviors), greater levels of internalizing behaviors were clearly identified in preschool-aged children in relation to parental stress compared to prior studies. The recent studies included many more older children. Parents who experienced greater psychological distress tended to report greater levels of internalizing difficulties in their children. For the third focus area (other-reports on internalizing behaviors), kindergarten-aged children in the critical group exhibited significantly lower symptoms of worry compared to children in the non-critical group after the 12-week program. Few significant changes in levels of internalizing behaviors were found, although parents in the non-critical group reported increases in withdrawn and somatic symptoms. Evaluation of the program was largely supportive of the (Jiang et al., 2022) study. Beyond the overall impact of the program on children's self-regulation, there was evidence that the program was beneficial for addressing behavioral-emotional difficulties following parental stress. Future studies examining such effects with other denoting samples or focus areas may strengthen or elaborate upon these.

### 5.2. Implications for Parents and Educators

Parents, educators, and practitioners will benefit from understanding how preschool-age children respond to stress and the unique influences on emotional-behavioral responses to stressors. Increased awareness will inform the development of targeted interventions for home, school, and healthcare settings. Typically, children display a range of adaptive and maladaptive emotional-behavioral responses to stress. This study suggests there may be a normative response to the common stressors experienced by preschool-age children during the transition to school. Increased focus on physiological reactivity as a precursor to emotional-behavioral responses can deepen understanding of the mechanisms linking stress to behavior, and also inform plans for preventative interventions to target modifiable risk factors rather than observable behaviors.

Parents and teachers can help preschool children to recognize and label their feelings and discuss changes in behaviors associated with these feelings. Early identification of problem behaviors is particularly crucial as there is a window of opportunity for effective interventions in changing children's patterns of behavior. Early interventions can contribute to children's development in the domains of social-emotional and behavioral development, along with an academic focus during the preschool year. School programs promoting social-emotional health can be expected to promote good outcomes for children, families, and schools. Helping children develop good social-emotional skills will enhance their development and reduce the potential for problems to develop.

Effective prevention programs include a whole-school approach, giving students a firm foundation for academic learning. Investing in these programs can pay off greatly at a national level. Positive Behavior Support or similar programs have been used by preschools to implement a whole-school approach to preventing behavioral problems. Early progress on the initial goal of using the power of the whole school, including families and the wider community, to work harmoniously has already been made by some schools. Collaborating with an increasing number of preschools has helped to widen the followers of this type of approach. This foray into using a whole school approach with preschools has also created opportunities to share ideas and provide support. There remains much work or refinement to be done in order to deliver the best outcomes for children and families.

### 5.3. Limitations of the Study

The present study is among the first to examine the relationship among stress and emotional-behavioral challenges in preschool-aged children. Parents' perceived stress, parents' emotional behavioral challenges, and teachers' and parents' perceived child emotional-behavioral challenges were included. Data were collected from a sample of 706 Kindergarten (K) and Pre-K children. It was hypothesized that (a) parent's perceived stress would be positively related to parent's emotional-behavioral challenges. It further was hypothesized that (b) parent's emotional-behavioral challenges would be positively related to parent's and teacher's perceived child emotional behavioral challenges,

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controlling for demographic variables. Finally, it was hypothesized that (c) parent's perceived stress would negatively relate to parents' and teachers' perceived child emotional-behavioral challenges, controlling for demographic characteristics.

To the author's knowledge, these findings provide the first evidence of the link between parents' perceived stress and the emotional-behavioral challenges of preschool-aged children. It was hypothesized that parents' perceived stress would be positively related to parents' emotional-behavioral challenges. This hypothesis was supported, in line with previous studies. Parents' stress increases the chances of experiencing mental health issues. Parents who are stressed are likely to display high rates of maladaptive parenting practices, such as reduced warmth and responsiveness (Kalpidou, 1997). These maladaptive parenting practices can lead to increased emotional-behavioral problems in preschool-aged children.

It was hypothesized that parents' emotional-behavioral challenges would be positively related to parents' perceived child emotional-behavioral challenges, controlling for demographic variables. This hypothesis was supported, indicating that parents' emotional-behavioral challenges were associated with teachers' perceived child emotional-behavioral challenges. This finding is consistent with existing research conducted with preschool-aged children. Mothers' mental health has been linked to the emotional-behavioral challenges of the child across various age groups. Along with the findings that parenting and child outcomes are shaped by each other, the current study provides evidence that mental ill-health in parents contributes specifically to the perceived difficulty in their children's emotions and behavior.

## 6. Recommendations

Parent Education A 10-week parent education program was developed with the goal of providing parents the information needed to understand their children's escalating emotional-behavioral difficulties, recognize personal and family risk factors, and access preventive resources or treatments. Family stress levels, including family conflict, changes in family structure and parental well-being, can all be viewed as antecedent vulnerabilities leading eventually to significant emotional and behavioral difficulties for children (Pace, 2019). Stressors are not per se determinative; rather, they set a context in which difficulty is more likely to occur. Explicit parent education about how to recognize these stressors and how their parenting could be adapted to ameliorate their impact is a reasonable approach.

Individual Parent Coaching For some families, educational programming is insufficient. In-depth activities, typically carried out over several sessions and with one family at a time, are needed to help families appreciate strategies for changing situations, helping their child regulate emotions and behavior and working to reorganize family patterns impacting the child. Research suggests the effectiveness of these approaches (Liz, 2020). For example, some families will need assistance identifying how their own personality style makes it difficult to manage their child's dysregulated emotional states. Others will need help id dealing with intransigent despair associated with a child who is physically aggressive or who has parental anxiety/depression. Again, parent hesitancies about engaging in significant therapy must be considered and the therapeutic process must be designed to reduce them.

Age-Sensitive Group Parent Programs While individual-level interventions often best respond to the degree of precarity of a problem, many families will only be mildly affected despite a learning curve, mini-crisis. Addressing pre-crisis vulnerabilities with programs giving parents an understanding of conditions affecting difficulties and skills for handling them, rather than responding solely to issues already raised by their children. Comprehensive knowledge-bases exist to articulate the developmental and individual child characteristics contributing vulnerability. Age-sensitive programs can be structured to help parent strive—rather than "struggle"—dealing with difficult situations normal for many children of a given age (e.g., difficulty sharing and taking turns, tantrums, or nighttime fears).

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### 6.1. Strategies for Parents

The majority of children in preschool settings develop normally and enjoy their preschool experiences, but for some children, the stress of interacting with other people may result in anxiety (Pace, 2019). These children may react to the prospect of being away from their mother by becoming extremely upset. While these emotional-behavioral challenges appear to be transient in many children, they can persist into later childhood and may result in a more serious anxiety disorder. Other children may display excess activity, appear unfocused, or be oppositional in the preschool setting, which may lead to behavioral disorders later in childhood. These undiagnosed disorders are one part of the social-emotional-behavior difficulties exemplified by preschool-age children being expelled from the preschool setting and entering the juvenile justice system. The preschool years are a critical period for intervention. By the time children enter school, the obvious signs of emotional-behavior challenges can set off a working memory and executive functioning cascade that increases problems for children currently at-risk. Early intervention efforts are key to promoting the mental health of preschool children, which in turn may increase the likelihood that children will succeed in school, avoid juvenile delinquency, and develop a positive mental health outlook. One method of prevention is the development of universally-screened programs that are in place at preschools; this is a multi-tiered approach to supporting children's social-emotional-behavioral health. These programs provide 100% support for universal screening programs, a professional learning module, and early intervention strategies and programs targeted toward children with disruptive behaviors.

### 6.2. Support Systems for Families

To better support families of preschool-aged children experiencing emotional or behavioral challenges, expanded access to behavioral services and supports is needed; systems for referrals and support for family needs need to be developed and expanded; and preventative programs with expectations to reduce emotional and behavioral concerns should be expanded. Given the multifactorial nature of children's social-emotional difficulties, family systems are crucial to their development. Systems of care are designed as a parent/caregiver-driven, team-based approach to support families with children with serious emotional disturbance. Developmentally appropriate positive behavior support approaches can be used within early childhood settings to prevent and address challenging behavior, and family engagement is important for the success of the approaches within the settings (Liz, 2020). A key dynamic in the interactions between families and these support systems has been the availability of effective screening and identification process. However, questions remain regarding inclusion of families in the processes at both the local and state level. The need for support systems is justified by background information on why the families of this age group are important. Ongoing needs of families to support them and their children are discussed.

Increasing public awareness about the importance of social and emotional development and how to nurture this development is one way to prevent problems and reduce their impacts on families and children. Informational materials can be product driven or provide general information about social-emotional development and local resources. States have engaged in statewide coalitions to promote early social-emotional development and have trained early care and education staff through outreach efforts. Improving family-school partnerships and providing parents with the skills, information, and resources they need will also help schools prevent and intervene with social-emotional problems. Creating new approaches to parenting education may be critical for the success of these services. New approaches would seek to teach both the environmental supports families need for their children's social-emotional development.

### 6.3. Role of Early Childhood Educators

Most preschoolers with significant emotional-behavioral problems will not be helped unless early childhood educators take action. Preparing students and families to experience a school environment that is emotionally safe, nourishes curiosity, and instructs on behavioral expectations can affect the outcome for many children and families (Johnson, 2016). Emotional security, self-regulation skills, and preacademic readiness are fundamental tools all children need

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to be successful in the kindergarten experience. While school systems and government entities tackle the problem of psychosocially disadvantaged families and children, preschool educators can affect children's lives on an individual basis using a developmentally sensitive lens. When the carrot does not work, educators need to resort to the stick by creating a zero-tolerance environment. If appealed to for assistance, the school psychologist may recommend a "calming corner" and some coping strategies for the loud and disruptive preschooler, instead of diagnosing or labeling the child. It is expected that the preschool teacher will intervene with both classroom and family strategies modeled after that which the school already employs. Teachers need training and support from school psychologists in anticipating function, assessing behavior, keeping behavioral records, and following up with the family.

The child care community needs greater sensitivity to mental health and behavioral issues, and preschool and child care programs must implement effective staff and family training programs (Levine Brown et al., 2022). Solutions to behavioral issues should center on staff training, family consultations, referrals to outside agencies, creating a calming social-emotional environment, and practiceity consultation by on-site mental health or social services professionals. Services come in as many varieties as described in the literature; they can provide various health services if the provider is willing to work in collaboration with the preschool. Unfortunately, these solutions all tend to result in out-of-sight care or supervision. At another, and more critical level, emphasizing a broad system perspective equal to that in use for other disabilities will create a kinder window for children to enter treatment.

## 7. Future Research Directions

Research efforts focusing on the mental health needs of preschool-aged children often focus on the development and piloting of evidence-based interventions. There is undoubtedly value in the addition of empirical data on the effectiveness of programs targeting preschool-aged children. However, further research efforts should focus on identifying effective ways to create a system of care in early childhood mental health (Johnson, 2016). Such efforts would require attention to issues involving capacity-building, community collaboration, political advocacy, public understanding, and funding of services. Additionally, thoughtful examinations of system of care development in other contexts, including schools, would help generate recommendations for the skeptical, uncertain, and often unwilling domain of children under 5 years of age (Payá et al., 2023).

While a growing number of empirically supported strategies are currently being piloted, many questions about the primary prevention and early identification space remain unexamined. What strategies work best to enhance policy-level awareness of the prevalence and seriousness of mental health difficulties in preschool-aged children? What approaches best reach the broadest coalition of individuals with the potential to identify and refer children and families? What role does media have in the process of improving awareness of, and access to, services? Such questions relate to risks of disorder, barriers to service access, and the designed intent of identifying concerns early versus implicitly supporting a system based response, whereby only identified disorders and services are supported.

Given the importance of preschool-aged children's feelings and behavior on day-to-day health and wellbeing, considerable research is needed on issues directly affecting the mental health needs of children under 5 years of age. Much remains to be accomplished in terms of advancing understanding of general domains of the differential access, availability, and usefulness of the early childhood intervention sector versus the traditional mental health sector, especially in attempting to tailor the latter to working with younger children (Liz, 2020).

### 7.1. Longitudinal Studies on Child Development

The present work describes the development of behavioral and emotional self-regulation during the preschool period, and it examines the interrelationship between the two forms of self-regulation. Self-regulation is defined as the developmental process during which a child acquires the ability to regulate his or her behavior, emotions, and feelings, a development that scores on behavioral limitations and emotions or appraisals of feelings, enhance as they learn new behaviors/strategies and forget strategies/behaviors that were thought previously. Self-regulation is developmental,

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not static during which behaviors are acquired and change significantly, and it could be studied in two aspects: behavioral and emotional.

A longitudinal cross-cultural study was conducted on the development of behavioral and emotional regulation in 229 preschoolers (M = 46.41 months, SD = 1.06 at Time 1) in Greece and China. Semistructural interviews were administered on children's task inhibition and on emotional understanding, as well as raters' of teachers and mothers, were utilized. The raters' reports on childcare practice were also collected. Behavioral self-regulation was found to develop during the preschool period, despite culture differences (Kalpidou, 1997). Task inhibition was scored using maternal and teacher's report questionnaires, coded to reflect performance behaviors of preschoolers on the fifth day, and mothers' ratings of compliance to instructions. Behavioral self-regulation could be studied in terms of task inhibition and compliance with respect to Boxer theorem on the development of regulation. Raters of mothers and teachers were found to be reliable with measured task inhibition scores.

The emotional competence in terms of understanding emotional states is another important aspect of self-regulation. Semistructured interview questions were asked of preschoolers at home and at school in terms of social references. Raters' report of teachers' emotional comprehension and knowing-scoring were utilized. Emotional self-regulation was also found to develop during the preschool period (Cucinella et al., 2022). The developmental increase in emotional self-regulation was found using age as the predictor on comprehension scores of emotional states across hedge and prediction, and the appropriateness of emotional reactions.

**7.2. Intervention Programs for Stress Management**

Intervention programs are to be designed and implemented to decrease preschool children's stress and enhance their emotional-behavioral development, to become an effective alternative to protect their health. Based on positive behavior support approaches, some strategies can be provided to preschoolers and school teachers (Liz, 2020). When preschool children are detected with emotional-behavioral challenges, immediate professional support should be provided to the children, their caregivers, and educators. Such program should be required to be developed according to the needs of local educators and caregivers, with a round of trainings to be provided before its implementation. These children can be referred to the local elder social service team once their problem persists. Coaches from the service team will develop individualized plans for these children, and provide families with practical strategies to be used at home. Such program can better serve these children with parental and sibling engagement since it aims for family wide intervention and brings professionals into joint support. Due to the delicate nature of the related issues and consent from families is required, preschool centers are to serve as a venue to get in touch with vulnerable children instead of a formal referral channel. Child behavior and stress has been observed as a reciprocal relationship (Liz, 2020). High levels of problem behaviors in preschool-age children predict higher levels of stress violations for parents. Protective factors for parents include family resources during early childhood. It seems that stress levels may be different between mothers and fathers, as initial levels of stress for mothers without social support were significantly higher than those with social support.

**8. Conclusion**

The social, emotional, and behavioral health of preschool-aged children in the United States is in crisis. As more children enter the preschool years without typical development of emotional-behavioral regulation, the number of strain behaviors such as aggression, tantrums, or anxiety has increased. As a result, preschool children with prolonged or persistent challenges are often referred for problem behavioral issues or threaten expulsion. Stress, trauma, and other adversity can be major contributors to the current state of preschool emotional-behavioral development crisis. Research has documented the significant impact of stress on early development of all domains of health. Additionally, early exposure to adverse childhood experiences has been found to have a dose-response effect on both physical and mental health well into adulthood and across generations.

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Parental stress resulting from high levels of child problem behaviors puts children at risk for negative development outcomes. High child problem behaviors at the start of preschool are known to predict elevated parental stress. Furthermore, parental stress can have negative effects on parenting practices, the parent-child relationship, and child development. Child behavior and parental stress have been found to be reciprocal, with both operating as risk factors for problems in the future. Parental stress magnifies the impact of even low levels of child problem behaviors on a number of negative parenting and child management outcomes. These findings are some of the first to highlight the importance of both targeting child behavior and parental stress together in task-oriented, preventive approaches.

Control over the process of change generally rests in the hands of the practitioners. Although parents may assist the practitioners' efforts and even make suggestions, ultimately it is the audience who is the target of the change. This points to the influence of children on parents' parenting and on the practitioners' initial assessment of that parenting. Specifically, both lower the likelihood a practitioner will focus on the child in intervention but also on children's context more broadly. For a child to inspire chronic parenting stress, their behaviors would need to be severe enough to cause concern in the home, and yet they would need to be less evident outside the home where the vast majority of parent-practitioner meetings take place.

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