COUNTDOWN to KINDERGARTEN

The Impact of Social and Emotional Development on Academic Success

Before they even step foot in a kindergarten classroom, children are experiencing significant and rapid cognitive, physical, and social-emotional growth that can impact their academic futures. This is also the time when a child may begin to exhibit signs of a developmental delay. This term, used by the American Academy of Pediatrics, refers to children under the age of five who fail to meet developmental milestones by the expected ages which can prevent them from entering kindergarten prepared to succeed.[1] Developmental screenings can help to identify children who may be experiencing developmental delays in fine and gross motor skills, communication and speech, personal-social interactions and emotions, as well as problem solving. Screenings can indicate the following: 1) if children are on target developmentally, 2) if they need to be "monitored" and administered more screenings to detect changes, or 3) if they should be referred to a professional for additional assessment.

During the 2014-2015 school year, 1,786 of Mississippi's 41,000 four year olds were enrolled in 11 state-funded pre-kindergarten (pre-k) programs located across the state.[2] These programs, or collaboratives, were selected through a competitive application process after the Mississippi legislature in April 2013 passed Senate Bill 2395, the Early Learning Collaborative Act, establishing Mississippi's first state-funded pre-k programs. A pilot study funded by the Center for Mississippi Health Policy and supported by the Mississippi Department of Education (MDE) was implemented in the fall of 2014 to identify developmental concerns among the children entering pre-K in Mississippi as well as to determine policy considerations that the state could address in the future.

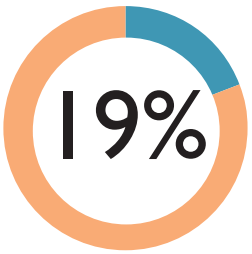
DEFINITIONS OF BEHAVIORAL AREAS MEASURED BY THE ASQ-SE

Self-Regulation: Child's ability or willingness to calm or settle down or adjust to physiological or environmental conditions or stimulation
Compliance: Child's ability or willingness to conform to the direction of others and follow rules
Communication: Child's ability or willingness to respond or initiate verbal or nonverbal signals to indicate feelings, affective, or internal states
Adaptive Functioning: Child's success or ability to cope with physiological needs (e.g., sleeping, eating, elimination, safety)
Autonomy: Child's ability or willingness to self-initiate or respond without guidance
Affect: Child's ability or willingness to demonstrate his or her own feelings and empathy for others
Interaction with People: Child's ability or willingness to respond to or initiate social responses to parents, other adults, and peers

Definitions provided by Brookes Publishing (2002).

Two widely recognized instruments with high levels of validity and reliability, the Ages and Stages Questionnaires Third Edition (ASQ-3) and the Ages and Stages Questionnaires Social Emotional (ASQ-SE), were used to screen approximately 1,350 of the 1,786 children who attended the pre-K collaboratives. The overall findings from the ASQ-3 revealed that approximately one half (52%) of the children were developmentally on target, but almost one out of every four (24%) pre-K child screened scored below the cutoff in one or more of the five developmental domains, resulting in a need for referral to a health care professional for further evaluation. Another 24% of the children were in need of "monitoring."[3,4] For a more detailed look at the ASQ-3 results, see http://www.mshealthpolicy.com/.

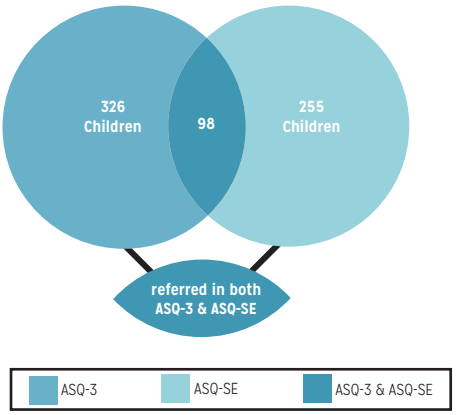
The purpose of this brief is to examine the findings from the ASQ-SE screenings, which focused on the social and emotional aspects of children, and to consider risk factors that may play a role on those screened. Almost one child out of every five screened (18.9%) fell into the "referral" range which means they were recommended for referral to a qualified health professional while 81.1% were "on target."[3,4] The behavioral areas measured by the ASQ-SE screens include: self-regulation, compliance, communication, adaptive functioning, autonomy, affect, and interaction with people.[5]



Source: Southward, McKee, Hanna, & Bell, (2015).

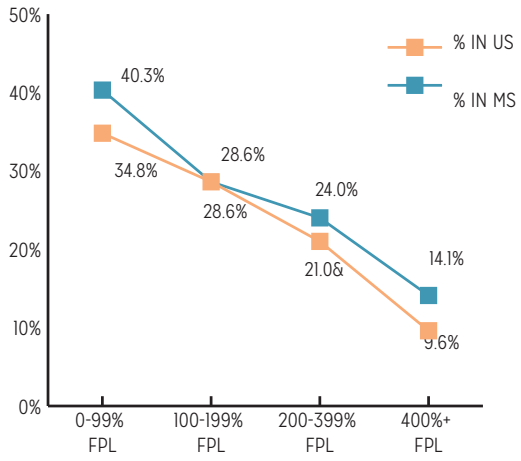
Mississippi Pre-K Collaborative Children Needing Referrals for Social-Emotional Concerns

MS Pre-K Collaborative Children Identified as Needing Referrals for Developmental Delays, Social-Emotional Delays, or Both



Source: Southward, McKee, Hanna, & Bell, (2015).

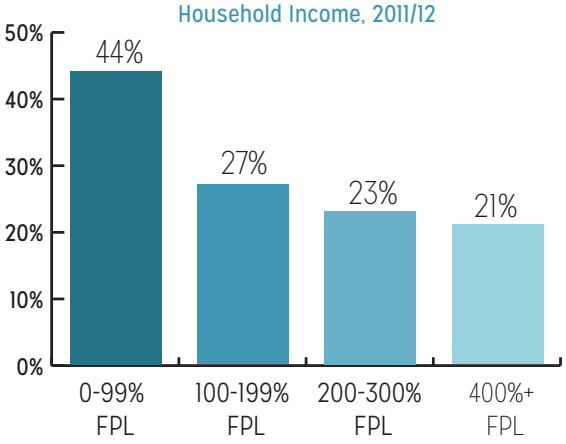
Children with Two Or More Adverse Experiences, 2011/12



Source: National Survey of Children's Health (NCHS), (2011/2012).

Children living in poverty are more likely to have two or more adverse experiences compared to children not living in poverty. Adverse experiences include the following: socioeconomic hardship, divorce/separation of parent, death of parent, witness to domestic violence, victim of neighborhood violence, victim of discrimination, and living with individuals with poor mental health and/or substance problems.

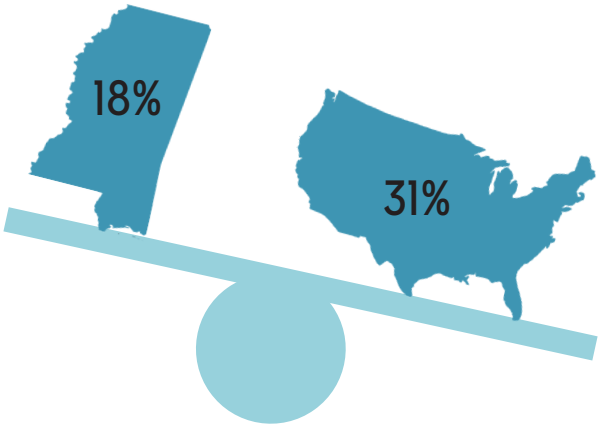
Mississippi Children at Moderate to High Risk of Developmental, Behavioral, or Social Delays by Household Income, 2011/12



Source: National Survey of Children's Health (NCHS), (2011/2012).

Mississippi children (ages 4 months to 5 years) living below the poverty line are at higher risk of developmental, behavioral, and social delays than those living above the poverty line.

Percent Of Mississippi Children Who Received Developmental Screenings In 2011/12



Source: National Survey of Children's Health (NCHS), (2011/2012).

There are many factors that put children at risk for social-emotional delays. Poverty, minority status, low parental educational attainment, and family dynamics such as abuse/neglect, substance abuse, and parental mental illness can significantly increase the chance that a child may have such delays. Nationally, 19% of children living at or below the poverty line are at high risk compared to just 7% of children living at more than twice the poverty line.[6] Additionally, 13% of Black children are at high risk, compared to 7% of White children.[6] And 24% of children whose parents have less than a high school degree are at risk, compared to 7% of children whose parents have more than a high school degree.[6] It should be noted that children of incarcerated parents can also be in greater need of social-emotional services.

A recent study noted a correlation between children's brain surface areas in very low income families compared to those living in higher income settings.[7] In families where caregivers earned less than $25K annual income, children's brain surfaces were 6% less than those of higher income families ($150K or greater). In 2013, 38% of Mississippi's children aged 0-5 lived in families with incomes below the federal poverty level.[8] Sixty-eight percent of children (ages 5 and under) lived with heads of households having no higher educational attainment than a high school diploma.[9]

> "The consequences of poverty on child and adolescent health are perhaps even more critical than those for health."
>
> Bernard Dreyer, M.D., the Director of the Division of Developmental-Behavioral Pediatrics at New York University's School of Medicine

In Mississippi's pilot study, the ASQ-SE screening results revealed that approximately one half (49.5%) of children falling into the "referral" range had caregivers with a high school diploma or less. One out of every two children (50.7%) needing referrals live in households of $20,000 or less annual income, and 51.3% live in single-parent households.[3]

It is important that developmental delays be detected early while a child's neurological system is involved in the acquisition of a variety of skills.[10] Children whose developmental delays are identified and given intervention services early will be more prepared for the academic setting of elementary school, as well as more socially and emotionally successful.[10] Waiting to refer a child could mean missing the critical window for successful intervention, as delays, if left unchecked, may become ingrained and more difficult to correct over time.[5] In Mississippi where the risks are great for developmental delays, only 18% of children under the age of six have received a screening that could detect developmental delays at an early age, compared to 31% nationally.[11] Because there is no uniform screening system in Mississippi, many children are not identified until they enter kindergarten, which further delays any intervention.

A recent evaluation study of North Carolina's early childhood programs revealed that participation in high-quality preschool programs with early developmental screening and early intervention for delays reduced the likelihood that children would be in special education by the conclusion of the third grade, particularly for children of less educated, minority mothers.[12] Providing services to children well before elementary school allows many delays to be overcome and for children to "graduate" out of special services before a more lasting special education classification is required.

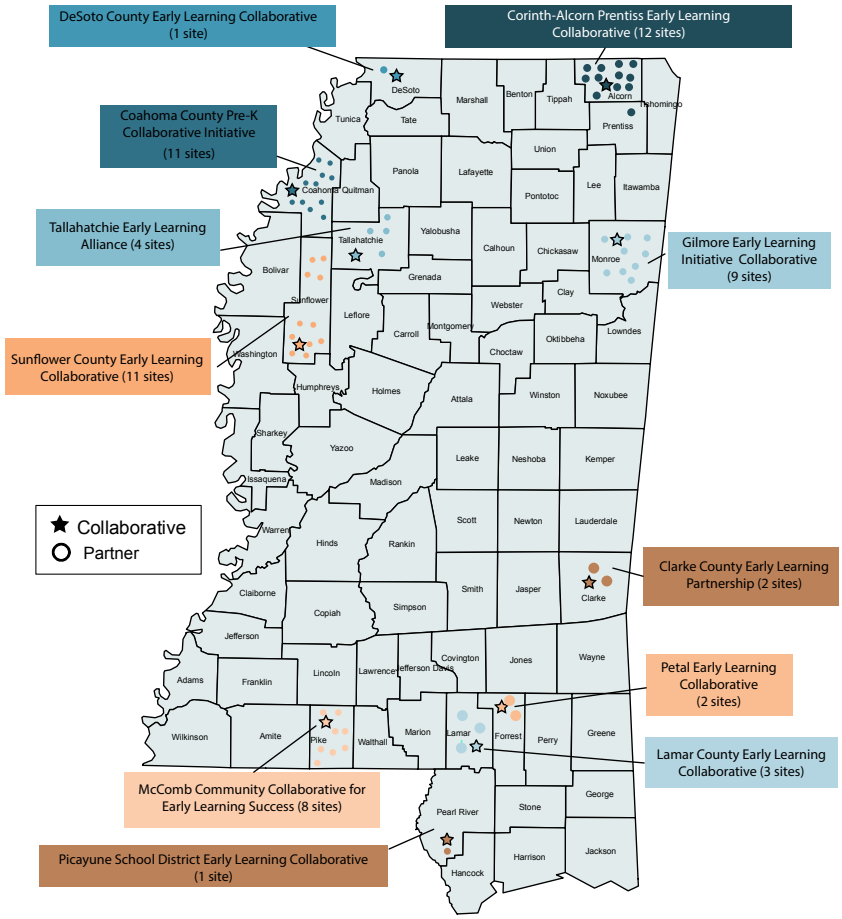
"Early intervention for these young children means diminished need for special education services, fewer grade repeats, and ultimately more children graduating on time."

Susan Buttross, M.D., Chief of the Division of Child Development and Behavioral Pediatrics at the University of Mississippi Medical Center

North Carolina's financial investments in early childhood programs produced substantial overall savings for the state.[12] A report of the White House similarly states that for every dollar spent on early childhood education, $8.60 is saved over the child's education career.[13] Additionally, early detection and services for delays impact third-grade reading success,[2] and high-quality early education reduces the likelihood that children will be required to repeat a grade.[14] The Mississippi Department of Education, the Mississippi Division of Medicaid, and the Mississippi State Department of Health are currently examining the North Carolina screening and referral program as a potential model for Mississippi, highlighting the importance of public-private partnerships for creating solutions and addressing citizen needs.

Another strategy that could be implemented to increase developmental screening rates involves the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program, a Medicaid service that provides comprehensive preventive health care to children from birth through age 21. North Carolina and other states now require that EPSDT screenings include developmental screenings in addition to screenings for medical, mental health, vision, hearing and dental. Mississippi has the opportunity to also require developmental and social-emotional screenings via the EPSDT program as a way to promote best child health practices.

Pre-K Collaborative Site Locations



Source: Mississippi Department of Education, June 2014
Pre-K Collaboratives Funded by Mississippi Department of Education

MISSISSIPPI EARLY LEARNING COLLABORATIVES

- Began in 2014/15 School Year
- $3 million in funding
- 11 collaboratives/ 1,786 students
- 4% of Mississippi 4 year olds enrolled
- 1,350 received developmental screenings

ADDRESSING THE PROBLEM

Require social and emotional screenings of infants and young children to be included in the developmental screening services of the Division of Medicaid's Early Periodic Screening, Diagnosis and Treatment (EPSDT) Program. This can be a separate reimbursable service code to health care providers.

Increase training and outreach to parents, child care providers, pre-k collaboratives, Head Start and medical providers to identify social and emotional concerns of young children. The roll-out of the pre-k collaboratives provides an opportunity to ensure that children will be systematically screened before they enter kindergarten as is done in North Carolina.

Increase funding of the Early Intervention Program, which serves children ages 0-3, (administered via the Mississippi State Department of Health) in order to identify and intervene with more children in their earliest years.

Coordinate services between the Early Intervention Program and the Child Find Program (administered by MS Department of Education) to ensure that children and families have continuity in services from birth through high school.

Promote appropriate follow-up services of children identified with social, emotional and developmental delays.

Promote research to conduct a county-by-county assessment of services and providers available to infants and young children with social, emotional and behavioral issues.

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NOTES:

In collaboration with the Center for Mississippi Health Policy, two briefs have been produced revealing the results of the pilot study. For more information on the pilot study, download the full report at http://www.mshealthpolicy.com/ or http://kidscount.ssrc.msstate.edu/.

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The Mississippi KIDS COUNT program is made possible, in part, through grants from the Annie E. Casey Foundation and Mississippi State University's Division of Agriculture, Forestry and Veterinary Medicine. This work is carried out through the Family and Children Research Unit, a division of the Social Science Research Center.