Risk and Resilience in Rural Minnesota: Helping Our Youngest Citizens Succeed Martha Farrell Erickson & Michele Fallon

Ten-month-old Michael cries in his high chair while his 3-year-old sister Lisa pleads with their dad to let her play outside. Exhausted from working the night shift at a factory in the next town, their dad lies on the couch wondering how he's going to get through the day until his wife gets home from her job cleaning rooms at a nearby motel. He knows the kids would be better off at the daycare home down the road, but then how would they have enough money to make ends meet? Maybe his sister will watch the kids for an hour when she gets off work today. But for now, if he can get the kids to watch TV, maybe he can sleep for an hour or two.

Before long Michael and Lisa will enter school in your community. But how will they fare in the classroom? Will they have the language and cognitive skills necessary to succeed? Will they have learned to focus their attention, express their feelings, and cooperate with others in ways that allow them to make the most of their classroom experience? Taking the long view, what are the odds that they will grow up to be caring, competent, responsible citizens of your community?

Our nation has had a longstanding commitment to education for all and a generally strong K-12 education system to support that commitment. Schools in our own state of Minnesota consistently rank well on educational outcomes when compared to schools in other states. Nonetheless, even in Minnesota, confidence in our education system is challenged by a persistent pattern of disparities showing that some children — particularly students of color and children living in poverty (like Michael and Lisa) — lag far behind their white, middle-class peers on almost any educational outcome of interest.

Too often discussions of education in general — and educational disparities in particular — fail to address the importance of the years before a child enters the K-12 system. But that is changing in

Minnesota, thanks to business leaders, private foundations, and a growing number of policy makers who have taken up the cause of early childhood care and education. That is good news for those of us who study early child development, and it is good news for children like Michael and Lisa, as well as anyone who cares about the future of rural Minnesota. A hot concept in economic development these days is "human capital" (the person power necessary to make a business, organization, or community thrive). Anyone who studies human development will attest that, to be effective, investment in human capital begins at (or even before) birth.

Unfortunately, investments in young children in Minnesota have been diminishing in recent years as the result of significant cuts in funding for child welfare, support services for struggling families, and early childhood care and education. Yet at the same time there has been a virtual explosion of research in child development, particularly in the area of early brain development, which strengthens the case for why early childhood experience is so important and worthy of significant investment. Taking that research to heart (and going beyond that research to demonstrate the cost effectiveness of investing early in the future work force), business leaders and other decision-makers around Minnesota have led the charge in building such collaborations as Ready4K, the Minnesota Early Learning Foundation, the Early Childhood Coalitions, and the Itasca Project. Those new and dynamic groups are adding their voices and important perspectives to other early childhood resources such as the Children's Defense Fund, the Center for Early Education and Development at the University of Minnesota, and the Minnesota Departments of Health and Education. With an eye to the research in child development, there appears to be a fair amount of consensus about what our children need to become healthy, contributing members of our communities, whether urban, suburban or rural. The foundation for competence in school, in work, and in relationships is laid in the early childhood years.

In considering the potential impact of early childhood education, especially in rural areas, it is important to consider a diversified delivery system that meets the needs of specific communities. Thus effective early childhood education can be delivered in a number of ways, e.g. through Head Start programs, high quality child care centers, and family childcare providers who have access to training and consultation. Our burgeoning knowledge of child development and infant and young children's mental health informs us, however, of the need for a holistic approach to meeting the needs of young children, not only through formal "early childhood education" programs, but also by addressing the many factors of risk and resiliency in their families and their communities.

What do our children need to succeed?

According to *Neurons to Neighborhoods* (National Research Council, Institute of Medicine, 2000), a comprehensive summary of recent scientific research in child development, "Virtually every aspect of early human development, from the brain's evolving circuitry to the child's capacity for empathy, is affected by the environments and experiences that are encountered in a cumulative fashion, beginning early in the prenatal period and extending throughout the early childhood years" (p. 6). Thus, parents have a powerful influence on a child's early development, and therefore, the health and well being of parents is an essential variable in children's developmental outcomes.

Early brain development occurs rapidly and is extremely vulnerable to early experiences; the organization of the neurons and pathways among them are designed to change in response to experience, particularly prenatally and in the first year of life. For optimal development, infants need **consistent, responsive**, **nurturing caregivers**. This leads to a secure attachment, which becomes the foundation for the child's view of the world, the blueprint for future relationships, and a critical mediator of the child's response to stress in the future (see, for example, Erickson & Kurz-Riemer, 2002, and Sroufe, Egeland, Carlson & Collins, 2005).

Research demonstrates that first and foremost in contributing to a child's success in school is the quality of the relationship between the parent and child. As the child's first teachers, parents provide the earliest experiences that contribute to the architectural organization of the developing brain. By successfully interpreting the infant's cues and meeting the infant's needs the majority of the time ("good enough" parenting), parents help the child develop expectations of the world as a safe place and lay the foundation for the child's developing capacity to regulate his or her behavior and emotions. In contrast, a child with insensitive or unresponsive care comes to view the world as a scary place and fails to develop the capacity to express and manage emotions in a healthy way. An important part of the parents' role in the early years also is to protect the young child from trauma and excessive stress (for example, domestic violence or high levels of family conflict) that can

cause physiological dysregulation and undermine young children's capacity to focus attention and think logically.

Children also need a safe and stimulating home environment, with **opportunities for exploration** that builds on the child's natural curiosity and promotes the development of creativity, initiative and problem-solving. Children living in crowded or inadequate housing — or whose parents do not understand or respect the importance of play and exploration — often lack such opportunities. A safe and stimulating childcare environment can compensate to some extent for that lack of opportunity at home. But too often children have neither.

In order to develop effective communication and literacy skills, young children must be provided with **language stimulation** beginning at birth. Singing, reading, and talking to a baby long before he or she can talk back lays the foundation for nearly all later academic learning. And, as babies become toddlers, asking "how" and "why" and "what then" kinds of questions nurtures important thinking skills. In a major study of language disparities among elementary school children, Hart and Risley (1995) documented just how critical these early language experiences are to subsequent school success.

Finally, through **modeling and guidance**, parents teach their very young children to take turns, share, resolve conflict, focus and attend, and follow directions, skills that teachers identify as critical to school success. By creating enriching experiences, making careful choices of childcare or preschool, and recognizing children's efforts and achievements, parents also communicate their attitudes about the importance of learning and succeeding in school — attitudes the children will internalize and carry forward as they actively contribute to their own school success.

The Role of Childcare in Young Children's Development

Although family is the first line of care and education, for most young children in Minnesota, childcare is a close second. A survey by the Minnesota Department of Human Services in 2004 indicates that approximately three fourths of Minnesota families with children under 13 years of age regularly use some type of childcare arrangement. Of these, approximately one third of families use center-based care as their primary childcare arrangement, 10% use licensed family childcare, and 46% use family, friend, and neighbor (FFN) care. At its best, childcare can be a supportive complement to what children experience at home or, for children in less-thanoptimal home environments, a compensatory experience that can tip the balance toward good developmental outcomes.

Multiple researchers have demonstrated that children, particularly those considered high-risk, make notable long-term gains when they have the opportunity to participate in highquality early childhood programs. High-quality programs provide children with the opportunity to develop close relationships with teachers in the context of cognitively stimulating environments. Those programs that include parent education and involvement are found to be most successful (Burr and Grunewald, 2006; Egeland & Bosquet, 2002). A developmental assessment of children attending 22 nationally accredited childcare settings in Minnesota found that almost twice as many children were rated as "proficient" or "school ready" compared to the statewide 2003 Minnesota School Readiness Study, regardless of the education level of their parents, family income, or minority status (Minnesota Department of Human Services, 2005). Economist Art Rolnick, Vice President for Research at the Federal Reserve Bank in Minneapolis, calculates as much as a 16% return on investment from high-quality early childhood programs aimed at children at risk; such programs reduce juvenile delinquency, special education services, teen pregnancy, welfare dependency and other negative outcomes later in life (Rolnick & Grunewald, 2003).

Identifying the risks

Risks that threaten children's achievement of their full developmental potential can occur in a number of ways. The environment into which a child is born can affect brain development, attachment relationships, and learning in profound ways. Environmental threats include poverty and its associated stresses, toxins in the environment (for example, residue from lead paint in substandard housing), family isolation, and violent homes or communities. Parents themselves bring their own histories of how they were parented; mental, physical and chemical health status; education and employment status; and other internal resources or lack thereof. The child also brings inherent strengths and challenges, including innate genetic potential, temperament, health status and developmental challenges. The strengths and challenges inherent in each of these three components environment, the parent, and the child — need to be identified and addressed to truly optimize the developmental potential of each of our children.

We know that many of our children are falling short of entering kindergarten adequately prepared. A school readiness study conducted in the fall of 2004 by the Minnesota Department of Education found that within a "strategically selected sample" of new kindergartners, only 51% demonstrated adequate readiness in personal and social development, and 47% demonstrated readiness in language and literacy (Barnidge, Cooke, Kuklinski, Larson, Latchaw, O' Sullivan, Swenson-Klatt, & Wallace, 2004).

Many of our young children in Minnesota are considered to be "at risk" for falling short of their potential as a result of living in poverty and/or living in families whose lives are complicated by mental health issues, chemical dependency, domestic abuse, lack of adequate health care, adolescent parenting, low educational achievement, unemployment and isolation. Each of these factors alone is known to have deleterious effects on children's development and research tells us that the exposure to multiple risk factors (as is often the case) significantly increases the likelihood of childhood learning and behavior problems.

For rural children, many of these risk factors are complicated by relative social isolation, higher rates of unemployment, lack of health insurance, transportation barriers and inaccessibility of services, such as quality childcare, early childhood programs, and mental health care for both parents and children. A national study of rural children by the Department of Agriculture (2005) indicates that, in 2003, 21% of children in rural areas were living in poverty compared to 18% of urban children. Also, proportionately more rural children were without health insurance (22%) than urban children (12%). Within our own state, the 2005 Kids Count data for Minnesota counties suggest that some of the highest rates of child poverty occur in rural Minnesota, with 30 rural counties exceeding (at 11%-22%) the 10% poverty rate documented in Hennepin County. The national Department of Agriculture study (2005) also notes that, "Non-metro children are more likely than metro children to have younger and less educated parents, and children with younger and less educated parents are more likely to be poor."

The adverse effects of parental mental illness on children are well documented, as described in *Neurons to Neighborhoods*, a landmark volume that synthesizes recent research in early child development. For example, compared with children of nondepressed mothers, those with depressed mothers are at increased risk for developing social/emotional and behavior problems, resulting in school difficulties, poor peer relationships, and difficulty regulating emotions and behavior. Children of depressed mothers are also at significantly increased risk for the development of serious psychopathology themselves. Infants and toddlers "who are acutely dependent on their mothers, whose frontal lobes are experiencing rapid growth, and whose attachment, social-emotional and regulatory capacities are developing, are particularly vulnerable to the negative effects of maternal depression" (National Research Council, Institute of Medicine, 2000, pp. 252-253).

Chemical health issues for parents are often very difficult to separate from mental health issues as the two so often co-occur. Children living with caregivers who are abusing chemicals, including alcohol, often experience very erratic patterns of care giving and are at much higher risk for neglect and abuse and a host of developmental difficulties (National Research Council, Institute of Medicine, 2000). Posing a particularly great risk to young children in rural Minnesota is methamphetamine use, which has risen dramatically in recent years. According to the Minnesota Department of Health, of 500 meth labs and affected sites identified in Minnesota in 2003, 75% were located in "rural or semi-rural areas."

The Minnesota Rural Health Advisory Committee's Report on Mental Health and Primary Care (2005) indicates that, "While studies have shown that prevalence of mental health distress in rural Minnesota is not greater than that in urban and suburban areas, there is a greater chance that mental health services may be limited or nonexistent." For example, in 2003, there was a ratio of 12.3 psychiatrists per 100,000 urban population in Minnesota, compared to approximately 4.5 psychiatrists for every 100,000 rural Minnesotans. Figures on other mental health providers — psychologists, social workers, and advanced practice nurses — suggest similarly disproportionate services in rural areas.

The Minnesota Children's Defense Fund reported that during the 2003 legislative session, there was a \$37.5 million reduction in state spending on child welfare grants for the 2004-05 biennium; 16 child welfare programs were merged into a single block grant, resulting in variation among counties' funding for child welfare programs, favoring those urban counties with a larger tax base. The Association of Minnesota Counties, when asked about the impact of the cuts, reported combating the cuts by "reducing or eliminating optional prevention and early intervention services in favor of 'deep-end' treatment services [child protection, foster care] which are usually more expensive," expressing concern that fewer early intervention programs would result in a higher need for these deep-end services. (Note that, in the last hours of this most recent legislative session, a bi-partisan bill was passed by the House of Representatives and the state Senate which restores some of the cuts to childcare, increases funding for early childhood family education, and improves the foundation to improve school readiness with the reinstatement of the Minnesota School Readiness Kindergarten Assessment and incentives for improved child care quality.)

While this year's legislative action is a welcome step in the right direction, there currently is a significant lack of high-quality early childhood education opportunities for our children in Minnesota. A 2005 study of the quality of Minnesota's childcare centers by the Minnesota Child Care Policy Research Partnership found that only 25% of the 100 centers evaluated across the state met criteria for a rating of "good;" 71% of centers were above criteria for meeting "minimal" standards, but did not achieve a "good" rating; and 4% of centers fell below "minimal" standards. Those centers rated as "good" tended to have a higher-educated, better paid staff and were accredited and part of a multi-service agency; of note is that geographic area was not linked to quality, nor was the number of enrolled children receiving childcare assistance. However, there are rural counties in Minnesota that do not have an accredited childcare center.

Even when quality childcare is available, it may not be affordable for many families. Families with incomes under \$20,000 spend an average of 28% of their household income on childcare, while families with average incomes spend 10% on childcare. Approximately 25% of low-income families with children under 5 are receiving state child care assistance, many fewer than could qualify. The 2003-legislated increase in co-pays for families receiving childcare assistance resulted in many families leaving quality care for less costly (and lower quality) options (Chase, Arnold, Schauben & Shardlow, 2005).

Promoting Resilience in Our Children

We have the research to tell us what children need to flourish, even in the face of adversity. We know that first and foremost, young children need consistent, nurturing, predictable relationships with their caregivers, whether this is provided by the parent and/or a child care provider. For this to occur, parents' social, emotional, educational, health and employment needs must be addressed as part of the promotion of successful parenting. Family support services can help parents enhance their competence and confidence in providing responsive and sensitive care by addressing factors that underlie the parent's ability to nurture his or her child, including both the relationship needs and more material needs of individual parents and children. "Pre[k]now," a national advocacy group for universally available high-quality pre-kindergarten programs, identifies Wisconsin as a model in this regard, as the state offers a higher rate of reimbursement for pre-K programs with a parent engagement component (Doggett, 2006).

Resilience research suggests that in the context of care giving deficits and stress in the home, alternative caregivers play a critical role in supporting a child's development by facilitating the development of self-regulatory skills, the ability to provide clear cues and signals, and the child's sense of mastery. Quality childcare can serve as a protective factor for children by potentially combating many of the risk factors and reducing the disparities of school readiness created by income, culture and opportunities for learning. There is research to suggest that high-risk mothers whose infants were attending high-quality childcare actually demonstrated more affectionate behavior toward their babies than comparison groups who infants were with them full time or were in lesser quality care (National Research Council, Institute of Medicine, 2000).

Rural communities are known to have a number of important strengths from which to build in developing resources to help their youngest citizens flourish. A strong commitment to community typically characterizes rural areas, as does a tradition of collaboration and cooperation leading to practical solutions to complex problems. Enduring social networks and relationships also tend to be a significant strength in rural areas (Minnesota Department of Health, 2005).

The Early Childhood Coalitions in Greater Minnesota are a prime example of such community strengths. The "Minnesota Early Childhood Initiative ... A Campaign for Our Youngest Children" is a statewide collaboration of the state's six Minnesota Initiative Foundations working together to advocate for investment in early care and education for the future of rural communities. More than 1,850 community members across the state have participated in face-to-face interviews, and 3,000 community members have been engaged in community forums to share their perceptions of the availability and accessibility of resources and supports for young children. A number of themes and issues have emerged from this initiative, including:

- The need for infant/toddler child care, as well as extended-hour and respite care;
- Barriers to accessing medical, mental health, dental and prenatal care;
- Limited financial resources for early care and education

programs due to state funding cuts;

- Long waiting lists for early childhood programs;
- The need for additional health and developmental screening and services for children from birth to 3 years of age;
- The need to recognize and address cultural, social, and economic disparities in communities; and
- The need to implement strategies to reach families who are not accessing services.

To address these identified needs, the MIFs are using a unique grassroots community organizing model in combination with enlistment of the business community, communication strategies, and public policy development and advocacy.

Collaborative, integrated systems of care that address the needs of very young children within the context of their families are essential if Minnesota's young children are to succeed in school and grow up to be responsible, competent citizens. This involves bringing all the stakeholders within communities to the table, including school districts, medical providers, business leaders, parents, social services, and the community providers of services to young children, including Head Start, center-based and familybased childcare providers. The equation for success must include strategies for addressing the economic needs, mental and physical health needs, and social support needs of parents. And the equation must include ongoing training, consultation, and support for all caregivers of young children. Targeting families with the greatest needs requires being creative in reaching parents where they are, as well as recognizing and communicating to parents that they are essential partners in educating strong and competent children. Programs that engage parents in this way early on assist them in staying engaged with their children's learning for the long term. This will require strong advocacy for community, state and national policies that acknowledge the efficacy of investing now in affordable, accessible, high-quality options for all children and families (especially those with the greatest needs) as a means of achieving an optimal future for us all.

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