Identifying, Assessing, and Intervening with Challenging Behavior in Head Start Children

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• Preschoolers Expelled: Rates and Predictors  
  Walter S. Gilliam

• Gloom, Doom, and Nasty Moods in Early Childhood: First Aid Strategies for Reducing Excessive Behaviors in the Classroom  
  Dennis D. Embry

• The Child Health and Development Interactive System: A Tool for Assessment, Training, Communication, and Referral  
  Barbara J. Howard

Gilliam: Results on children expelled from state-funded preschool programs was presented. Typically, state departments of education aims to provide educational school readiness experiences for children attending these programs. Oftentimes these programs are located in the public schools, Head Start, for-profit childcare programs, and a variety of other places. Forty states offer some degree of state funding for preschool programs.

All the data come from the National Prekindergarten Study, a study of the way in which preschool programs are implemented across the nation. Preschool teachers were contacted directly and asked a range of questions. Some questions pertained to children with behavior problems and what happens with children with behavioral problems in the classrooms. Teachers were surveyed across the 52 different state-funded prekindergarten programs operating in 40 states. Literally every one of the state-funded prekindergarten administrators agreed to participate in the study. An 81% response rate was achieved, and participants in the telephone interview were paid $10. Many people sent the money back.

The study found that 10% of the classroom teachers reported “yes,” that in fact, one of these events had happened in the past 12 months in his or her state-funded prekindergarten classroom. Most teachers, indeed 78%, reported that the incident had occurred with only one child over the past 12 months; but a few teachers had as many as four children disciplined in this manner. When the study was piloted in Massachusetts among childcare programs, which are somewhat different than state-funded prekindergarten programs, one teacher reported expelling six children out of a class of 16 in the course of 12 months. When a rate was derived from these numbers, it was found that for every 1,000 children enrolled in these state-funded Pre-K programs, there were 6.7 expulsions.

In order to analyze whether this number is a lot or a little, researchers compared expulsion rates of children in preschool to children in kindergarten to 12th-grade. In the year 2000, the U.S. Department of Education, Office for Civil Rights started collecting information regarding expulsion and out-of-school suspensions. This survey involved 98% of all school districts in America. The expulsion rate among preschoolers was far higher than the aggregate of kindergarten through 12th-grade, even though expulsion means something different in each state. Typically, if expulsion is defined, it means anything more than 10
consecutive days. There is no state that defines it as expelled for good, as a minimum. The definition used in the study for preschoolers was, as a minimum, a child told to leave and never come back, whereas in the kindergarten through 12th-grade data, it could mean something less stringent. Additionally, expulsion rates seem consistent among childcare programs not necessarily participating as state-funded preschool programs.

Four-year-olds are about 80% more likely to be expelled than three-year-olds in mixed grade classrooms. Boys are more likely to be expelled than girls, and African-American children are more likely to be expelled than children of European descent of Latino or non-Latino ethnicity, and far more likely than Asian children. There is also an interaction between gender and ethnicity. The likelihood of expulsion for an African-American boy is high, while African-American girls were extremely unlikely to be expelled.

Regarding the 4-year-olds being more likely than 3-year-olds to be expelled, classrooms with a higher proportion of 3-year-olds in the classroom are also more likely to report expelling some child during the course of the year; but the child expelled is not a 3-year-old, but a 4-year-old. Teachers explained that it is challenging to have an aggressive 4-year-old in the classroom, but of particular concern when that child is around younger 3-year-olds. The concern for liability if a child were hurt reaches a threshold and someone has to get sent home; usually it is the aggressive 4-year-old.

Other factors are also predictive of higher rates of expulsion, including high teacher-child ratio. As the number of children per adult increases by a function of 3.8 more children per adult, the likelihood of an expulsion rises another 15 percentage points. For each two-and-a-half hours tacked onto the program day, the likelihood of expulsion increases by 25%. Longer length of school day also correlates with higher expulsion rates, but it is possible that the longer-day programs serve a different demographic than half-day programs. The length of the day may not be the cause of the increase.

Teacher job stress also related to expulsion rates. Teachers who screened positive for depression expelled children at twice the rate of teachers who screened negative for depression, but job stress seemed to matter more. This relationship, may be related as being depressed, increased the likelihood of having job-associated stress, and the job-associated stress was usually related to the expulsion; however, causality remains unclear.

Job stress has a similar relationship to expulsion as depression, whereas job satisfaction had the opposite effect. Teachers with high levels of job satisfaction are less likely to expel. There is also a relationship between job stress and group size, at least in childcare programs in Massachusetts; but it is not a classic interaction effect. The absence of both factors seems to be predictive of a strong decrease in the likelihood of expulsion. A large group size or high job stress rate relates to higher expulsion likelihood in the classroom. It does not matter if both factors are present, one is enough to affect expulsion rates. Job stress may not be a causal agent, but it may influence how a teacher perceives problems caused by a child’s behaviors, and his or her ability to handle the problems.

Access to support staff also relates to expulsion rates. When teachers reported access to a behavioral consultant who could provide on-site or on-call services for behavior management concerns in the classroom, the likelihood of expulsion rates was dramatically lower, especially if that consultant was on-site and available to the teacher at any time. Teachers who report access to a behavioral consultant are far less likely to expel, but
remains unclear what those behavioral consultants do in the classroom, how much time they spend, or who they are. Perhaps programs that value such consultants also employ other effective interventions, or teachers with access to support may feel better equipped to handle behavior problems when they appear.

The study offers many recommendations. Of utmost importance, preschool programs should not expel children. If the state-funded preschool programs aim to ready children for school, fewer groups are in more need of assistance than the children being expelled from preschool. A program concerned with getting children ready for school should not expel them for behavioral or social-emotional problems. Integration of terms and procedures for prekindergarten and kindergarten-through-12th-grade would be useful. The words “expulsion” and “suspension” should have the same meaning with a common terminology. Clear policies for behavioral supports and access to behavioral consultants may be helpful, as would decent teacher-child ratios.

The American Association for Pediatrics has a policy statement regarding expulsion and suspension for children in kindergarten through 12th-grade, but this statement should be expanded for preschool and childcare. The statement for children in kindergarten through 12th-grade suggests that if a child is to be expelled, he or she should receive a full comprehensive assessment. The pediatricians also recommend prompt referral to a healthcare provider outside of the school to ensure rapid assessment. The statement also advises programs to have a strong relationship to community centers prior to expelling a child, and to assess the safety of alternative placement.

**Embry:** The symptomatology related to aggression, depression, and mental illness are in fact evolutionary adaptive mechanisms. Children show symptoms differently from adults, but they are likely to show their feelings through acts of regression, aggression, high startle responses, and so forth. Many children with these problems have been exposed to difficulties in their lives, including a bad classroom. Human beings, especially children, are primed to search for threats in their world. The primary predator of human beings since we invented tools to kill each other, are other human beings. Environment determines many of these behaviors that children manifest, suggesting that environmental modifications must be made in order to reduce the symptomatology labeled as mental illness.

How is peace created in a classroom, community, or environment, so children can flourish, especially children with difficulties? Children must figure out which adults are safe. The biggest predators of children are often from their own family, so the persons to help them may be outside the family. Children respond differently to adult cues and facial expressions. Their survival depends on those things, so they have a perceptual set bias to avoid certain kinds of people and overselect other kinds of people. Children who have been exposed to serious trauma often have hyperdilated eyes due to high stress hormones and norepinephrine. These responses have implications for transitions in school which then result in high startle responses, unpredictable routines and problems such as freezing, fighting, fleeing; the behaviors that can result in expulsion.

Exposure to bad things creates stressors among all children, but gender differences do exist. Both genders exhibit inattention and distractibility, but boys are more likely to show impulsivity and hyperactivity, requiring more frequent, intense reinforcement. How well do depressed teachers or parents offer reinforcement? Racial, ethnic, and gender
differences show up with behavioral outcomes. Exposure to birth complications, hypoischemia, birth canal problems, and lead can also affect children’s development and behavior. For example, African-American children are more likely to pick up lead in the environment, due to two genes that they carry. Their diets are also more likely to be high in saturated fat and low in vitamin C, which accelerates the negative impact of the lead. These interactions produce the effects in the classroom that can lead to mental illness and eventual expulsion.

Many children with these problems seek attention through negative behaviors in order to have control of their worlds, because control is a way to protect oneself. There is hypothetical math about how social interactions relate to children’s behavior, adult response, and brain chemistry. To a large extent, these biochemical changes or deficiencies come from changes in social interactions. Genes are turned on or off by environmental experiences. Genes can be metaphorically added, subtracted, multiplied, and divided with new combinations, which is why children’s behavior is idiosyncratic. For example, three genes relate to clinical diagnosis of attention deficit hyperactivity disorder. One of these genes is turned on by stress exposure.

Serotonin, as a molecule of belonging, has a similar response. Two to four percent of children have this particular gene, which has an impact if they are exposed to high trauma. Boys have the SRY gene in the testes and brain, which regulates the dopamine receptors. Boys need more reward than girls. If they do not get rewards in normal ways, they will get it in other ways.

There are low-cost prevention and treatment practices, kernels of behavioral vaccines, small recipes in the scientific literature. For example, omega-3 supplementation substantially reduces bipolar depression, borderline personality disorder, and aggression among men. Omega-3 is rarely present in the diets of poor people. Behavioral momentum also is effective in teaching children to comply with requests. A good behavior game can help reduce disruptive behavior in the classroom and reward children for good behavior. Emotional regulation through breathing through the nose rather than the mouth has also shown effectiveness. Finally, nonverbal cues can signal to children what behavior is appropriate, as opposed to yelling and screaming. Yelling causes a startle response and increases the ADHD probability. Differential reinforcement of other behaviors have also proven effective.

Another set of strategies teaches adults to reinforce peaceful behavior. For example, children with Oppositional Defiant Disorder are best handled by making the child a hero of the action, as a safe player. Parents are encouraged to define boundaries and reward children for acting correctly, rather than spanking or yelling in response to negative behavior. Sending positive notes home can also positively impact the experience of the child at home, and therefore his or her behavior in the classroom. Structured recess in the school or facility can also improve behavior among children.

Howard: Currently, there are challenges in working with families of children aged 0 to 5 years. It is costly to get systematic child and family screening information, and often there is a lack of useful pre-entry health checkups. There can be involvement by multiple agents, but with little coordination between them. There is a need for more training on how to assess children, assist parenting, and provide behavior and stress management. Families
lack easy access to community resources and interventions. Finally, documentation on community needs is lacking, which affects how services are provided.

The Child Health and Development Interactive System (CHADIS) has been developed at the Center for Promotion of Child Development through Primary Care, a nonprofit organization based at Johns Hopkins University. CHADIS helps programs detect problems by providing valid, online screening tools. CHADIS saves time in recording data and requires no software. Rather, an online textbook can be accessed at various levels of depth, and handouts with practical advice can be printed.

CHADIS resources can be accessed by category of the problem or strength selected, and it includes an ongoing standard database of extensive information without requiring a network of research assistants. Parents fill out questionnaires over the internet before their health visit or before their early childhood education entry. The information collected is comprehensive, including an Early Periodic Screening, Diagnosis, and Treatment (EPSDT) service, a developmental assessment, mental health, competency, or strength information. The information is scored and analyzed by the computer and presented on an electronic worksheet for the professional with permission to view that information. The textbook of information and other resources are linked to the evaluation. The process allows for communicating this information to other people for whom the parent has given consent, including home visitors, mental health professionals, or childcare professionals in addition to primary care physicians.

The tool utilizes the Diagnostic and Statistical Manual for Primary Care (DSM-PC) and the Diagnostic and Statistical Manual of Mental Disorders - Fourth Edition (DSM-IV), which is a standard classification system for mental health problems. The American Academy of Pediatrics, in conjunction with the American Academy of Child and Adolescent Psychiatry, the American Psychological Association, and other organizations, came up with a book designed for primary care. The difference between these and the standard classification system for psychiatrists is that it includes not just disorders, but precursor levels called problem and variation.

The CHADIS-DSM takes the DSM-PC and tailors it for children aged 4 to 12 years. There is also the pediatric symptom checklist. Starting out with the highest level of concerns, it then follows the algorithm of questions using the minimum number of questions to determine whether the child has a problem, disorder, or variation in that area. It suggests provisional diagnosis and also assesses family factors.

This comprehensive assessment takes the parent between 10 to 40 minutes to complete, and they demonstrate high satisfaction with the process. Because CHADIS is an engine that can deliver questionnaires without the use of a programmer, it offers a range of questionnaires and resources for families. For example, the Modified Checklist for Autism in Toddlers (M-CHAT) is on the site, as well as the Ages and Stages Questionnaire (ASQ).

Schools can also use the Vanderbilt Questionnaire for Attention Deficit Hyperactivity Disorder (ADHD), which includes simple questions about anxiety, depression, conduct, and so forth, so that schools can access this online and fill out the questionnaire which provides a valid screen for ADHD. There is an opportunity for free text, and with parent consent, this information can be shared to allow for optimal management and exchange of information. If a child is given medication, information can be easily exchanged to
optimize the way it is used. The parents are asked to rank the items listed, and they are given further questions following up items in that diagnostic cluster.

An advanced search option specifically suggests relevant resources such as programs, activities, providers, clinician text, parent text, and tools. One can pick a specialty, select the type of insurance the family holds, and define the nearest zip code. Resource people are identified based on this information, and a map can be printed with directions to offices. The program also detects strengths so that a child’s strengths can be supported by having the child join an activity. For example, the program can help a parent find the nearest gymnastics camp.

Many tools embedded in the program have their own validity, such as the M-CHAT and the ASQ. But the questionnaire was developed specifically for this program, so the data is specific. The CHADIS-DSM was compared to the Child Behavior Checklist, for example, which is a commonly used, extensive checklist of behaviors. Although it does not strictly diagnose mental health disorders, it does have some useful categories that were matched for the CHADIS-DSM.

Future additions to the program include healthy passport and memory books, and a patient portal for families to view their information and use the resource search engine. Parents who have online access can check the information about their child in case they dropped their handout somewhere or prefer to organize electronically.

Head Start has a regular health checkup as a requirement for participation. CHADIS could enhance those checkups and make them much more valuable by offering extensive information and serving as a hub for clinical coordination, both to the problems the child might have and also for strengths that were discovered by a CHADIS-aided clinical encounter. CHADIS can be used as an assessment tool by early childhood education professionals, home visitors, or primary care providers, so that children are co-monitored by the different people involved in their lives. It is an educational and communication resource for professionals and parents. The CHADIS database is also a form of accountability, since it can assess needs and effectiveness in improving outcomes.

**Broyles:** The Southeast Kansas Community Action Partnership (SEK-CAP) Head Start program used the teaching pyramid described to model the project. Stressed teachers may contribute to higher expulsion rates. This program has an absolute no reject policy for children. The initiative is a staff support model. Teachers have access to supervisors and behavior consultants to decrease stress levels. Program coordinators were previously in charge of seven Head Start centers; that number was reduced to four to enable them to be present in every Head Start center at least one full day per week.

The program coordinators are cross-trained and use a system called positive behavior support. Policies and procedures are written for classrooms, socializations, home visits, parents, children, staff, and the general program. Memorandums of understanding have been written with all the special education cooperatives and mental health providers, and discussions are underway with the public school districts.

These changes were based on a self-assessment of the environment and on the program’s contributions to challenging behavior. One lesson learned is that such changes require time and intentionality. It is much more difficult to do person-centered planning than to give a
child a “time out.” Reforms require strong administrative commitment for successful implementation. There is much discussion about identifying, assessing, and intervening with challenging behavior. Prevention is another important goal, to prevent challenging behaviors before they happen.

One of the plenary speakers said that an estimated 25% of Head Start children have challenging behavior. The teaching pyramid offers an approach to promote social competence and address challenging behavior. The first two levels of the teaching pyramid involve building relationships and creating supportive environments, which cater to 85% of the children. The remaining 15% require more intensive individualized interventions and social-emotional teaching strategies.

One reason the project started is because staff did not know the difference between bad children and bad behavior. The staff would change their behavior in the classroom based on whether certain children were present. It requires a system in order to have consistent responses to challenging behavior. Staff received extensive training around behavior management and redirection. Before the project, 84% of the program’s mental health dollars were spent on intervention, which was like pouring money down a black hole. Only 16% of the budget was spent on prevention, mainly on some training and observation. Last year, 97% of the mental health budget was spent on prevention, and 3% on intervention. Four years ago, there were 49 mental health referrals compared to two last year.

Children still have mental health needs, but staff members have developed more internal expertise. A mental health advisory committee was formed. A second-step curriculum and team also assisted with prevention in the classroom, not just when there was a problem or crisis. Since implementing this project, staff satisfaction has increased significantly. Staff turnover has decreased and child outcomes show additional growth. Children are learning more because teachers have more time to teach, instead of working on challenging behavior.

Another benefit is a culture of support and friendship throughout the program. The teachers now understand that there are not just two teachers in the classroom. If there are 17 children in that classroom and two teachers, there are 19 teachers in that classroom because children learn from each other. Children mentor other children and have good peer relationships. The program emphasizes the ways children are alike instead of how they are different, and they are better equipped to self-regulate. Staff view themselves as having the skills to better support children in the classroom. They look to each other as sources of support and information. The number of children being identified with challenging behaviors is decreasing. Resources are re-allocated for prevention instead of intervention.

In terms of cost savings, there is less staff turnover. Each time a staff person turns over, 1 year’s worth of salary is lost. Staff turnover improved from 46% 4 years ago to below 20% last year, and most of the turnover was in part-time positions. The letters of intent for teacher positions for next year show zero turnover. Early investments yield great dividends.