

EMERGING PRACTICES

REFERENCE

ABSTRACT

Barnett, D. W., Pepiton, A. E., Bell, S. H., Gilkey, C. M., Smith, J. J., & Stone, C. M. et al. (1999). Evaluating early intervention: Accountability methods for service delivery innovations. *Journal of Special Education*, 33(3), 177-188. Retrieved March 17, 2005.

Providing accountability as a core professional role includes documenting the outcomes of consultations with parents and teachers. Furthermore, these consultations can serve as building blocks for evaluating overall intervention program effectiveness. The authors report the use of single-case accountability designs for examining individual child outcomes and evaluating the Ohio Early Childhood Intervention (ECI) project. The outcomes of consultations were described in early childhood case portfolios constructed for 34 children (aged 3-5 yrs) based on consultation with parents and teachers and intervention planning results. Procedural guidelines (termed PASSKey) were used to help structure the process of ecobehavioral analysis, collaborative consultation, and naturalistic intervention design for children's learning, developmental, and behavioral problems. The methods serve as examples of functional assessment, accountability, and program evaluation efforts appropriate for early intervention consultations. Moreover, the results offer evidence for the effectiveness of the ECI model.

Bayer, J.K. & Sanson, A.V. (2003). Preventing the development of emotional mental health problems from early childhood: Recent advances in the field. *International Journal of Mental Health Promotion*, 5 (3), 4-16.

Emotional mental health problems, also referred to as 'internalising' disorders, consist primarily of anxiety and depression. This paper discusses recent advances in preventing these mental health problems. Current research in fields relevant to internalising problems is reviewed, identifying the gaps in knowledge that need to be addressed to allow effective prevention and early intervention programmes to be developed. The importance of attending to early childhood emotional problems is argued, based on data demonstrating their prevalence and continuity over time. There is currently an urgent need for empirical research focusing on the preschool years to inform prevention efforts.

Cole, K.N., Dale, P.S., Mills, P.E. & Jenkins, J.R. (1993). Interaction between early intervention curricula and student characteristics. *Exceptional Children*. 60(1), 17-28.

Compared the effects of 2 early intervention programs, mediated learning (ML) and direct instruction (DI), in a randomized design using 164 children (mean age 4.75 yrs) with mild to moderate disabilities in cognitive, language, social-emotional, and/or motor development. No main effect differences between the 2 intervention groups were found on a battery of measures, including the McCarthy Scales of Children's Abilities, Peabody Picture Vocabulary Test--Revised (PPVT--R), and Test of Early Language Development. Aptitude by Treatment Interaction (ATI) analyses of pretest and posttest results indicated that relatively higher performing Ss gained more from DI, whereas relatively lower performing Ss gained more from ML. Although ATIs were significant, the effect sizes were modest.

Da Silva, P. C., Eira, C., Pombo, J., Silva, A. P., Da Silva, L. C., & Martins, F. et al. (2003). Clinical program for treatment of difficulties with relating and communicating, based on the D.I.R. Model 21(1), 31-39.

Studied the efficacy of an intensive intervention program for treating autistic spectrum disorders in 22 male and female infants and young children (aged 31-71 mo) with mild to severe autism. The intervention program was based on the Development, Individual Differences, and Relationship model (Interdisciplinary Council on Developmental and Learning Disorders, 2000), which uses a floor-time approach in conjunction with sensory integration, augmentative communication, and affective interaction components. The infants and children were treated for up to 31 mo. Response to the program was evaluated according to changes in development and social and emotional adaptation. The Childhood Autism Rating Scale (E. Schopler et al, 1980) was used. The results confirm the efficacy of the Development, Individual Differences, and Relationship program. Difficulties in patient selection and implications for the implementation of the program are also discussed.

Domitrovich, C.E. & Greenberg, M.T. (2004). Preventive interventions with young children: Building on the foundation of early intervention programs. *Early Education & Development. Special Prevention Interventions with Young Children*, 15 (4), 365-370.

This special issue was initiated to highlight the latest innovations in prevention research with young children. This special issue of *Early Education and Development* includes articles that focus on two aspects of prevention science. In the first article Boyce et al examine the natural behavior of Latina mothers and their children when interacting with books. The findings provide important information about vocabulary development in young Latino children and potential strategies for future culturally sensitive interventions that promote cognitive development. The second article by Brotman et al. present findings regarding the multiple risk factors associated with conduct problems and social competence in a sample of preschool-age children with older, adjudicated siblings. The third article by Izard et al. evaluates the impact of the Emotions Course curriculum, a universal program that is delivered by teachers. The final article by Seifer et al. describes the perspectives of individuals using the curriculum and some of the implementation challenges encountered when conducting the program in the school setting with elementary age children. The collection of articles in this special issue represents some of the most recent advances in prevention science with young children.

Evangelista, N., & McLellan, M. J. (2004). The zero to three diagnostic system: A framework for considering emotional and behavioral problems in young children. *School Psychology Review*, 33(1), 159-173.

The expansion of early childhood services has brought increasing recognition of the need to address mental health disorders in young children. The transactional perspective of developmental psychopathology is the basis for review of diagnostic frameworks for young children. The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) is discussed in light of developmental and contextual factors that characterize emotional and behavioral problems in infants, toddlers, and preschool-age children. The Diagnostic and Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood (DC:0-3) system, developed by Zero to Three: The National Center for Clinical Infant Programs, is introduced as an alternative framework offering developmentally appropriate diagnoses and incorporating aspects of family functioning. Research using the DC:0-3 diagnostic system is reviewed, followed by a discussion of applications of this framework for school psychologists working in early childhood programs.

Fantuzzo, J., Bulotsky, R., McDermott, P., Mosca, S., & Lutz, M. N. (2003). A multivariate analysis of emotional and behavioral adjustment and preschool educational outcomes. *School Psychology Review*, 32(2), 185-203.

The study examined the multivariate relationship between dimensions of preschool emotional and behavioral adjustment assessed at the beginning of the year by the Adjustment Scales for Preschool Intervention (ASPI) and multiple learning and social competencies at the end of the year with an urban Head Start sample. This study also examined the differential pattern of emotional and behavioral problems for children identified to receive services by Head Start staff. Results indicated that overactive dimensions at the beginning of the year predicted socially disruptive problems in the classroom at the end of the year. Underactive problem dimensions were associated with disengagement in play and poor emergent literacy and classroom learning outcomes. Findings indicated that Head Start staff underidentified children with emotional/behavioral problems as a group, with a pattern toward identifying children with overactive needs. Children with underactive needs were least likely to be detected by the staff and were most at-risk for active poor school readiness outcomes. Implications for policy, practice, and future research are discussed.

Fitzgibbons, L. (2004). Differentiating between "normal" developmental difficulties and mental health disturbances among infants, toddlers, and preschoolers. *Differentiating Between "Normal" Developmental Difficulties and Mental Health Disturbances Among Infants, Toddlers, and Preschoolers.*, 49 (suppl 4).

The Handbook of Infant, Toddler, and Preschool Mental Health Assessment partially fills a gap in the behavioral and emotional health literature by providing a thorough and comprehensive synthesis of best practices for mental health assessment with infants, toddlers, and preschool-age children. The expertise of the editors, Rebecca DelCarmen-Wiggins and Alice Carter, in the areas of developmental psychopathology and the role of family and moderating factors on the expression of psychopathology, provides the framework from which the unifying messages of the text are built and delivered. The basic foundation of the text is based on the perspective that mental health disturbances occur within the context of the culture and the parent-child relationship. Furthermore, consideration of the child's temperament and regulation abilities in the manifestation of symptomatology and the caregiver's interpretation of this symptomatology is essential for a thorough understanding of the overall diagnostic picture. The volume includes seven sections that cover both the science and practice of mental health assessment with this population. The volume primarily targets clinical researchers and clinicians, and it would be a great text for inclusion in a graduate-level course on child psychopathology, assessment, or development.

Forness, S.R., Serna, L.A., Kavale, K.A., & Nielsen, E. (1998). Mental health and head start: Teaching adaptive skills. *Education & Treatment of Children. Special Severe behavior disorders of children and youth*, 21(3), 258-274.

Primary prevention of behavioral disorders has recently focused on early detection and universal interventions for high-risk children. Head Start has been a particular focus; yet the nature of effective mental health intervention for preschool children is not entirely clear. Since most professionals would agree that skill-building approaches are critical, the use of a self-determination curriculum would seem to offer definite advantages. The curriculum has a number of critical adaptive skill domains including (a) social skills, (b) self-evaluation, (c) self-direction, (d) networking or friendship, (e) collaboration or support seeking, (f) problem-solving and decision-making, and (g) dealing with stress and conflict. Examples of lessons are presented, and the use of this curriculum in the context of mental health intervention for Head Start children is discussed.

Fox, N.A. & Henderson, H.A. (1999). Does infancy matter? Predicting social behavior from infant temperament. *Infant Behavior & Development*, 22(4), 445-455.

Argues that infant temperament, defined as behavioral styles that appear early in life as a direct result of neurobiological factors, plays a significant role in the development and expression of social behavior. Temperament may be studied using a typological or dimensional approach and the relations between early temperament and later behavior can be examined in terms of homotypic or heterotypic continuity. The implication of each of these approaches for understanding the influence of infant temperament on social development is examined. The authors suggest that under certain circumstances one can predict social behavior by identifying two temperament types in infancy. These types are high reactive/high negative infants and high reactive/high positive infants. A significant proportion of the high reactive/high negative infants display behavioral inhibition and social reticence through the preschool years, whereas a significant proportion of the high reactive/high positive infants display exuberance and positive social interaction through the preschool period.

Fraser, M. W., Day, S. H., Galinsky, M. J., Hodges, V. G., & Smokowski, P. R. (2004). Conduct problems and peer rejection in childhood: A randomized trial of the making choices and strong families programs. *Research on Social Work Practice*, 14(5), 313-324.

This article discusses the effectiveness of a multicomponent intervention designed to disrupt developmental processes associated with conduct problems and peer rejection in childhood. Compared with 41 children randomized to a wait list control condition, 45 children in an intervention condition received a social skills training program. At the same time, their parents participated in an in-home family intervention. Compared with control group children, intervention children demonstrated significant improvements on five of six outcome measures. Differences between the experimental and control groups suggest the programs strengthen children's prosocial behavior, promote their ability to regulate emotions, and increase social contact with peers. Intervention also was associated with significant improvements in classroom comportment and decreases in relational aggression, a measure of coercion in peer relationships. The findings are consistent with those of other programs effective in interrupting risk processes associated with conduct problems in childhood and early adolescence.

Friedman, Fraeda Rebecca. (2002). Aspects of early mother-child interaction that relate to later diagnosed mental disorders. *Dissertation Abstracts International: Section B: The Sciences & Engineering*, 62(10-B), 4816.

This research investigated the relationship between early mother-child interaction and later diagnosed mental disorders. The study had two goals. The primary goal was to identify specific sequences of interaction associated with problematic development. Identification of these sequences could provide invaluable information for intervention and prevention. The secondary goal of the study was to clarify global parenting constructs at the level of concrete actions. This research used a microanalytic approach to examine mother-child interactions at 8, 12, 18, and 24 months. In particular, this study assessed three interaction types videotaped in the lab setting: discipline, free play, and games. The early interactions were also rated with a global scale that measured qualities of parenting. The children were psychologically assessed at 10 years of age. The sample for this research consisted of 16 subjects. Twelve core subjects were matched on the basis of sex and prenatal drug exposure. The 4 additional subjects were siblings of the subjects in the core group. The siblings were included to address parenting differences within a given family. The early interaction data yielded 13 microanalytic variables. One of these variables demonstrated a statistically significant relationship with the outcome diagnoses. The sibling data suggest additional ways that certain mother-child behavior patterns may lead to later disorders. The study also found six concurrent associations, between the early interaction variables and the global measures of parenting. The small sample size constitutes a major limitation of the study. This potentially accounts for the restricted results. Other possible limitations of the study were also considered. This research serves to remind us of the complexity of the parent-child relationship and the child's overall developmental course.

Geeraert, L., Van den Noortgate, W., Grietens, H., & Onghena, P. (2004). The effects of early prevention programs for families with young children at risk for physical child abuse and neglect: A meta-analysis. *Child Maltreatment: Journal of the American Professional Society on the Abuse of Children*, 9(3), 277-291. Retrieved March 17, 2005.

In this article, a meta-analysis is presented on 40 evaluation studies of early prevention programs for families with young children at risk for physical child abuse and neglect with mostly nonrandomized designs. The main aim of all programs was to prevent physical child abuse and neglect by providing early family support. For the meta-analysis, a multilevel approach was used. A significant overall positive effect was found, pointing to the potential usefulness of these programs. The study demonstrated a significant decrease in the manifestation of abusive and neglectful acts and a significant risk reduction in factors such as child functioning, parent-child interaction, parent functioning, family functioning, and context characteristics.

Hill, L.G., Coie, J.D., Lochman, J.E., & Greenberg, M.T. (2004). Effectiveness of early screening for externalizing problems: Issues of screening accuracy and utility. *Journal of Consulting & Clinical Psychology*, 72(5), 809-820.

Accurate, early screening is a prerequisite for indicated interventions intended to prevent development of externalizing disorders and delinquent behaviors. Using the Fast Track longitudinal sample of 396 children drawn from high-risk environments, the authors varied assumptions about base rates and examined effects of multiple-time-point and multiple-rater screening procedures. The authors also considered the practical import of various levels of screening accuracy in terms of true and false positive rates and their potential costs and benefits. Additional research is needed to determine true costs and benefits of early screening. However, the results indicate that 1st grade single- and multiple-rater screening models effectively predicted externalizing behavior and delinquent outcomes in 4th and 5th grades and that early screening is justified.

Hyter, Y.D. (2003). Language intervention for children with emotional or behavioral disorders. *Behavioral Disorders*, 29(1), 65-76.

This article describes a prevention-focused intervention program designed to facilitate the language skills of preschool children at risk for emotional or behavioral and communication difficulties. The program is a collaborative effort between a university speech-language pathology program and a Head Start program in southwest Michigan. Semiquantitative descriptions of two case studies are used to characterize the collaborative intervention processes used in the classroom context by the preschool teacher and a speech-language pathologist. The outcome of the case studies suggests that authentic communicative interactions used as the context for implementation of the child-centered intervention strategies may be effective in reducing some behavioral challenges. Questions generated from the analyses of the case studies are provided.

Jones, C.W. & Unger, D.G (2000). Diverse adaptations of single parent, low-income families with young children; Implications for community-based prevention and intervention. *Journal of Prevention & Intervention in the Community*, 20(1-2), 5-23.

Identified distinct family caregiving structures among low-income single parent families. The relationships between these structures and family needs, social resources and family functioning were described. 218 unmarried low-income, primarily African-American mothers (aged 15-63 yrs) whose children (aged 1-5 yrs) were enrolled in community-based early childhood programs were interviewed. While global measures of functioning or distress were unrelated to type of family caregiving structure, there were significant differences with respect to specific sources of stress or conflict, stability of the caregiving structure across time, and perceived sources of primary support. Implications of these findings are discussed with respect to planning community-based services that build upon and strengthen family competencies.

Kaiser, C. E. (1991). Early intervention and family support for children with special developmental challenges. In D. (Elkind (Ed.), Perspectives on early childhood education: Growing with young children toward the 21st century.; perspectives on early childhood education: Growing with young children toward the 21st century. early childhood education series (pp. 85-97). Washington, DC, US: National Education Association. Retrieved March 17, 2005.

Years of research in early development intervention and related family support have culminated in a strong body of data supporting the effectiveness of early intervention programs for young children with diagnosed handicaps, as well as those who are at biologic or environmental risk for developmental problems / today's early intervention strives to provide the opportunity for each child to achieve his highest developmental potential, and to lead a balanced and happy life in a normalized social context family support is now recognized as an integral best practice component of an effective early intervention program / new emphasis on helping parents to attain a balanced lifestyle not completely centered on the one handicapped family member federal legislation makes a difference / the social integration movement in early intervention / categorization systems, attitude shifts, and linguistic markers / the hospital neonatal intensive care unit: an emerging new early intervention subspecialty / future challenges as we approach the 21st century.

Knoblauch, P. J. (2001). Play therapy in a special education preschool. In A. A. (Drewes, & L. J. (Carey (Eds.), School-based play therapy.; school-based play therapy (pp. 81-101). New York, NY, US: John Wiley & Sons, Inc. Retrieved March 11, 2005.

This chapter discusses play therapy in a special education preschool. The emotional responses and adaptation of a child of preschool age are not always considered significant. However, the author discusses how people who closely work with young children know that therapeutic intervention assists children's coping skills and boosts developmental opportunities, whether at times of crisis, coping with ongoing matters, or meeting developmental challenges. The chapter covers (1) referral process; (2) the playroom; (3) play therapist's engagement of child, family, and team; (4) approaches to play therapy in preschool; and (5) special issues in special education preschools.

Knoff, H. M., Stollar, S. A., Johnson, J. J., & Chenneville, T. A. (1999). Assessment of social-emotional functioning and adaptive behavior. In E. V. (Nuttall, & I. (Romero (Eds.), Assessing and screening preschoolers: Psychological and educational dimensions (2nd ed.); assessing and screening preschoolers: Psychological and educational dimensions (2nd ed.) (pp. 126-160). Needham Heights, MA, US: Allyn & Bacon. Retrieved March 11, 2005.

The assessment of social-emotional and adaptive behavior functioning is critical during the preschool years because many of these affective and skill-related areas form a foundation that guides and influences children's later functioning in home, school, and community domains. Ongoing assessment in these areas is able to identify children's age-appropriate development or their atypical development in one or a number of areas. From a social-emotional perspective, atypical development may involve anxiety disorders, attachment disorders, or pervasive developmental disorders. From a behavioral or functional perspective, atypical development may involve skill deficits, performance deficits, or deficits of self-control or self-management. In total, the assessment process attempts to integrate all of these perspectives while evaluating the child in an objective and ecological context. This context is discussed briefly first because of its importance to accurate, effective assessment. The chapter then provides specific information on direct observation, clinical interviews, behavior rating scales, behavioral observation approaches, projective techniques, and adaptive behavior scales.

Lally, J. R., Mangione, P. L., & Honig, A. S. (1988). The Syracuse University family development research program: Long-range impact on an early intervention with low-income children and their families. In D. R. (Powell (Ed.), Parent education as early childhood intervention: Emerging directions in theory, research and practice.; parent education as early childhood intervention: Emerging directions in theory, research and practice. annual advances in applied developmental psychology, vol. 3 (pp. 79-104). Westport, CT, US: Ablex Publishing. Retrieved March 17, 2005.

History of the project / theoretical foundations / parent involvement component / parent organization / Children's Center component / infant-fold / family style education (multi-age differentiated environment groupings) / short-term impact on child functioning longitudinal follow-up study / demographic profile / school functioning / family interviews / juvenile delinquency.

Laucht, M., Esser, G., & Schmidt, M. H. (2001). Differential development of infants at risk for psychopathology: The moderating role of early maternal responsivity. *Developmental Medicine & Child Neurology*, 43 (5), 292-300.

Studied the role of early maternal responsive caregiving in the development of behavior problems among infants born with biological risk (low birth weight) and psychosocial risk (disadvantaged family). Psychosocial risk factors included parental low education, psychiatric disorder, broken home/delinquency history, marital discord, unwanted pregnancy, early parenthood, 1-parent family, poor social integration and support, severe chronic difficulties, poor coping skills and overcrowding. 347 children were examined at the ages of 2, 4.5 and 8 yrs. Results of the Mannheim Parent Interview and observations of mother-child interactions indicate that infants at psychosocial risk exhibited more externalizing and internalizing problems across ages than infants not at psychosocial risk, while there were no overall differences between normal and low birth weight groups. With 1 exception, no interactions between biological and psychosocial risk factors emerged. Maternal responsivity did moderate the effects of low birth weight on hyperkinetic and internalizing problems, and influenced the consequences of family disadvantage on total problems. These findings emphasize the importance of early parenting in the behavioral development of at-risk children.

Lee, S. & Kahn, J.V. (1997). Measures of child progress and program effectiveness in early intervention. *Infant-Toddler Intervention*, 7 (4), 215-233.

Several approaches have been or could be used in analyzing developmental progress of participants in early intervention services. However, the relative merits of these different approaches are not well known. In this study, 12 approaches classified into 1 of 5 categories are presented and 10 of these approaches are compared by applying them to Bayley data from 1 early intervention program. Ss were 0-3 yr olds with disabilities or at risk for disabilities and their families. The results of the data analyses varied with the approaches. The results of each approach are discussed and the M. Wolery (see record 1984-04494- 001) approach is regarded as most appropriate for measuring child progress and program effectiveness in early intervention.

Lewis, M.D., Zimmeran, S., Hollenstein, T., & Lamey, A.V. (2004). Reorganization in coping behavior at 1½ years: Dynamic systems and normative change. *Developmental Science*, 7 (1), 56-73.

By the age of 1 year toddlers demonstrate distinct coping habits for dealing with frustration. However, these habits may be open to change and reorganization at subsequent developmental junctures. We investigated change in coping habits at 18-20 months, a normative age for major advances in social cognition, focusing on the dynamic systems principles of fluctuation and novelty at transitions. Specifically, we asked whether month-to-month fluctuation, novel behavioral habits and real-time variability increased at the age of a normative transition, despite individual differences in the content of behavior. Infants were given frustrating toys while their mothers sat nearby without helping, on monthly visits at 14-25 months (before, during and after the hypothesized transition). State space grids representing patterns of behavioral durations were constructed for each episode and compared over age. As predicted, month-to-month fluctuation in grid patterns increased temporarily between 17 and 20 months, partly independently of a concurrent peak in distress, and new behavioral habits replaced old ones at the same age. Coping habits changed differently for high- and low-distressed toddlers. However, changes in real-time variability did not generally meet our expectations.

Lieberman, A. F. (2003). The treatment of attachment disorder in infancy and early childhood: Reflections from clinical intervention with later-adopted foster care children. *Attachment and Human Development*, 5(3) 279-282.

Provides a review of assessment strategies and treatment approaches for attachment disorders. O'Connor and Zeanah point out that, compounding the conceptual and methodological problems of formulating a coherent diagnostic category, there are no established treatment guidelines for institutionalized children with attachment disorder who continue to show attachment disorder behavior following adoption. Here, the current author's central argument of the present reply is that lack of trust in the reliable availability and protectiveness of the attachment figure(s) remains a core problem for institutionalized children who are later adopted, and that this persistent lack of trust has a major influence in shaping the adoptive parent's perception of the child. In light of this perspective, the author outlines relevant assessment findings and treatment principles, derived from interventions with infants, toddlers and preschoolers. (PsycINFO Database Record (c) 2004 APA).

McBride, S. L., & Peterson, C. (1997). Home-based early intervention with families of children with disabilities: Who is doing what? *Topics in Early Childhood Special Education*, 17(2), 209-233. Retrieved March 17, 2005.

Reports observational data describing the content addressed and the processes employed by early childhood special educators during home visits with newborn to 3-yr-old children with disabilities and their families. The extent to which home visits were individualized was examined in terms of available family resources and level of child's caretaking demands. Findings revealed that a model of child-focused intervention was most frequently implemented. Some evidence was found to indicate that the content of home visits was more likely to focus on the child when family resources were adequate, and that the role of the interventionist was more likely to be that of an observer when children had greater care-taking demands.

McCall, R. B., Larsen, L., Ingram, A., (2003). In A. Reynolds, M. Wang (Eds), et al. Introduction: The science and policies of early childhood education and family services (pp.255-298). Washington, DC: Child Welfare League of America, Inc.

This chapter discusses evidence concerning the effects of alternative early childhood programs for different lengths of time on children's development and the implications of recent advances in knowledge for specific policy alternatives. The authors show that both model (e.g., pilot) and large-scale early education programs have accomplished many of their short- and long-term goals, including enhancing children's cognitive skills, increasing social maturity, and reducing rates of grade retention and special education placement. Although the overall pattern of findings is similar between model and large-scale programs, the effects of large-scale programs such as Head Start are smaller in size and less consistent from program to program. The characteristics of the successful programs discussed include the quality and quantity of treatment dosage (e.g., more is generally better), provision of developmentally appropriate services, use of smaller class sizes, implementation by well-trained staff, and quality of parent involvement. Based on the evidence reviewed, the authors indicate that in balancing cost and effectiveness, "lite" early childhood programs are unlikely to work, and that it is better to provide more extensive and longer lasting educational and family services to fewer children than less extensive services for shorter periods of time to greater numbers of children.

McNeil, T.F., Persson-Blennow, I. (1988). Stability of temperament characteristics in childhood. *American Journal of Orthopsychiatry*, 58(4), 622-626.

Studied longitudinally individuals' stability on the 9 temperament variables (identified in the New York Longitudinal Study by A. Thomas et al [1963, 1968]) in 160 children from the ages of 6 mo to 1, 2, and 3 yrs. Stability was typically significant but only moderately strong at a maximum. Greatest stability was found for rhythm, approach, adaptability, activity, mood, and distractibility.

Mogharreban, C. N., Overbey, G., Parette, P., Pollina, L., Shafaie, S., & Zlokovich, M. (1997). School readiness and early intervention: An emerging model for service delivery. *Infant-Toddler Intervention*, 7(1), 17-43. Retrieved March 17, 2005.

States that the current national attention on school readiness points to the importance of early identification of factors that put children at risk for school failure. A reconceptualization of developmental risk factors related to school readiness, and an overview of Educare, a model of comprehensive rural service coordination based on early risk identification assessment, are presented. It is argued that, unlike other state and federal programs, Educare, a Missouri school readiness initiative that targets children from birth-3 yrs old and continues through kindergarten, is available to all families rather than for targeted populations (e.g., low income, identified disability, or record of abuse or neglect). Offered as an optimal model service delivery system, Educare is designed to include universal early intervention beginning at birth, risk assessment in multiple domains, facilitation of cultural context and perceptions resulting in individualized intervention, comprehensive service coordination, sustained intervention for providing continuity of services, and communication between parents, schools, and community agencies. The Risk Assessment for Readiness Survey, developed by Educare, is appended.

Murray, L.K. (2002). Self-control training in young children. *Dissertation Abstracts International: Section B: The Sciences & Engineering*, 63(6-B), 3017.

The incidence of conduct and behavioral disorders is steadily on the rise. Externalizing problems in the preschool years are considerable predictors of problems in later childhood, and even adulthood. There is a growing need for effective prevention programs for young children that can be implemented in school environments. Prevention efforts with young children often focus on self-control training for the reduction of impulsive behaviors. Impulsivity is an early presenting behavior pattern that can lead to a variety of disorders. The present study had two goals: (1) to measure the effects of a package intervention containing cognitive and behavioral treatment techniques on self-control in preschoolers, and (2) to use both cognitive and behavioral outcome measures to demonstrate where the changes, if any, would be most clearly seen. Thirty-one 4-year-old children in a preschool program for "at-risk" children were randomly assigned to a treatment or control group. The treatment group received a five-week self-control training program that incorporated cognitive and behavioral techniques. Dependent measures were assessed before and after intervention, and included Conners' Rating Scales (CPRS, CTRS), Self-Control Rating Scale (SCRS), Matching Familiar Figures Test, classroom behavior observations, and a waiting task. The treatment group showed improvement on the CPRS and the SCRS-teacher report. Many outcome measures showed significant changes from pre- to post-intervention that did not differ across groups. This cognitive-behavioral package intervention had a positive impact on widely used and well validated rating scale measures of impulsive behavior in preschool children. Cognitive-behavioral interventions such as this may be an effective prevention strategy to avert future maladaptive behaviors.

Nelson, C. A. (2000). The neurobiological bases of early intervention. In J. P. (Shonkoff, & S. J. (Meisels (Eds.), *Handbook of early childhood intervention* (2nd ed.); handbook of early childhood intervention (2nd ed.) (pp. 204-227). New York, NY, US: Cambridge University Press. Retrieved March 17, 2005.

This chapter lays the foundation for considering the possible neurobiological mechanisms that may underlie the success of early childhood intervention. It is suggested that the efficacy of any given intervention will depend on the capacity of the nervous system to be modified by experience. This process, called neural plasticity, is often bounded by time; that is, there may be a window of opportunity, or critical period, for altering neural function. However, critical periods often interact with different neural systems, such that some neural systems remain open to modification longer than others. Moreover, there is evidence that critical periods and neural systems may interact at yet a 3rd level, that of the individual. Thus, there may be individual differences in both the timing and the extent to which neural systems can be modified by experience. To demonstrate that neural plasticity lies at the heart of early childhood intervention, the chapter begins with an exposition of the precise embryonic and fetal events that give rise to the human brain. The next section turns to the postnatal development of the brain, including those regions of the brain that may underlie the focus of many early intervention programs. The chapter concludes with a discussion of underlying mechanisms.

Ozaki, Y. (2003). Attachment, temperament, and maternal separation: Observations of peer play by toddlers. *Japanese Journal of Educational Psychology*, 51(1), 96-104.

The present research investigated how attachment and temperament affect children's reactions to maternal separation in early childhood. Observations of 101 children separated from their mothers were made when they were playing with their peers, during the first year after they entered a family education center. The children, ranging in age from 2:6 to 3:5 years at the start of observations, were classified into 4 groups, (a) easy separation group (N=29): those who easily separated from their mothers from the beginning of the year; (b) slow separation group (N=26): those who, during the year, gradually became better at handling the separation; (c) consistent separation group (N=29): those who had consistent reactions to separation throughout the year; and (d) difficult separation group (N=17). The observations indicated that the children in the slow-separation and difficult-separation groups had more shy temperament in new situations than those in the easy-separation group. These results suggest that children's patterns of reaction to maternal separation in early childhood could be predicted from a combination of their attachment security and their temperament.

Sanders, M.R., Pidgeon, A.M., Gravestock, F., Connors, M.D., Brown, S., & Young, R.W. (2004). Does parental attributional retraining and anger management enhance the effects of the triple p-positive parenting program with parents at risk of child maltreatment?. *Behavior Therapy*, 35 (3), 513-535.

Ninety-eight parents experiencing significant difficulties in managing their own anger in their interactions with their preschool-aged children were randomly assigned either to an enhanced group-administered behavioral family intervention program based on the Triple P-Positive Parenting Program that incorporated attributional retraining and anger management (EBFI) or a standard behavioral family intervention program (SBFI) that provided training in parenting skills alone. At post-intervention, both conditions were associated with lower levels of observed and parent-reported disruptive child behavior, lower levels of parent-reported dysfunctional parenting, greater parental self-efficacy, less parental distress, relationship conflict and similarly high levels of consumer satisfaction. EBFI showed a significantly greater short-term improvement on measures of negative parental attributions for children's misbehavior, potential for child abuse and unrealistic parental expectations than SBFI. At 6-month follow-up both conditions showed similarly positive outcomes on all measures of child abuse potential, parent practices, parental adjustment, and child behavior and adjustment; however, EBFI continued to show greater change in negative parental attributions. Implications for tailoring early-intervention programs to the needs of parents at risk of child maltreatment are discussed.

Schwartz, I. S., Sandall, S. R., McBride, B. J., Boulware, G.I. (2004). Project DATA (developmentally appropriate treatment for autism): An inclusive school-based Approach to educating young children with autism. *Topics in Early Childhood Special Education*, 24(3), 156-168.

Providing appropriate educational services to young children with autism may be one of the defining challenges of the 1990s and early 2000s for early childhood special education. The number of children with autism is increasing dramatically, the research literature is rich with evidence-based instructional strategies, and the Internet is even more full of information and advice of unknown quality. Parents and school district personnel, often working together but sometimes at odds, need to develop programs to meet the needs of these children. Project DATA (Development Appropriate Treatment for Autism) started as a federally funded model demonstration project for developing a school-based program for young children with autism that would be effective and acceptable to consumers (e.g., parents, school personnel). Project DATA consists of five components: a high-quality early childhood environment, extended instructional time, social and technical support for families, collaboration and cooperation across services, and transition support. In this article, we provide data demonstrating the effectiveness of this model and discuss the implications of this type of inclusive programming for young children with autism.

Sharpio, B.J., Derrington, T.M. (2004). Equity and Disparity in Access to Services: An Outcomes-Based Evaluation of Early Intervention Child Find in Hawai'i. *Topics in Early Childhood Special Education*, 24(4), 199-212.

Young children with developmental delays can benefit from early intervention under Part C of the Individuals with Disabilities Education Act (IDEA) only if they are identified and served before the age of 3 years. IDEA mandates Child Find activities to promote access to Part C services, that is, to promote identification of children and referral for and enrollment in services. An evaluation of Hawai'i's early intervention Child Find examined the equity of access to referral and enrollment across various subpopulations. Reassuring results were obtained for low-income and immigrant households, but access for children from military families appeared to be less equitable. The study provided conflicting evidence with respect to access for children whose parents spoke little English. Uninsured children experienced the greatest disparity in access. Recommendations to improve Child Find services include expanded outreach among military families and families whose children lack health insurance. Future evaluations of equity would be facilitated by more complete statewide data systems and by qualitative studies of the perceptions of referred families and referring professionals. Other states are encouraged to undertake similar evaluations.

Shonkoff, J. P., Hauser-Cram, P., Krauss, M. W., & Upshur, C. C. (1992). Development of infants with disabilities and their families: Implications for theory and service delivery. *Monographs of the Society for Research in Child Development*, 57(6), 1-153.

Conducted a longitudinal investigation of developmental change in 190 infants with either Down's syndrome, motor impairment, or developmental delays of uncertain etiology, and their families after 1 yr of early intervention services. Data were collected during 2 home visits (within 6 mo of program entry and 12 mo later) and included formal child assessments, observations of mother-child interaction, maternal interviews, questionnaires for both parents, and monthly data from the service providers. The strongest predictor of developmental change was the relative severity of the child's psychomotor impairment at study entry. Early intervention was found to be a complex and multidimensional experience. Some aspects were correlated with enhanced child and family development; others were associated with less desirable outcomes.

Squires, J., Bricker, D., & Twombly, E. (2004). Parent-completed screening for social emotional problems in young children: The effects of risk/disability status and gender on performance. *Infant Mental Health Journal*, 25(1), 62-73.

Results of psychometric studies on the Ages and Stages Questionnaires: Social Emotional (ASQ:SE), a parent-completed screening tool for infants, toddlers, and preschoolers, are described. The ability of the ASQ:SE to distinguish risk and disabilities groups, and the relationship of gender and ASQ:SE scores were examined. No/low risk, at risk, developmental disabilities, and social emotional disability groups were significantly different at all eight age intervals (i.e., 6, 12, 18, 24, 30, 36, 48, and 60 months). Significant differences were found between males and females at the 30-, 36-, 48-, and 60-month age intervals. These data support the ASQ:SE as a valid screening test to assist in early identification of social and emotional problems in young children.

Squires, J., Bricker, D., Heo, K., & Twombly, E. (2001). Identification of social-emotional problems in young children using a parent-completed screening measure. *Early Childhood Research Quarterly*, 16(4), 405-419.

Results of psychometric studies on the Ages and Stages Questionnaires: Social Emotional (ASQ:SE), a parent-completed screening tool for infants, toddlers, and preschoolers, are described. The ability of the ASQ:SE to distinguish risk and disabilities groups, and the relationship of gender and ASQ:SE scores were examined. No/low risk, at risk, developmental disabilities, and social emotional disability groups were significantly different at all eight age intervals (i.e., 6, 12, 18, 24, 30, 36, 48, and 60 months). Significant differences were found between males and females at the 30-, 36-, 48-, and 60-month age intervals. These data support the ASQ:SE as a valid screening test to assist in early identification of social and emotional problems in young children.

St Pierre, R. G., Layzer, J. I., Goodson, B. D., & Bernstein, L. S. (1999). The effectiveness of comprehensive, case management interventions: Evidence from the national evaluation of the comprehensive child development program. *American Journal of Evaluation*, 20(1), 15-34. Retrieved March 17, 2005.

Evaluated the effectiveness of the Comprehensive Child Development Program (CCDP), a program designed to ensure the delivery of early and comprehensive services through case management with the aim of enhancing child development and helping low-income families to achieve economic self-sufficiency. The evaluation addressed the overall impacts of the program on children and their mothers and possible variation in effects. Data was collected through assessments of children and families in the form of testing and interviews conducted on or about each focus child's 2nd, 3rd, 4th, and 5th birthdate. Findings revealed no impact of the CCDP, showing that the case management approach does not lead to improved outcomes for parents or children. Several possible reasons for this outcome are offered and discussed.

Stansbury, K. & Zimmermann, L.K. (1999). Relations among child language skills, maternal socializations of emotion regulation, and child behavior problems. *Child Psychiatry & Human Development*, 30(2), 121-142.

Research has linked language delays in young children to behavior problems and risk for psychopathology. The authors hypothesized that low language skill would affect normal socialization of emotion regulation, which in turn would affect the development of behavior problems. Seventy-eight mother/preschool-age child pairs participated in two mildly frustrating situations. Parents (aged 27-45 yrs) of children (aged 33-59 months) with low verbal comprehension used more unexplained compliance demands than other parents. Further, children whose parents used more unexplained compliance demands used fewer cognitive and distraction strategies, and more instrumental strategies. Children's use of physical self-comforting was positively related to overall, internalizing, and externalizing behavior problems. Findings supported the original hypothesis.

The Conduct Problems Prevention Research Group. (2002). The implementation of the fast track program: An example of a large-scale prevention science efficacy trial. *Journal of abnormal child psychology*, 30(1), 1-17. Retrieved March 11, 2005.

In 1990, the Fast Track Project was initiated to evaluate the feasibility and effectiveness of a comprehensive, multicomponent prevention program targeting children at risk for conduct disorders in four demographically diverse American communities. Representing a prevention science approach toward community-based preventive intervention, the Fast Track intervention design was based upon the available data base elucidating the epidemiology of risk for conduct disorder and suggesting key causal developmental influences. Critical questions about this approach to prevention center around the extent to which such a science-based program can be effective at (1) engaging community members and stakeholders, (2) maintaining intervention fidelity while responding appropriately to the local norms and needs of communities that vary widely in their demographic and cultural/ethnic composition, and (3) maintaining community engagement in the long-term to support effective and sustainable intervention dissemination. This paper discusses these issues, providing examples from the Fast Track project illustrating the process of program implementation and the success of this science-based program at engaging communities in sustainable and effective ways as partners in prevention programming.

Thomas, J.M. & Clark, R. (1998). Disruptive behavior in the very young child: Diagnostic classification: 0-3 guides identification of risk factors and relational interventions. *Infant Mental Health Journal*. Special 6th World Congress, World Association of Infant Mental Health, 19(2), 229-244.

The high prevalence of disruptive behavior in children, ages 0-4 yrs, who present to early childhood psychiatry clinics, and the urgency of intervening early have focused attention on how to identify specific risk factors and guide relational intervention. Diagnostic Classification: 0-3 (DC: 0-3) has been found to be helpful in this work. Preliminary data from the first 64 children (aged 12-47 mo), who presented to the Early Development Program with a primary concern of disruptive behavior, were collected using the Diagnostic and Statistical Manual of Mental Disorders-IV (DSM-IV) and the DC: 0-3. Descriptive, correlational, and group comparison data suggest that DC: 0-3's Axis I and II and the Parent-Infant Relationship Global Assessment Scale (PIR-GAS) help to identify specific biopsychosocial risk factors, especially regarding the quality and nature of the parent-child relationship. A brief case of a 36-mo-old male referred for head banging and aggressive behavior is presented to illustrate how the DC: 0-3, used in conjunction with standardized assessment tools, guides relational intervention strategies.

Weissberg, R.P., Kumpfer, K.L. & Seligman, M. (2003). Prevention that works for children and youth: An introduction. *American Psychologist*. Special Prevention that works for children and youth, 58(6-7), 425-432.

The widespread implementation of effective prevention programs for children and youth is a sound investment in society's future. The most beneficial preventive interventions for young people involve coordinated, systemic efforts to enhance their social-emotional competence and health. The articles in this special issue propose standards for empirically supported programming worthy of dissemination and steps to integrate prevention science with practice. They highlight key research findings and common principles for effective programming across family, school, community, health care, and policy interventions and discuss their implications for practice. Recent advances in prevention research and growing support for evidence-based practice are encouraging developments that will increase the number of children and youth who succeed and contribute in school and life.

Weisz, J.R., Hawley, K.R., & Doss, A.J. (2004). Empirically tested psychotherapies for youth internalizing and externalizing problems and disorders. *Child & Adolescent Psychiatric Clinics of North America*. Special Evidence-Based Practice, Part I: Research Update, 13(4), 729-815.

This article is a review of specific psychotherapies that have been supported in clinical trials. Treatments that showed significant effects in studies published over a period of 4 decades were identified, with the goal of complementing the overall picture of treatment benefit provided in narrative reviews and meta-analyses with a detailing of the specific interventions that have shown significant effects. The article focuses on treatments for four broad clusters of problems and disorders that account for a very large proportion of youth mental health referrals: anxiety, depression, attention-deficit/hyperactivity, and conduct.

Wittmer, D., Doll, B., & Strain, P. (1996). Social and emotional development in early childhood: The identification of competence and disabilities. *Journal of Early Intervention*, 20(4), 299-317.

To better identify young children with social and emotional delay and disability and ensure adequate program planning, professionals and families need information concerning available norm-referenced and qualitative measures. This article presents an analysis of existing norm-referenced measures of social and emotional competence and disability for young children (aged birth-5 yrs) to determine the degree to which these indices satisfy both technical and conceptual requirements. Although results suggest that norm-referenced measures can be a part of a comprehensive evaluation to ensure that social and emotional competence and disability are identified early in young children's lives, it is recommended that methods for assessing social and emotional competence and disability that allow for informed clinical opinion supplement norm-referenced measures.

Worobey, J., Pisuk, J. & Decker, K. (2004). Diet and behavior in at-risk children: Evaluation of an early intervention program. *Public Health Nursing*, 21(2), 122-127.

This study describes outcomes for children enrolled in the Prevention-Oriented System for Child Health Project, an early intervention program aimed at improving health and developmental status in at-risk families. Through a series of home visits by public health nurses, 60 families received lessons on nutrition- and health-related topics determined by the child and family's needs. On two occasions, some 8 months apart, the children were evaluated using the Developmental Assessment of Young Children, and their energy intake over the previous day was recorded. Analyses of the dietary and behavioral records indicated that the children's scores on the physical subtest improved significantly. A number of nutrition-development associations were found at follow-up, suggesting that the intervention was successful. Implications of the results for at-risk children are discussed.

Zaslow, M.J., Oldham, E., Moore, K.A. & Magenheimer, E. (1998). Welfare families' use of early childhood care and education programs, and implications for their children's development. *Early Childhood Research Quarterly*, 13(4), 535-565.

Examined whether participation in early childhood care and education programs has implications for the development of young children from welfare families. First examined is whether in a sample of 182 African American welfare families with a child aged 3-5 yrs (the focal child), there are family background characteristics that predict the use of such a program. Then it is explored whether measures of the child's school readiness and social maturity are predicted by current participation in early childhood program above and beyond the family background characteristics that predict use of such a program. Interview data were collected on areas such as the mother's educational and employment activities and history, household composition, mother's psychological well-being, and the cognitive stimulation and emotional support available to the focal child in the home environment. Results indicate that participation in an early childhood program is associated with significantly higher scores on the measure of school readiness.