

# Introducing the Neonatal Behavioral Assessment Scale (NBAS) and NBO

- therapeutic interventions to help understand babies and support parents

Joanna Hawthorne, Ph.D.

Psychologist

Director, Brazelton Centre in Great Britain  
and Associate, Centre for Family Research,  
University of Cambridge

**Betty Hutchon**

Consultant Neurodevelopmental Therapist

University College London Hospital

Lecturer Institute of Child Health UCL

Trainer and Co-Founder Brazelton Centre in Great Britain

# Historical background

- In 1950's the newborn baby was thought of as a 'blank slate' – a reflexive organism
- Three decades of research have shown that from birth, babies have many capabilities:
- The competent infant – uses all 5 senses
- The organized infant – system of behaviours
- The social infant - the infant as actively engaged in transforming her own environment from the beginning
- The individual infant - has own unique set of dispositions and sensibilities

# What are newborns doing?

- Imitation and understanding other's minds (Meltzoff)
- Making meaning of the world (Trevarthen)
- Learning from relationships about emotional states – their own and others
- Learning about familiar people around them
- Learning to self-regulate

# Newborn brain development

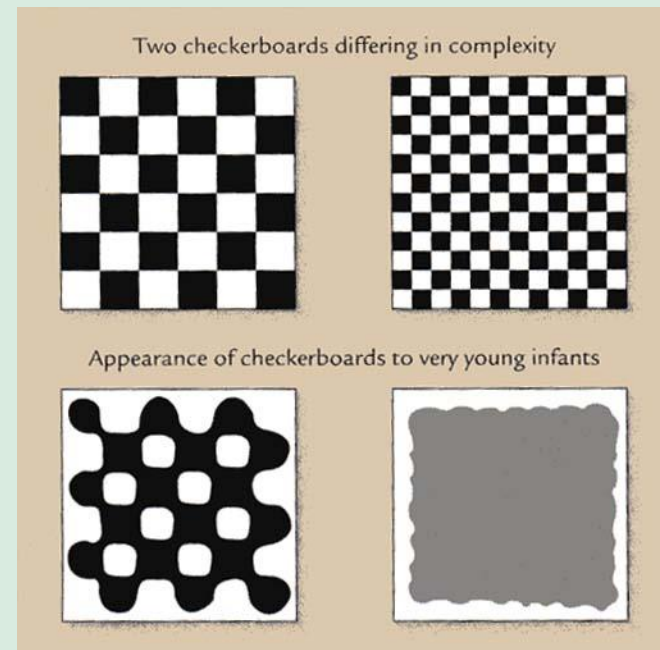
- Very rapid development; babies learn fast.
- Early experiences affect the development and structure of the brain.
- The actual development of brain function is influenced by the environment and interactions

# The Competent Newborn

- **Competent in all five modalities** (taste, smell, touch, hear, see)
- **Can visually track** (Dannemiller and Friedland, 1991; LaPlante et al. 1996, Meltzoff and Moore, 1999)
- **Can hear and locate sounds** (Muir and Field, 1979; Moon and Fifer, 2000)
- **Can habituate** (Hood et al, 1996; Slater et al. 1984)
- **Can recognize mother's voice and smell** (deCasper and Spence, 1991; Schaal, 1998; Spence and Freeman, 1996)
- **Can discriminate mother's face from stranger** (Pascalis et al. 1995)
- **Can recognize emotional expressions** (Field, 1984)
- **Look significantly more at a face with direct gaze than at a face with averted gaze** (Faroni et al (2001).

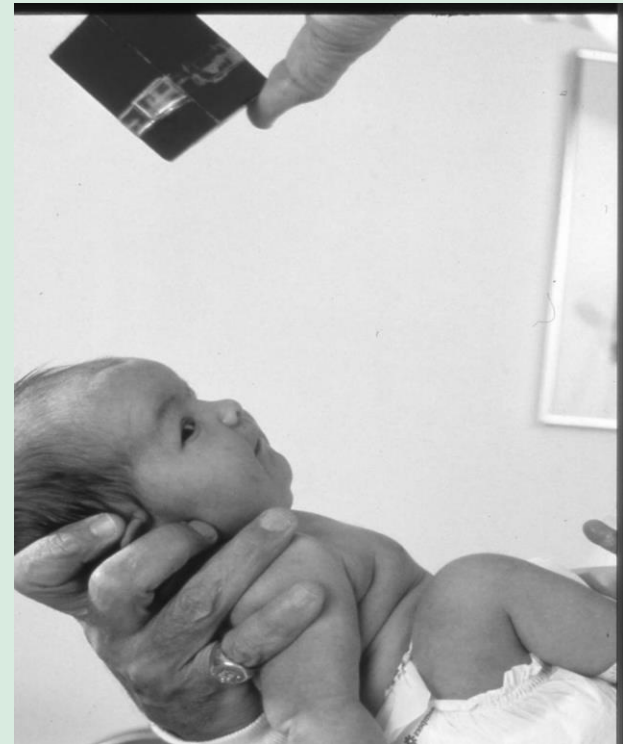
# The “discovery of the newborn:” The newborn can see!

- In 1963, Robert Fantz demonstrated that newborn infants could not only see but also have clear-cut visual preferences

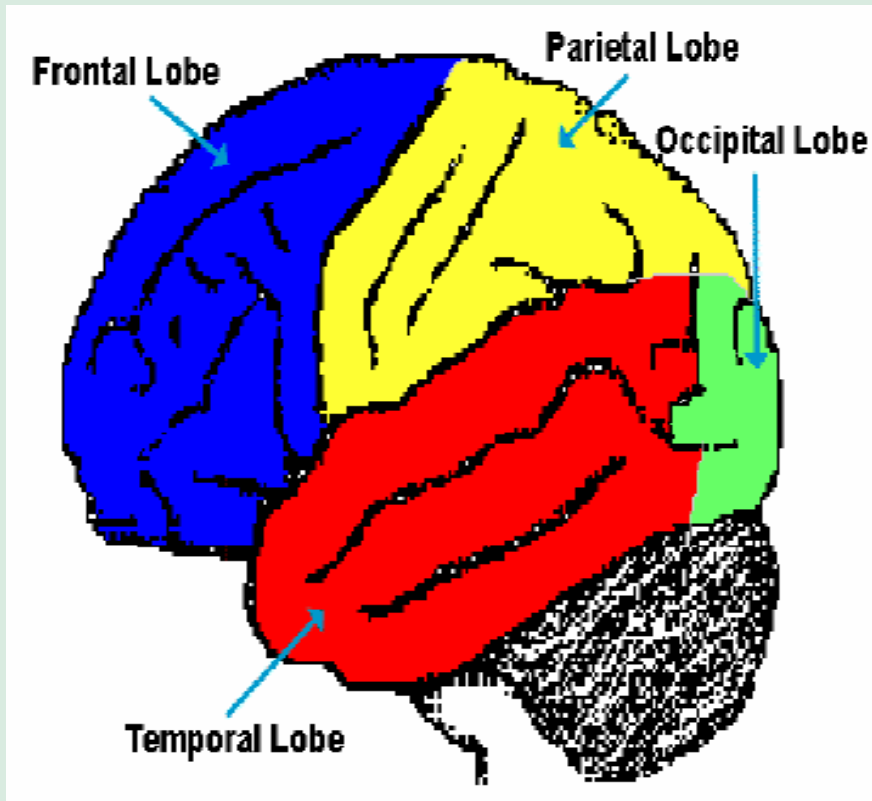


# 1963 – Michael Wertheimer: Infants can hear at 10 minutes after birth

- Wertheimer showed that newborns could orient towards a sound as early as 10 minutes of age.
- We have learned more about the other senses, too – smell, touch, taste etc..



# Social sensitivity of infant brain



## Critical windows

Visual cortex (complete by 2 yrs)

Auditory map (complete by 1 yr)

Language acquisition (by 6 yrs)

## Emotional brain (by 18 mos)

*Fonagy, 1998*



- The first ‘higher’ brain capacities to develop are social and they develop in response to social experience.
- Rather than holding up flashcards to a baby it would be more appropriate to his stage of development to hold him and enjoy him.

# Social sensitivity of infant brain

## Trauma

- Infant brain acutely affected by trauma

## Stress & trauma for an infant:

- Not getting a response from others
- Not being able to predict response
- Lengthy wait to be fed, changed
- Lack of stimuli (boredom)
- Too much stimulation (overwhelmed)

***“Children’s brains reflect the world they live in:  
if their world is one of trauma, fear & chaos,  
then that’s the environment their brain develops to cope with”***

- Babyhood can be extremely stressful without the support of tender, protective parenting
- It is not necessarily the nature of the stress that matters but the availability of others to help manage it, as well as the inner resources of the person experiencing it.

- Early care actually shapes the developing nervous system and determines how stress is interpreted and responded to in the future.
- Stress in infancy – such as consistently being ignored when you cry – is particularly hazardous in the early months of life because of high levels of cortisol.
- Human babies are born with the expectation of having stress managed.

- Positive support for parents may help to reduce some of the defensive behaviour that harms their children and continues vicious cycles of insecurity and inability to regulate feelings well down the generations.

- Work done with Romanian orphans has shown that those who were cut off from close bonds with an adult by being left in their cots all day, unable to make relationships, had a virtual black hole where their orbitofrontal cortex should be.

(Chugani et al. 2001)

- Good timing is a critical aspect of parenting
- A poorly handled baby develops a more reactive stress response and different biochemical patterns from a well handled baby.
- Children who are emotionally secure and well regulated rarely become the antisocial individuals of the future.

- The key feature of insecure attachment is a lack of confidence in others' emotional availability and support.



- A well resourced and well-regulated infant becomes a child and adult who can regulate himself well, whilst a poorly resourced infant becomes a child who cannot regulate himself well.

- When parents respond to their baby's signals, they are participating in many important biological processes.
- They are helping the baby's nervous systems to mature in such a way as that it doesn't get overstressed
- They are helping the bioamine pathways to be set at a moderate level

- They are contributing to a robust immune system
- They are helping to build up the prefrontal cortex and the child's capacity to hold information in mind
- To reflect on feelings
- To restrain impulses
- To behave socially in the future!

# Keys to shaping an emotionally healthy infant brain (0-2 years)

*Attunement: match between two people's emotional states*

*Empathy: sensitivity to other people's emotional states*

**Sensitive parenting helps baby to regulate emotions**

# The social skills

- Entice adults to pay attention to them by crying; then responds to soothing
- Engage in mutual gazing
- Respond to social interactions in turn; initiates interaction
- Show dislikes: turning away, yawning, sneezing, hand movements. Shows likes: bright, focused look, smiling
- Ability to self-soothe: suck on fingers/hand, look, listen

- Smiles actually help the brain to grow.
- Schore suggests that it is positive looks which are the most vital stimulus to the growth of the social, emotionally intelligent brain

# Questions parents ask:

- Can my baby see?
- What can she see?
- Does my baby recognise my voice?
- What kind of stimulation do babies need?
- How do I know when she is hungry?
- How much will she sleep?
- Is there something wrong if my baby cries a lot?
- What can I expect over the next few weeks?

# **At birth: a critical period in the parent-child relationship**

- The social infant - in a heightened state of readiness to interact with his/her caregiver
- Interaction leads to growth of attachment
- Reading the baby's communication cues
- Using the NBAS to sensitise parents to these communication cues and thus promote the bond between parent and infant



# What do babies need?

- 1) An observer who sees their strengths and helps them with their difficulties
- 2) Warm, responsive interactions with their caretakers - taking turns
- 3) Vocalisations reinforced by response, initially imitation
- 4) Structure and routine, with flexibility

(Adapted from Brazelton and Cramer, 1991)

## What do babies need? (cont.)

- 5) Interesting things to look at and do
- 6) Establishment of a dialogue with their caretaker who understands variabilities in development and the process
- 7) Play, autonomy and flexibility in their interactions leading to attachment
- 8) A parent confident in understanding the behaviour of their baby

(Adapted from Brazelton and Cramer, 1991)

# Mothering tasks

- To keep her baby alive and protect her baby
- Primary-relatedness: Can she love her baby and baby love her?
- Needs support from others to validate her relationship with the baby
- Identity reorganisation

(from Daniel Stern, *The Motherhood Constellation*, 1995)

# Father's role

- Support mother
- Provide link between mother and staff
- Get to know baby
- Interventions involving fathers 'appear to be significantly more effective' than interventions focusing on mothers only.  
*Bakermans-Kraneburg MJ, Van Ijzendoorn MH & Juffer F (2003)*
- NBAS with fathers at birth improves caretaking contact at one month old

# Fathers

- Research shows that fathers are more likely to leave the family within the baby's first year than at any other time
- NBAS intervention encourages involvement of the father
- Supportive work with couples helps them stay together

# Helping parents read, interpret and respond to behaviour

- Parent's ability to read and respond appropriately to their infant's needs is the most important component of parental interactive competence
- Sensitive and contingent maternal interactions between parents and their infants have been related to better social and cognitive competence and the formation of secure attachment in infants.
- But, what are the obstacles?

## **The Special case of Preterm and LBW infants**

- Some babies are more difficult to read
- Preterm and low birthweight infants tend to be less responsive, are more fretful, smile less and give less readable communication signals than full-terms infants (e.g. Melnyk et al. 2002, Spiker et al., 1993).
- Parents of at-risk infants experience even more stress in meeting the infant's daily needs and are at greater risk for postpartum depression

# Background of NBAS

Developed by Dr T Berry Brazelton (1973)

- interactive and systematic way of observing infant behaviour

## **Model used**

- positive model of child development and parenting, not deficit model of paediatrics and child psychiatry

## **Features of NBAS – observes:**

- infant's contribution to the parent-infant system, infant's competencies and difficulties, individual differences



## **The newborn period- a new view of the newborn baby the contribution of T. Berry Brazelton (Nugent, 2006)**

- **The competent infant**
- **The organized infant**
- **The social infant -  
the infant as actively  
engaged in  
transforming her  
own environment  
from the beginning**
- **The infant as an  
individual with her  
own unique set of  
dispositions and  
sensibilities**

JK Nugent, 2006



# Neonatal Behavioural Assessment Scale (1973)

- Systematic observation and neurobehavioural interactive assessment producing a profile of infant behaviour (birth - 2 months old)
- shows infant's reactions to stimulation, reflexes and social interaction
- habituation, state-regulation, self-quieting



**SUPPLEMENTARY ITEMS**

	9	8	7	6	5	4	3	2	1	Comments
Quality of Alertness										
Cost of Attention										
Examiner Facilitation										
General Irritability										
Robustness & Endurance										
State Regulation										
E's Emotional Response										

**REFLEXES**

	0	1	2	3	Asym	Comments
Plantar						
Babinski						
Ankle Clonus						
Rooting						
Sucking						
Glabella						
Passive Resist.—Legs						
Passive Resist.—Arms						
Palmar (hand-grasp)						
Placing						
Standing						
Walking						
Crawling						
Incurvation						
Tonic Dev.—Head & Eyes						
Nystagmus						
TNR						
Moro						

**SUMMARY: INFANT**  
Strengths \_\_\_\_\_  
Concerns \_\_\_\_\_

**SUMMARY: PARENT(S)**  
Strengths \_\_\_\_\_  
Concerns \_\_\_\_\_

**RECOMMENDATIONS FOR CAREGIVING:**

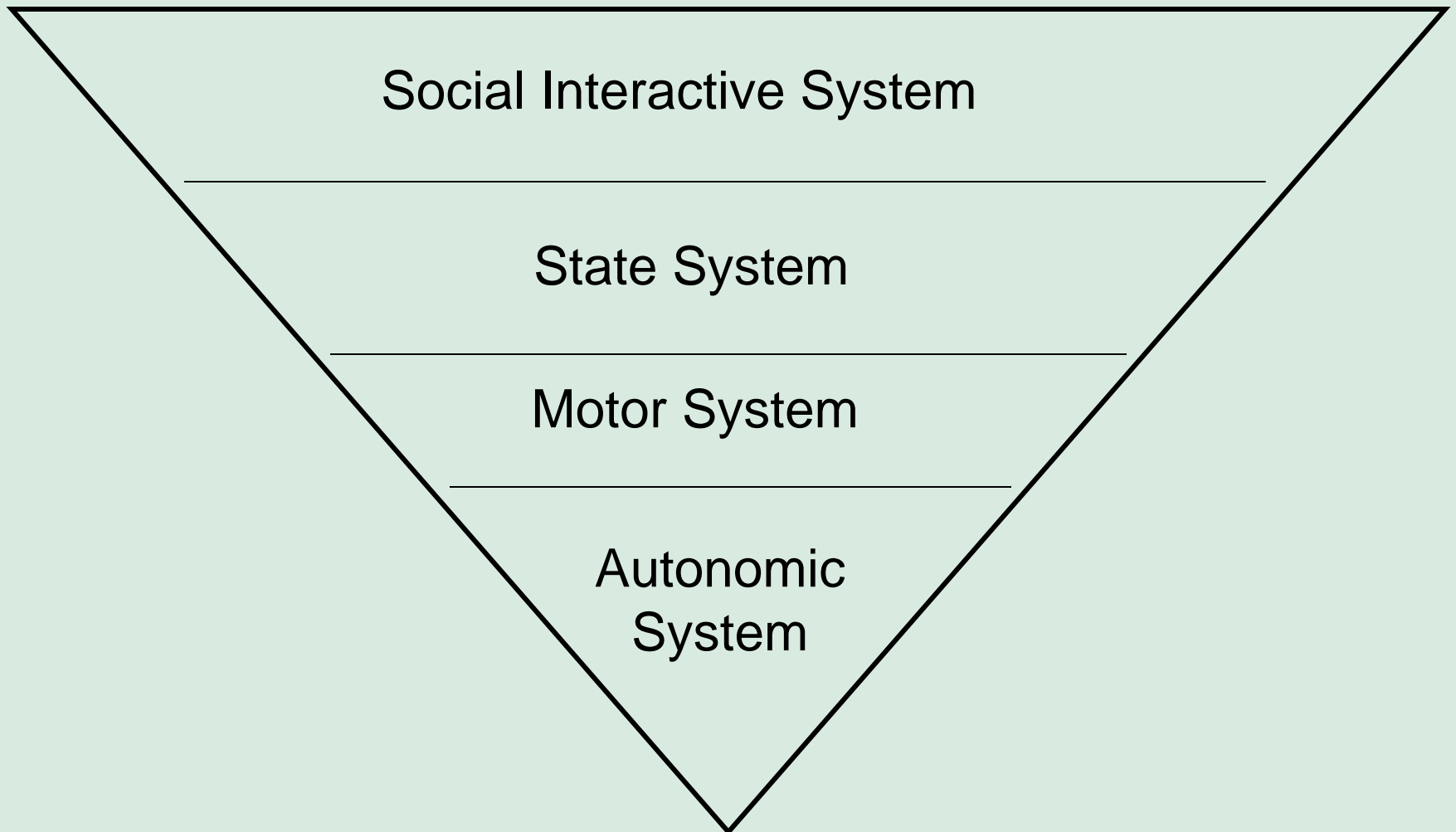
# Uses of Brazelton Scale

- Pre-term babies (over 35 weeks ga, medically stable)
- Down's syndrome, congenital malformations, birth trauma, HIE, IUGR
- Maternal anxiety, fear, previous babies with problems
- Postnatally depressed mothers
- Teen mothers

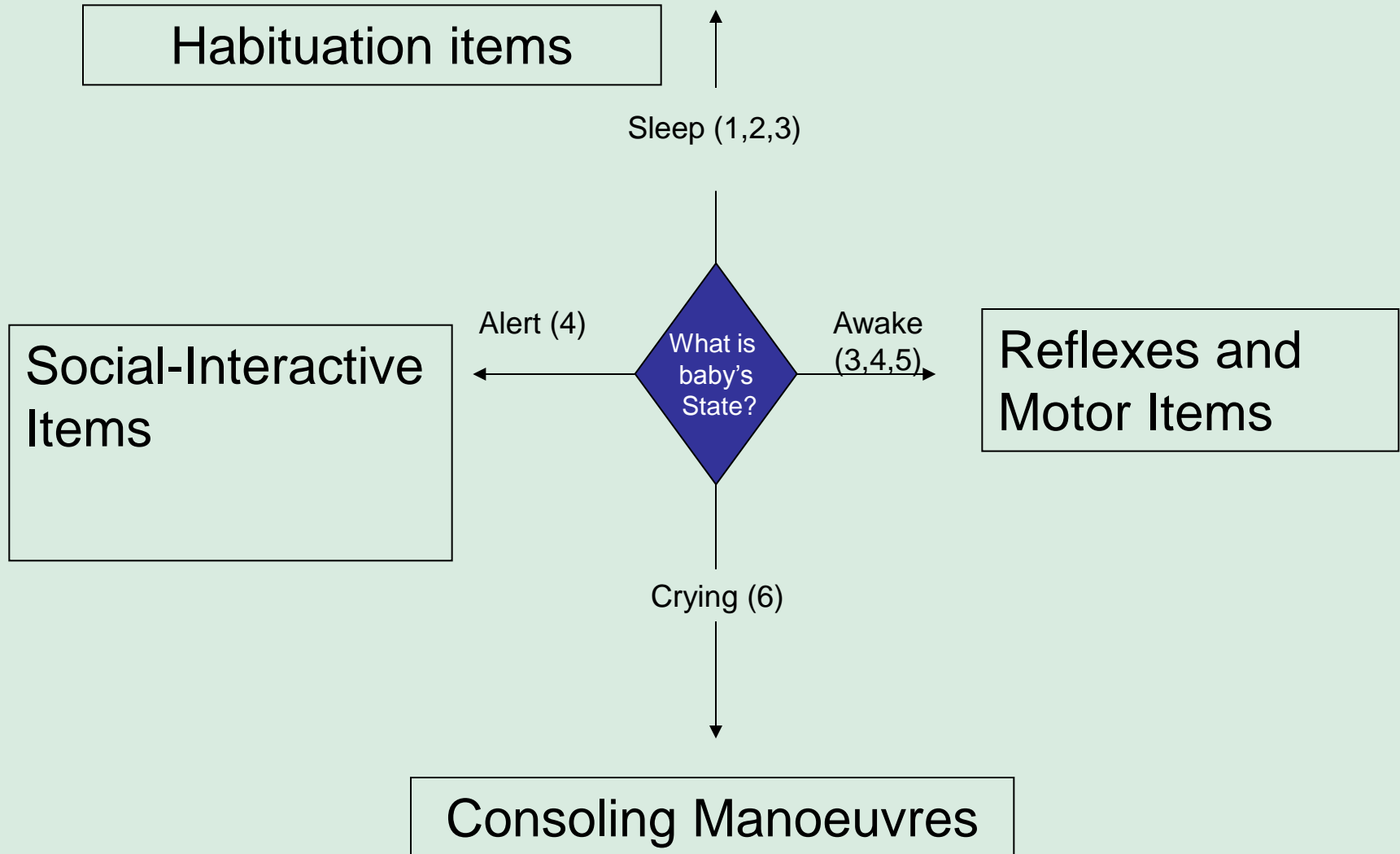
# Key concepts of the NBAS

- Interactive
- Not pass/fail
- To bring out the baby's "best performance" – show the baby's strengths
- Collaborate with parents

# Newborn Developmental Agenda









## **NBAS is a useful tool to look at issues around:**

- **Sleeping** – provides information about the baby's ability to cope with disturbances during sleep, and get themselves back to sleep
- **Crying** – provides information about the baby's ability to comfort themselves
- **Feeding** – provides information about the baby's sucking ability and ability to stay in an alert state for feeding.

# Self-regulation and facilitation

- Recognise infant's efforts at self-regulation
- Offer examiner-facilitation based on infant's own efforts at self-regulation

(Blanchard, 2003)

# Behavioural States

(Brazelton and Nugent, 1995)

Deep sleep (State 1)      Alert (State 4)

Light sleep (State 2)      Alert and active (State 5)

Drowsy (State 3)      Crying (State 6)

# STATE REGULATION

- transitions between states
- robust states
- full range of states

part of self regulatory mechanism

# Stress/time out signals

- Looking away, shutting eyes, spitting up, hiccuping, yawning, sneezing, holding hands up defensively, finger splaying, clenching fists, arching back, squirming, staring with no facial expression, frown, grimace, skin colour changes, sucking, changing position, changing state

# Recognizing signs of stress



# Shutdown



- Inappropriate stimulation causes a baby to go back to sleep or at least disengage

Nugent, 2006



# How do I feel?





# Reflexes and Motor Items

- Used to stimulate a sleepy baby
- Parents see these as skills
- Shows how strong the baby is
- Screening tool for major problems
- Can help to organise the baby

# Habituation

- Watch how disturbing stimulation affects the baby's sleep states
- Use light, rattle, bell, foot probe
- Can baby settle after he/she is disturbed?
- Strategies he/she uses to settle back to sleep

# Crying

- When baby cries, stand back for a few seconds to watch if he/she uses any strategies to help calm – e.g.  
Hand to mouth, hands together across chest, sucking, changing position, looking at something.
- If baby needs help to calm, proceed with consoling manoeuvres

# Consoling manouevres

- Look at baby
- Look at and talk to baby
- Look at, talk and put hand on belly
- Look at, talk, hold arms across chest
- Look at, talk, pick up and hold calmly
- Look at, talk, hold and rock calmly
- Look at, talk, swaddle with hands to mouth, rock calmly
- Look at, talk, swaddle, rock calmly, give finger to suck or pacifier

- Babies temperament differ – some are more demanding.
- Less reactive and
- Highly reactive baby (15%) – more sensitive sensory system, cries more, more timid and fearful, easily overwhelmed by stimuli.
- Need more than average amount of calming and soothing

# CASE STUDY

- DOB 20.04.
- 30 Gestation (EDD 20.06.)
- Birth Weight 1.106kg
- Apgar: 6 at 1 minutes, 8 at 5 minutes
- Intubated and ventilated

- Chronic lung disease
- G O R
- Behavioural and feeding problems
- Failure to thrive



- Very Irritable
- Cried frequently for long periods and difficult to console
- Slept poorly and mostly light sleep and for short periods of time
- Problems sustaining relaxed tone and posture
- Difficult to feed
- Parents distressed by her behaviour
- Medical and nursing staff pessimistic about outcome

- 26.06. Day 67
- Still irritable – Bottle and tube feeding
- 07.07.
- Very irritable and unsettled
- 10.07. Day 81
- ? Feeding slowly improving
- Still very irritable and unsettled

- 16.07.  
Irritable poor feeding  
Increasingly irritable and difficult to manage with persistent crying
- 17.07.  
Assessed by OT using Brazelton Neonatal Behavioural Assessment Scale  
Aged 43 weeks

## **Results of assessment presented a profile of**

- A sensitive and poorly organized infant.
- Reacted to every presentation of habituation items.
- Squirming
- Fidgeting
- Increased respiratory effort
- Waking and crying
- Little or no self- regulatory behaviours

## Interpretation of Results of NBAS -

Hypersensitive to

- Noise
- Light (unable to block out or habituate to this type of stimuli)
- This affected her ability to get into deep sleep
- This in turn made her very irritable
- Once upset unable to calm herself due to lack of self-regulatory behaviours

## **Main goals for Aysha as results of NBAS were:**

- Constant reading of behavioural cues
- Support efforts to self-regulate
- Modulation of the environment
- Reduction of stimulation
- Help parents and staff understand the reasons for her over-reactive behaviours

- Slower, gentler handling
- Swaddling
- Undisturbed sleep
- Protection from light and noise
- Move to side room/quiet
- Dimmed lighting
- No talking near her cot

- Happier, calmer baby
- Less irritable
- Slept better
- Fed better
- Parents and staff much happier too
- People began to respond to Aysha differently and more positive interactions



20.07.

- Doing well, taking bottles
- Much more settled, gaining weight

21.07.

- Well, gaining weight
- Seems much less irritable

25.07.

- Bottle feeding, gaining weight, less irritable

28.07.

- Stable
- Responsive – fixed and follows
- Smiled today
- Gained 100g

05.08.

- Handles well
- Feeding well
- No problems

- Self-regulatory skills have important implications for how well children negotiate many other tasks of early childhood.
- Identifying and intervening with children who need extra help in developing these skills is important.
- This can be a promising entry point for early interventions aimed at getting new parents and infants off to a good start.

# What do we know about the baby after the NBAS?

- The NBAS tells us how the baby manages the tasks and handling
- Is the baby easily overstimulated?
- Does the baby have any self-soothing strategies?
- Does the baby manage to protect his sleep?
- How does the baby manage state changes?
- How does the baby manage crying?
- Is the baby available for social interaction?

## **NBAS used as a supportive intervention (3 times in first month)**

- shows parents amazing abilities of their infant
- validates parent's observations + share concerns
- provides therapeutic alliance with professional
- demonstrates infant's stress signals and abilities to self-quiet
- provides observation of parent-infant interaction
- helps parents come to terms with baby they have

## **Studies using Brazelton Scale - (over 700)**

- Mothers felt more confident and were more responsive
- mothers spent more time playing and talking with their infants
- fathers more involved in their baby's care at one month
- premature babies had higher cognitive scores
- low-birthweight babies had higher developmental scores at 4 years

# Training in the NBAS

- Pre- and post-training questionnaire
- 2 day course with Trainers
- Self-training phase: practice on 20-25 babies
- Refresher day (optional)
- Certification day – assess one or two babies to achieve a 90% reliability
- NBAS certificate (renewed every 3 years for those in research)

**Brazelton Institute**

[www.brazelton-institute.com](http://www.brazelton-institute.com)

Children's Hospital  
Brazelton Institute



Harvard Medical School  
Department of Pediatrics



# Introduction to NBO (Newborn Behavior Observation)

**Betty Hutchon, Consultant Occupational Therapist**  
Royal Free and University College Hospital London

**Constance H. Keefer, M.D**  
Boston Children's Hospital

**the Brazelton Centre**

*Promoting an understanding of infant behavior*

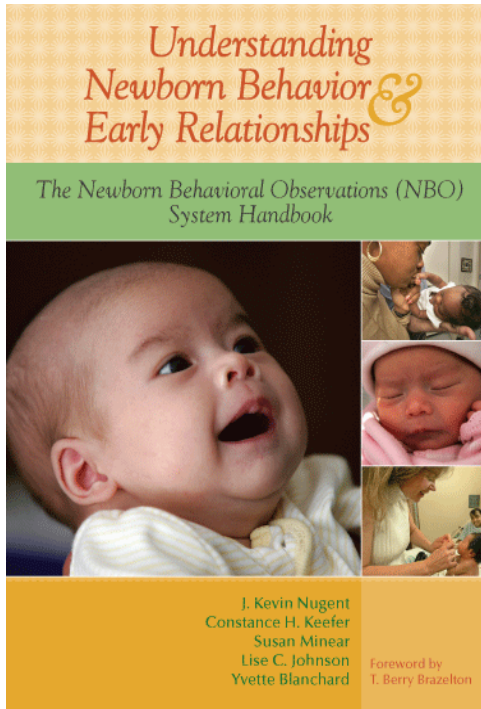


in Great Britain



# What is the NBO\*?

**A structured,  
neurobehavioral,  
relationship-based,  
Observation System of  
Newborn Behavior for parents**



***\*Understanding Newborn Behavior & Early Relationships: The Newborn Behavioral Observations (NBO) System Handbook (2007). Nugent JK, Keefer CH, Minear S, Johnson LC, Blanchard Y. Baltimore: Paul H Brookes Publishing Co.***

# The NBO: Infant- focused and family-centered

**... is a relationship-  
based, structured,  
neurobehavioral  
observation which  
enables infant  
specialists and family  
workers to describe  
and interpret newborn  
behavior for parents**

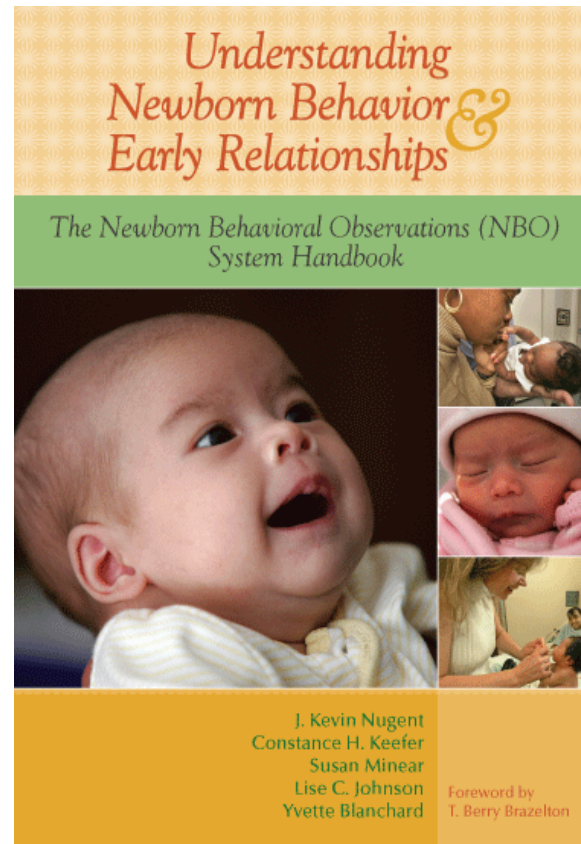


Aisha at one month home visit (video)

•NBO is based on 30 years of research and clinical work with newborns

•Shifts the focus from assessment to relationship-building

•Can be easily integrated into everyday clinical practice



**Brazelton Institute**

[www.brazelton-institute.com](http://www.brazelton-institute.com)

Children's Hospital  
Brazelton Institute



Harvard Medical School  
Department of Pediatrics



# Whence came the NBO?

**the Brazelton Centre**

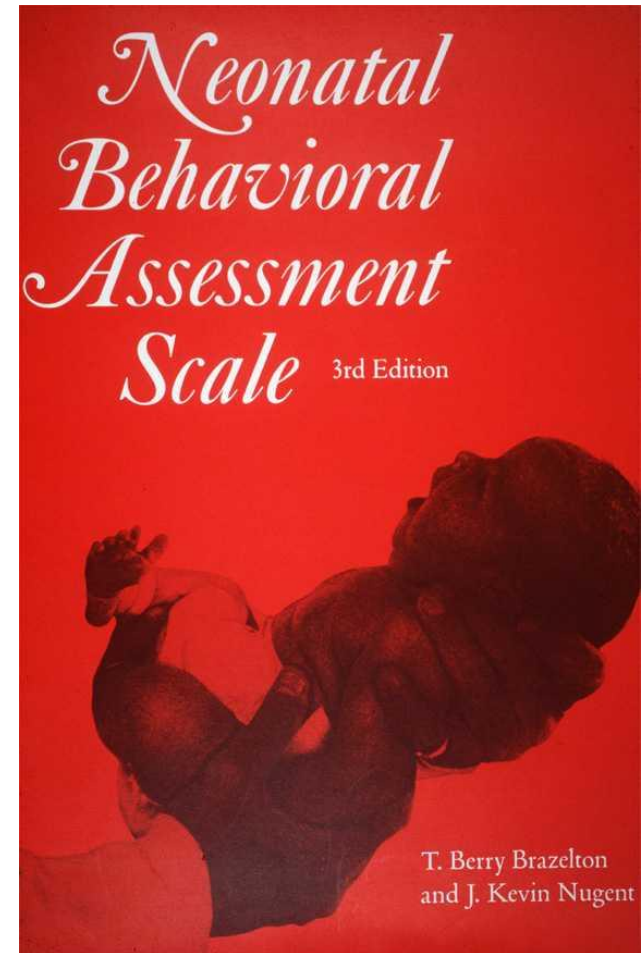
*Promoting an understanding of infant behavior*



*in Great Britain*

# The newborn: The contribution of T Berry Brazelton - the NBAS

- **The competent infant**
- **The organized infant**
- **The social infant**
- **The infant as an individual with her own unique set of dispositions and sensibilities**



# Could the NBO be an effective therapeutic tool

*Q. Could we retain the conceptual richness of the NBAS and develop a flexible interactive tool for use in clinical settings that was still effective as a form of intervention with parents?*





# NBO – infant-focused and family-centered

- The NBO gives the infant a voice – **the infant’s story**

*(answers the “who am I” question?)*

- The NBO session gives parents a voice – **the family story**

*(“who we are and what our hopes and expectations are”)*



# The Goal of the NBO:

- to sensitize parents to their infant's capabilities and individuality
- to strengthen the relationship between the parents and their infant and
- to promote a positive relationship between clinician and family



# NBO Observations Item Summary

- **Habituation** to light and sound
- **Muscle tone** in legs and arms and **activity** levels
- **Reflexes**: rooting, sucking, hand grasp, pull to sit and crawling
- **Visual and auditory Responsiveness**: face and voice, the red ball, the rattle
- **Crying and Consolability**
- **Self-regulation**



# Effects of the NBO:

- Promoted more positive interactions of pediatric residents with parents (McQuiston et al., 2006).
- Helped nurses promote positive parent-infant interactions (Sanders and Buckner, 2006).
- Reduced by 80% mothers' reports of depressive symptomatology (Nugent et al., 2007).
- Promoted positive parent-infant relationship in parents of infants with hearing loss (Hartblay, 2010).
- Contributed to parent's ability to read and respond appropriately to their infant's needs and positively influenced parental interactive competence and professional confidence (McManus and Nugent, 2012).

# Pre-training questionnaire (UK)

- Motivation – *increase knowledge, skills, better future outcomes and benefits for parents and babies, mandatory in their NHS Trust*

*‘Greater understanding, supporting parents in recognising cues and states of behaviour.*

*To empower parents to understand what their baby is saying to them.’*

# Practitioners least likely to discuss with parents

- Habituation,
- visual tracking,
- response to stress and
- hand-grasp.

# Post-training questionnaires (UK)

- Statistically significant increase in practitioners confidence level in discussing infant behaviours with parents
- Specifically – those who scored low on pre-t questionnaires showed a bigger increase in levels of confidence post training. An independent samples t-test found that the change in confidence was significantly greater for those who had initially reported low levels of recognition

## Potential change in practice:

### *Improvement in communication with parents:*

*Going at their pace - letting them set it at the start.*

*Change my language, prepare before sessions.*

*Hope to be able to communicate calm and confidence in the midst of crying baby and to be able to relate information about "states".*

*Tailoring advice depending on observations. More confidence with high risk babies.*

## Focus on baby's strengths and positivity

## Increase parents' knowledge and involvement with baby

**the Brazelton Centre**

Promoting an understanding of infant behavior



**Brazelton Institute**

Children's Hospital  
Brazelton Institute



Harvard Medical School  
Department of Pediatrics



# Objectives for NBO Training

1. Learn how to **identify, describe and interpret newborn behavior** in the context of the NBO
2. Learn how to **administer** the NBO
3. Develop a deeper understanding of the importance of **relationship-based care** in working with parents
4. Learn how to implement the NBO in a way that is **developmentally sound and culturally appropriate.**

# NBO Training

- **Step 1**: NBO training day
- **Step 2**: Study the NBO Handbook and Recording Form
- **Step 3**: Practice until comfortable with all NBO items
- **Step 4**: Participate in NBO mentoring calls
- **Step 5**: Submit recording forms of NBO with 5 families
- **Step 6**: Certificate of completion is issued



**Brazelton Institute**

[www.brazelton-institute.com](http://www.brazelton-institute.com)

Children's Hospital  
Brazelton Institute



Harvard Medical School  
Department of Pediatrics



**NBO Training sites:**

**[www.brazelton.co.uk](http://www.brazelton.co.uk)**

**[www.brazelton-institute.com](http://www.brazelton-institute.com)**

**Norway**  
**Australia**

**the Brazelton Centre**

*Promoting an understanding of infant behavior*



*in Great Britain*

# Families in neonatal units

- Parents – grief response at loss of baby they expected and loss of their pregnancy, lack confidence, anxiety, stress, much-wanted baby, unexpected event, loss of control
- Babies – behaviourally challenging, look different, uncertain outcome

## **Follow-up of babies in a neonatal unit using the NBAS (22 babies)** (Hawthorne, 2002)

- First visit – introduction, listening to parent's concerns
- Second and other visits – discussion of baby behaviour, signals and cues; observations
- First NBAS
- Second and third NBAS
- Teaching of staff

## **Brazelton concepts - 10 points**

When watching the baby with the parents, ask them:

What is your baby like – his/her personality?

What does your baby like to do/look at?

How does your baby react to noise and light?

How does your baby react to handling?

What position does your baby like to be in?

How does your baby manage his/her sleep and awake states?

How does your baby comfort him- or herself?

Is your baby cuddly?

Is your baby strong?

How does your baby show you he/she knows you?

## **Brazelton concepts - 10 points**

When watching the baby with the parents, ask them:

What is your baby like – his/her personality?

What does your baby like to do/look at?

How does your baby react to noise and light?

How does your baby react to handling?

What position does your baby like to be in?

How does your baby manage his/her sleep and awake states?

How does your baby comfort him- or herself?

Is your baby cuddly?

Is your baby strong?

How does your baby show you he/she knows you?

## Parent's comments

“Bonding is difficult in the NICU. Baby does not feel like your own. The assessment helps to affirm you do know your baby.”

“Gave us the ability to see him as a “normal” developing baby and not seem like a medical patient.”

“Sessions helped us relax and enjoy time spent with him rather than anticipating the worst.”

“Seeing someone respond to her and play with her as if she was a normal baby.”

## Parents' comments (cont.)

“Hadn’t previously realised how much it was possible to interact with her and therefore played with her much more following sessions.”

“Amazing to me to see someone being positive about my baby who was so sick.”

“Before and after the Assessment, I spent almost everyday with her. Afterwards, I just knew for certain that our guesses about her behaviour were true.”

Hawthorne, 2002

## Recent developments in the UK

- **Department of Health** named NBAS named as important intervention in the newborn period (Child Health Promotion Programme - CHPP, 2008), renamed Healthy Child Programme, 2009
- **One Plus One project** – Brief Encounters and NBAS training combined in order to develop innovative training programme for practitioners to help them support relationships between new parents and between parents and their infant. (Funded by the Department for Children, Schools and Families through the Children and Young People's Fund).
- **Project in Wales** – Getting to know you: A community project to help mothers with their newborn babies (Funded by Laura Ashley Foundation)
- **Newborn Behavioural Observations Systems Training (NBO)** introduced to UK, 2009



# Summary

- Babies are extraordinary communicators
- We can support parents in understanding their baby's language
- Supporting parents very early in the postnatal period leads to better outcomes
- The NBAS and the NBO are excellent tools for understanding babies and supporting parents

# Relationship-based intervention

- There is a growing body of scientific literature, demonstrating the positive preventative effects of **relationship-based interventions** for infants and their families
- Most successful interventions, whether they are primarily preventive or therapeutic, are based on facilitating that relationship and helping both the child and the caregiver learn to adapt successfully to each other's individuality

(Als et al. 2004; Meisels and Shonkoff, 1990; Nugent and Brazelton, 2000; Shonkoff and Phillips, 2000)

# Helping parents read, interpret and respond to behavior

- Research shows that parent's ability to read and respond appropriately to their infant's needs is the most important component of parental interactive competence (Brazelton et al. 1974; Tronick and Weinberg, 1997).
- There is evidence to show that sensitive and contingent maternal interactions between mothers and their infants have been related to better social and cognitive competence and the formation of secure attachment in **infants** (Barnard and Bee, 1984; Egeland and Farber, 1984; Greenberg et al. 1988; Grossmann and Grossmann, 1991; Mertesacker et al. 2004; Pederson et al, 1990; Van den Boom, 1994)

## Useful websites

- [www.brazelton.co.uk](http://www.brazelton.co.uk)
- [www.touchpoints.org](http://www.touchpoints.org)
- [www.brazelton-institute.com](http://www.brazelton-institute.com)
- [www.oneplusone.org.uk](http://www.oneplusone.org.uk)
- [www.zerotothree.org](http://www.zerotothree.org)
- [www.talktoyourbaby.org.uk](http://www.talktoyourbaby.org.uk)
- [www.socialbaby.com](http://www.socialbaby.com)