Preschool teachers’ responses to challenging behavior: The role of organizational climate in referrals and expulsions

Shauna Miller  
*University of Florida*

Tina Smith-Bonahue  
*University of Florida*

Kristen Kemple  
*University of Florida*

**Abstract**

Challenging behavior in preschool can lead to harmful outcomes for some children. While interventions have been shown to be effective in reducing or eliminating challenging behavior, evidence suggests that young children with challenging behavior are under-identified for services, increasing their risk for expulsion from early childhood programs. This study surveyed preschool teachers working in Florida Voluntary Prekindergarten (VPK) programs, to examine factors related to exclusion of children with challenging behaviors. Specifically, the study examined whether teachers’ perceptions of the organizational climate of their workplace, including access to behavioral supports, the utility of those supports and the consequences of referral predicted teachers’ responses to challenging behavior in their classroom. Results indicated: that teachers’ perceptions of the availability of resources to provide behavioral support varied by program type; that the quality of supervisory relationships was significantly related to teachers’ perceptions of availability of resources; and that teachers’ perceptions of the availability of resources to provide behavioral support was a significant predictor of child expulsion from preschool. The results of this study have implications for increasing the availability of behavioral supports and high quality supervision, as means of stemming the tide of expulsions of children from preschool programs.

**Keywords**

Challenging behavior; expulsion; exclusion; organizational climate referral
This study examines predictors of the choices that preschool teachers make about expulsion and referral of children with challenging behavior. Specifically, we examine teachers’ perceptions of the availability and utility of support for helping them to address challenging behavior as predictors of the actions teachers take with regard to children with challenging behavior.

Challenging behavior

While aggressive, defiant, and oppositional behaviors in young children may sometimes be viewed as developmentally typical, evidence suggests that for some children, these challenging behaviors are precursors to a trajectory of delinquency and poor outcomes (Powell, Dunlap, & Fox, 2006). “Challenging behavior” has been broadly defined as any repeated pattern of behavior, or perception of behavior, that interferes with, or is at risk of interfering with optimal learning or engagement in prosocial interactions with peers and adults (Smith & Fox, 2003). For the purpose of this study, challenging behaviors are those perceived by the teacher as aggressive, noncompliant, or disruptive within the early childhood program environment.

Behaviors characterized as challenging in the preschool years are typical during toddlerhood and decrease after age 3. For example, while some aggression can be expected among very young children, high and escalating rates of aggression in preschool children are atypical (Wakschlag, Tolan, & Leventhal, 2010). Similarly, noncompliant behavior generally increases before preschool as an expression of increasing independence and decreases as preschoolers become adept at using alternate methods of negotiating for their desired goals. Atypical noncompliance is accompanied with negative affect, is often resistant to redirection, and is intransigent (Brumfield & Roberts, 1998; Wakschlag, et al., 2010).

Challenging behaviors in early childhood predict later problems in children’s relationships with teachers and with peers. A large body of research indicates that aggression has deleterious effects on a child’s academic and social outcomes (Farmer & Xie, 2007). Challenging behaviors at age 5 have been found to predict the effort required for teachers to teach that same child at age 10 (Houts, Caspi, Pianta, Arsenaullt, & Moffitt, 2010). High ratings on the Child Behavior Checklist (CBCL) externalizing symptoms, even as young as 2 years of age, have been shown to correlate to persistent high ratings on the CBCL into adolescence and consequently lead into poor social and behavioral outcomes, particularly when those early childhood high ratings were coupled with family dysfunction (Beyer, Postert, Müller, & Furniss, 2012; Dunlap et al., 2006; Fanti & Henrich, 2010). In a long-term study of the trajectory of externalizing behavior problems, children who had been identified as exhibiting moderate to high levels of externalizing behaviors from early childhood were significantly more likely to be engaged in violent/delinquent behavior than children identified as engaged in low frequency, even after controlling for demographic characteristics and child maltreatment (Thompson et al., 2011).
Response to challenging behavior in early childhood settings

Evidence suggests that preschool teachers feel underprepared to handle children with challenging behavior (Hemmeter, Santos, & Ostrowsky, 2008). In addition, there are indications of higher rates of expulsion at the preschool level than in K–12 education (Gilliam, 2005). In preschool settings, children with behavioral problems are likely to be served in classrooms with teachers with insufficient training and resources to address their needs using positive strategies, leading to harsher responses and increased exclusions (Scott et al., 2005).

Challenging behavior in young children has become a focus for intervention in schools as a result of both a recent trend of early childhood mental health consultation (Azzi-Lessing, 2010) and special education law (Bullock & Gable, 2006), specifically P.L. 108-446, the Individuals with Disabilities Improvement Act of 2004. Although previous special education law (e.g., Education for All Handicapped Children Act of 1975) identified behavior disorders as an area of eligibility for special education services, the Individuals with Disabilities Improvement Act (2004) addressed behavior disorders more extensively than previous iterations of the law, expanding requirements for assessment and due process. The evidence indicates a clear need for early, preventive services; unfortunately, evidence also suggests that few community agencies meet this need (Lavigne, LeBailly, Hopkins, Gouze, & Binns, 2009). While special education legislation provides an avenue for channeling appropriate services for students in need, research shows that behavior problems are under-identified (Kauffman, Mock, & Simpson, 2007). Further, it is unclear what factors lead teachers to refer students for socioemotional concerns.

Insufficient resources and support reinforce punitive and reactive practices, or worse, expulsions (Gilliam, 2005; Scott et al., 2005). Because access to early childhood education is not mandatory in most states, the educational options for preschool children deemed “challenging” may become severely restricted (Perry, Dunne, Mcfadden, & Campbell, 2008). It is not surprising then that expulsion rates are three times higher in preschool than for K–12 students, with higher rates for older preschoolers, African-American students, and boys (Gilliam, 2005). The 2011-2012 Civil Rights Data Collection, offering the first federal accounting of preschool suspensions, shows that during that school year more than 8,000 public preschoolers were suspended at least once, with black children and males being disproportionately represented (US Department of Education Office for Civil Rights, 2014).

Challenging behavior can be alleviated

While challenging behavior can have a long-term impact on children’s development and adjustment, the developmental and transactional nature of challenging behavior in the context of preschool settings makes it amenable to early intervention if caregivers are given the tools to support children displaying atypical features of aggression, noncompliance, and disruption. Teachers can play a role in ameliorating potentially deleterious long-term consequences of challenging behavior; the teacher-child relationship in the early years is a potent preventive influence in averting adverse outcomes (Silver, Measelle, Armstrong, & Essex, 2005). Furthermore, research-supported practices for creating positive teacher–child relationships, and for preventing and managing challenging behaviors, have been documented and described (Conroy,
Sutherland, Haydon, Stormont, & Harmon, 2009). Professional development in strategies for managing behaviors has been shown to be effective in helping teachers implement evidence-informed intervention strategies in their programs (Gebbie, Cegowski, Taylor, & Miels, 2012).

Recognizing the importance of well-prepared teachers, a growing trend in early childhood education is to make available mental health consultants as a means of helping teachers address challenging behaviors. Studies of teachers working with various forms of support (for example, online communities and itinerant consultants) show improvement in classroom behavior management (Carter & Van Norman, 2010; Gebbie et al., 2012; Reinke, Stormont, Webster-Stratton, Newcomer, & Herman, 2012).

Increasing evidence suggests that early intervention creates better outcomes for children displaying challenging behaviors. In a long-term analysis of the effect of mental health services on child outcomes, earlier intervention was associated with significantly decreased problems in later years (Tabone, Thompson, & Wiley, 2010; Thompson, 2009). Recent reviews focusing on child outcomes for early childhood mental health outcomes suggest strong evidence for this being a viable option in significantly reducing challenging behavior in preschool settings (Brennan, Bradley, Allen, & Perry 2008; Perry, Allen, Brennan, & Bradley 2010).

Organizational climate and response to challenging behavior

In educational settings, organization climate has been described as “teachers’ perceptions of their work environment” (Hoy & Clover, 1986 p. 94). Organizational climate is not a mere factual accounting of resources, classroom size, staff, and administrative functions. Instead, it is a measurement of how these resources are perceived by the teacher.

In one of the few studies that examine organizational climate and teacher action in the classroom, Baker, Kupersmidt, Voegler-Lee, Arnold, and Willoughby (2009) studied factors that predicted greater use of intervention strategies among preschool teachers. They found that “teachers who perceived their centers as promoting collegiality, professional growth, as well as providing a supportive, efficient, and fair work environment implemented significantly more intervention activities” (p. 278). It seems then, that organizational climate can have a significant effect on teacher practice. However, this has not been examined with regard to understanding how teachers make decisions about challenging behavior. In addition to the broad construct, it is likely that there are more specific aspects of organizational climate that are germane to challenging behavior and teacher referral, including the availability of supports and the utility of those supports. The supports and resources that are available for managing challenging behavior, as well as how useful those supports are perceived to be, may be ecological antecedents of teacher referral.

Teachers’ perceptions of availability of services

The challenge of inadequate resources is frequently cited as adding stress to teachers’ work, and the absence of adequate resources is likely to be a deterrent in following through. This is even more apparent with respect to challenging behavior, an area that teachers feel unprepared to address and a source of high stress for many (Greenlee & Ogeltree, 1993). For example, teachers attempting to implement positive behavior support (PBS) pointed to lack of resources available to them, time constraints, and
problems with family cooperation as the most challenging barriers in implementation (Chitiyo & Wheeler, 2009). Common approaches to challenging behaviors in preschool have been reactive, often leading to exclusion. One of the barriers to intervention could be the absence of available support or services to present alternative options for teachers. If teachers have limited choices for treatment, there is a narrow range of outcomes for preschoolers. While a higher rate of expulsions has been found in preschools than in K–12 education, the presence of mental health consultants in early childhood centers made a significant difference in the rate of expulsions (Gilliam, 2005) suggesting that centers with access to additional resources were using more strategies to keep their students. In addition, positive changes in teacher behavior and decreased likelihood of expulsions for children with challenging behavior have been shown after teachers had access to an early childhood mental health consultant (Gebbie et al., 2012; Perry et al., 2008).

**Teachers’ perceptions of utility of services**

In addition to making services available to teachers, there may be merit in examining whether the perceived usefulness of those resources affect teacher referral behavior. Not surprisingly, research supports that general help-seeking behavior in teachers is related to perceptions of usefulness (Butler, 2007). Teachers typically only utilize resources they believe to be helpful in meeting their needs in the classroom. Utility can apply to clear and effective referral procedures, to fair assessments for students, to efficacious service providers, and to behavioral supports. Perceived ineffectiveness in any of these may make teachers reluctant to engage in the process.

Zhang, Fowler, and Bennett (2004) conducted interviews with Early Head Start staff about their perceptions of the special education process. Major concerns of time, paperwork, and lack of collaboration were reported and the majority of the staff reported needing more training in IFSP procedures. Summers et al. (2001) interviewed staff and family involved in six Early Head Start and Part C programs in five states looking at perceptions of collaboration between the two programs at referral and intake, evaluation and individualized planning, service delivery, and transitions. Referrals to both programs were described as occurring frequently but providers pointed to the complexity of procedures as a hindrance in the referral process. Each state had different policies that complicated referrals.

Intervention specialists might also not be seen as helpful by teachers. Gilman and Gabriel (2004) surveyed 1600 teachers and administrators about their perceptions of school psychologists and their services. The results for Florida were more significant than other states, with a significantly lower score from teachers than administrators in how helpful they thought school psychologists were to children or to educators, as well as a significantly higher perceived level of seriousness before the school psychologist should be consulted compared to what the administrators or school psychologist believed. This could affect whether teachers reach out for consultation or intervention, as they might be less likely to seek help if they believe the service provider is ineffective.

A perceived lack of effective strategies may also reduce teachers’ belief in referral or behavior intervention. Teachers might become disillusioned after going through the process of referral, assessment and getting an Individualized Education Program (IEP) but still being left with behavioral supports that they value as important but less feasible (Stormont, Lewis, & Covington-Smith, 2005). Interviews with Head Start staff about
barriers to addressing challenging behaviors included inadequate training, disagreements with specialists on interventions, a lack of direct classroom assistance, poor coordination and communication, wait times for service and lack of behavior plans (Snell, Berlin, Voorhees, Stanton-Chapman, Hadden, 2012; Snell et al., 2011).

Method

Challenging behaviors have been shown to be identifiable from very early ages and responsive to early intervention, particularly due to the transactional nature of their development. Research suggests that teachers in supportive work climates implement more intervention strategies and that having access to behavior supports such as mental health consultants can reduce rates of child removal. However, preschool teachers often have little training and few resources, and they work in settings that have no mandatory attendance policies. They may resort to excluding students rather than attempting to manage their behaviors. To date, few studies have examined exclusion practices in preschools or the role of climate as a factor in either exclusion or referral of children with challenging behaviors. Specifically, this exploratory survey study sought to examine the extent to which preschool teachers in Florida perceived that they had access to behavioral supports, how useful they found supports to be, how much that differed amongst types of programs and whether that affected removal and referral rates for children.

Participants

Data collection. Teachers were recruited from programs that provide VPK services in a suburban county in the Southeastern US. Surveys were distributed at a workshop for VPK teachers and also sent out in an email introducing the study to all the VPK program directors. Out of 71 total VPK programs in the county, a random sample of 30 preschools was contacted and eligible teachers were invited to participate. To be included in the study, teachers had to report at least 3 months of experience teaching children ages 2.5–6 years in the current setting, working at least 10 hours a week as a lead teacher, teacher, or assistant teacher in a center-based early childhood program. Of 146 forms distributed, 92 (63%) were returned. 12 of these forms were unusable due to incomplete data, leaving \( N = 80 \) participants.

Demographics. The majority (86%) of the eighty preschool teachers were female. The majority (56%) reported having either Child Development Associate (CDA) credential or Florida Child Care Professional Credential (FCCPC). Sixty-eight percent of the respondents had been in the classroom for under 10 years; 33% for under 5 years. The program types were fairly evenly represented in the sample: 15 respondents from faith-based programs, 16 from nonprofit, 18 from for-profit, 22 respondents from Head Start, and 9 unknown. Teachers’ years of formal education ranged from 12 to 18 with a mean of 14.5 years.
Measures

Early childhood job satisfaction survey
The Early Childhood Job Satisfaction Survey (ECJSS) was used to measure the general organizational climate variable. The ECJSS is a 50-item questionnaire measuring individual teacher’s perception of their work climate (Bloom, 2010). Normed using a sample of 3,579 early childhood workers (Bloom, 2010), the ECJSS has 10 Likert-type questions, ranging from 1 (strongly disagree) to 5 (strongly agree) in five subscales. The first three subscales, coworker relations, supervisor relations, and nature of the work itself, were used for this study. The scale demonstrates adequate reliability (Bloom, 2010), with Cronbach’s alphas ranging from $\alpha = .76$ to $\alpha = .90$.

Working with Challenging Behaviors Preschool Survey (WCBPS)
Developed for this study, the Working with Challenging Behaviors Preschool Survey (see Appendix) is a Likert-type scale, ranging from 1 (strongly disagree) to 5 (strongly agree) on the availability of supports for behavioral issues and beliefs about the consequences of referral and teacher treatment of behavior, based on the literature and existing scales (Bambara, Goh, Kern, & Caskie, 2012; Gilliam & Sahar, 2006; Gilman & Gabriel, 2004). The statements about the utility of supports are revisions of questions from the Usage Rating Profile-Intervention (Chafouleas, Briesch, Riley-Tillman, & McCoach, 2009), a self-report measure of intervention usage in four factors of treatment validity: acceptability, understanding, feasibility, and systems support. Statements were reworded to examine behavior support acceptability, understanding, and feasibility more broadly than a specific intervention and for simplicity in phrasing and precision and to avoid evaluative properties. Internal consistency was examined using Cronbach’s alpha for the three subscales of the Working with Challenging Behaviors in Preschool Survey, with $\alpha = .45$ for Belief, $\alpha = .93$ for Availability, and $\alpha = .96$ for Utility. Due to low reliability, the Belief scale was dropped from the study.

Assessment of teacher response
To measure the dependent variable of teacher actions in response to challenging behaviors, teachers were asked to think of three students who had been in their classroom for the past 6 months who met the following definition for challenging behaviors: “challenging behavior is a frequent occurrence in preschool children and can be defined by aggressive, disruptive and noncompliant behavior”. Then they were asked to check off what actions took place for that child from this list of options: Sought advice from mental health/behavioral consultant; Referred for special education assessment; Removed from school permanently by caregiver decision; Removed from school permanently by school decision; Moved short-term to another classroom; Moved permanently to another classroom; Assessed by IEP team; IEP implemented; and Behavior plan implemented in the classroom. Teachers also provided overall referral and removal statistics for their class by providing the following: Total number of students in class last year; Total number permanently removed due to behavior problems; and Total number referred for assessment due to behavior problems.
Data analysis

The data were analyzed using the statistical software package Statistical Package for Social Sciences (SPSS 21). Characteristics of the sample were analyzed and descriptive statistics are reported for teacher and program variables. The variables analyzed from the measures are (1) program variables (program type), (2) organizational variables (coworker relations, supervisor relations, and the work itself from the Early Childhood Job Satisfaction Survey; and availability of supports, utility of support, and beliefs about consequences of referral from the Working with Challenging Behaviors Preschool Survey), and (3) teacher responses to challenging behavior.

Program type is based on the categories identified in Florida’s School Readiness Act (2011), and include the following categories: public school-affiliated, nonprofit agency, for-profit agency, a family home, faith-based, Head Start, or other. The organizational variables were measured as mean raw scores of each subscale. Teacher response to challenging behavior was measured by a set of categorical actions (e.g., “moved short-term to another classroom”) given on the survey as well as by removal and referral rates.

Results

Teachers were asked to identify the three most challenging children in their class and most teachers surveyed provided this information. Three teachers did not identify any children, six teachers identified one challenging child in the class and four teachers chose two children. The remainder identified three. Overall, more males were identified as most challenging, with 71% of the first-most-challenging child, 56% of the second-most-challenging child, and 59% of the third-most-challenging child being male.

The data for the teachers’ perceptions of the availability and utility of behavioral supports were collected from the teachers’ rating (1–5) on the Working with Challenging Behavior Preschool Survey. The overall mean for the availability scale was 3.47 (SD = 1.15) while the mean for the utility scale was 3.5 (SD = 1.05). Means for the items in each scale ranged from a low mean of 3.08 for “I have worked with a behavior or mental health consultant” to a high mean of 3.86 for “I know that I can ask for help for a child for behavioral issues” on the availability scale. On the utility scale the range was more limited with lowest mean of 3.39 for “The amount of time required to use the suggestions is reasonable” to the highest mean of 3.69 for “The suggestions for behavior problems are typically beneficial for the child”.

The means of the subscales varied among the program types as seen in Table 1, with larger ranges in the availability and utility subscales. Within those two subscales the nonprofit program had the lowest mean with 2.75 in availability and 2.98 in utility. To examine whether there were significant differences in the availability, utility, and belief scales, based on program type, an analysis of variance was conducted and there was only a significant difference on the availability scale (Table 2). Bonferroni’s post hoc analysis was conducted to determine where differences existed and there was a significant difference (p = .033) between availability from nonprofit programs and availability from Head Start programs.
Table 1

Means and Standard Deviations $\overline{X}$ (SD) of Availability, Utility, and Belief by Program Type

<table>
<thead>
<tr>
<th>Program Type (N)</th>
<th>Availability</th>
<th>Utility</th>
<th>Belief</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faith-based (15)</td>
<td>3.66 (.98)</td>
<td>3.97 (.81)</td>
<td>3.113 (.43)</td>
</tr>
<tr>
<td>For-profit (18)</td>
<td>3.50 (1.19)</td>
<td>3.69 (1.07)</td>
<td>3.109 (.61)</td>
</tr>
<tr>
<td>Head Start (22)</td>
<td>3.77 (1.08)</td>
<td>3.37 (1.05)</td>
<td>3.277 (.59)</td>
</tr>
<tr>
<td>Nonprofit (16)</td>
<td>2.75 (1.02)</td>
<td>2.98 (1.19)</td>
<td>3.281 (.53)</td>
</tr>
</tbody>
</table>

Table 2

Analyses of Variances for Availability, Utility, and Belief by Program Type

<table>
<thead>
<tr>
<th>Scale</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability</td>
<td>10.735</td>
<td>3</td>
<td>3.578</td>
<td>3.099</td>
<td>.033</td>
</tr>
<tr>
<td>Utility</td>
<td>9.155</td>
<td>3</td>
<td>3.052</td>
<td>2.076</td>
<td>.112</td>
</tr>
<tr>
<td>Belief</td>
<td>.496</td>
<td>3</td>
<td>.165</td>
<td>.546</td>
<td>.653</td>
</tr>
</tbody>
</table>

Treatment of challenging behavior

The most frequently endorsed option for treating challenging behaviors was using a “Behavior plan”. The second most endorsed option was “Seeking Advice” (see Table 3).

Table 3

Teacher Actions in Response to Challenging Behaviors for Nominated Children

<table>
<thead>
<tr>
<th>Child 1*</th>
<th>Child 2</th>
<th>Child 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>n = 77</td>
<td>n = 76</td>
<td>n = 74</td>
</tr>
<tr>
<td>Sought advice</td>
<td>44%</td>
<td>41%</td>
</tr>
<tr>
<td>Referred student</td>
<td>26%</td>
<td>19%</td>
</tr>
<tr>
<td>Removed by school</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Removed by parent</td>
<td>1%</td>
<td>10%</td>
</tr>
<tr>
<td>Moved class temporarily</td>
<td>13%</td>
<td>11%</td>
</tr>
<tr>
<td>Moved class permanently</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Assessment</td>
<td>11%</td>
<td>13%</td>
</tr>
<tr>
<td>IEP</td>
<td>11%</td>
<td>9%</td>
</tr>
<tr>
<td>Behavior plan</td>
<td>67%</td>
<td>59%</td>
</tr>
</tbody>
</table>

*Child 1 = first-most-challenging child, Child 2 = second-most-challenging child, Child 3 = third-most-challenging child, according to teacher nomination.
**Workplace and behavioral supports**

Multiple regression analysis was conducted to examine the net contribution of the measured perception of workplace climate using the ECJSS and the type of program on the availability, utility, and beliefs about behavioral support. The assumptions of conditional normality, linearity, and homoscedasticity were met for each independent variable. Therefore, the use of multiple linear regression was deemed appropriate.

**Availability of behavioral supports**

The independent variables in the multiple regression analysis for availability were the subscales from the ECJSS (Coworker relations, Supervisor relations, and Nature of the work itself) and the type of program. The set of independent variables were significant predictors of availability, \( F(6, 62) = 4.150, p = .001 \). For the availability scale, \( R^2 \) was .217 and adjusted \( R^2 \) was .168. As seen in Table 4, both program type and the supervision subscale of the ECJSS were significant predictors after controlling for other variables in the model. Supervision had a significant positive relationship indicating that teachers who perceived better supervision were more likely to perceive access to more behavioral supports. In the comparison tests for the program types, all the comparisons between the nonprofit type and any other type were significant (for-profit vs. nonprofit, \( p = .011 \); Head Start vs. nonprofit, \( p = .003 \); faith vs. nonprofit, \( p = .006 \)). None of the other comparisons excluding nonprofit were significant. The adjusted means for program type showed that nonprofit had the lowest mean (2.64, \( SE = .258 \)) for availability compared to for-profit (3.56, \( SE = .236 \)), Head Start (3.71, \( SE = .222 \)) and faith-based (3.67, \( SE = .257 \)).

**Table 4**

*Summary of Multiple Regression Analysis of Program Type and Workplace Climate on Availability of Support*

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>SE b</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECJSS Coworker</td>
<td>.050</td>
<td>.219</td>
<td>.820</td>
</tr>
<tr>
<td>ECJSS Supervisor</td>
<td>.556</td>
<td>.180</td>
<td>.003</td>
</tr>
<tr>
<td>ECJSS Work</td>
<td>-.176</td>
<td>.281</td>
<td>.533</td>
</tr>
<tr>
<td>For-profit</td>
<td>.921</td>
<td>.349</td>
<td>.011</td>
</tr>
<tr>
<td>Head Start</td>
<td>1.072</td>
<td>.343</td>
<td>.003</td>
</tr>
<tr>
<td>Faith</td>
<td>1.031</td>
<td>.363</td>
<td>.006</td>
</tr>
</tbody>
</table>

*Nonprofit was used as the reference and β set to 0

**Utility of behavioral supports**

The independent variables in the multiple regression analysis for utility were the subscales from the ECJSS (Coworker relations, Supervisor relations and Nature of the work itself) as well as the type of program. The set of independent variables were significant predictors of utility, \( F(6, 62) = 2.439, p = .035 \). For the utility scale \( R^2 \) was .191 and adjusted \( R^2 \) was .113. Both program type and the supervision subscale of the ECJSS were significant predictors for utility as well (Table 5). Supervision had a significant positive relationship indicating that teachers who perceived better supervision would be more likely to perceive that behavioral supports were useful to them. In the comparison tests...
for the program types, the significant differences were between for-profit and nonprofit ($p = .015$) and between faith and nonprofit ($p = .022$). The adjusted means for program type showed that nonprofit had the lowest mean (2.72, $SE = .30$) for utility compared to for-profit (3.73, $SE = .274$), Head Start (3.37, $SE = .258$) and faith-based (3.71, $SE = .298$).

Table 5

Summary of Multiple Regression Analysis of Program Type and Workplace Climate on Utility of Support

<table>
<thead>
<tr>
<th>Program Type</th>
<th>$b$</th>
<th>$SE b$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECJSS Coworker</td>
<td>-.224</td>
<td>.255</td>
<td>.383</td>
</tr>
<tr>
<td>ECJSS Supervisor</td>
<td>.547</td>
<td>.209</td>
<td>.011</td>
</tr>
<tr>
<td>ECJSS Work</td>
<td>-.068</td>
<td>.326</td>
<td>.836</td>
</tr>
<tr>
<td>For-profit</td>
<td>1.018</td>
<td>.406</td>
<td>.015</td>
</tr>
<tr>
<td>Head Start</td>
<td>.651</td>
<td>.398</td>
<td>.107</td>
</tr>
<tr>
<td>Faith</td>
<td>.989</td>
<td>.422</td>
<td>.022</td>
</tr>
</tbody>
</table>

*Nonprofit was used as the reference and $\beta$ set to 0

Child removal and referral

Because removal and referral were calculated as rate data, negative binomial regression analyses were conducted to examine the contributions of workplace climate, teacher perception of behavior supports, and teacher years in school, and teacher experience, to the prediction of the removal and referral of children in the classroom. Goodness-of-fit criteria, including Akaike information criterion (AIC), Bayes information criterion (BIC), deviance, and Pearson chi-square, all indicated good fit for both models.

Table 6

Summary of Regression Analysis of Workplace Climate, Behavior Supports, and Teacher Demographics on Child Removal

<table>
<thead>
<tr>
<th>Variable</th>
<th>$b$</th>
<th>$SE b$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher years in school</td>
<td>-.480</td>
<td>.171</td>
<td>.005</td>
</tr>
<tr>
<td>Teacher experience</td>
<td>.053</td>
<td>.029</td>
<td>.069</td>
</tr>
<tr>
<td>ECJSS Coworker</td>
<td>-.270</td>
<td>.429</td>
<td>.543</td>
</tr>
<tr>
<td>ECJSS Supervisor</td>
<td>-.164</td>
<td>.445</td>
<td>.712</td>
</tr>
<tr>
<td>ECJSS Work</td>
<td>-.053</td>
<td>.535</td>
<td>.921</td>
</tr>
<tr>
<td>Availability</td>
<td>-.545</td>
<td>.264</td>
<td>.039</td>
</tr>
<tr>
<td>Utility</td>
<td>.102</td>
<td>.245</td>
<td>.676</td>
</tr>
<tr>
<td>Belief</td>
<td>-.166</td>
<td>.473</td>
<td>.725</td>
</tr>
</tbody>
</table>
Table 7

Summary of Regression Analysis of Workplace Climate, Behavior Supports, and Teacher Demographics on Child Referral

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>SE b</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher years in school</td>
<td>-.044</td>
<td>.107</td>
<td>.678</td>
</tr>
<tr>
<td>Teacher experience</td>
<td>-.0005</td>
<td>.022</td>
<td>.981</td>
</tr>
<tr>
<td>ECJSS Coworker</td>
<td>-.198</td>
<td>.350</td>
<td>.571</td>
</tr>
<tr>
<td>ECJSS Supervisor</td>
<td>.149</td>
<td>.294</td>
<td>.613</td>
</tr>
<tr>
<td>ECJSS Work</td>
<td>-.152</td>
<td>.411</td>
<td>.711</td>
</tr>
<tr>
<td>Availability</td>
<td>.052</td>
<td>.245</td>
<td>.831</td>
</tr>
<tr>
<td>Utility</td>
<td>-.120</td>
<td>.227</td>
<td>.596</td>
</tr>
<tr>
<td>Belief</td>
<td>-.065</td>
<td>.301</td>
<td>.829</td>
</tr>
</tbody>
</table>

In the negative binomial regression model predicting child removal with workplace climate, perceptions of behavior supports, and teacher demographics, the following predictors were each statically significant predictors: teacher years in school and availability of behavior supports (see Table 6). For these data, each additional year a teacher was in school was expected to decrease the log rate for child removal by .48, holding all other variables constant. In addition, each additional unit increase in perception of access of behavior supports was expected to decrease the log rate for child removal by .55. In the regression model predicting child referral with workplace climate, perceptions of behavior support, and teacher demographics, none of the predictors were statistically significant (Table 7).

Discussion

The purpose of this study was to examine the relationship of school climate to teachers’ response to challenging behavior, specifically removal and referral in preschools. Challenging behaviors have been shown to be identifiable from very early ages and responsive to early intervention, particularly due to the transactional nature of their development (Olson, Sameroff, Lunkenheimer, & Kerr, 2009; Tabone et al., 2010). However, teachers with little training and few resources in preschool settings that have no mandatory attendance policies may resort to excluding students rather than attempting to manage their behaviors (Gilliam, 2005; Hemmeter et al., 2008). To date, few studies have examined exclusion practices in preschools or the role of climate as a factor in either exclusion or referral of children with challenging behaviors. Specifically, this study examined the extent to which preschool teachers in Florida VPK programs perceived that they had access to behavioral supports, how useful they believed those supports to be, how that differed among program types, and whether those factors affected removal and referral rates for children. Of course, the small sample size from one county in Florida limits the generalizability of this study. Florida is a state characterized by great diversity and the composition of preschool programs and program types vary across district and state lines. Therefore, results may not generalize to preschools in Florida or U.S. preschools in general.

One of the goals of this study was to explore the behavioral supports that preschool teachers believed to be available, as well as the extent to which they believed behavioral
supports to be useful. The scales designed to measure teachers’ perception of availability and utility (Working with Children with Challenging Behaviors) showed evidence of good reliability in the sample in this study.

Significant differences were found in this sample regarding the perceived availability of behavioral supports by program types. In Florida, legislation funding VPK Programs specifies that eligible programs fall under program types, including school-based, faith-based, nonprofit, and for-profit. These categories are not entirely mutually exclusive (e.g., a center affiliated with a church may be both faith-based and nonprofit). It is important to note, however, that programs which self-selected as nonprofit tended to be unaffiliated with any larger entities, such as churches, school districts, or corporations (e.g., Kindercare). Nonprofit preschools differed from other program types, with regard to availability of support, when controlling for supervision, coworker relations, and the nature of the work. Teachers in nonprofit programs perceived less available support, and perceived behavioral supports as less useful, as compared to teachers in other types of programs. This aligns with previous research findings have supported that differences in program types affect the level of supervision and professional development to which teachers have access (Fuligni, Howes, Lara-Cinisomo, & Karoly, 2009).

The inequity of resource allocation, teacher quality and administrative oversight is not unique to preschool education and K–12 public education has its own dilemma assuring high standards within district, state, and national boundaries (Akiba, LeTendre, & Scribner, 2007). The issue is exacerbated in early childhood due to the lack of universal, or in some cases, state, oversight of the system. Existing state regulations such as Florida’s VPK standards are relatively recent and may not adequately address the needs of the teachers. The Florida VPK standards require that each Early Learning Coalition provide child care workers with a toll-free line to access strategies for behavior management and inclusion. Given the program differences found in the study, it is unclear if all programs have access to the line or how many teachers are aware of and use the toll-free line.

In this study, the supervision subscale of the ECJSS was a significant predictor for both utility and availability. Supervision has been shown to compensate for deficits in teacher training in improving preschool classroom quality (Dennis & O’Connor, 2013; Vu, Jeon, & Howes, 2008). Given that recent research has indicated that professional development is more effective when delivered onsite and in the classroom than at workshops or conferences (Dunst & Raab, 2010), it is not surprising that quality supervision can be a helpful resource for providing teachers with the on-the-job support for addressing challenging behaviors. However, childcare workers may experience a wide variability in supervision as administrators have differing skills, experience, and training and there is a dearth of research in early childhood leadership to inform practice (Muijs, Aubrey, Harris, & Briggs, 2004). Childcare administrators often come into this role after experience as teachers and have little formal training in management or supervision (Larkin, 1999). Evidence suggests that supervisor behaviors identified by preschool teachers as effective include being supportive, offering professional development, being visible, giving verbal or written praise, and offering suggestions based on knowledge of early childhood development (Rous, 2004). In the present study, there was an association between quality of the supervisory relationship and teachers’ perceptions of availability of behavioral supports. However, specific aspects of that supervisory relationship were not defined or examined in this study.
In looking at responses to challenging behavior, this study examined both the actions taken by teachers to challenging children in the classroom and the relationship between teacher and organizational climate variables, and referral and removal. In the frequency count of actions, teachers reported a “behavior plan” and “seeking advice” were most common. However, the list of choices was preset and given without additional definition, expansion, or clarification, which means there could be wide variation in what a “behavior plan” might entail.

Research supports that teachers in supportive work climates implement more intervention strategies (Baker et al., 2009) and having access to behavior supports such as mental health consultants can reduce the chance of child removal (Perry et al., 2008). None of the variables in this sample were significant as a predictor for referral. On the other hand, availability of behavioral supports and quality of supervision were significant predictors for removal. The more access to supports that a teacher reported having, the less likely a child was to be removed from preschool. This gives additional support to studies that have found that access to early childhood mental health consultants is likely to decrease the chance of expulsion in preschools (Gilliam, 2005; Perry et al, 2008). In this sample, the teachers rated having access to a mental health consultant as the lowest item on the availability scale ($M = 3.08$). The other aspect of this finding is that it is the teachers’ perception of availability that is linked with child removal. Studies have found that evidence-based behavioral interventions may exist in school districts but teachers are unaware of their availability (Stormont, Reinke, & Herman, 2011). Teachers may need to be educated about the resources that they can access to support children with challenging behaviors. Furthermore, a school culture of resource utilization may help to create a perception of availability. Additional research is needed to delineate differences in the lack of availability of resources, the lack of knowledge of available resources, and the lack of utilization of resources, to determine their relative effect on teacher behavior.

The results of this study have implications for interventions to reduce challenging behavior in preschools. One of the more important findings is that children with challenging behaviors are more likely to be maintained in preschool settings and less likely to be removed if teachers have greater access to behavioral supports. A similar finding in a study conducted in the state of Colorado led to a policy change giving preschools access to early childhood mental health consultants (Hoover, Kubicek, Rosenberg, Zundel, & Rosenberg, 2012). One practical implication of the present study would be to explore avenues for increasing access to behavioral supports in Florida. Given that there may be differences in how types of preschools access behavioral supports, there may be a need for more coordinated efforts to ensure that all program types have equal access. In Florida, the local Early Learning Coalitions have responsibility for training VPK providers and providing behavioral support. Though the toll-free line is mandated as part of that provision, further steps may be required to ensure that this is an effective supportive tool, and that teachers are aware of its existence.

The improvement of early childhood administrative ability to provide behavioral support and leadership may be an often overlooked avenue of intervention. Targeting directors for professional development may be an important and effective use of resources, particularly if those training opportunities accommodate for the variance in experience and skill among directors and cultivate directors as change-agents, enacting responsive systemic change (Bloom & Rafanello, 1995).
References


Smith, B., & Fox, L. (2003). Systems of service delivery: A synthesis of evidence relevant to young children at risk of or who have challenging behavior. Tampa, FL: University of South Florida.


**Authors**

Shauna Miller is a recent graduate of the Ph.D. Program in School Psychology at the University of Florida. As a psychologist working in Jamaica, she specializes in evidence-based early intervention, behavioral consultation and counseling techniques.

**Correspondence:** shaunza@ufl.edu

Tina Smith-Bonahue, Ph.D. is a licensed psychologist and an Associate Professor of School Psychology at the University of Florida. She teaches courses in direct interventions in school psychology and assessment and evaluation in the Unified PROTEACH Early Childhood program. Her primary research interests include aggression and challenging behaviors in early childhood, intervention for challenging behaviors, and teacher beliefs regarding children with special needs.

**Correspondence:** tsmith@coe.ufl.edu
Kristen Kemple, Ph.D. is a Professor of Early Childhood Studies at the University of Florida and affiliate of the Anita Zucker Center for Excellence in Early Childhood Studies. Her research focuses on peer relationships, social and emotional competence in early childhood, teacher education, and play. She also has expertise in the arts and the development of creativity in the early childhood years.

Correspondence: kkemple@coe.ufl.edu
Appendix

Working with Challenging Behaviors in Preschools

Challenging behavior is a frequent occurrence in preschool children and can be defined by aggressive, noncompliant and disruptive behaviors. Please answer the following questions related to resources and experiences in your school/center. Check (✓) the corresponding space, from strongly disagree (1) to strongly agree (5), to indicate how you feel about each of the statements in the categories below:

Availability of Supports for Behavioral Issues

When I’ve had concerns about a child with behavior problems I had someone I could ask for advice
I can get access to an expert in behavior or mental health if needed
I know that I can ask for help for a child for behavioral issues
There is a behavior or mental health expert that I can access
I have worked with a behavior or mental health consultant
I have received a behavior plan after asking for help
I have received additional training on how to deal with behavior problems
There is a clear structure for how to get help for children with behavior problems

Utility of Supports for Behavioral Issues

I like the suggestions that are been offered for behavior problems
The suggestions are a good way to handle the child’s behavior problems
The suggestions for behavior problems are typically beneficial for the child
The suggestions for behavior problems are typically motivating
The suggestions were typically reasonable for behavior problems
The suggestions are an effective choice for addressing a variety of problems
The suggestions have understandable steps at every stage
The amount of time required to use the suggestions is reasonable