

spotlight

Explaining Challenging Behavior in Early Childhood

William, age three, was pushing and biting other kids at child care, having trouble changing activities and throwing temper tantrums. His teachers gave him time-outs and explained the behaviors they would like to see. An occupational therapy (O.T.) evaluation found that he was having difficulties making sense of the stimulation in his environment. The occupational therapist made recommendations for O.T. services that focused on helping him to understand the feelings his body was experiencing, and he was placed into a classroom for children with, or at risk for, disabilities. Teachers also began providing extra cues for him to help him understand when he would be switching activities. William is pushing and biting less and is spending less time in time-out.

There are many children in child care similar to William: children who have a hard time adjusting to their environment and who display challenging behaviors. Issues of child behavior as well as social and emotional development are critical pieces of school readiness. From birth to age five, children develop the foundation necessary for later growth. However, for some children early childhood development can be seriously compromised by a variety of environmental and biological risk factors. Failure to nurture the development that takes place in early childhood may result in disenrollment from child care programs, challenges to families and long-term deficits. To ensure that children are prepared to begin school, achieve academic success, and become productive adult citizens, these risk factors must be addressed [1] [2].

We review several factors that can contribute to and intensify behavioral problems in children from birth to five years old. Challenging behavior may include, but is not limited to, hitting, shoving, yelling, having tantrums, not sharing, throwing and breaking toys, grabbing, spitting and kicking. These may reflect hyperactivity, inattention, irritability, over-sensitivity to stimuli, impulsivity, social withdrawal, anxiety, noncompliance, low self-esteem, poor self-control, insecurity, poor peer relationships, and aggression. However, we must not jump to a diagnosis; preschool age children are by nature active and have limited social skills. This may make it difficult to distinguish seriously challenging behavior from the usual behavior of childhood. Of particular concern, however, is extreme behavior that consistently appears in more than one setting and with different caregivers.

In the following brief, we outline causes of challenging behavior in early childhood to help policy makers, communities, and parents understand where the behavior comes from. Specifically, we examine

- Environmental and social risk factors
 - Biological and congenital risk factors
-



Michigan Nonprofit Association

CAUTION

Do not use this list to diagnose the causes of behavior in an individual child. As you will see below, there are many possible causes of challenging behavior, and professional help is needed to sort these out.

Latricia, age four, began hitting other children at her child care and yelling at both her teachers and her friends. Her teachers noticed that Latricia's most difficult time was when the classroom was shifting to a new activity. Latricia was spending much of her day in the time-out chair. While talking to her parents, her teachers learned that Latricia's parents were in the process of a difficult divorce. They shuffled Latricia between households and she would see her parents yell at one another. This was causing Latricia to feel anxious. Latricia's parents and teachers began to make her life more predictable; they used a board to show her what her day was going to be like and where she would be going after school. They also set firm, consistent rules at home and school on behavior expectations and rewarded Latricia when she was acting appropriately. Latricia is becoming a happier, more social child.

Throughout the day at preschool, Johnny (age 3) was biting, hitting, kicking and having trouble ending one activity and starting a new activity. His teacher was frustrated; she thought Johnny was a bully. His mother told his teacher that Johnny had been witnessing domestic violence at home. His behaviors were likely reflections of posttraumatic stress disorder (PTSD). The family began to go to therapy. Training began for both mother and staff on how to make his days safer and more predictable. His teacher also began to teach him to use his words instead of his fists. Mother and Johnny moved away from the violent situation. Now that Johnny is safe, his behavior is improving.

Environmental and Social Risk Factors

Family/Community Factors

Parental Illness. Parental illness can have a profound impact on children's behavior [3]. Parents facing a serious illness may express anxiety, depression, or other emotional reactions, which can affect their ability to parent as well as their relationship with their children. As a result, young children may experience sadness, fear, loneliness, and anger about a parent's illness and the interplay of these emotions may cause behavioral problems.

Homelessness. Residential instability and homelessness can be very stressful and can be associated with other traumatic circumstances in a child's life. Children experiencing homelessness are more likely to internalize problems and experience depression, low self-esteem, and anxiety [4].

Poverty. Poverty is associated with higher levels of behavioral problems in children [5] [2]. Poverty effects may be due to its association with factors such as parental stress and depression as well as low birth weight, lead poisoning, and frequent hospitalization.

Family Separation or Divorce. Children who experience parental divorce exhibit more inappropriate behavior when compared to children in continuously intact two-parent families [6] [7]. However, behavioral problems in children of divorced or separated families may emerge because of accompanying factors, such as the absence of the non-custodial parent, the adjustment of the custodial parent, conflict between parents, and financial difficulties [6].

Domestic Violence. Young children who live in households where domestic violence is present are at risk for maladjustment and can develop problematic behavior [8] [9].

Parent Mental Health. The healthy development of children largely depends on the health and well being of their parents. Parental mental illness, particularly maternal depression, can have harmful effects on children [1]. Severe parental depression can influence a young child's ability to manage and express emotions and the ability to form secure relationships with others [10] [11] [12].

Community Violence. Everyday in the United States forty children are killed or injured by guns [13] and in some communities three out of four children witness violent crimes [14]. Young children who are exposed to heavy doses of violence can exhibit symptoms of posttraumatic stress disorder and may display challenging behavior [15]. Without treatment, these behavioral problems may get worse [16] [17].

TV Violence. Children are often exposed to violent and aggressive behavior through the shows they watch on TV, and preschool children watch a lot of TV. Watching violence on TV increases the likelihood of inappropriate behavior in children by taking the place of other more constructive activities, through modeling inappropriate behavior, and by making the child less sensitive to aggression [18].

Parenting Factors

Diet/Nutrition. For some young children, especially impoverished children and children with poor health, nutritional deficiencies can affect behavior. Reduced breast-feeding, iron and iodine deficiencies, and protein-energy malnutrition can create long-term deficits in a child's development and behavior [19] [1]. Even short-term hunger can lead to crabbiness and challenging behavior.

Relationship with Parental Figures. The relationship between children and parents is crucial in a child's adjustment and development. Parents who are overly strict, punish harshly, do not establish consistent rules, and strongly show their anger or disappointment to their children are likely to risk delays in their child's positive social development [20]. Relationships with parents are built through developmentally appropriate expectations and interactions. Children are helped when parents are patient, understanding, and sympathetic when children are angry, upset or scared [21].

Working Parents—Demanding Schedules and Increased Stress. Parents' work experiences can indirectly influence children's behavior through the effects that work schedules and stresses have on quality parenting. Parents who feel overwhelmed by work tend to have more conflict with their children and may have less time to spend with them [22] [23].

Early Parenthood. Children of teen mothers may be more prone to experience behavior problems and are less likely to develop secure relationships with their caregivers and classmates [24]. These may be attributed to the immaturity of the mother or to the many accompanying factors of early parenthood, such as low levels of education, being a single parent, and poverty.

Kinship Care / Foster Care. In 1997, there were approximately 2 million children living with neither parent [25]. Children may end up with relatives or in foster care as a result of family homelessness, parental substance abuse, child abuse or neglect. The risk factors that contribute to a child's placement in an alternative family structure put them at greater risk for developing behavioral problems.

Four-year-old Selina sometimes came to her Head Start class in her pajamas. Often, she had not eaten breakfast and rarely was she clean. Selina had a difficult time sitting still for group activities, and never stayed at one activity long enough to finish it. When other children tried to join in her play, she grabbed toys from them and hit them if they did something she did not like. Her teachers talked to her mother about making sure she was getting to bed early enough so that she would wake up on time in the morning. They also worked with her mother on setting and following through with rules at home. Selina comes to school rested and clean more often now. She is also doing better at staying with group and individual activities and is beginning to make friends.

Child Abuse/Neglect. Child abuse and neglect can have serious implications for children’s development and social adjustment. Children who experience forms of physical, sexual, or emotional abuse may demonstrate a variety of behavioral challenges [26]. Similar types of behavioral problems are found in children who are neglected [1].

Child Care Factors

Group Size. Being with child care staff who have to take care of too many children and with too large a group of children can impact the behavior of young children. When fewer adults are available to interact with children, children tend to engage in less positive interactions with their classmates as well as with their adult caregivers [27]. Caregivers are able to offer more positive interactions when group sizes and ratios of children to caregivers are low, and they struggle to maintain control and offer individual attention when group sizes are higher [28].

Training for Caregivers. Trained child care providers in homes and centers are more sensitive, nurturing, and responsive and are less detached and restrictive. Training comes from community college, college and university courses as well as workshops and in-service training. Children benefit from having trained caregivers who understand children [29].

Caregiver/Child Relationship. The child-teacher relationship is important in fostering positive social interactions in children. Young children in child care exhibit fewer behavioral problems when they have a close relationship with the caregiver [30]. The sense of security provided by the teacher can help to encourage more socially appropriate behavior in children [31].

Consistency in Care Giving. Turnover of staff in child care programs is very high. Further, the use of multiple childcare arrangements, also known as patchwork care, has become common in recent years as a way to accommodate parental work schedules and shifting family roles [32] and family moves lead to changes in child care [33]. The instability that comes with being exposed to changing caregivers is associated with an increase in behavioral problems in young children, at home and in child care [34].

Poor Contingency Setting by Providers. Young children in child care may misbehave in response to the disciplinary approach of their teachers. Some child care providers do not have developmentally appropriate expectations. Child care teachers who do not set and enforce clear, firm, consistent, and appropriate classroom rules are likely to face increased levels of challenging behavior in children [35].

The child care teachers labeled 3-year-old Alex as a troublemaker and constantly reprimanded him: “Don’t do that” “Stop being such a baby” “You bully – no!” “Can’t you ever behave?” Alex did much better in another child care program with more experienced and educated teachers who valued his good points.

Peer Victimization. Young children who have been permitted to be victimized or bullied by their peers are more likely to demonstrate problematic behavior when compared to children who have not experienced peer victimization [36]. Peer victimization in preschool can lead to children internalizing their victimization and may impact their ability to interact and cope in peer group settings [37].

Biological/Congenital Risk Factors

Physical Factors

Fetal Alcohol Syndrome. Fetal Alcohol Syndrome (FAS) is the result of excessive prenatal exposure to alcohol and can cause developmental and behavioral challenges in young children. It is the leading cause of preventable developmental delays, occurring in perhaps 1% of births. Fetal Alcohol Effect (FAE) is diagnosed when some, but not all, of the characteristics of FAS are present. Over 50,000 infants are born with FAE each year and may demonstrate similar developmental delays and behavioral challenges [38].

Drug Exposure. Prenatal drug exposure can also impact the behavior and cognitive development of young children [39] [40]. However, there is a great deal of variability in the outcome of prenatal drug exposure.

Low birth weight children, particularly those born into supportive families, may be fine. However, pre-term low birth weight children are more likely than other young children to demonstrate destructive and aggressive behavior, hyperactivity, lack of attention, unassertiveness and withdrawn behavior [41].

Allergies and allergy medications can impact the behavior of young children: effects include over-talkativeness, irritability, impulsivity, drowsiness, and withdrawal. Hyperactivity may also be evident with some food allergies [42].

Chronic Illness/Hospitalization. Young children who are chronically ill may develop behavior problems. Coping with long hospital stays, separation from family and friends, and frequent medical procedures may strain their ability to cope and lead to challenging behavior [43].

Sleep Disorders. Settling down and sleeping through the night is not easy for many young children. Young children with sleep difficulties may display temper tantrums, noncompliance, anxiety, or depression. Young children may also respond to their lack of sleep by being overactive, irritable, or inattentive [44]. Even one night of poor sleep can lead to crabbiness.

Children with fetal alcohol syndrome present ongoing issues. For example, teachers often removed four-year-old Jose from his friends during lunch at his childcare center because he was spitting. It was found that replacing hard, crunchy food with softer food reduced Jose's tactile defensiveness, and he was able to eat with the other children.

Mohamed, a three-year-old who was a drug-exposed baby, constantly moved about and refused to follow instructions at home and in his classroom for children with disabilities. After moving him to a classroom with higher functioning children, and using picture stories to help him understand what teachers expected of him, Mohamed has started calming down and is following directions more often.

Three-year-old Tessa was enrolled in a classroom for children with, or at risk for, disabilities, and in Head Start. She was a very busy child, very often moving from one activity to another. At snack time, Tessa would dump her milk on other children and run away so that her teachers could not catch her. Her teachers had tried rewarding positive behavior and using a time-out room for unwanted behavior, but Tessa spent much of her day at the door of the time-out room spitting at other children as they passed by. A lead screening found elevated levels of lead in Tessa. This helped her teachers understand where some of these behaviors might be coming from. Tessa went on a special diet that helped remove lead from her body. To help her understand expectations, Tessa's teachers began to interrupt negative behavior and explain acceptable behavior. Instead of having her sit in a time-out room, she is helping to clean up the mess she made, and then is being redirected to a positive activity.

Lead poisoning Lead is the most widespread neurotoxin in the United States. For many poor and minority children, exposure to lead, particularly from old paint, has become commonplace [45]. Lead poisoning has been found to negatively impact a child's behavior and cognitive development [46].

Child Mental Health Factors

Sensory Integration. Children with sensory integration difficulties tend to be overly sensitive or under-reactive to touch, smell, taste, sight, sound, and movement. They may be easily distracted, clumsy, impulsive, unable to unwind, and may have problems transitioning from one situation to another [47]. This type of diagnosis can often be determined by an occupational therapist.

Emotional Regulation. Appropriate behavior and compliance depends on children's ability to control their emotional reactions. Emotional regulation is fostered by the interactions and relationships between children and their caregivers and is one of the primary tasks of early childhood. Those who are unable to regulate their emotions are more prone to behavioral problems [1] [48].

Attention Deficit Hyperactivity Disorder (ADHD) affects approximately 6% of children, more boys than girls [49]. Because young children are inherently active and easily distracted, ADHD is hard to recognize. ADHD is a mental health diagnosis that often requires input from parents, caregivers, and professionals, such as psychiatrists or psychologists [49].

Oppositional Defiant Disorder (ODD) is a mental health diagnosis reflecting high rates of problematic behaviors [50]. However, disruptive behaviors and hyperactivity in preschool children often cluster together, which makes ODD hard to separate from ADHD [51].

Autism. Children with autism have problems interacting and communicating with others, and may appear to be unaware of others or of surrounding stimuli. Autism often appears before a child's third birthday and its incidence is 1 in 500 children [52]. Autism is a mental health diagnosis that can usually be determined by a psychologist or multidisciplinary team [53] [54]. Disruptive behavior may also reflect other related syndromes such as Asperger Syndrome.

Developmental Factors

Developmental Delays. Young children with developmental delays or mental retardation tend to be at risk for developing behavioral problems. Teachers and parents often identify children with developmental delays as having lower levels of social skills and higher levels of problem behavior [55].

Language/Hearing Impairments. Language delays and hearing impairments in young children can place children at risk for social problems [1]. Low language skills can affect the normal socialization and emotional regulation of young children [56]. Children who have trouble hearing and communicating tend to feel less in control, which can in turn create frustrations and behavior problems [57].

Traumatic Brain Injury. A traumatic brain injury, resulting from a car accident or physical abuse, can damage the nervous system resulting in a variety of social-emotional and behavior problems in early childhood [58].

At age four, Rene still could not talk and would become angry and cry when others could not understand what he wanted. Rene's father was deaf and Rene was also showing signs of hearing impairment. Rene had a hearing screen and began attending a classroom for children with, or at risk for, disabilities. With new hearing aids, Rene began talking. Teachers are now working with Rene on how to use words to express his needs.

Responding to Challenging Behaviors

What Can Government Policy Makers Do?

Support Prevention and Services. Policy makers can be proactive by:

- Supporting and emphasizing access to prenatal care
- Providing access to physical and mental health care for all children and parents
- Ensuring availability of quality child care through licensing, reimbursement, and education
- Supporting measures that reduce family and community violence
- Supporting parents' involvement in their children's lives
- Supporting young families' with minimum wage, housing, financial literacy, and income support

What Can Communities Do?

Foster Resiliency. Communities make it easier for children to be well behaved by offering services that build upon children and families' strengths. Many children with multiple risks do very well because of their inherent resiliency. Communities support this resiliency by building upon the positive relationships in the child and family's life. Strengths and positive relationships are included in the assets that can help overcome risks.

Provide Information and Services. Communities can support children’s resiliency by:

- Teaching parents about good parenting
- Offering networking of parents with one another
- Ensuring availability of high quality child care with college educated staff, low ratios of children to staff, and low turn-over
- Reducing community violence through comprehensive community efforts
- Providing mental health services for young children
- Providing parent training for separated and divorced parents

What Can Parents Do?

From time to time, most young children display challenging behavior like hitting, yelling, scratching, and spitting. The lack of mental and emotional maturity make it hard for children to be patient and use good judgment. However, mental health consultation with families and child care can benefit children who consistently present challenging behavior.

Examine the Immediate Situation. Children may misbehave in response to an overcrowded or over-stimulating child care classroom or home. They may be tired, hungry, or stressed. Before assuming children are demonstrating challenging behavior because of emotional or biological problems, parents and caregivers need to assess the immediate situation. Changing the immediate environment may be the answer for children who are simply uncomfortable or overwhelmed by their surroundings. It may be important to change the way parents and caregivers respond to the child’s appropriate and inappropriate behaviors.

Understand Children’s Development. Knowing the limitations of young children and their need for secure relationships helps parents make good choices.

Protect Children. Parents can help children behave well by avoiding physical problems like lead poisoning, head injury, and hearing problems and by protecting their children from victimization, from actual violence, and from TV violence. They can also help by taking care of their own physical and mental health problems. They can provide good parenting; the loving care of parents supports children’s inherent resiliency, and choosing high quality child care helps children.

Find Resources within the Community. Communities often offer services to assist parents. Services may include:

- Head Start programs that focus on increasing the school readiness of young children in low-income families

- Community Coordinated Child Care (4 C's program), which offers referrals for child care and training that promotes high quality child care
- State programs which serve infants and toddlers from birth to 36 months with developmental delay or conditions that could lead to delay (called EarlyOn in Michigan)
- Universities and community colleges with child development programs
- Special classrooms in a public school district for children with, or at risk for, disabilities (called Pre-Primary Impaired (PPI) in Michigan)

What Can Caregivers Do?

For a child with challenging behavior it is important for parents and caregivers to communicate and collaborate. What is going on at home? What is going on in child care? A log documenting appropriate and inappropriate behavior can offer a useful way for parents and caregivers to share information with one another and with professionals. Caregivers can resist the urge to disenroll the child while seeking training, support groups and mental health consultation.

Recommended Books

The following books are recommended for parents, caregivers and practitioners who want to learn more about identifying and addressing challenging behavior in young children. Additional reading materials are available at your local library.

- *Meeting the Challenge* (Barbara Kaiser & Judy Sklar Rasminsky, 1999)
- *The Difficult Child* (Stanley Turecki, 1989)
- *Raising Your Spirited Child* (Mary Sheedy Kurcinka, 1992)
- *A Practical Guide to Solving Pre-School Behavior Problems* (Eva Essa, 1999)
- *The Incredible Years: A Trouble Shooting Guide for Parents of Children Ages 3-8* (Carolyn Webster-Stratton, 1992)
- *The Crisis Manual for Early Childhood Teachers: How to Handle the Really Difficult Problems* (Karen Miller, 1996)
- *The Explosive Child* (Ross Greene, 1998)
- *Child Development: A Practitioner's Guide* (Doug Davies, 1999)
- *The Challenging Child* (Stanley Greenspan, 1996)
- *Building relationships: Pathways to Early Learning* (Perry, Martin and Prairie, 2001)
- *Infant Mental Health Services: Supporting Competencies/Reducing Risks* (Weatherston & Tableman, for Michigan Department of Community Health, 2001)

Acknowledgements

The authors gratefully acknowledge the feedback and suggestions given on earlier drafts of this brief from Keeping Early Childhood Positive (KEEP) committee members, legislative staffers, Michigan State University professors and researchers, and parents. This brief was prepared with support from Michigan State University Outreach and Michigan State University's Institute for Children, Youth, and Families.

Prepared for

Michigan Public Policy Initiative (MPPI) is a program of the Michigan Nonprofit Association, affiliated with the Council of Michigan Foundations. MPPI works to promote the involvement of Michigan's nonprofit community in public policy by training its leaders, building the capacity of its organizations and encouraging collaborations with policymakers. MPPI is funded by the C.S. Mott Foundation, The Joyce Foundation and the W.K. Kellogg Foundation. For more information contact:

Erin Skene
Director, Michigan Public Policy Initiative
1048 Pierpont, Suite 3
Lansing, MI 48911
Tel: (517) 492-2400 Fax: (517) 492-2410
Web: www.mppi.mna.msu.edu

Prepared by

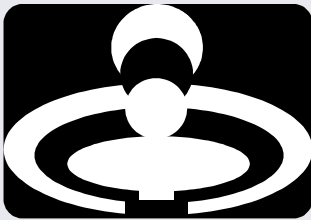
Chelsea Haring (haringch@msu.edu)
Marguerite Barratt, Ph.D. (mbarratt@msu.edu)
Dyane Hawkins (hawkin44@msu.edu)

Institute for Children, Youth, and Families
Michigan State University
Suite 27 Kellogg Center
East Lansing, MI 48824-1022
Tel: (517) 353-6617/ Fax: (517) 432-2022
Web: www.icyf.msu.edu

Other Spotlights

Families On The Move—A Look at the Impact of Childrens' Frequent School Changes

Promising Approaches to Prevent Dating Violence



References

1. Shonkoff, J., & Phillips, D. (2000). *From neurons to neighborhoods: The science of early childhood development*. Washington D.C.: National Academy Press.
2. Hawkins-Walsh, E. (2001). Turning primary care providers' attention to child behavior: A review of the literature. *Journal of Pediatric Health Care, 15*, 115-122.
3. Barnes, J., Kroll, L., Lee, J., Jones, A., & Stein, A. (1998). Communication about parental illness with children who have learning disabilities and behavioral problems: Three case studies. *Child: Care, Health, and Development, 24*, 441-456.
4. Buckner, J., Bassuk, E., & Weinreb, L. (1999). Homelessness and its relation to the mental health and behavior of low-income school-age children. *Developmental Psychology, 35*(246-257).
5. Duncan, G., & Brooks-Gunn, J. (2000). Family, poverty, welfare reform, and child development. *Child Development, 71*, 188-196.
6. Amato, P. (2000). Children and divorce: Outcomes for children and young adults. In E. Genheimer (Ed.), *Children and divorce (Michigan Family Impact Seminars Briefing Report 2000-2)* (pp. 7-11). Detroit MI: Wayne State University, School of Social Work.
7. Pagain, L., Boulerice, B., Tremblay, R., & Vitaro, F. (1997). Behavioural development in children of divorce and remarriage. *Journal of Child Psychology and Psychiatry, 38*, 769-781.
8. Ingoldsby, E., Shaw, D., Owens, E., & Winslow, E. (1999). A longitudinal study of interparental conflict, emotional and behavioral reactivity, and preschoolers' adjustment problems among low-income families. *Journal of Abnormal Child Psychology, 27*, 343-356.
9. Fantuzzo, J., & Mohr, W. (1999). Prevalence and effects of child exposure to domestic violence. *Domestic Violence and Children, 9*, 21-30.
10. Radke-Yarrow, M., Zahn-Waxler, C., Richardson, D., & Susman, A. (1994). Caring behavior in children of clinically depressed and well mothers. *Child Development, 65*, 1405-1415.
11. Seiner, S. (1995). Children's regulation of distress: Influences of maternal depression and maternal strategies. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 56*, 2905.
12. Brennan, P., Hammen, C., Anderson, M., & Bor, W. (2000). Chronicity, severity, and timing of maternal depressive symptoms: Relationships with child outcomes at age 5. *Developmental Psychology, 36*, 759-766.
13. Ascher, C. (1994). Gaining control of violence in the schools: A view from the field. *ERIC Digest*(No. 100).
14. Wallach, L. (1993). Helping children cope with violence. *Young Children, 48*, 4-11.
15. Duncan, D. (1996). Growing up under the gun: Children and adolescents coping with violent neighborhoods. *Journal of Primary Prevention, 16*, 343-356.
16. Garbarino, J., Dubrow, N., Kosteyn, K., & Pardo, C. (1992). *Children in danger: Coping with the consequences of community violence*. San Francisco: Jossey Bass.
17. Bell, C., & Jenkins, E. (1991). Traumatic stress and children. *Journal of Health Care for the Poor and Underserved, 2*, 175-185.
18. Derksen, D., & Strasburger, V. (1996). Media and television violence: Effects on violence, aggression, and antisocial behaviors in children. *Schools, Violence, and Society, 61-67*.
19. Grantham-McGregor, S., Walker, S., & Chang, S. (2000). Nutritional deficiencies and later behavioral development. *Proceedings of the Nutritional Society, 59*, 47-54.
20. Hastings, P., Zahn-Wexler, C., Robinson, J., Usher, B., & Bridges, D. (2000). The development of concern for others in children with behavioral problems. *Developmental Psychology, 36*, 531-544.
21. UNICEF, WHO, UNESCO, & UNFPA. (1993). *Facts for Life*. New York.
22. Crouter, A., Bumpus, M., Maguire, M., & McHale, S. (1999). Linking parents work pressure and adolescents' well being: Insights into dynamics in dual-earner families. *Developmental Psychology, 35*, 1453-1461.
23. Harvey, E. (1999). Short-term and long-term effects of early parental employment on children on the national longitudinal survey of youth. *Developmental Psychology, 35*, 445-458.
24. Sommers, K., Whitman, T., & Borkowski, J. (2000). Prenatal maternal predictors of cognitive and emotional delays in children of adolescent mothers. *Adolescence, 35*, 87-112.
25. Geen, R. (2000). In the interest of children: Rethinking federal and state policies affecting kinship care. *Policy and Practice of Public Human Services, 58*, 19-27.
26. Reckling, A., & Buirski, P. (1996). Child abuse, self-development, and affect regulation. *Psychoanalytic Psychology, 13*(81-99).
27. Vollings, B., & Feagans, L. (1995). Infant day care and children's social competence. *Infant Behavior and Development, 18*, 177-188.
28. NICHD, E. C. C. R. N. (1996). Characteristics of infant child care: Factors contributing to positive caregiving. *Early Childhood Research Quarterly, 269-306*.
29. Kontos, S., Howes, C., Shinn, M., & Galinsky, E. (1995). *Quality in family child care & relative care*. New York: Teachers College Press.
30. Burchinal, M. (1999). Child care experiences and developmental outcomes. *Annals of The American Academy of Political and Social Science, 563*, 73-95.
31. DeMulder, E., Denham, S., Schmidt, M., & Mitchell, J. (2000). Q-sort assessment of attachment security during the preschool years: Links from home to school. *Developmental Psychology, 36*, 274-282.
32. Fox-Folk, K., & Yi, Y. (1994). Piecing together child care with multiple arrangements: Crazy quilt or preferred pattern for employed parents of preschool children? *Journal of Marriage and Family, 56*, 669-680.

33. Stutzky, G., Barratt, M., & Haring, C. (2001). Families on the move. *Michigan Public Policy Initiative Spotlight on Applied Research*.
34. NICHD, E. C. C. R. N. (1995). Infant day care and children's social competence. *Infant Behavior and Development*, 185.
35. Arnold, D., McWilliams, L., & Harvey, E. (1998). Teacher discipline and child misbehavior in day care: Untangling casualty with correlation data. *Developmental Psychology*, 34, 276-287.
36. Crick, N., & Bigbee, M. (1998). Relational and overt forms of peer victimization: A multiinformante approach. *Journal of Consulting and Clinical Psychology*, 66, 337-347.
37. Crick, N., Casas, J., & Ku, H. (1999). Relational and physical forms of peer victimization in preschool developmental psychology. *Developmental Psychology*, 35, 376-385.
38. National, O. o. F. A. S. What is fetal alcohol syndrome. <http://www.nofas.org>.
39. Carta, J., Sideridis, G., Rinkel, P., & Guimaraes, S. (1994). Behavioral outcomes of young children prenatally exposed to illicit drugs: Review and analysis of experimental literature. *Topics in Early Childhood Special Education*, 14, 184-216.
40. Cohen, S., & Erwin, E. (1994). Characteristics of children with prenatal drug exposure being served in preschool special education programs in New York city. *Topics in Early Childhood Special Education*, 14, 232-253.
41. Hack, M., Klein, N., & Taylor, H. (1995). Long-term developmental outcomes of low birth weight infants. *The Future of Children*, 5, 176-196.
42. McLoughlin, J., & Nall, M. (1994). Allergies and learning/behavioral disorders. *Intervention in School and Clinic*, 29, 198-207.
43. Brown, R., & DuPaul, G. (1999). Introduction of the mini-series: Promoting school success in children with chronic medical conditions. *The School Psychology Review*, 28, 175-181.
44. Kuhn, B., Mayfield, J., & Kuhn, R. (1999). Clinical assessment of child and adolescent sleep disturbance. *Journal of Counseling and Development*, 77, 359-368.
45. Cepelewicz-Harbater, E. (2000). The effects of bone lead poisoning on cognitive, achievement, attentional, and language functioning in children. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 60, 5247.
46. Mendelson, A., Dreyer, B., Fierman, A., Rosen, C., Legano, L., Kruger, H., Lim, S., Barasch, S., Au, L., & Courtlandt, C. (1999). Low-level blood exposure and cognitive development in early childhood. *Journal of Development and Behavioral Pediatrics*, 20, 425-431.
47. Nelson, S. (1999). Sensory integration dysfunction: The misunderstood, misdiagnosed, and unseen disability. <http://home.ptd.net/~blnelson/SIDWEBPAGE2.html>.
48. Murphy, B., Eisenberg, N., & Fabes, R. (1999). Consistency and change in children's emotionality and regulation: A longitudinal study. *Merrill-Palmer Quarterly*, 45, 413-444.
49. Barreda-Hanson, C., & Kilham, C. (1997). Attention-deficit hyperactivity disorder in children under five. *Australian Journal of Early Childhood*, 22, 34-39.
50. Speltz, M., McClellan, J., & DeKleyen, M. (1999). Preschool boys with oppositional defiant disorder: Clinical presentation and diagnostic change. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38, 838-845.
51. Lahey, B., Loeber, R., Quay, H., Applegate, B., Shaffer, D., Waldman, I., Hart, E., McBurnett, K., Frick, P., Jensen, P., Dulcan, M., Canino, G., & Bird, H. (1998). Validity of DSM-IV subtypes of conduct disorder based on age of onset. *Journal of the American Academy of Child and Adolescent Psychiatry*, 37, 435-442.
52. National, I. f. M. H. (1998). Mental, emotional, and behavioral disorders in children and adolescents. <http://www.mentalhealth.org/publications>.
53. Vig, S., & Jederysek, E. (1999). Autistic features in young children with significant cognitive impairment: Autism or mental retardation. *Journal of Autism and Developmental Disorders*, 29, 235-148.
54. American, A. o. N. T. C. N. S. (2000). Practice parameter: Screening and diagnosis of autism. *Neurology*, 55, 468-429.
55. Merrell, K., & Holland, M. (1997). Social-emotional behavior on preschool-age children with and without developmental delays. *Research in Developmental Disabilities*, 8, 393-405.
56. Stansbury, K., & Zimmerman, L. (1999). Relations among child language skills, maternal socializations of emotion regulation, and child behavior problems. *Child Psychiatry & Human Development*, 30, 121-142.
57. Murdoch, H. (1996). Stereotyped behaviors in deaf and hard of hearing children. *American Annals of the Deaf*, 141, 379-386.
58. Loenthal, B. (1998). Early childhood traumatic brain injuries: Effects on development and interventions. *Early Childhood Development and Care*, 146, 21-32.