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Early Educator Depressive Symptoms and Responses to Challenging Behaviors

A thesis submitted in partial satisfaction of the

requirements for the degree Master of Arts in Education

by

Flora Salgado Ziprin

2026

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ABSTRACT OF THE THESIS

Early Educator Depressive Symptoms and Responses to Challenging Behaviors

by

Flora Salgado Ziprin

Master of Arts in Education

University of California, Los Angeles, 2026

Professor Anna Markowitz, Chair

Educator wellbeing has received increased attention as a critical factor in early care and education (ECE) quality, yet little is known about how depressive symptoms impact moment-to-moment classroom practices, particularly responses to challenging behaviors. We use data from a community sample of toddler and preschool teachers working in publicly funded ECE settings in Louisiana to document the prevalence of depressive symptoms and examine their relationship to educators' reported behavior management strategies. Consistent with previous findings in Louisiana, our study revealed elevated rates of depressive symptoms across the workforce. Regression analyses revealed that educators with depressive symptoms were significantly more likely to endorse non-supportive strategies in response to challenging behaviors. These findings suggest that depressive symptoms may hinder educators' ability to respond in developmentally supportive ways, with implications for policy and practice to promote educator wellbeing and improve classroom interactions.

The thesis of Flora Salgado Ziprin is approved.

Jennie Katherine Grammer

Rashmita S. Mistry

Anna Markowitz, Committee Chair

University of California, Los Angeles

2026

DEDICATION

To my mom, dad, sister, Alfie, Hazel, Basil and Uncle Dave, whose love and support has carried me through every chapter of my life – including the many months it took to write this one.

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Introduction

Research suggests that young children learn best when engaged in stimulating, content-oriented interactions with warm, supportive, and responsive caregivers (Burchinal et al., 2008; Hamre, 2014; Mashburn et al., 2008). In early care and education (ECE) settings, the quality and content of children's interactions with adults shapes their learning across multiple domains, including language, cognition, and social-emotional development (Barnett, 1995; Howes et al., 2008). Social-emotional development – the emerging ability of young children to feel, regulate, and communicate their emotions, as well as create and manage relationships—predicts school adjustment, academic success, and overall wellbeing (Ashdown & Bernard, 2012; Denham et al., 2012), making social-emotional learning (SEL) – the acquisition of social-emotional skills gained through intentional, structured educational experiences – a key early learning objective and indicator of school readiness (Bassok et al., 2016; Enriquez, 2015). Thus, early educators play a central role in creating environments where these foundational skills can develop.

In ECE settings, opportunities for social-emotional development emerge throughout the day, during explicit instruction, daily routines, play with peers, and through teachers' responses to children in the moment. Teacher responses create important SEL opportunities, as supportive back-and-forth exchanges with caregivers help children understand and manage the feelings that arise in their bodies (Landry et al., 2014). It is often during moments when emotional regulation is challenging, however, that these supportive responses become critical. In the classroom, behaviors often labeled as challenging —such as tantrums, separation anxiety, physical aggression, or extreme stubbornness— frequently reflect natural, normative developmental processes. These behaviors may stem from a child's developmental stage, stress levels, or emerging ability to communicate or regulate emotions (Posner & Rothbart, 2000). For example,

behaviors such as screaming, crying, occasional hitting or biting, difficulty following directions or maintaining focus, can reflect early attempts at impulse control and emotional regulation as the brain develops (Metcalfe & Mischel, 1999; Wakschlag et al., 2007). Given that these behaviors often reflect normative stages of development and occur in 10-30% of children between 2 and 5 (Zinsser et al., 2022), it is essential that early educators are able to support children's behavior management and social-emotional growth. However, many report feeling underprepared and unsupported in this area (Hemmeter et al., 2008).

An early educator's own wellbeing serves as the foundation for their ability to respond supportively when children display challenging behaviors. Research in ECE and other caregiving contexts has highlighted how challenges in emotional capacity, such as depressive symptoms, can impact adult-child relationships, including increased incidence of harsh or withdrawn interactions (Vreeland et al., 2019), reduced responsiveness, and increased negative reactions to children's behaviors (Buettner et al., 2016). Unfortunately, early educators face an elevated risk of depressive symptoms, likely due, at least in part, to the significant physical, financial, and emotional demands of their work (Jeon et al., 2018; Roberts et al., 2019; Whitebook et al., 2014). Given that teacher-child interactions are central to social-emotional learning, understanding how common depressive symptoms are among early educators, and how these symptoms may influence classroom dynamic, is vital.

While several studies have investigated the relationship between early educator wellbeing, classroom quality, and challenging behaviors (Jeon et al., 2014, 2019; Kwon et al., 2019, 2019; 2022; Roberts et al., 2016; Zinsser et al., 2013), to our knowledge none have explored the connection between depressive symptoms and the strategies educators use to address behaviors when they occur. The present study has three aims. First, it seeks to explore

the prevalence of self-reported depressive symptoms among a large sample of early educators working in child care settings in Louisiana in the aftermath of the COVID-19 pandemic shutdowns. Second, it aims to identify the types of strategies educators report frequently using—whether supportive, neutral, or non-supportive when addressing challenging behaviors. Finally, the study will examine whether the presence of depressive symptoms is related to the use of non-supportive strategies in response to these behaviors.

Literature Review

Responses to Challenging Behaviors

In the classroom, early childhood educators have the opportunity to nurture young children's social-emotional skills and behaviors, which helps children understand and express their emotions (Ahn & Stifter, 2006; Denham, Bassett, & Zinsser, 2012). The importance of using these opportunities is suggested by emotion socialization theory, which underscores the key role of adults in providing opportunities for children to practice and develop social and emotional skills through responses to children's emotions (Eisenberg et al., 1998a). This is particularly important to consider in early education programs, where challenging behaviors such as prolonged crying, refusing to take turns, throwing objects, engaging in impulsive actions, or struggling to communicate needs, are normal. In these moments, supportive responses become powerful opportunities to support children's emotion regulation, empathy, social functioning and classroom outcomes (Davidov & Grusec, 2006; Jennings & Greenberg, 2009).

Scaffolding challenging behaviors in a calm, consistent, and nurturing manner, not only supports children's skill development but also fosters a positive classroom climate (Jennings & Greenberg, 2009). Practices such as teaching a child a breathing exercise or guiding them to label their emotions can enhance children's ability to recognize and interpret emotional cues in

themselves and others (Zelazo & Lyons, 2012). When caregivers label emotions and validate feelings—including difficult ones like anger or sadness—these forms of emotional coaching foster children's emotional expressiveness and improve their capacity to effectively communicate their emotions to others (Fabes et al., 2002). Supportive responses to children's negative emotions promote the development of prosocial behaviors and emotional coping skills (Eisenberg et al., 1996). Conversely, non-supportive responses may impede these developmental processes.

Negative or non-supportive responses, such as avoiding contact with a child who needs support, responding with actions that are punitive or minimizing of a child's emotional experience, or reacting in self-focused ways, also teach children about their emotions (Eisenberg et al., 1996). When caregivers discourage or punish children's expression of emotion, children may learn to view their own and others' emotions as negative, causing them to avoid opportunities to explore their emotions in meaningful ways. Moreover, punitive or minimizing reactions are associated with low levels of constructive coping skills, high levels of avoidant coping, and increased negative emotionality in children (Eisenberg et al., 1996, 1998, 1999; Eisenberg & Fabes, 1994; Fabes et al., 2002).

Exclusionary discipline— which encompasses the various ways children are removed from a child care or preschool arrangement for behavioral reasons (Conners-Edge et al., 2018; Martin et al., 2018; Zinsser et al., 2021)—is one of the least supportive and all too common responses to challenging behaviors in early education settings. Preschool children face suspension and expulsion at a significantly higher rates than K-12 students, with hundreds affected daily, highlighting a widespread reliance on exclusionary practices and the need for more supportive approaches to managing challenging behaviors (Gilliam, 2005; Gilliam &

Shahar, 2006). Given that children with challenging behaviors may be at an elevated risk for experiencing exclusionary discipline, understanding teacher characteristics that may be related to teacher practice and strategies used to respond to challenging behaviors is needed. This paper explores educator wellbeing as a teacher characteristic, due to significant concerns about wellbeing, particularly in the wake of COVID-19.

Educator Workforce Wellbeing: Depressive Symptoms

The ECE workforce—largely composed of women from racially and ethnically underrepresented backgrounds—is one of the lowest-paid professional sectors in the United States, with an average hourly wage of $13.07 and poverty rates nearly 6 times higher than elementary and middle school teachers (McLean et al., 2024). In addition to pay disparities, an accumulation of challenges to wellbeing—including poor work conditions, limited benefits, high physical and emotional work demands, and limited workplace support (Kwon et al., 2022)—places the workforce at an increased risk for experiencing food insecurity, financial instability, and, in particular, depressive symptoms (Jeon et al., 2018; A. M. Roberts et al., 2019; Whitebook et al., 2014). Studies conducted across the U.S. have documented elevated rates of depression ranging between 23%-40% among educators working across various early learning contexts (Johnson et al., 2020; Kwon et al., 2022; Kwon et al., 2022; Otten et al., 2019).

In Louisiana, the context for the present study, the early education landscape mirrors the challenges to educator wellbeing observed nationally, with some issues especially pronounced. According to the 2024 Early Childhood Workforce Index, Louisiana ranked the lowest median workforce wage at $10.60. While many states experienced wage increases between 2019 and 2022, Louisiana was one of ten states where early educator wages declined, dropping by nearly 7.4% (McLean et al., 2024). This financial strain is compounded by persistently low wages, high

rates of turnover, and elevated levels of depressive symptoms among early educators (Bassok et al., 2020, 2021; Markowitz & Bassok, 2022). In 2019, prior to the COVID-19 pandemic, 20% of child care lead teachers experienced clinically relevant depressive symptoms. This figure increased to 29% in 2020 (Markowitz & Bassok, 2022). These workforce conditions likely impact teachers' classroom interactions and management strategies.

Bronfenbrenner's bioecological model provides a useful framework for examining how workplace contexts surrounding the ECE workforce may influence educator wellbeing and, in turn, affect their ability to deliver high-quality care and education (Bronfenbrenner & Morris, 2007). This model emphasizes the interconnections between multiple environmental systems, such as the microsystem (e.g., teacher-child interactions), the mesosystem (e.g., workplace policies and relationships), and the exosystem (e.g., compensation structures and regulatory standards) that collectively influence educators' lived experiences and practices. Within this framework, emotion socialization theory illuminates how teachers' own emotional wellbeing influences moment-to-moment interactions with children.

The challenges to wellbeing early educators experience may have implications for how they manage student behaviors. Teachers' capacity to respond to children's emotions in supportive, rather than non-supportive ways, depends in part on their own emotional resources, stress levels and surrounding environment (Buettner et al., 2016; Jeon et al., 2016; A. Roberts et al., 2016). This hypothesized connection is well-established, with research showing that elevated rates of depression to be negatively associated with key aspects of caregiving, including classroom quality, attitudes toward challenging behaviors and social-emotional support (Jennings, 2015; Jeon et al., 2018; Markowitz et al., 2024). Kwon and colleagues (2019), for example, found that Early Head Start teachers with higher levels of depressive symptoms were

more likely to perceive toddlers as having behavioral challenges, even after accounting for child, family, and teacher characteristics. Similarly, Silver and Zinsser (2020) reported that preschool teachers with higher levels of depression were more likely to request the expulsion of a child from their program.

These findings highlight the potential impact of early educators' emotional wellbeing on their practices related to managing child behaviors. They do not, however, illuminate the way that wellbeing may be related to teachers' typical, day-to-day practices when faced with children's challenging behaviors, which may be more consequential for development.

Present Study

This study examined the relationship between early educators' depressive symptoms and their use of emotionally supportive, neutral, or non-supportive strategies in response to challenging behaviors. It extends previous research concerning teacher wellbeing by focusing specifically on how depressive symptoms influence educators' day-to-day approaches to behavior management. Based on a review of the existing literature, it is hypothesized that educators with higher levels of depressive symptoms will be more likely to use non-supportive strategies when addressing challenging behaviors. The findings from this study have the potential to deepen our understanding of the potential benefits to support educator wellbeing, and whether doing so will improve both teacher and child outcomes and advance educational equity in ECE settings. We ask:

1. What are the prevalence rates of depressive symptoms among early educators working in publicly funded child care centers in Louisiana after the COVID-19 pandemic?

2. How frequently do educators report using emotionally supportive, neutral, or non-supportive strategies in response to challenging behaviors?

3. Are educator depressive symptoms associated with an increased endorsement of non-supportive strategies in response to challenging behaviors?

Method

Data were drawn from the Fall 2021 and Spring 2022 waves of the Study of Early Education in Louisiana (SEE-LA) workforce surveys, conducted in collaboration with the Louisiana Department of Education and two Louisiana parishes (similar to a county), Jefferson and Orleans. Jefferson and Orleans are the second and third largest parishes in terms of population. Poverty rates in both Jefferson and Orleans exceed the national average of 11.5%, with Jefferson at 17.5% and Orleans at 25.2% (U.S. Census Bureau, 2022).

At both timepoints, electronic and paper surveys were distributed to all educators working in all publicly funded child care sites in the parish. Specifically, in the Fall of 2021, site leaders generated a list of all early educators working at a site, which was used as our primary source for distribution. We emailed all teachers based on the email address provided by site leaders, as well as mailed paper surveys to sites. Site leaders and educators were encouraged to share the survey with new hires, and links/paper surveys were provided for this purpose. In the Spring of 2022, we again emailed all addresses from the Fall 2021 data collection (including those we received from new teachers who had not been on site directors original lists), as well as sent paper surveys to sites and solicited responses from new teachers. Educators who participated in the survey received a $25 gift card as a token of appreciation.

The achieved response rate, calculated by dividing the total number of surveys returned by the total number of educators working in all child care sites in the parish, as provided by the initial list from leaders (e.g., that gave the best approximation of the size of the site, and therefore the potential number of teachers at any given time point), was approximately 60% (fall

2021 N= 863, and spring 2022 N= 807). The survey inquired about sociodemographic background, work experiences, and emotional wellbeing.

Data and Sample

We restricted our analytic sample to teachers who responded at both timepoints (N=613). Given high rates of within-year teacher turnover in child care settings (Bellows et al., 2022), our sample thus likely excludes the teachers who struggled most in their work, a point we return to in the discussion. We then further restricted our sample to teachers with full data on our main variables, 1) depressive symptoms and 2) strategies used in response to challenging behaviors (N=541). Finally, we refined our sample to include only educators who worked with toddlers and preschool aged children (N = 409), to best align with the survey's conception of challenging behaviors and response strategies. Depressive symptoms were collected at both timepoints, and strategies were collected in spring 2022. To address missing covariate data, multiple imputation with chained equations (m=25) –a statistical method used to fill in missing values with plausible estimates based on observed data– was used and estimates were combined using Rubin's rules (Barnard & Rubin, 1999; Royston, 2004; Von Hippel, 2007; Woods et al., 2021).

Table 1 presents descriptive information on sample demographic characteristics and the percent of missing data prior to multiple imputation. Of the final sample (N=409), 98% percent of the sample were female. Seventy percent of teachers identified as Black, 24% as White and 7% as Asian, Hispanic, Multi-Racial or "other." Thirty-two percent of teachers reported their current level of education as having a high school diploma, GED or less, 51% reported an associate degree or some college, and 16% percent a bachelor's degree or higher. Teachers' years of experience ranged from less than 3 months to over thirty-four years (M = 12.9, SD = 8.56).

Nearly 48% of our sample had over seven years of experience in early education, 20% worked in the field for three to six years, and 32% had three years of experience or less in ECE.

Measures

Depression

In fall 2021 and spring 2022, a seven-item Center for Epidemiologic Studies Depression scale Short Form (CES-D-SF) was used to assess early educators' depressive symptoms. The CES-D-SF is a widely used self-report questionnaire with accepted psychometric properties, that measures the frequency of depressive symptoms participants experienced in the past week (Levine, 2013). Ratings are reported on a scale ranging from 0 to 3, and response options indicate the frequency or severity of symptoms (e.g., "0 = rarely or never," "1 = some or a little," "2 = occasionally or moderately," or "3 = most or all of the time). Symptoms include restless sleep, trouble focusing, poor appetite, feelings of sadness and depression, and educators' sense that it is "difficult to get going" or that "everything is an effort." We used the CES-D-SF to create two measures. First, we summed each individual's CES-D-SF scores to create a continuous variable that reflected each educator's overall score. Second, we used this measure to create a dichotomous variable categorizing educators as either reporting clinically significant depressive symptoms (score ≥8) or not. We use the spring 2022 version of the CESD-SF as our main predictor variable, while controlling for teacher's reported depressive symptoms in fall 2021.

Strategies Used in Response to Challenging Behaviors

In spring 2022, teachers were asked, "When a child behaves in a way that is disruptive, which of the following strategies do you use most often to address the disruptive behavior?" Educators were directed to mark their top three choices to the following ten options: a) talk to the

child to help them calm down b) put the child in a time-out c) use a designated quiet area for the child to calm down d) take away toys or other privileges e) give the child sensory objects to play with (e.g., soft putty, something to chew, fidget object) f) teach the child a “calm down” strategy, such as a breathing exercise g) take the child out of the classroom (e.g., to the office, your site leader, or another teacher) h) use verbal or non-verbal redirection i) other j) not applicable. Items i) (N=10) and j) (N=21) were not used for this analysis. Each option represents the teacher-reported behavioral strategy most frequently used to manage disruptive behavior.

The remaining eight strategies were placed into three behavioral response categories — supportive, neutral, or non-supportive — adapted from the Coping with Children's Negative Emotions Scale, (CCNES; Fabes et al., 2002) and emotion socialization theory (Eisenberg et al., 1998a), in which CCNES is based. Emotion socialization theory states that children learn to understand, regulate and express emotions through types of interactions with caregivers, broadly classified as supportive or non-supportive. The CCNES is a validated self-report instrument designed to assess parental responses to young children's emotional distress. It has sound internal reliability, test re-test reliability and construct validity (Fabes et al., 2002) and has been widely used to examine links between caregiver responses and children’s emotional development. CCNES has also been adapted for use in early childhood education settings (Buettner et al., 2016b; Jeon et al., 2016; Wilhelmsen et al., 2024).

The CCNES framework classifies subscales of expressive encouragement, emotion-focused reactions, and problem-focused reaction as supportive, whereas distressed reactions, punitive reactions and minimizing reactions are classified as non-supportive. The addition of a neutral category aligns with recent adaptations of the CCNES in early childhood education

contexts, where factor analyses identified a distinct “distracting” dimension (Wilhelmsen et al., 2024)

Using the CCNES and emotion socialization theory as a reference for coding, the following three strategies were coded as supportive: talk to the child to help them calm down, use a designated quiet area for the child to calm down and teach the child a “calm down” activity. Supportive responses reflected strategies designed to help the child feel better (i.e., oriented towards affecting the child's negative feelings and behaviors). Supportive responses include acknowledging, validating, and labeling children’s emotions, offering comfort, and helping children to regulate their feelings and solve problems. These response have been positively associated with children's emotional competence, including their ability to decode and express emotions (Eisenberg et al., 1998; Fabes et al., 2002).

The next three strategies were coded as non-supportive: put the child in a time out, take away toys or privileges, and take the child out of the classroom. Non-supportive reactions are characterized by minimizing or devaluing children’s emotions, harsh and disapproving responses, or expressions of adult discomfort (Eisenberg et al., 1998; Fabes et al., 2002).” Such non-supportive strategies reduce the caregiver’s exposure or need to deal with the negative emotions of the child directly. These responses have been linked to diminished emotional expressiveness in children (Fabes et al., 2002).

Finally, the following two strategies were coded as neutral: e) give the child a sensory object to play with h) use verbal or nonverbal redirection. Neutral strategies involved interventions that redirected or distracted the child's attention and or provided simple instructions without addressing the emotional context specifically (Bjørk et al., 2020; Wilhelmsen et al., 2024).

Teachers were assigned a category such that they were coded as 1 if they endorsed any of the items comprising that group (e.g., they were given a 1 for supportive if they responded affirmatively to either a, c, or f), 0 otherwise. Teachers could be coded as using multiple categories, depending on their responses; that is, categories were not mutually exclusive.

While we initially are interested in describing teachers' reactions to children's behaviors broadly (RQ2), our final research question (RQ3) focuses specifically on understanding how depressive symptoms are related to teacher's use of non-supportive strategies. Thus, our final analysis compares non-supportive strategies (coded as 1) to all other strategies (coded as 0). Secondarily, we examine the comparison between supportive strategies (coded as 1) and all other strategies (coded as 0), as well as neutral strategies (coded as 1) compared to all other strategies (coded as 0). These sensitivity test findings are shown in Appendix A.

Covariates

A set of covariates from Fall 2021 data were included in the analysis to control for potential influences of educator sociodemographic characteristics, professional experience, classroom characteristics, and site-level variables on both depressive symptoms and teachers' use of various strategies. Educator socio-demographic covariates included: age; gender (male = 0, female = 1); race/ethnicity (Black, Multi-racial or other, White; White as reference category); marital status (0 = married or cohabiting, 1 = single, separated, divorced or widowed); annual household income (using 5 categories; 1 = *$15,000 or less*, 2 = *$15,000-25,000*, 3 = $*25,000-35,000*, 4 = $*35,000-55,000; 5 = $55,000* as reference category); wages in dollars per hour; access to benefits such as health insurance (not offered = 0, offered = 1); and paid leave off (not offered = 0, offered = 1). Professional background covariates included: educational background (a 3 level variable indicating a high school diploma, GED, or less; an Associate's degree (AA) or

some college; or a Bachelor's degree (BA) or more; BA as a reference category); number of years teaching in early childhood (1 year or less, 1-3 years, 3-6 years; 7+ years as reference category; current teaching position (other = 0, lead or co-lead = 1); and total number of SEL professional development hours completed since the start of the academic year. The final set of covariates included classroom and site level characteristics including: number of children in the class; age of children in the classroom (toddlers = 1, three-to-five-year olds = 0; and percentage of children with special needs.

Analytic Strategy

This study has three overarching research questions (RQs): (1) What are the prevalence rates of depressive symptoms among early educators working in publicly funded childcare centers in Louisiana? (2) How frequently do educators report using emotionally supportive, neutral or non-supportive strategies in response to challenging behaviors? and (3) Are educator depressive symptoms associated with an increase in the endorsement of non-supportive strategies in response to challenging behaviors?

We first described our two main constructs: (RQ1) rates of clinically relevant depressive symptoms and (RQ2) endorsement of emotionally supportive, neutral or non-supportive. To estimate the prevalence of depressive symptoms, we first calculated individual CES-D-SF scores to generate a continuous measure of depressive symptoms. We then identified clinically significant depressive symptoms based on a cutoff score of eight. Following this, we calculated the endorsement rates for each individual strategy, as well as for each category of strategy (e.g., supportive, neutral, and non-supportive). Finally, we counted how many strategies within each category educators endorsed to get a sense of how the intensity of each strategy in an educator's classroom.

Then, to explore (RQ3) the relationship between educator depressive symptoms and use of non-supportive strategies, we ran a series of multiple linear probability models.[1] First, we ran an uncontrolled model regressing educators' use of non-supportive strategies on our measure of Spring clinically relevant levels of depressive symptoms. Second, we added covariates to our model, including the fall measure of depressive symptoms. Finally, to better account for center factors (e.g., center climate, policies, or leadership practices) that may be related to depressive symptoms and educators' choice of strategies due to work environment, a center fixed effect was added. The center fixed effect model allows us to estimate the relationship between depressive symptoms and educators' choice of strategies within each center, that is, among teachers working at the same site. In all models, standard errors clustered at the site level.

Model 1: Non-supportive Strategies = $\alpha + \beta_1 Depression + e_{i.}$

Model 2: Non-supportive Strategies = $\alpha + \beta_1 Depression + \beta_k Covariates + e_{i.}$

Model 3: Non-supportive Strategies = $\alpha + \beta_1 Depression + \beta_k Covariates + e_i + \gamma_{j.}$

Sensitivity analyses were run to probe the robustness of our findings to modeling choices (see Appendix B). First, models were re-ran taking into consideration the intensity of non-supportive strategy endorsement (High = 3, Medium = 2, Low = 1, None = 0) Next, models were re-ran using a dichotomous measure of Spring depressive symptoms (CES-D-SF $\geq$ 8 coded = 1, CES-D-SF < 8 = 0). Finally, models were re-run using the fall measure of clinically relevant levels of depressive symptoms as the main variable.

[1] Findings were not sensitive to the use of logit models; linear probability models were retained for ease of interpretability.

Results

Table 1 presents descriptive information about our final sample of educators. The sample included approximately 73% lead and co-lead teachers. Consistent with other data from child care teachers (e.g., McLean et al., 2021; Bassok et al., 2019), educators reported relatively low wages, an average rate of about $13.00 per hour. Most of our teaching sample (73%) reported having no access to health insurance, and only 40% reported access to sick leave benefits. Just under half of the educators reported experiencing food insecurity over the past year. Despite this, 43% still saw themselves as 'likely or very likely' to continue as educators for the next three years. Among the teachers surveyed, 57% worked with toddlers (ages 2-3), while 43% worked with preschool-aged children (ages 3-5). A significant majority (83%) reported participating in social and emotional professional development opportunities over the course of the year. Consistent with licensing requirements, classroom sizes varied widely by age group, with enrollments ranging from fewer than 4 to over 20 children, average enrollment was 10.6 children per classroom. Additionally, 42% of educators reported caring for at least one child with special needs in their classroom.

RQ1: Rates of Educator Depressive Symptoms

Table 1 describes the frequency and severity of depressive symptoms experienced by teachers, as measured by the CES-D-SF. Teacher depression was higher at the beginning of the year, with an average fall score of 4.74, compared to an average spring score of 4.49, though not statistically significantly so. This means that on average, teachers reported at least some level of regular depressive symptoms. Put another way, using the research-validated CES-D-SF cutoff score of 8 to indicate the presence of clinically significant depressive symptoms (Levine, 2013),

we found that 26% of educators in the fall and 23% in the spring exhibited clinically relevant levels of depressive symptoms.

RQ2: Endorsement of Strategies Used in Response to Challenging Behaviors

Table 2 presents the proportion of teachers who identified emotionally supportive, neutral, and non-supportive strategies as among the top three used in their classrooms, both overall and for each individual strategy. Most teachers (96%) reported at least one supportive strategy as their top choice; 48% endorsed at least one neutral strategy; and 14% endorsed at least one non-supportive strategy. The most endorsed strategies were supportive: 86% endorsed "talk to a child to help them calm down," 56% endorsed "teach the child a calm down strategy, such as a breathing exercise," and 47% endorsed "use a designated quiet area for the child to calm down." Within the non-supportive category, the most frequently endorsed strategy (7%) was “take the child out of the classroom (e.g., to the office, your site leader, or another teacher).”

Table 3 presents intensity results for each category of strategies, indicating how many strategies (high = 3, medium = 2, low = 1, none = 0) within each category were endorsed by individual educators. Most educators (86%) endorsed zero non-supportive strategies as a top three, about half (52%) endorsed zero neutral strategies, and less than 4% endorsed no supportive strategies. Just under half (48%) of educators endorsed at least two supportive strategies, and 22% endorsed all three. Overall, less than 2% of educators reported more than one non-supportive strategy among their most frequently used.

RQ3: Association between depressive symptoms and teachers’ use of non-supportive strategies in response to challenging behavior

Table 4 presents the estimate from regression analyses exploring teachers' spring depressive symptoms and endorsement of non-supportive strategies. We found that in

uncontrolled models, depressive symptoms were significantly associated with endorsement of non-supportive strategies ($b = 0.01$; $p < 0.05$); this relationship was initially no longer present after including covariates, but re-emerged as statistically significant with the addition of center fixed effects ($b = 0.01$; $p < 0.05$). Our findings suggest that the likelihood that a teacher reported a non-supportive strategy as among their top three increased as depressive symptoms increased, such that for every one-unit increase in CES-D-SF score, educators' likelihood to endorse a non-supportive strategy increased by 1.3 percentage points as compared to other teachers in their center who have lower levels of depressive symptoms. Put another way, educators experiencing baseline clinically relevant depressive symptoms (e.g., CES-D-SF Score = 8) were 10.4% more likely to endorse non-supportive strategies in response to challenging behaviors than educators with zero symptoms.

Secondary analysis of the association between depressive symptoms and use of supportive strategies (coded = 1) compared to all other strategies (coded = 0), and neutral strategies (coded =1) compared to all other strategies (coded = 0) were non-significant. Findings from these sensitivity tests can be found in Appendix A. Appendix B reveals that results were consistent in models that used the intensity of non-supportive strategy use as the key independent variable, but models that used a dichotomous measure of depressive symptoms and predicted strategy use from fall CESD-SF scores resulted in nonsignificant findings.

Discussion

The quality and content of children's interactions with early educators shape their learning experiences (Ashdown & Bernard, 2012; Denham et al., 2012). This is particularly true for the interactions early educators have with young children when they are experiencing emotionally difficult moments. The strategies educators use to respond to these moments and

resulting challenging behaviors are crucial for helping children feel understood, safe, and capable of managing their emotions and actions, which in turn supports their social-emotional development. However, educators' ability to effectively respond to challenging behaviors is likely shaped by their own emotional wellbeing. This paper is the first to explore whether educators' depressive symptoms are linked to their approach to managing challenging behaviors, and in doing so improves our understanding of how underinvestment in educator wellbeing may impact young children. It also emphasizes to policymakers and leadership the potential benefits of prioritizing educator wellbeing to support both educators and children.

We first examined the prevalence of self-reported depressive symptoms among educators in publicly funded Louisiana child care centers shortly following the COVID-19 pandemic. Consistent with previous findings in Louisiana (Bassok et al., 2021; Markowitz & Bassok, 2022) and nationally (Jeon et al., 2018; Roberts et al., 2019), we found that early educators reported high rates of depressive symptoms (26%), exceeding the national prevalence rate for women (CDC, Behavioral Risk Factor Surveillance System, 2022).

Second, we examined the rates at which early educators endorsed strategies for managing challenging behavior—specifically emotionally supportive strategies that likely boost social and emotional development, neutral strategies, and non-supportive strategies. We found that 96% of educators endorsed at least one supportive strategy and 22% reported using only supportive strategies. The high percentage of educators using these strategies suggests that many educators are aware of and attempting to use practices that acknowledge children's feelings and promote their development.

Nonetheless, nearly 14% of teachers reported using at least one non-supportive strategy as a "top three" response in their classroom, and nearly half endorsed a neutral strategy. This

mixed approach to responding to challenging behaviors is not uncommon in early education settings, where the complexity of classroom dynamics can lead to varied practices. To our knowledge, this study is among one of the first to collect data on the day-to-day strategies educators are using in their practice to address challenging behaviors.

Finally, we explored whether educators' experiences of depressive symptoms were related to their endorsement of non-supportive strategies in response to challenging behaviors. In center fixed effects models, which leverage within-center comparisons to account for center-level factors such as director characteristics or site climate, educators with higher levels of depressive symptoms were more likely to endorse use of a non-supportive strategy than educators working in the same center with lower levels of depressive symptoms ($b = 0.01$; $p < 0.05$). Put another way, educators with higher rates of depressive symptoms were more likely to indicate that placing a child in time-out, taking away toys or privileges, or removing them from the classroom were among their preferred responses to challenging behaviors. The effect size was small to modest: for example, extrapolating from our estimates, educators experiencing baseline clinically relevant depressive symptoms (CES-D Score = 8) were 10.4% more likely to endorse using non-supportive strategies than educators experiencing no clinically relevant symptoms of depression (CES-D = 0).

It is important to interpret these findings within the broader context of the COVID-19 pandemic, during which data collection occurred. While these conditions may have elevated depressive symptoms (Markowitz & Bassok, 2022) and altered classroom dynamics, they also highlight an ongoing reality: many educators face chronic stress, inadequate support, and challenging working conditions that extend far beyond the pandemic context (Bassok, D., et al., 2019; Kwon, Ford, et al., 2022; Logan et al., 2020; McLean, et al., 2024; Whitebook, et al.,

2014). As such, workforce conditions including low compensation, limited resources, and high emotional demands, shape teachers' wellbeing and their capacity to respond to children's needs in meaningful ways (Jennings, 2015; Jeon et al., 2018). From a bioecological perspective, these findings underscore how broader systemic and contextual factors influence educators' wellbeing and responses to children's needs.

In practical terms, our findings suggest that depressive symptoms may influence both educators' practices and the learning experiences of the children in their care, potentially contributing to the observed relationships between wellbeing and child outcomes. For example, previous research found that children in classrooms with more depressed teachers made significantly smaller gains in social-emotional skills (Roberts et al., 2016) with no evidence of mediation by the quality of teacher–child interactions. Our study extends this understanding by suggesting that early educator depressive symptoms may shape classroom processes and quality, particularly through their influence on how teachers respond during critical teaching moments.

This hypothesis warrants further exploration. In particular, it is worth noting that our measures of depressive symptoms and challenging behaviors were collected in the spring; it is possible that teachers who struggled the most in their classrooms left their positions prior to responding to the spring survey (e.g., Bassok, et al., 2021). This may have resulted in positive selection, such that respondents were, on average, less likely to be experiencing high levels of depressive symptoms, more experienced and are more committed to their work -- potentially leading to an underestimation of both the prevalence of depressive symptoms and challenges in classroom dynamics.

Limitations

While our study leverages large, recent survey data to explore the role of educator wellbeing in shaping child experiences, several limitations must be acknowledged. First, the temporal ordering and directionality of the relationships between depressive symptoms and practices remain unclear. For example, it is uncertain whether depressive symptoms lead to changes in how educators handle challenging behaviors or if managing behavioral challenges affects educator wellbeing. This bidirectional nature makes it difficult to establish causal links, and future research should prioritize exploring these dynamics to clarify the underlying mechanisms. Beyond issues of bidirectionality, our model is correlational and cannot identify a causal impact in either direction. To partially address this concern, our regression analysis used two strategies.

First, we included a measure of previous fall 2021 depressive symptoms as a covariate, to account for educators' baseline mental health. This approach helps control for pre-existing depressive symptoms, allowing us to better isolate the association between current symptoms and responses to challenging behaviors. By incorporating fall and spring time points, we can account, at least in part, for time-invariant relationships between teacher wellbeing and survey responses. Second, we included center fixed effects, which account for all site-level factors that may contribute to depressive symptoms and behavior challenges, such as leadership style, program philosophy, organizational climate etc. By controlling for site-specific characteristics, we aimed to ensure that any relationship between depressive symptoms and responses to challenging behaviors was not influenced by differences between the centers.

Third, our data were entirely collected via self-report measures, which introduce potential bias into our findings due to shared method variance. This might inflate estimated associations. On the other hand, educators might also underreport their depressive symptoms or overestimate their use of supportive disciplinary practices for reasons related to social desirability. Such

tendencies would mean that we underestimated the true relationship between depressive symptoms and educators' strategies.

Fourth, while we note the strong theoretical foundation for the CCNES, and the previous application of CCNES in previously published ECE research, such a scale nonetheless inevitably simplifies the complexity of teachers' responses and moment-to-moment decision-making. This approach may not capture variations in intent, contextual demands, or teacher decision-making in real time, which likely adds error to our estimates. This limitation should be considered in interpreting results, and future research should both continue to refine the use of scales like the CCNES and incorporate other methods, such as direct observation or teacher interviews, to help mitigate this issue and provide a clearer understanding of how educators respond to and manage challenging behaviors in real time.

Finally, our sample was drawn from publicly funded ECE settings in two Louisiana educational contexts during the COVID-19 pandemic and therefore is not representative of the broader population of educators. Our findings are likely not applicable to every educational setting, particularly those with different demographic and socio-economic characteristics, or settings where educators may have different levels of training and support.

Future research should aim to explore a more diverse and representative sample to enhance the external validity of the results.

Implications and Conclusions

A key goal of ECE settings is to support children's social-emotional development. When early educator wellbeing is high, teachers are able to create the kind of supportive environments and interactions that lead to positive outcomes for children (Buettner et al., 2016; Jeon et al., 2014, 2019). However, many early educators face challenges to their wellbeing (Roberts et al.,

2019). This study reinforces existing evidence on the prevalence of depressive symptoms among early educators and provides new insights suggesting that depression may hinder educators' ability to offer social-emotional support when addressing behavioral challenges.

This trend is concerning given the increasing use of exclusionary discipline practices—such as suspensions, expulsions, or other actions that isolate students from classroom activities—in early childhood settings, as well as the inequitable distribution of these practices across racial and gender lines (Fabes et al., 2021; Zinsser et al., 2022). The extant of the literature exploring the relationship between depressive symptoms and exclusionary discipline is limited and often focuses on broader patterns rather than day-to-day interactions (e.g., Gilliam & Shahar, 2006; Silver & Zinsser, 2020); our findings provide an alternative perspective, suggesting that depressive symptoms may influence educators' immediate responses to challenging behaviors. This is important to consider, given that site policies may moderate the use of exclusionary discipline, but may not mitigate the influence of educators' psychological wellbeing on their responses to challenging behaviors—a factor that remains a critical concern.

This study adds to a body of work asserting that the developmental benefits of early education are likely only to be realized at a large scale if policymakers focus on supports for educator wellbeing. Recently there has been a push to explore evidence-based initiatives that focus on both systemic and individual-level strategies to support wellbeing, yet a systematic review by Berger and colleagues (2022) found that these initiatives predominantly target individual, rather than systemic, determinants of wellbeing. Individual-level strategies include mindfulness-based practices, social-emotional programs, and mental health literacy initiatives, and may have some impact. However, these approaches often fail to consider more complex and nuanced factors, such as health and safety concerns (e.g., support for physical and emotional

health); operational difficulties (e.g., staffing shortages, recruiting and retaining qualified staff, class sizes); and the importance of supportive work environments, including workplace structures, leadership characteristics, and staffing practices (Logan et al., 2020), which may lead to broader, most sustainable changes in educator wellbeing. Future systemic based initiatives that could be considered include strategies such as raising wages, increasing access to health benefits, ensuring job security and professional growth opportunities, providing continuous professional development opportunities, and implementing supportive workplace policies that emphasize the wellbeing of educators; research on such strategies should help policymakers determine impacts on outcomes including teachers' responses to challenging behaviors.

The wellbeing of early educators plays a fundamental role in shaping the learning opportunities and outcomes of young children. This study provides initial evidence that when educator wellbeing is low, non-supportive responses to challenging behaviors increase, highlighting the need for increased attention on educators' mental health. Since the foundation of early childhood education relies on the quality of educator-child interactions, policy initiatives should prioritize the wellbeing of early educators, ensuring they have the resources needed to create positive, nurturing learning environments.

Tables

Table 1: Descriptive Statistics

Variable	Total	Missing	Mean	SD
CESD, Fall 21 Total	409	0.00%	4.74	5.33
CESD, Fall 21 score ≥ 8	409	0.00%	0.26	
CESD, Spring 22 Total	409	0.00%	4.49	4.99
CESD, Spring 22 score ≥ 8	409	0.00%	0.22	
Strategy, Supportive	409	0.00%	0.96	
Strategy, Neutral	409	0.00%	0.48	
Strategy, Non-supportive	409	0.00%	0.14	
Age	404	1.22%	39.30	13.2
Gender Female	404	1.22%	0.98	
Race Ethnicity, Black	396	3.18%	0.70	
Rec Ethnicity, White	396	3.18%	0.24	
Race Ethnicity, Multi-Racial or Other	396	3.18%	0.07	
Income, $15k or less	379	7.33%	0.19	
Income, $15k - $25k	379	7.33%	0.26	
Income, $25k - $35k	379	7.33%	0.22	
Income, $35k - $55k	379	7.33%	0.15	
Income, $55k or more	379	7.33%	0.17	
Hourly Wages	405	0.98%	13.00	3.37
Marital Status, Married	406	0.74%	0.44	
Education, High School Diploma, GED or Below	399	2.44%	0.32	
Education, AA or some College	399	2.44%	0.51	
Education, BA or above	399	2.44%	0.16	
Role, Lead or Co-Lead	407	0.49%	0.73	
Years Teaching, 1 Year or Less	395	3.42%	0.11	
Years Teaching, 1-3 Years	395	3.42%	0.21	
Years Teaching, 3-6 Years	395	3.42%	0.20	
Years Teaching, 6 Years or More	395	3.42%	0.48	
Time Teaching in ECE	395	3.42%	12.90	8.56
Age Group, Toddlers	321	21.52%	0.57	
Total Classroom Enrollment	313	23.47%	10.60	3.97

Variable	Total	Missing	Mean	SD
Special Education Enrollment	309	24.45%	0.42	
Received SEL PD in the Last Year	401	1.96%	0.83	
Job Satisfaction, Very Likely to Stay 3 Years	404	1.22%	0.43	
Benefits, Health Insurance	358	12.47%	0.27	
Benefits, Sick Leave	371	9.29%	0.40	
Experiencing Food Insecurity	407	0.49%	0.45	
Parish, Jefferson	409	0.00%	0.54	
N	409			

Note. Fall 2021 and Spring 2022 waves of the Study of Early Education in Louisiana (SEE-LA) Workforce Survey. Sample is limited to toddler and pre-school teachers who responded at both time points, and had full data on our two main variables, reported depressive symptoms and strategies used in response to challenging behaviors (N=409). The large percentages of missing data for the variables 'Age Group,' 'Total Classroom Enrollment,' and 'Special Education Enrollment' are attributed to responses from site leaders, assistant teachers, floaters and substitutes for whom these questions were not applicable.

Table 2: Strategies Used in Response to Challenging Behaviors

	Individual Strategy	%
Supportive	Overall	96.3
	Talk	86.1
	Quiet Area	47.4
	Teach Strategy	55.8
Neutral	Overall	47.7
	Sensory Object	18.1
	Redirection	33.4
Non-supportive	Overall	13.7
	Time- Out	4.70
	Take Away	3.70
	Out of Class	7.30

Note. Teachers were asked, "When a child behaves in a way that is disruptive, which of the following strategies do you use most often to address the disruptive behavior?" Educators were directed to mark their top three choices to the following ten options. Endorsement into category is not mutually exclusive.

Table 3: Strategies Used in Response to Challenging Behaviors: Intensity

	Intensity	Total	%
Supportive	None	15	3.70
	Low	105	25.7
	Medium	198	48.4
	High	91	22.3
Neutral	None	214	52.3
	Low	178	43.5
	Medium	17	4.20
Non-Supportive	None	356	86.3
	Low	49	12.0
	Medium	6	1.50
	High	1	0.20

Note. Educators were asked to indicate their top three strategies used in response to challenging behaviors. Intensity measures the number of strategies endorsed in each category (High = 3, Medium = 2, Low = 1, None = 0) Categories are not mutually exclusive.

Table 4 Associations Between Depressive Symptoms and Non-Supportive Strategy Use

	Non-Supportive Strategy Endorsed		
	Raw	Controls	FE
	b(SE)	*b*(SE)	*b*(SE)
Spring CES-D-SF Total	0.01 (0.00) *	0.01 (0.00)	0.01 (0.01) *
Gender, Female		-0.14 (0.18)	-0.08 (0.18)
Age		0.00 (0.00)	0.00 (0.00)
Race Ethnicity, Black		-0.10 (0.05)	-0.08 (0.06)
Race Ethnicity, Other		-0.13 (0.08)	-0.05 (0.09)
Education, HS or less		0.05 (0.06)	0.02 (0.06)
Education, Some College		-0.04 (0.05)	-0.03 (0.05)
Education, AA		-0.01 (0.06)	0.00 (0.07)
Marital Status, Married		-0.02 (0.04)	-0.02 (0.05)
Yearly Wages		-0.01 (0.01)	-0.01 (0.01)
Health Insurance		-0.01 (0.05)	0.02 (0.06)
Sick Leave		0.04 (0.04)	0.02 (0.04)
Time Teaching in ECE		-0.00 (0.00)	-0.00 (0.00) +
Role, Lead or Co-Lead		-0.00 (0.04)	0.07 (0.04) +
Intention to Stay 3 Yrs., Very Likely		-0.08 (0.04)	-0.10 (0.05) +
Food Insecurity		-0.017 (0.4)	-0.05 (0.00)
PD Social and Emotional		0.06 (0.05)	0.01 (0.07)
Sped		-0.04 (0.04)	-0.03 (0.05)
Age Group, Toddlers		0.02 (0.04)	0.02 (0.05)
Total Enrollment		-0.00 (0.00)	-0.00 (0.01)
Parish, Jefferson		0.05 (0.03)	0 (omitted)
Fall CES-D-SF Total		-0.00 (0.00)	-0.01 (0.01)
Constant		0.42 (0.22)	0.37 (0.23)

Note. Data are drawn from the fall 2021 and spring 2022 waves of the Study of Early Education in Louisiana Workforce Survey, individual N at each wave = 409. Sample

	Non-Supportive Strategy Endorsed		
	Raw	Controls	FE
	b(SE)	*b*(SE)	*b*(SE)

includes toddlers and preschooler teachers, who provided full dependent and independent variable information across both waves of data. Raw models include no other variables; Controls model includes educator gender, age, race/ethnicity, level of education, marital status, hourly wages, access to health insurance, sick leave benefits, role (e.g., lead or assistant teacher), intention to stay, food insecurity, social-emotional PD, enrollment of children with special needs, age of children served, total classroom enrollment, parish (Orleans vs Jefferson) and fall wellbeing; FE model includes center fixed effects, which estimate within center estimates of each outcome. All models include standard errors clustered by site. ∗∗ $p < 0.01$, ∗ $p < 0.05$, + $p < 0.10$.

Appendices

Appendix A Associations Between Depressive Symptoms and Supportive and Neutral Strategy Use

	Supportive Strategy			Neutral Strategy		
	Raw	Controls	FE	Raw	Controls	FE
	b(SE)	*b*(SE)	*b*(SE)	*b*(SE)	*b*(SE)	*b*(SE)
Spring CES-D-SF Total	0.00(0.00)	0.00(0.00)+	0.00(0.00)	0.00(0.01)	-0.00(0.01)	-0.01(0.01)
Gender, Female		0.07(0.11)	0.11(0.13)		-0.06(0.21)	-0.26(0.33)
Age		-0.00(0.00)	-0.00(0.00)+		-0.00(0.00)+	-0.00(0.00)
Race Ethnicity, Black		0.00(0.02)	0.02(0.03)		-0.06(0.06)	-0.05(0.10)
Race Ethnicity, Other		-0.04(0.05)	-0.06(0.06)		-0.06(0.08)	-0.07(0.09)
Education, HS or less		0.06(0.04)	0.07(0.05)		-0.1(0.09)*	-0.14(0.11)
Education, Some College		0.06(0.04)	0.07(0.05)		0.06(0.07)	0.07(0.09)
Education, AA		0.08(0.04)+	0.05(0.04)		0.00(0.08)	-0.04(0.09)
Marital Status, Married		-0.01(0.02)	-0.01(0.02)		0.07(0.05)	0.04(0.06)
Yearly Wages		0.00(0.00)	0.01(0.00)		0.02(0.01)*	0.01(0.01)
Health Insurance		0.05(0.03)	0.05(0.04)		0.07(0.08)	0.13(0.12)
Sick Leave		-0.05(0.03)	-0.05(0.05)		0.12(0.06)*	0.23(0.09)**
Time Teaching in ECE		0.00(0.00)	0.00(0.00)		0.00(0.00)	0.00(0.00)

Role, Lead or Co-Lead	-0.01(0.02)	-0.02(0.03)	0.06(0.05)	0.05(0.06)
Intention to Stay 3 Yrs., Very Likely	0.02(0.03)	0.01(0.04)	-0.09(0.06)	-0.13(0.08)
Food Insecurity	0.01(0.02)	0.02(0.03)	-0.03(0.06)	-0.04(0.07)
PD Social and Emotional	-0.02(0.02)	-0.02(0.03)	0.06(0.07)	-0.02(0.09)
Sped	-0.04(0.02)+	-0.05(0.03)+	0.06(0.06)	0.06(0.07)
Age Group, Toddlers	-0.00(0.02)	-0.00(0.03)	0.05(0.05)	0.06(0.07)
Total Enrollment	0.00(0.00)	0.00(0.00)	-0.00(0.01)	-0.01(0.01)
Parish, Jefferson	-0.00(0.02)		-0.08(0.05)	
Fall CES-D-SF Total	-0.00(0.00)	-0.00(0.00)	-0.01(0.01)	-0.00(0.01)
Constant	0.83(0.15)	0.77(0.17)	0.45(0.26)+	0.54(0.36)*

Note. Data are drawn from the fall 2021 and spring 2022 waves of the Study of Early Education in Louisiana Workforce Survey, individual N at each wave = 409. Sample is reduced to participants teaching toddlers and preschoolers, who provided full dependent and independent variable information across both waves of data. Raw models include no other variables; Controls model includes educator gender, age, race/ethnicity, level of education, marital status, hourly wages, access to health insurance, sick leave benefits, role (e.g., lead or assistant teacher), intention to stay, food insecurity, social-emotional PD, enrollment of children with special needs, age of children served, total classroom enrollment, parish (Orleans vs Jefferson) and fall wellbeing; FE model includes center fixed effects, which estimate within center estimates of each outcome. All models include standard errors clustered by site. $**$ $p < 0.01$, $*$ $p < 0.05$, + $p < 0.10$.

Appendix B Sensitivity Analysis

Sensitivity Analysis for Regression Models Linking Depressive Symptoms to Strategies Used in Response to Challenging Behaviors

	Spring CES-D-SF and Intensity Level of Non-Supportive Strategy	Spring CES-D-SF Cutoff and Non-Supportive Strategy	Fall CES-D-SF and Non-Supportive Strategy
	FE	FE	FE
	b(SE)	*b*(SE)	*b*(SE)
Spring CES-D-SF Total	0.01 (0.01)*	--	--
Spring CES-D-SF Cutoff	--	0 .09 (0.06)	--
Fall CES-D-SF Total	-0.00 (0.01)	0.00 (0.00)	0.00(0.00)
Gender, Female	-0.07 (0.18)	-0.09 (0.19)	-0.22 (0.21)
Age	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)
Race Ethnicity, Black	-0.09 (0.06)	-0.08 (0.06)	-0.06 (0.06)
Race Ethnicity, Other	-0.04 (0.12)	-0.05 (0.09)	-0.07 (0.07)
Education, HS or less	0.04 (0.07)	0.02 (0.06)	0.01 (0.06)
Education, Some College	-0.05 (0.06)	-0.03 (0.06)	-0.03 (0.06)
Education, AA	0.02 (0.08)	0.00 (0.07)	-0.02 (0.07)
Marital Status, Married	-0.00 (0.05)	-0.02 (0.05)	-0.00 (0.05)
Yearly Wages	-0.01 (0.01)	0.00 (0.01)	-0.01 (0.01)

Health Insurance	0.03 (0.07)	0.02 (0.06)	0.03 (0.07)
Sick Leave	0.04 (0.05)	0.02 (0.04)	0.02 (0.04)
Time Teaching in ECE	-0.00 (0.00)	0.00 (0.00) +	-0.00 (0.00)
Role, Lead or Co-Lead	0.05 (0.05)	0.07 (0.04)	0.04 (0.04)
Intention to Stay 3 Yrs., Very Likely	-0.07 (0.07)	-0.11 (0.05)*	-0.13 (0.05)*
Food Insecurity	-0.08 (0.06)	-0.06 (0.04)	-0.03 (0.05)
PD Social and Emotional	0.05 (0.09)	0.02 (0.08)	0.05 (0.08)
Sped	-0.01 (0.06)	-0.03 (0.05)	-0.03 (0.05)
Age Group, Toddlers	0.04 (0.07)	0.02 (0.05)	0.02 (0.05)
Total Enrollment	-0.00 (0.01)	0.00 (0.01)	-0.00 (0.01)
Constant	0.29 (0.26)	0.41 (0.24)	(0.51) (0.25)

Note. Data are drawn from the fall 2021 and spring 2022 waves of the Study of Early Education in Louisiana Workforce Survey, individual N at each wave = 409. Sample includes toddlers and preschooler teachers, who provided full dependent and independent variable information across both waves of data. Intensity measures the number of strategies endorsed (High = 3, Medium = 2, Low = 1, None = 0) Categories are not mutually exclusive. Raw models include no other variables; Controls model includes educator gender, age, race/ethnicity, level of education, marital status, hourly wages, access to health insurance, sick leave benefits, role (e.g., lead or assistant teacher), intention to stay, food insecurity, social-emotional PD, enrollment of children with special needs, age of children served, total classroom enrollment, and fall wellbeing; all models include center fixed effects, which estimate within center estimates of each outcome. All models include standard errors clustered by site. $** p < 0.01$, $* p < 0.05$, $+ p < 0.10$.

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