

Current News:



Developmental Changes in Nighttime Awakenings from 6 to 36 Months

Dolores Gonzalez

All healthy babies awake multiple times throughout the night; these sleep awakenings are considered normative throughout infant development. Babies are generally able to soothe themselves and return to sleep with little to no problem. It is when infants are unable to return to normal sleep that they tend to signal or alert their parents, and tend to cry or call out when alerting their parents. When infants continue to awake throughout the night they have higher chances of developing an awakening cycle. It is this awakening cycle that Weinraub et al. (2012) chose to study, questioning if these nighttime awakenings are increased due to parental, biological, or temperamental factors.

Some literature implicates both biological and environmental factors that contribute to sleep awakenings, yet most are not thoroughly understood. Some researchers believe awakenings are enforced by repeated parental responses, suggesting that it may interfere with the infant's developing ability to self-soothe and return to sleep independently. The infant's difficulty to self-soothe may then enforce parental responsiveness, furthering the reinforcement of the signaling behavior. This would then further delay the infant's ability to self-soothe, which would only enforce the vicious cycle.

(Continued on page 2...)

Graduation Announcements

The Infant Learning Project would like to congratulate Ashley DiFabio-Borthick, B.S., who will be graduating with her M.S. in Human Development and Early Childhood



Disorders in December. Ashley was an enormous asset to the lab in her two years here and we wish her all the best in her new career! We would also like to congratulate Mariah Fowler on graduating with her B.S. in Psychology this fall.

We look forward to her continuing as a research assistant in the lab, and wish her luck as she prepares for future studies.

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Current Projects

1 visit:

6-month-olds



We use eye-tracking to determine where babies look on the face when shown audiovisual videos of women speaking in approving and comforting messages.

Infant Learning Project

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**We are on the web:
bbs.utdallas.edu/ilp**

**“Like” [Infant Learning Project](#)
on [Facebook](#) to receive
weekly information about
infant research, child
development and parenting!**

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Developmental Change in Infant’s Nighttime Awakenings

(...Continued from page 1)

In the study conducted, Weinraub et al. (2012) examined child, parent, and environmental factors that have implicating effects on nighttime awakenings, focusing on those that may put the infant at risk for sleeping problems. They considered each child’s characteristics, maternal characteristics such as sensitivity, and environmental factors. They pulled a large diverse sample of families from 10 different locations across the United States. The mothers were visited at home when the child was 1, 6, 15, 24, and 36 months of age, and contacted via phone in three month intervals. At each face-to-face session mothers completed a series of questionnaires about themselves and the child, as well as the family, and responded to standardized demographic interviews. At 15, 24, and 36 months of age the infant and mother attended visits at the university where they were observed to establish attachment, specifically observing mother-child dyads to establish the type of attachment and relationship patterns they showed. The study concluded that signaling upon sleep awakenings are indeed a developmental course, therefore considered normative, over the first three years in an infant’s life. The study found that although normative, these nighttime awakenings should occur no more than once or twice a week by 6 months of age. The frequency of these awakenings was found to decrease with time, resulting in children signaling only once a night by the end of infancy.



Weinraub et al. (2012) established two distinct patterns over the first three years of life that characterized sleep awakenings of healthy, community living children. The first two-thirds of children were identified as “sleepers.” These children show little evidence of elevated awakenings defined as consistently waking less than two nights per week during the entire period of the study. In contrast one-third of these children were considered “transitional sleepers,” awakening six to seven times per week at around six months in age, to less than three nights a week at 15 months of age. At the age of 18-24 months these transitional sleepers leveled off in awakenings, and were at about the same number of sleep awakenings as children labeled sleepers. There were identifiable characteristics shared by both sleepers and transitional sleepers: both groups were mainly comprised of males who were breastfed at 6-15 months, and were described by their mothers as having difficult temperament at 6 months of age.

These findings suggest that all parents should be aware that infants who are healthy and developing normally have nighttime awakenings that extend into the infant’s second year of life. For families that continue to report continued sleep awakenings for infants 18 months or older, intervention might be necessary. The study found evidence supporting the use of sleep schedules to aid in the development of proper infant sleep patterns. Parents are encouraged to create a sleep schedule and stick to it, allowing the infant to develop self-soothing techniques by reducing the amount of parental response. This form of parental interference is discouraged early on, emphasizing the encouragement of infant self-soothing to promote sleep that is continuous throughout the night, and then across development.

Is your baby an Infant Scientist yet?

Dr. Andrea Warner-Czyz is currently recruiting English-learning **3- to 13-month-old infants** to listen to speech sounds in the **Child and Infant Listening Lab (CHILL)** at the Callier Center at the University of Texas at Dallas (both Richardson and Dallas locations). The lab is interested in how the clarity of the sounds affects infants' ability to tell the difference between two speech sounds. Your baby will sit in your lap in front of a TV screen so that he or she can listen to different types of speech sounds. The clarity of some of the speech sounds will be modified to imitate how sounds might be heard by a child with hearing loss, especially a child who wears a *cochlear implant*.



You will receive a free hearing screening for your baby and \$20. Parking is free. For more information, contact CHILL...
Phone: 214.905.3110
E-mail: callierchill@utdallas.edu

Thanks—we look forward to hearing from you!

Thank You!

We would like to thank our parents and families who have participated. Without you, our research would not be possible.

Breastfeeding and Working Moms

Mariah Fowler

A recent study by Cardenas & Major of Old Dominion University examines the obstacles faced by women who choose to combine employment and breastfeeding. Practical solutions and interventions were suggested as a means of providing mothers the support needed to have a higher chance at successfully managing the dual roles of the breastfeeding mother and employee.

Medical professionals provided substantial evidence for the numerous benefits of breastfeeding for both mother and child, including health, growth, and developmental benefits for baby, and reduced ovarian cancer and premenopausal cancer rates for mothers (American Academy of Pediatrics, 1997; Cardenas & Major, 2005). Despite the advocacy of breastfeeding as the optimal form of infant nutrition, breastfeeding rates remain low among working mothers in the United States (Cardenas & Major, 2005). It is important to note that although overall breastfeeding rates remain low in the U.S. increased efforts to raise awareness of the benefits of breastfeeding in recent years have led to a slow increase in women who want to breastfeed their infant. The CDC reports that many women at least try to breastfeed their newborn infants in the first few weeks of life, yet by the time the mother must return to work, breastfeeding stops for a large majority. Most American households require two incomes to survive. This means many mothers are returning to work between 6 and 12 weeks after the birth of their newborn. While breastfeeding may come easily at home, the transition back into the role of employee can be difficult. The American Academy of Pediatrics recommends that the minimum duration of exclusive breastfeeding should be 6 months, but ideally breastfeeding should continue until the child is at least one year of age (Ball & Wright, 1999; Cardenas & Major, 2005). Among women who do initially breastfeed, the majority stop before the pediatrician-recommended 6 month minimum (AAP, 1997; Duberstein Lindberg, 1996).

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Fall 2013 Students

We would like to welcome one **new student** to the Infant Learning Project team this semester. As always, we appreciate the hard work and enthusiasm of all of our wonderful lab members!

Graduate Research Assistants

Kate Shepard, M.S., CCC-SLP, Ph.D.

Claire Noonan, B.A.

Fariba Davoodi, B.S.

Elizabeth Wilson, B.S.

Undergraduate Research Assistants

Mariah Fowler

Dolores Gonzalez

Madeeha Mian

**Center for
Children and Families**

Spring Lecture Series!

**Surviving – and Thriving –
in Adolescence**

January 17, 2014

Emily A. Tobey, Ph.D.

“The Bionic Ear: Challenges of Educating
Deaf Teenagers in the 21st Century”

February 14, 2014

Alex R. Piquero, Ph.D.

“Preventing Juveniles from
A Life of Crime”

March 7, 2014

Samuel Ehrenreich, Ph.D.

“Adolescent Text Messaging and
the Development of
Antisocial Behavior”

April 11, 2014

Joanna K. Gentsch, Ph.D.

“Beyond the Birds and the Bees:
Communicating about Sexuality from
Childhood through Adolescence”

For more information, please visit:

<http://ccf.utdallas.edu/>

Breastfeeding and Working Moms

(...Continued from page 3)

Many mothers who return to work find it difficult to maintain the dual roles of breastfeeding mother and employee, resulting in a work-family conflict that decreases the breastfeeding duration. Cardenas and Major found that much of this conflict stems from a lack of time required to adequately meet the requirements of both roles. Women who need to express breast milk at work need a clean, private, quiet space to pump in as well as breaks that allow adequate time for pumping.

There are many ways employers can help mothers successfully manage the dual breastfeeding mother and employee roles. Options such as on-site child care or longer work breaks to allow a woman the time to travel to her child and breastfeed have gained momentum in recent



years. If these solutions are not viable, the ability to express breast milk at work is crucial to the breastfeeding mother's maintenance of milk supply. Excessive stress caused by conflict between the work and family roles can cause anxiety,

which research has found can interfere with a woman's ability to lactate (Gengler, Mulvey, & Oglethorpe, 1999; Cardenas & Major, 2005). Workplace interventions were found to be the most helpful resources for women in reducing the work-family conflict. Prenatal education, lactation programs, support systems, job flexibility, and child care are reviewed as ways to help working mothers successfully manage both the breastfeeding mother and employee roles.

WANTED: CHILD ORATORS

for the

North Texas Children's Speech Database



We are recruiting children and young adults ages 5-18 for a new speech database funded by the National Science Foundation. The project is designed to study speech development in native English speaking children who grew up in the North Texas region. Children are paid \$10 for their participation and the recording sessions last about one hour. If you have or know a 5-18 yr. old who would like to participate, please contact Denise Cardenas at dec130030@utdallas.edu (ph. 214-448-2864), or Daniel Hubbard at dhubbard@utdallas.edu (ph. 469-371-5831). Thank you!