

## **Infância e Paz**

**3ª Semana de valorização da primeira infância e cultura da paz**

*16-19 Novembro 2010*

*SENADO FEDERAL, Brasilia, DF, Brasil*

**O ambiente de cuidados para promover a saúde mental materno infantil: a perspectiva da psicologia neonatal.**

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**“One picture is worth a ten  
thousand words.”**

*(Confucious in S J Gould and R W Purcell, 2000)*

**How did I get here?**



# Plano

- Fundo
- Ambiente de Cuidado
- Surgimento da Psicologia da Saúde Neonatal
- Resumo de evidência baseado em pesquisas
- O Presente e o Futuro - Infância e Paz

# Facts

- 70,000 Premature births are born each year in Britain  
(Wellbeing 2009)
- 2,500 of those babies will weigh less than 1816g and will require long term intensive care in a SCBU.
- Short, medium and long-term sequelae



# Facts

- A Public Health problem thus a *Public Health Psychology issue*
- Low social economic status (SES); low social economic position
- Teenagers
- Mortality decreased but morbidity increased

SPRINGS



# Rationale

- Perinatal brain plasticity increases vulnerability to early adverse experiences, leading to abnormal development and behaviour (Anand and Scalzo, 2000)

# Ambiente de Cuidado

- Físico
- Bio-psico-social e comportamento
- O bebê
- Os pais e os profissionais
- Casa e família





**Original questions:**

**Could I support them?**

**How?**

## Too much? Too little? Inappropriate

A controvérsia sobre os benefícios da estimulação sensorial com bebês hospitalizados, nos anos 1960s e 1970s



# Theoretical background

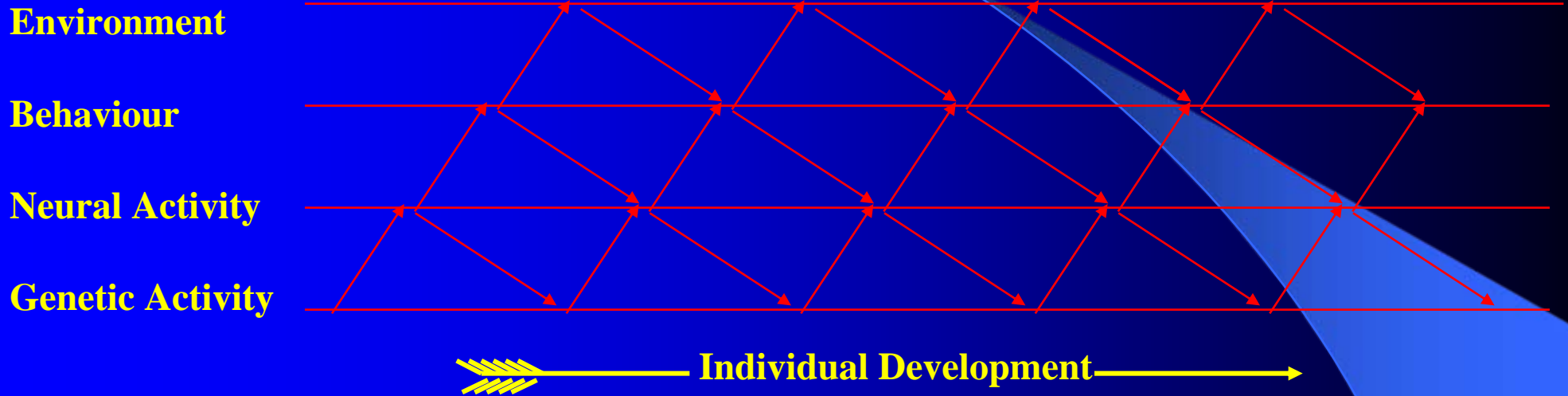
- Assumption:

Individual Development can be *maintained, facilitated or induced* by horizontal and vertical coactions

G. Gottlieb, (1991) Experiential canalization of behavioral development: theory. *Dev. Psychol.*, 27(1), 4-13



## BIDIRECTIONAL INFLUENCES



*Figure 1.* A simplified scheme of the developmental systems view, showing a hierarchy of four mutually interacting components in which there are “top-down” as well as “bottom-up” bidirectional influences.

Gottlieb, G (1991) Experiential Canalization of Behavioral Developmental Psychology, Vol. 27, 1, 4-13

# Neonatal Health Psychology (NNHP)

## Definition

“ is the scientific study of biopsychosocial and behavioural processes in health, illness and health care of the preterm (and fullterm) neonate during his/her first 28 days of life, and the relationship of such processes with later outcome” (Adamson-Macedo, 2004)

# The Dream Baby

## Prenatal and Perinatal Health Psychology

### My Scientific Passion: NNHP

4 Psychological Tasks (Caplan, Mason + Kaplan 1965)

1. Anticipatory grief
2. Acknowledgement of feeling of failure.
3. Believing that the infant will survive.
4. To understand the needs of the preterm.



# The developmental sequence of the sensory systems

The sense of Touch, the most  
developed of the senses at birth

“MEANS” and not “END”

Como poderia apoiar os prematuros e  
sua família?

**1978**

**Through systematic light  
stroking**

**Stroking:**

**passar a mão de leve**

**numa direção apenas como uma  
carícia**

# Touching And Caressing, Tender In Caring (TAC-TIC)

Principles underlying the therapy

- \* **Gentleness/lightness**
- \* **Equilibrium**
- \* **Rhythm**
- \* **Continuity**





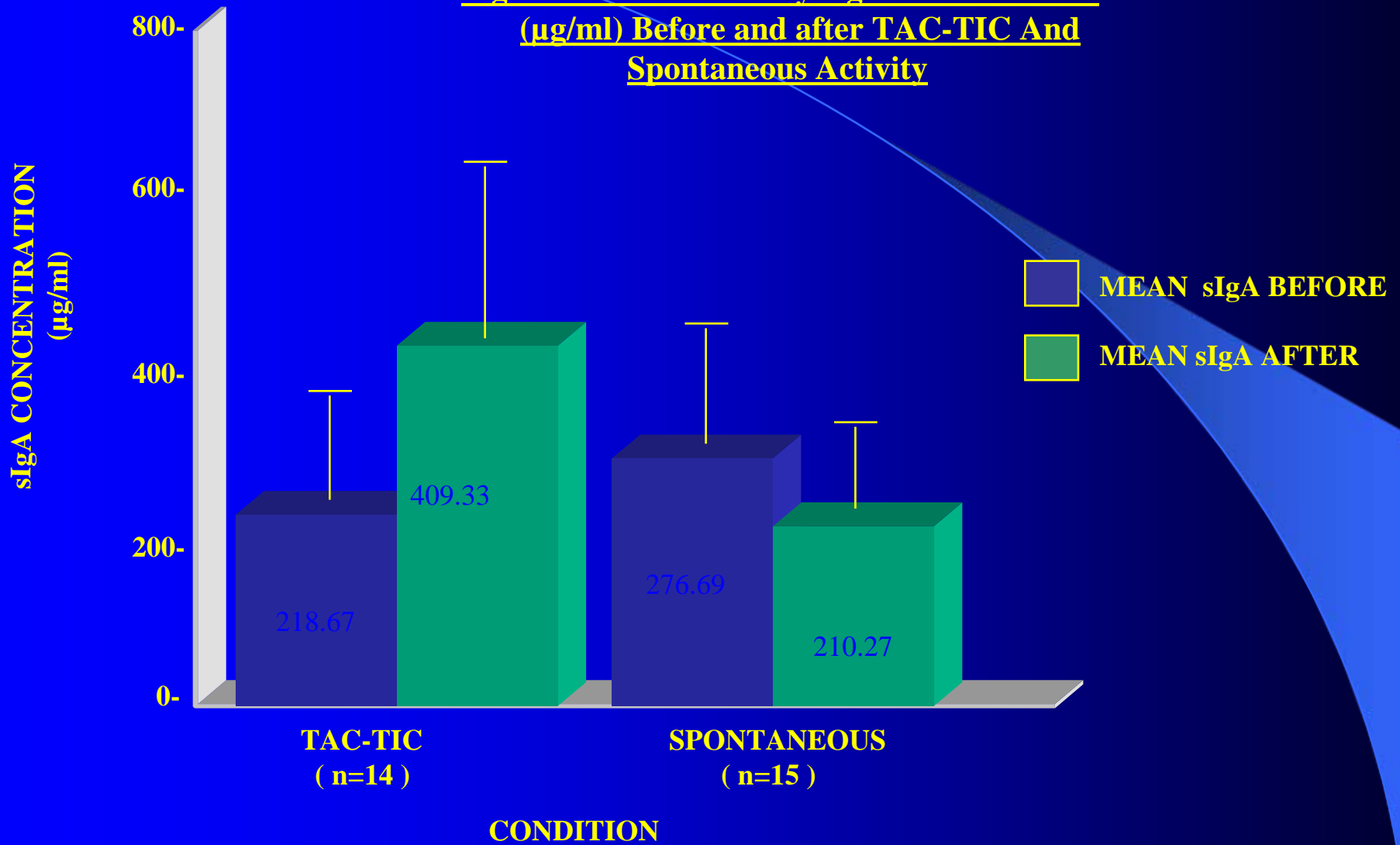
# Desenvolvimento e Saúde Mental

# Exemplos selecionados de recém-nascidos que receberam TAC-TIC

- Perderam menos peso
- Sucção mais forte e mais acelerada; melhor digestão talvez pelo aumento de secreção de lipase lingual
- Maior pressão da sucção (de Roiste & Bushnel)
  - Mecanismo: tato-sucção-alimentção
  - Acido no estomago mais acidico (Ph)
- Saturação de oxigenio ( $TcPO^2$ ) equilibrada



**Figure 1. Mean Salivary sIgA Concentration (µg/ml) Before and after TAC-TIC And Spontaneous Activity**



Hayes, Adamson-Macedo and Perera (1999)

# Importância da relação familiar



# Saúde Mental Materna:

A auto-eficácia

Apego

A auto-estima

# Self-Efficacy



Albert Bandura

- Self-Efficacy
  - ‘Perceived self-efficacy refers to beliefs in one’s capabilities to organize and execute the course of action asked to produce attainments. (Bandura, 1997, p3)
- Maternal Self-efficacy
  - ‘is specific to a women’s perceived performance in the maternal role, and the beliefs she has in her ability to respond contingently to the signals of her infant. (Teti & Gelfand, 1991)’

# Early Assessments

## **The Mother**

Perceived Maternal  
Parenting Self-Efficacy  
(PMP S-E) Scale (Barnes  
& Adamson-Macedo,  
2000)

Maternal Self-Esteem  
(McGrath, 1998)

Maternal Attachment  
(Condon & Corkindale,  
1998)



# What is Maternal Attachment?

- Attachment Theory (Ainsworth and Bowlby, 1969)
- Maternal attachment has been defined as the unique, affectionate relationship that develops between a woman and her baby and which persists over time (Muller, 1994).
- Parental affectionate attachment is perhaps most important because research has cumulatively recognised it as a major contributor to the child's healthy growth and development (Koniak-Griffin, 1993).
- The majority of literature focuses upon observable behaviours and less often measured by maternal self-reported perceptions or experiences about interactions their infant.

# What is Maternal Self-Esteem?

- is defined as; “the value a woman attaches to her reflected appraisal of herself as a mother,” (Barlow, 2004).
  - Self-esteem can derive from self-evaluations based on competence or whether people possess characteristics that are deemed as culturally positive or negative e.g. being a good parent.

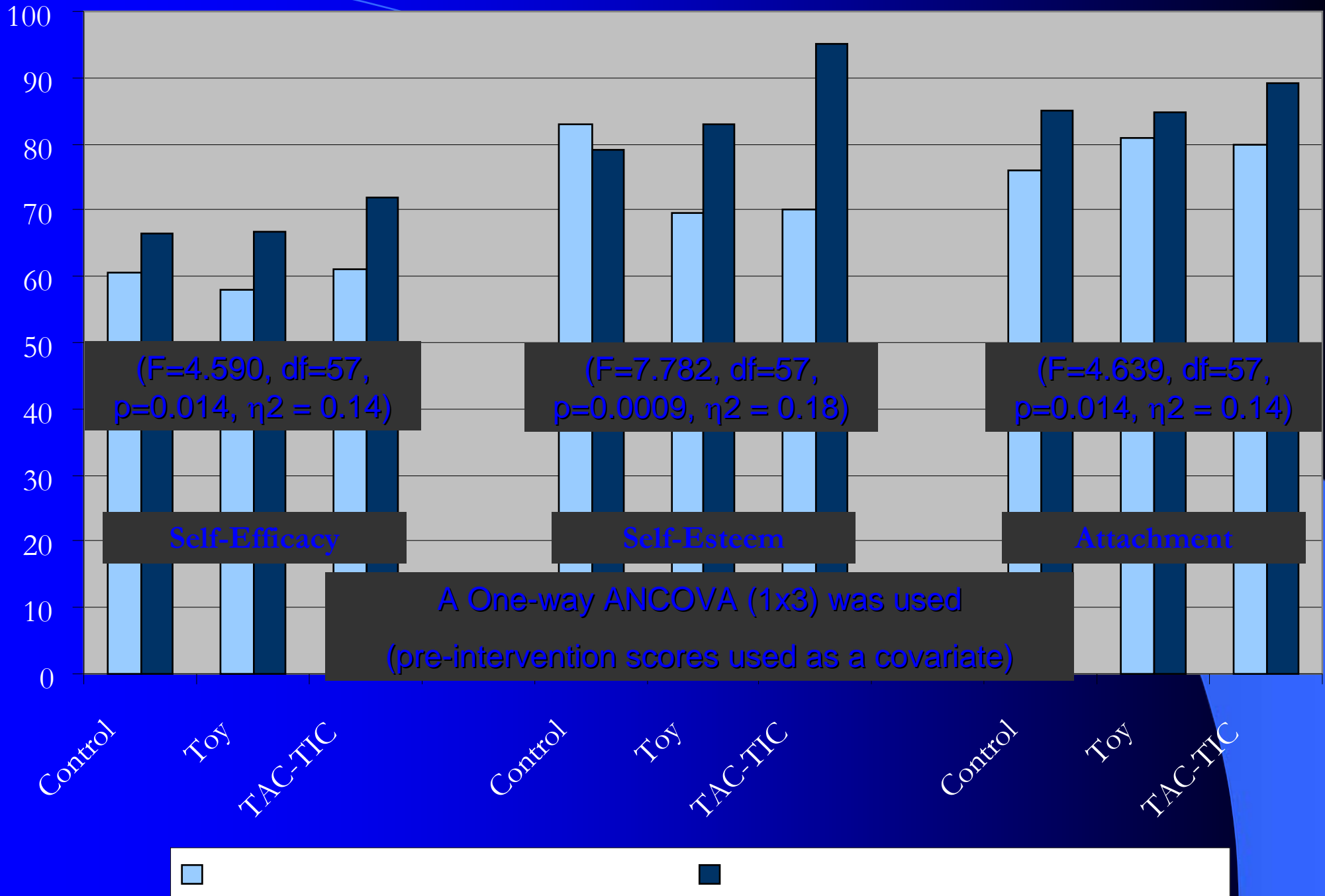


REGULAR TOY

**Barnes, C. (2008) Cognitive, Emotional and Environmental Mediators of Early Parenting in High Risk Families. unpublished Doctoral Thesis.**

**Barnes, C.R. & Adamson-Macedo, E.N. (*in Prep*) Nurturing the Mental Health of Mothers of Hospitalised Preterm Babies.**

Figure 1. Maternal Pre- and Post-Intervention Mean Total Score Measurements



# Uma nova Invenção: neo-hapy™

E.N. Adamson-Macedo, 2000 ©

## Hypothesis:

Full-term healthy babies who are exposed to a novel manual stimulus that they can explore by **neo-haptic touch** will have their cognitive, motor and communication developed and enhanced further than their fullterm counterparts exposed to a regular toy.

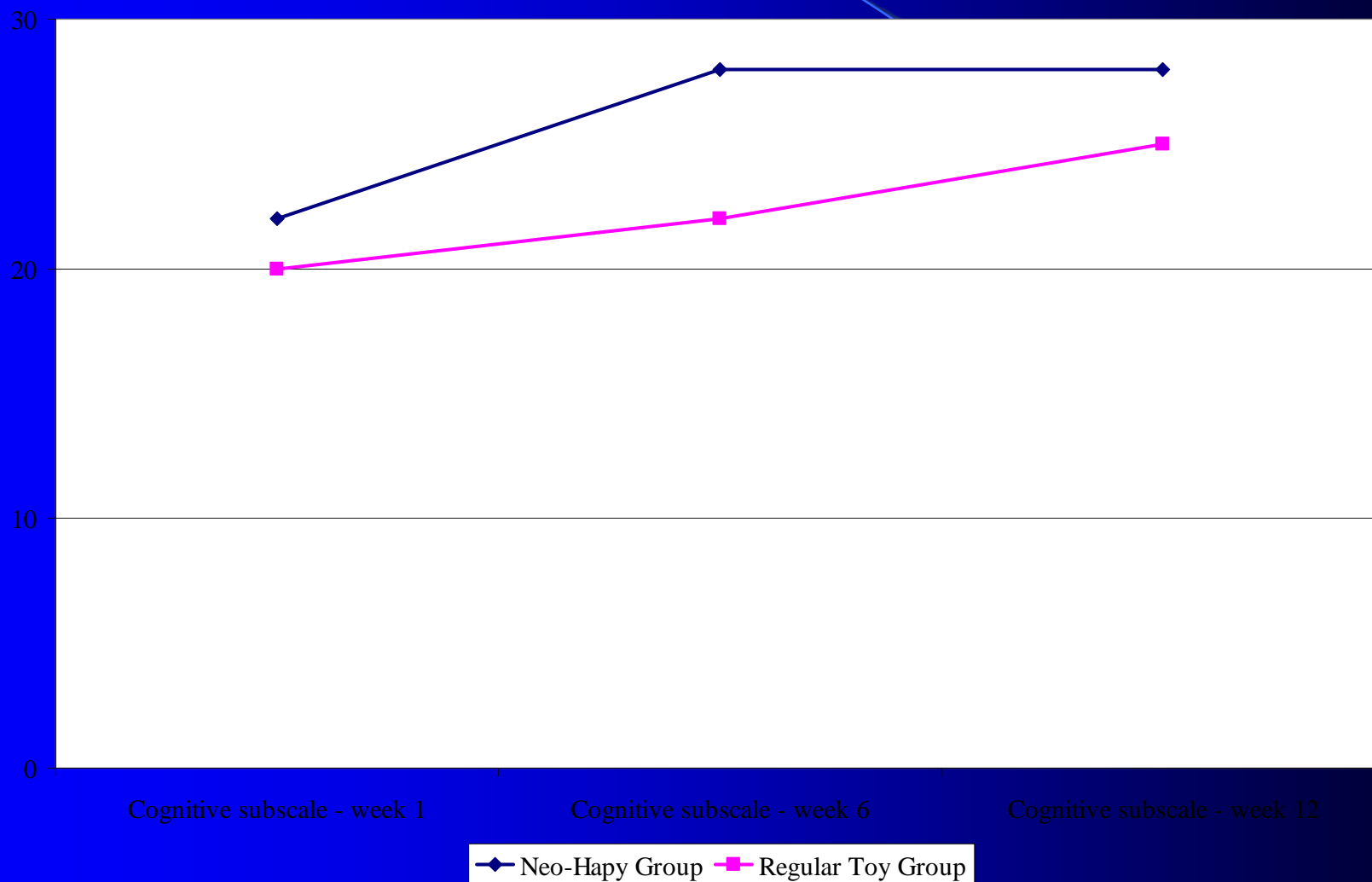


REGULAR TOY



NEO-HAPY

Figure 1. – Bayley (III) *Cognitive Subscale Scores* for the Summed for the Neo-Hapy and Regular Toy Groups.



# Maternal Statements

- **Mother 01**

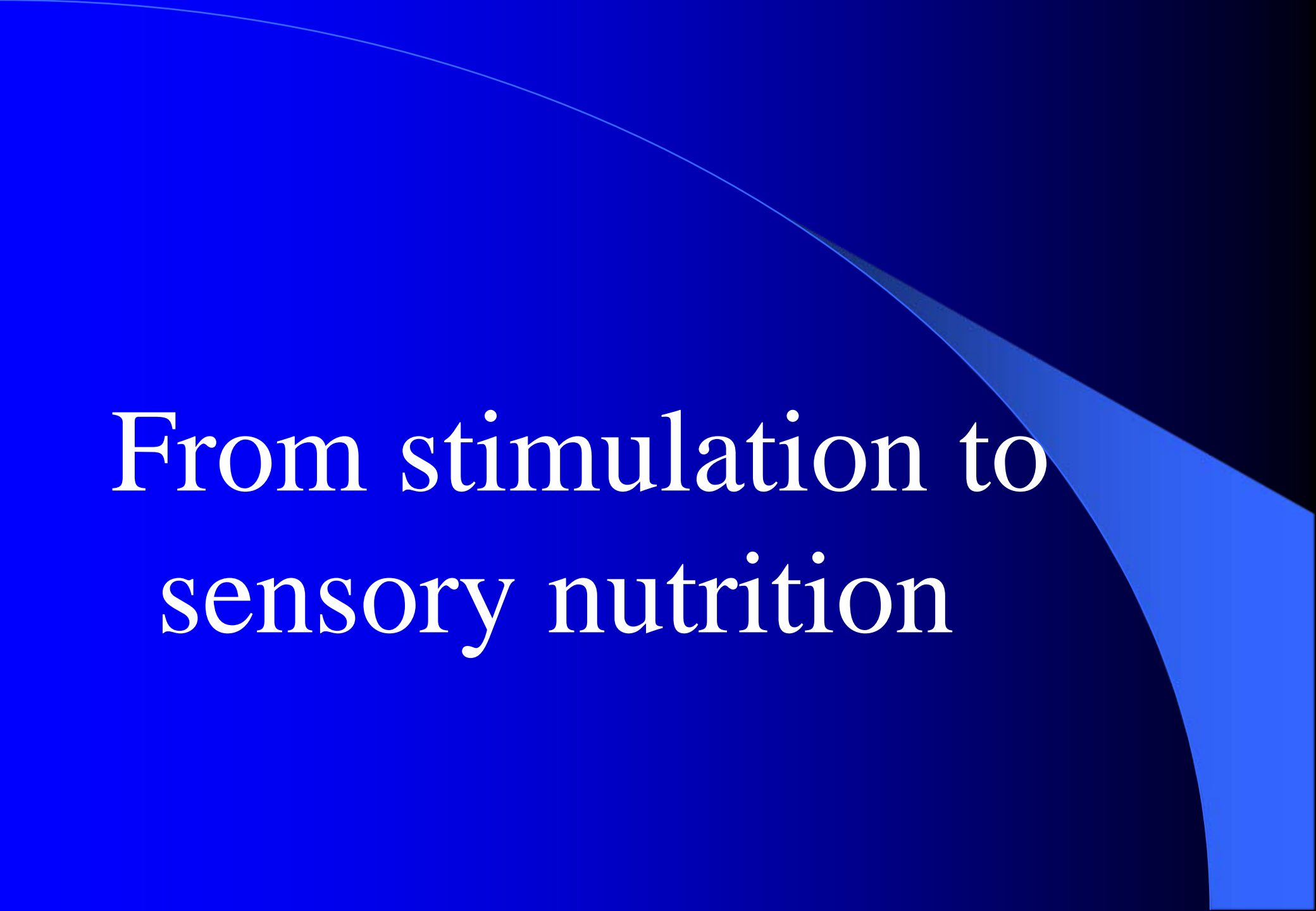
- “Did you see how she moved her hands with the toy.”

- **Mother 02**

- “I didn’t think he would do much because he doesn’t with his other toys.”

- **Mother 04**

- “When she uses the toy she always seems so calm afterwards.”



# From stimulation to sensory nutrition



# TAC-TIC: Evidence

1. Firstly, that gentle light and systematic stroking in the form of *TAC-TIC therapy does not adversely affect TcPO<sub>2</sub> levels* (an indicator of infant distress) in either relatively healthy preterm neonates (De Roiste, 1991) or those babies receiving ventilation (Adamson-Macedo et al., 1994 and 1997).
2. Secondly, preterms who received TACTIC *lost significantly less weight during* the first week of life and *gained more weight overall than controls* (Macedo, 1984 and 1985/6) although this was not supported later by De Roiste (1991).
3. De Roiste and Bushnell (1993, 1995 and 1996) found that relatively healthy preterms who received TAC-TIC demonstrated significant and *enhanced sucking behaviour*, greater acidity of stomach concentrations and *progression to all suck feeds earlier* as opposed to their controls.
4. Hayes (1999) identified that there were benefits to the immune system of the ventilated preterm in the form of *significantly increased SIgA concentrations in the saliva*.
5. It was also found that babies who received TAC-TIC also were *discharged from hospital sooner* (De Roiste and Bushnell, 1996), *moved from an incubator to a cot earlier* (Macedo, 1984; De Roiste, 1991), *displayed significantly more comfort behaviours* than distress behaviours (Hayes, 1996) and possessed *higher intelligence scores at 7 years of age* (Adamson-Macedo, 1993).

# Compreensão, Integração, Sincronização

O Ambiente de cuidado para promover  
o desenvolvimento e saúde  
mental.....

# Touch

Promoting Health, Q of L +  
Facilitating Development

Sensory  
Nutrition  
**TAC-TIC  
Therapy**

Being  
Touched

Touching Oneself

Touching Objects

Early  
(developmental  
appropriate)  
Nurturing Support

New theory of  
play. New  
paradigms

Early Haptic Touch  
(Neo-Haptic Touch)

Applied

Theoretical  
Applied  
Action

*Neoplay*

Theoretical +  
Applied

Supporting Parents and Babies: Continuity of Care: Hospital  
and Community Based Action.

# Conclusão

- Implicações & procura pelo Equilibrium
- O papel da Psicólogo Neonatal
- Applications - o futuro juntos em defesa da Infância e Paz
- O ambiente de cuidado MELHOR é o individualizado que facilita/promove/sustenta a saúde física/mental/desenvolvimeto sistêmico

OBRIGADA -por cuidar de mim com gentileza e carinho  
Continuemos juntos a grande jornada

Pela Infância e Paz



OBRIGADA -por cuidar de mim com gentileza e carinho  
Continuemos juntos a grande jornada

Pela Infância e Paz

