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RESIDENT FATHERS AND CHILD DEVELOPMENT INFANTS AND TODDLERS (0-2)

Definitions and Topics

- **Resident fathers** are men who co-reside with their children.
- **Cognitive development** refers to an infant's ability to explore objects, babble, problem solve, and use words.
- **Emotional development** refers to children's ability to be expressive, regulate their emotions, and control their behavior.
- **Father Cognitive Stimulation** refers to a father's teaching their children through outings, reading, playing, and positive feedback.
- **Father Engagement** refers to fathers' direct participation in recreational and caregiving activities with the child.
- **Father Restrictiveness/Harshness/Controlling behaviors** refer to harsh physical behaviors, criticism, and restrictive commands.
- **Father Supportiveness** refers to fathers' demonstration of support and encouragement toward his child.
- **Father Warmth/Sensitivity/Closeness** refers to fathers' demonstration of warmth and affection for his child (e.g., hugging), his sensitivity to his child's needs and desires, and the degree of closeness or intimacy in the relationship between the father and his child.
- **Infant health** refers to infants' prenatal care, birth weight, and mortality.
- **Motor development** refers to infants' hand-eye coordination and ability to sit, crawl, walk independently, and balance.
- **Social development** refers to the ability of infants and toddlers to meet the societal expectations within daily routines (i.e., independently dressing, eating, using the restroom, and communicating), maintain a spontaneous interest in learning (i.e., participating in self-initiated activities), and developing interpersonal relationships (i.e., interaction with caregivers).

Take Time to Be a Dad Today

Cognitive development

Father Warmth/ Sensitivity/ Closeness

- Resident fathers who are more sensitive toward their one-year-old infants (as measured by the Nursing Child Assessment Teaching Scale, NCATS) have children with more advanced language development by four years of age. Specifically, such children have higher scores of expressive language (ability to recall sentences in context) on the Clinical Evaluation of Language Fundamentals – Preschool scale.
Source: Magill-Evans, J., & Harrison, M.J. (2001). Parent-child interactions, parenting stress, and developmental outcomes at 4 years. *Children's Health Care*, 30(2), 135-150.
- Resident fathers who are sensitive and who demonstrate love and admiration for their children have children with higher mental development scores at 24 months of age (Bayley Scales of Infant Development, Second Edition Mental Development Index).
Source: Tamis-LeMonda, C.S., Shannon, J.D., Cabrera, N.J., & Lamb, M.E. (2004). Fathers and mothers at play with their 2- and 3-year-olds: Contributions to language and cognitive development. *Child Development*, 75(6), 1806-1820.
- Resident fathers' sensitive parenting behavior is positively associated with better task affect for daughters and better task orientation for sons at 20 months of age.
Source: Easterbrooks, M.A., & Goldberg, W.A. (1984). Toddler development in the family: Impact of father involvement and parenting characteristics. *Child Development*, 55(3), 740-752.
- Resident fathers who exhibit more positive behaviors during teaching tasks with their infants (e.g., responding to infants' distress, exhibiting behaviors that foster socioemotional and cognitive growth, and displaying sensitivity to infants' cues, as measured by the Nursing Child Assessment Teaching Scale, NCATS) have children who exhibit better receptive language skills when 18 months old.
Source: Magill-Evans, J., Harrison, M. J., & Burke, S. O. (1999). Parent-child interactions and development of toddlers born preterm. *Western Journal of Nursing Research*, 21, 292-312.
- Resident fathers who more frequently hold and tickle their infants have children with lower odds of cognitive delays. Specifically, when fathers engage in these types of warm behavior, 9-month-old children are less likely to show delays in babbling and exploring objects with a purpose (Bayley Short Form – Research Edition).
Source: Bronte-Tinkew, J., Carrano, J., Horowitz, A., & Kinukawa, A. (2008). Involvement among resident fathers and links to infant cognitive outcomes. *Journal of Family Issues*, 29, 1211-1244.
- Resident fathers who are supportive, responsive, and encouraging towards their infants have children with better cognitive and language outcomes at two years of age (Bayley Scales of Infant Development, Second Edition).
Source: Cabrera, N.J., Shannon, J.D., & Tamis-LeMonda, C. (2007). Fathers' influence on their children's cognitive and emotional development: From toddlers to Pre-K. *Applied Developmental Science*, 11(4), 208-213.
- Resident fathers who are highly responsive and instructive towards their two-year-old children are five times less likely than fathers who are not responsive and instructive to have children with a cognitive delay (as assessed by the Bayley Scales of Infant Development, Mental Development Index).
Source: Shannon, J.D., Tamis-LeMonda, C.S., London, K., & Cabrera, N. (2002). Beyond rough and tumble: Low-income fathers' interactions and children's cognitive development at 24 months. *Parenting*, 2(2), 77-104.

- Resident fathers who show positive responses to infant stress and who foster infants' socioemotional growth (as measured by the Nursing Child Assessment Teaching Scale, NCATS) have children who exhibit better receptive language skills (assessed by the Receptive Communication Age of the Sequenced Inventory of Communication Development-Revised, SICD-R) at 18 months old.

Source: Magill-Evans, J., Harrison, M. J., & Burke, S. O. (1999). Parent-child interactions and development of toddlers born preterm. *Western Journal of Nursing Research*, 21, 292-312.

Father Cognitive Stimulation

- Resident fathers who more frequently read to, tell stories to, and play with building toys with their children have two-year-old children with higher cognitive ability on the Mental Development Index of the Bayley Scales of Infant Development, Second Edition.

Source: Shears, J., & Robinson, J. (2005). Fathering attitudes and practices: Influences on children's development. *Child Care in Practice*, 11(1), 63-79.

- Resident fathers who are more involved in sensory stimulation (including stimulating with an object, prompting a motor act, and baby massage) have children with greater problem solving persistence (e.g., infants who engage in activities directed toward solving detour problems) at six months of age. Fathers' sensory stimulation is also associated with overall mastery motivation and task persistence for 1-year-old boys.

Source: Yarrow, L.J., MacTurk, R.H., Vietze, P.M., McCarthy, M.E., Klein, R.P., & McQuiston, S. (1984). Developmental course of parental stimulation and its relationship to mastery motivation during infancy. *Developmental Psychology*, 20(3), 492-503.

- Resident fathers who engage in more cognitive stimulation have children with higher mental development (i.e., memory skills, problem-solving skills, vocalization, language skills) at 24 months of age (as measured by the Bayley Scales of Infant Development, Second Edition Mental Development Index).

Source: Tamis-LeMonda, C.S., Shannon, J.D., Cabrera, N.J., & Lamb, M.E. (2004). Fathers and mothers at play with their 2- and 3-year-olds: Contributions to language and cognitive development. *Child Development*, 75(6), 1806-1820.

- Resident fathers who foster cognitive growth during interactions with 3 month old infants (as measured by the Nursing Child Assessment Teaching Scale, NCATS) have children who exhibit better receptive language skills (assessed by the Receptive Communication Age of the Sequenced Inventory of Communication Development-Revised, SICD-R) at 18 months old.

Source: Magill-Evans, J., Harrison, M. J., & Burke, S. O. (1999). Parent-child interactions and development of toddlers born preterm. *Western Journal of Nursing Research*, 21, 292-312.

Father Engagement

- African American resident fathers who play frequently with their children during infancy have children with higher IQ scores during toddlerhood.

Source: Yogman, M.W., Kindlon, D., & Earls, F. (1995). Father involvement and cognitive/behavioral outcomes of preterm infants. *Journal of the American Academy of Child & Adolescent Psychiatry*, 34(1), 58-66

- Resident fathers who play frequently and for longer periods of time with their children during toddlerhood have children with better mental proficiency at 16 and 22 months (Bayley Scales of Infant Development Mental Development Index).

Source: Clarke-Stewart, K.A. (1978). And Daddy makes three: The father's impact on mother and young child. *Child Development*, 49, 466-478.

- Resident fathers who engage their children in more complex social play during infancy and early toddlerhood have children with more advanced cognitive and language development at two years of age (Bayley Scales of Infant Development, Second Edition).

Source: Roggman, L.A., Boyce, L.K., Cook, G.A., Christiansen, K., & Jones, D. (2004). Playing with Daddy: Social toy play, Early Head Start, and developmental outcomes. *Fathering*, 2(1), 83-108.

- Resident fathers who spend more time interacting with their infants perceive their children as being more competent and developmentally advanced at nine months of age than fathers who spend less time with their infants.
Source: Ninio, A., & Rinott, N. (1988). Fathers' involvement in the care of their infants and their attributions of cognitive competence to infants. *Child Development, 59*, 652-663.
- Resident fathers who are more engaged with their children have children with higher cognitive proficiency based on the Uzgiris-Hunt Scales.
Source: Wachs, T., Uzgaris, I., & Hunt, J. (1971). Cognitive development in infants of different age levels and from different environmental backgrounds. *Merrill-Palmer Quarterly, 17*, 283-317.
- Resident fathers who spend more time alone with their children, play more frequently with their children, and are more active in caregiving have daughters with stronger task orientation at 20 months of age.
Source: Easterbrooks, M.A., & Goldberg, W.A. (1984). Toddler development in the family: Impact of father involvement and parenting characteristics. *Child Development, 55*(3), 740-752.
- Resident fathers who engage in more face-to-face contact and object stimulation with their three-month-olds have children who are more likely to recognize themselves in a mirror when they are one and a half years old.
Source: Borke, J., Lamm, B., Eickhorst, A., & Keller, H. (2007). Father-infant interaction, paternal ideas about early child care, and their consequences for the development of children's self-recognition. *Journal of Genetic Psychology, 168*(4), 365-379.
- Resident fathers who are more engaged in play with their five-month-old infants have children with higher mental proficiency at nine and eighteen months of age (Bayley Mental Development Scale)
Source: Yogman, M.W., (1987). Father-infant caregiving and play with preterm and full-term infants. In P.W. Berman and F.A. Pedersen (Eds.), *Men's transitions to parenthood: Longitudinal studies of early family experience* (pp. 175-195). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Resident fathers who have more modern parenting beliefs that endorse child-directed versus adult-directed parenting attitudes (e.g., believing that parents should play along with children's pretend games, not believing that children should always obey parents/teachers, and not believing that children will be bad unless they are taught what is right, as measured by the Shaefer and Edgerton Parental Modernity Scale) have children with higher cognitive scores on the Mental Development Index of the Bayley Scales of Infant Development, Second Edition at 24 months of age.
Source: Shears, J., & Robinson, J. (2005). Fathering attitudes and practices: Influences on children's development. *Child Care in Practice, 11*(1), 63-79.
- Resident fathers who are more involved in physical care activities (changing diapers, preparing meals and bottles, feeding the child), caregiving activities (bathing, dressing, going on errands, and going for a walk with the child), and cognitively stimulating activities (reading, telling stories, singing songs) with their nine-month-old infants have children who have lower odds of delayed babbling and exploring of objects with a purpose (Bayley Scales of Infant Development – Short Form Research Edition).
Source: Bronte-Tinkew, J., Carrano, J., Horowitz, A., & Kinukawa, A. (2008). Involvement among resident fathers and links to infant cognitive outcomes. *Journal of Family Issues, 29*, 1211-1244.

- Resident fathers who participate in prenatal activities, who are present at the birth of their child, and who more frequently feed and change the baby during the first month of life have children with better mental development at one year of age (Bayley Scales of Infant Development, Mental Development Index)

Source: Nugent, J.K. (1991). Cultural and psychological influences on the father's role in infant development. *Journal of Marriage and the Family*, 53(2), 475-485.

Father Restrictiveness/ Harshness / Controlling behaviors

- Resident fathers who are overcontrolling and overinvolved have children with lower mental development scores at 24 months of age (Bayley Scales of Infant Development, Second Edition Mental Development Index).

Source: Tamis-LeMonda, C.S., Shannon, J.D., Cabrera, N.J., & Lamb, M.E. (2004). Fathers and mothers at play with their 2- and 3-year-olds: Contributions to language and cognitive development. *Child Development*, 75(6), 1806-1820.

- Low-income African-American resident fathers who are restrictive have children with poorer cognitive development (Bayley Scales of Mental Development Index and McCarthy Scales of Children's Abilities) and communication skills (Vineland Adaptive Behavior Scales) during toddlerhood.

Source: Kelley, M.L., Smith, T.S., Green, A.P., Berndt, A.E., & Rogers, M.C. (1998). Importance of fathers' parenting to African-American toddler's social and cognitive development. *Infant Behavior and Development*, 21(4), 733-744.

Social/Emotional Development

Father Warmth/ Sensitivity/ Closeness

- Resident fathers who are more affectionate, more positive, and more involved overall with their children at three months of age are more likely to have securely attached infants at one year of age.

Source: Cox, M.J., Owen, M.T., Henderson, V.K., & Margand, N.A. (1992). Prediction of infant-father and infant-mother attachment. *Developmental Psychology*, 28, 474-483.

Father Supportiveness

- Highly supportive resident fathers have children with better emotional regulation at two years of age (Bayley Scales of Infant Development, Second Edition – behavior ratings scales).

Source: Cabrera, N.J., Shannon, J.D., & Tamis-LeMonda, C. (2007). Fathers' influence on their children's cognitive and emotional development: From toddlers to Pre-K. *Applied Developmental Science*, 11(4), 208-213.

Father Engagement

- Resident fathers who spend more time alone with their children, play more frequently with their children, and are more active in caregiving have sons who are more securely attached at 20 months of age.

Source: Easterbrooks, M.A., & Goldberg, W.A. (1984). Toddler development in the family: Impact of father involvement and parenting characteristics. *Child Development*, 55(3), 740-752.

- Resident fathers who are more involved in daily caretaking activities have children who are more sociable both with parents and with strangers at one year of age (according to Ainsworth et al.'s "strange situation" paradigm and interactive scales).

Source: Frascarolo, F. (2004). Paternal involvement in child caregiving and infant sociability. *Infant Mental Health Journal*, 25(6), 509-521.

- Resident fathers who visit their prematurely-born children in the hospital more frequently after birth have children with more positive social-personal development at eight and eighteen months of age and with better adaptive behavior at eighteen months of age (assessed using Gesell's Developmental Schedules). They also perceive their child as less difficult at eight and eighteen months of age.

Source: Levy-Shiff, R., Hoffman, M.A., Mogilner, S., Levinger, S., & Mogilner, M.B. (1990). Fathers' hospital visits to their preterm infants as a predictor of father-infant relationship and infant development. *Pediatrics*, 86(2), 289-293.

Father Restrictiveness/ Harshness / Controlling behaviors

- Intrusive resident fathers have children who are more oriented-engaged at two years of age (Bayley Scales of Infant Development, Second Edition – behavior ratings scales).
Source: Cabrera, N.J., Shannon, J.D., & Tamis-LeMonda, C. (2007). Fathers' influence on their children's cognitive and emotional development: From toddlers to Pre-K. *Applied Developmental Science*, 11(4), 208-213.
- Low-income African-American resident fathers who are restrictive have children with poorer socialization skills during toddlerhood (Vineland Adaptive Behavior Scales).
Source: Kelley, M.L., Smith, T.S., Green, A.P., Berndt, A.E., & Rogers, M.C. (1998). Importance of fathers' parenting to African-American toddler's social and cognitive development. *Infant Behavior and Development*, 21(4), 733-744.

Motor development

Father Warmth/ Sensitivity/ Closeness

- Low-income African-American resident fathers who are more sensitive have children with more advanced motor development during toddlerhood (Vineland Adaptive Behavior Scales).
Source: Kelley, M.L., Smith, T.S., Green, A.P., Berndt, A.E., & Rogers, M.C. (1998). Importance of fathers' parenting to African-American toddler's social and cognitive development. *Infant Behavior and Development*, 21(4), 733-744.

Infant Health

Father Engagement

- Fathers who visit their prematurely-born children in the hospital more frequently after birth have children who gain more weight during hospitalization.
Source: Levy-Shiff, R., Hoffman, M.A., Mogilner, S., Levinger, S., & Mogilner, M.B. (1990). Fathers' hospital visits to their preterm infants as a predictor of father-infant relationship and infant development. *Pediatrics*, 86(2), 289-293.
- Fathers who are more involved during their partner's pregnancy have partners who are more likely to seek prenatal care during the first trimester and to reduce smoking, both of which have implications for children's health.
Source: Martin, L.T., McNamara, M.J., Milot, A.S., Halle, T., & Hair, E.C. (2007). The effects of father involvement during pregnancy on receipt of prenatal care and maternal smoking. *Maternal and Child Health Journal*, 11(6), 595-602.