

# Family Relationship Influences on Children's Mental Health: New Research, Emerging Themes, Future Opportunities

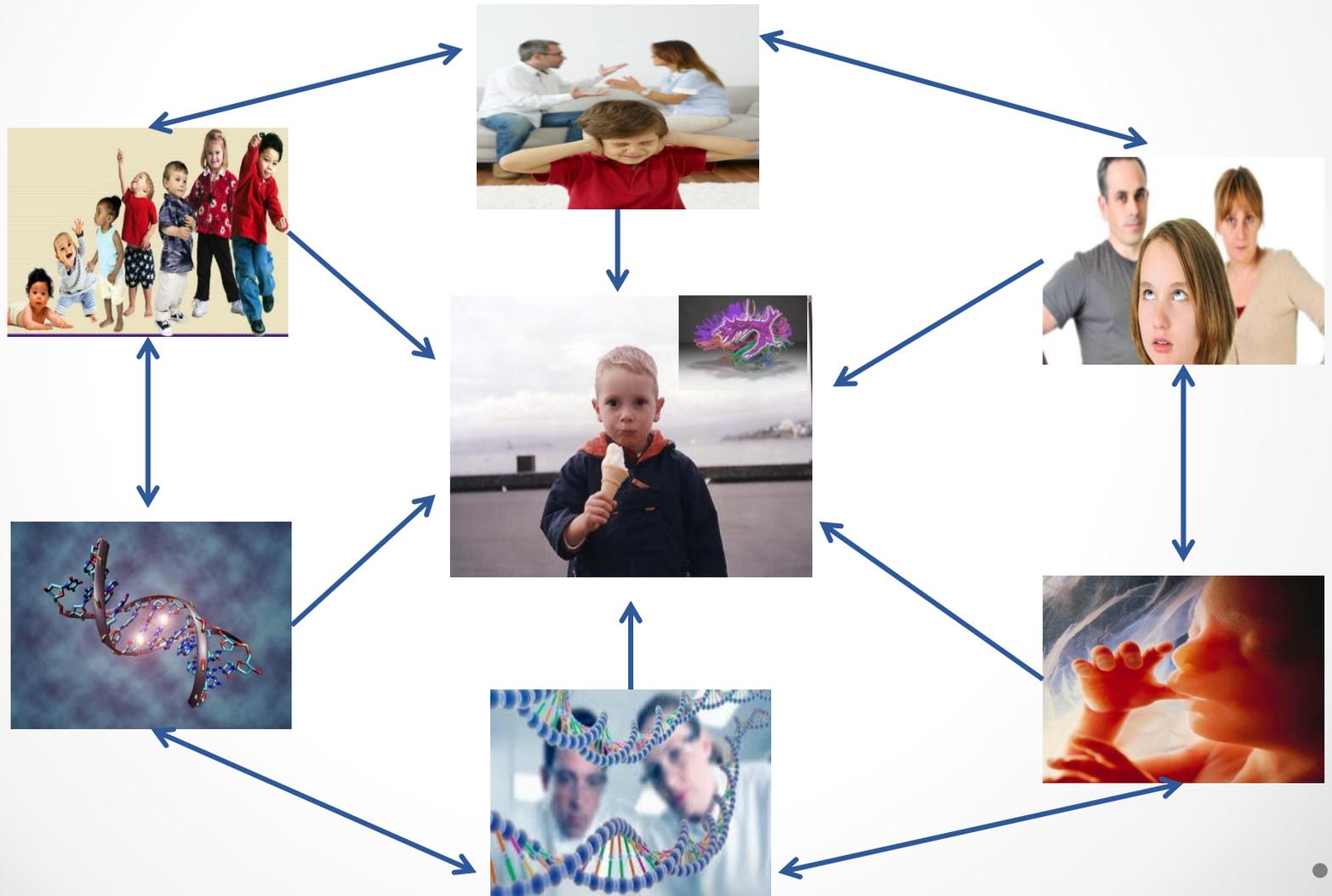
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Growing Up in Ireland Research Conference, Croke Park Conference Centre, Dublin,  
2016

# Processes Underlying Children's Mental Health and Development



# Overview of Presentation

- Family relationship influences on children's mental health/outcomes
  - A brief review of theory and research
    - Focus on the inter-parental and parent-child relationships
    - Addressing caveats of past research
- Examining the role of family relationships on child mental health/outcomes – What is the evidence?
  - Example Study 1: Inter-parental conflict and children's sleep problems, or vice versa?
  - Example Study 2: The role of parenting underlying inter-parental conflict and child conduct problems?
  - Example Study 3: Examining prenatal and postnatal stress and children's conduct problems: The advantages of multiple complementary research designs
- Implications for practice and policy
  - Summary and recommendations
  - Implications for policy (and practice)

# Family Factors and Child Mental Health

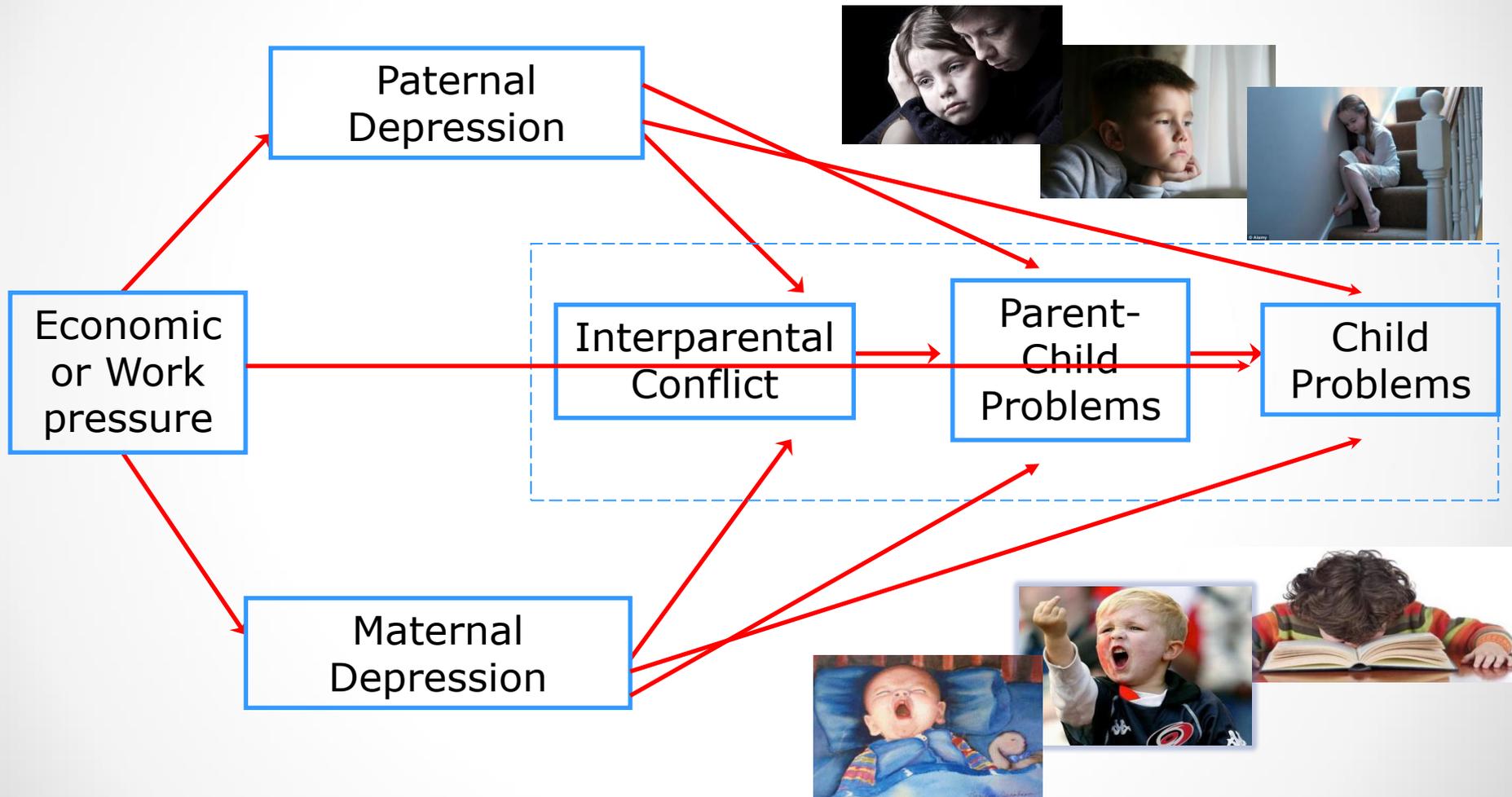
- How are children affected by family factors
  - Internalising problems
  - Externalising problem
  - Social competence
  - Academic attainment
  - Physical health
- Medical/social care/production
  - Depression – WHO 2020
  - Conduct disorder - £22 billion
  - Education, employability



- What family factors affect children
  - Family stress (econ. press/poverty)
  - Parent mental health
  - Parenting behaviour/practices
  - Inter-parental conflict, DV
  - Parental separation-divorce



# A Process Model of Family Relationship Influences on Child Mental Health

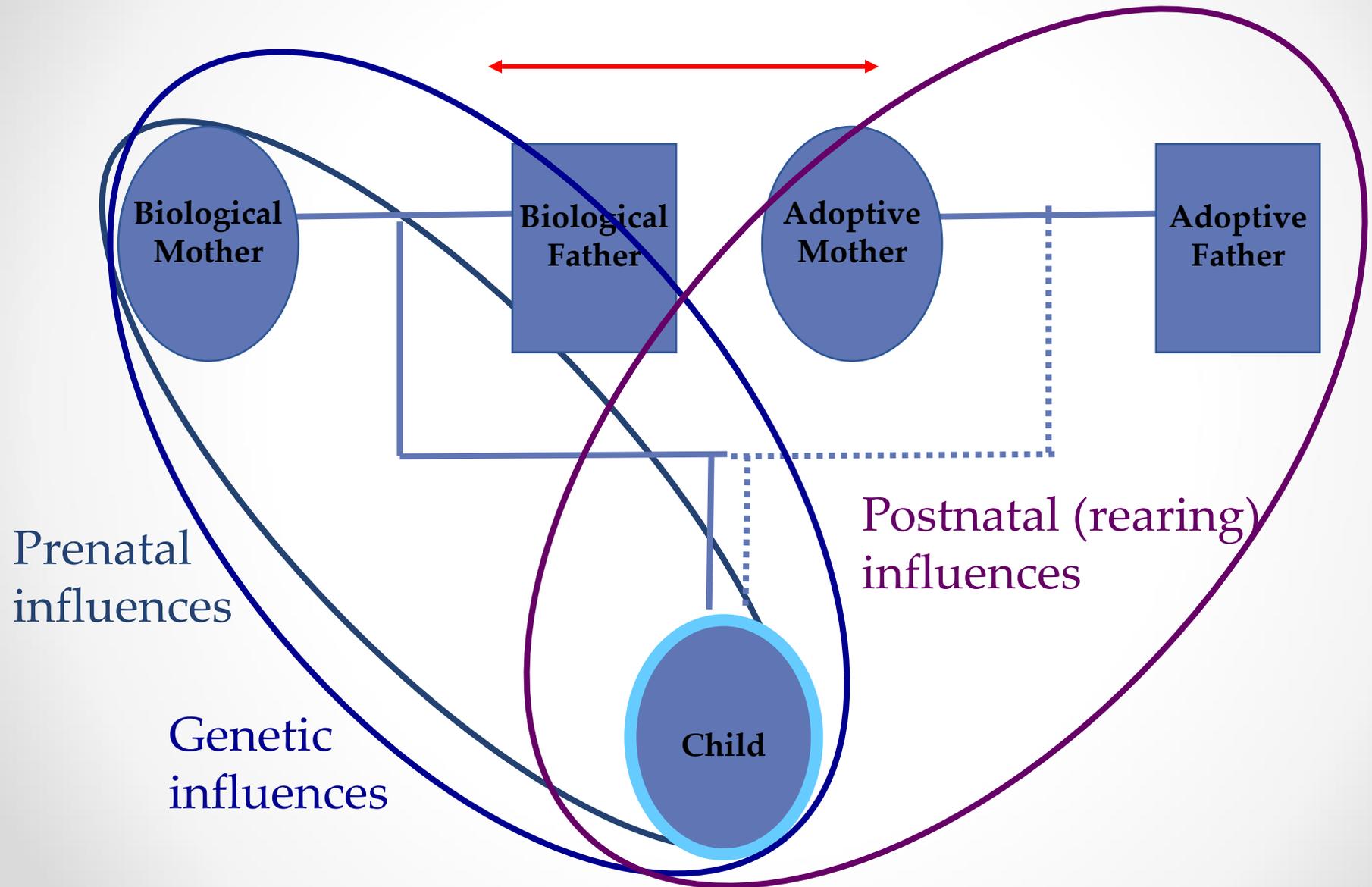


# Caveats of Past Research

- Salience of the family environment ?
  - Predominantly conducted with biologically related parents and children
  - Limited examination of maternal AND paternal influences on outcomes
- What if it is all in the genes?
  - Associations between parental behaviour (e.g. parenting) and child behaviour is BECAUSE children share genes with their parents??
    - Passive *rGe*; Evocative *rGE*
- Disentangling genetic factors from rearing environment factors
  - A challenge of research design



# Disentangling *rGE* by Research Design



# Does Inter-Parental Conflict affect Children's mental health?

## Sleep and Children's Early Brain Development

Mannering, A., Harold, G. T., Leve, L., et al., (2010). Longitudinal Associations Between Marital Instability and Child Sleep Problems across Infancy and Toddlerhood. *Child Development*.

# Early Growth and Development Study (Adoption at Birth Design)

## Sample

- 561 sets of adopted children, adoptive parents, and birth parents
  - Sample retention: Adoptive family = 90% Birth parent = 92%
  - Families assessed at child age 9-, 18-, 27-months of age; ongoing assessments at 4.5 years, 6 years, 7 years, 8 years, 9 years
  - Present sample included 341 linked families assessed at 27 months, 4.5 years, and 6 years
- Nationally-representative sample of families who made domestic infant adoption placements in the United States between 2003-2009

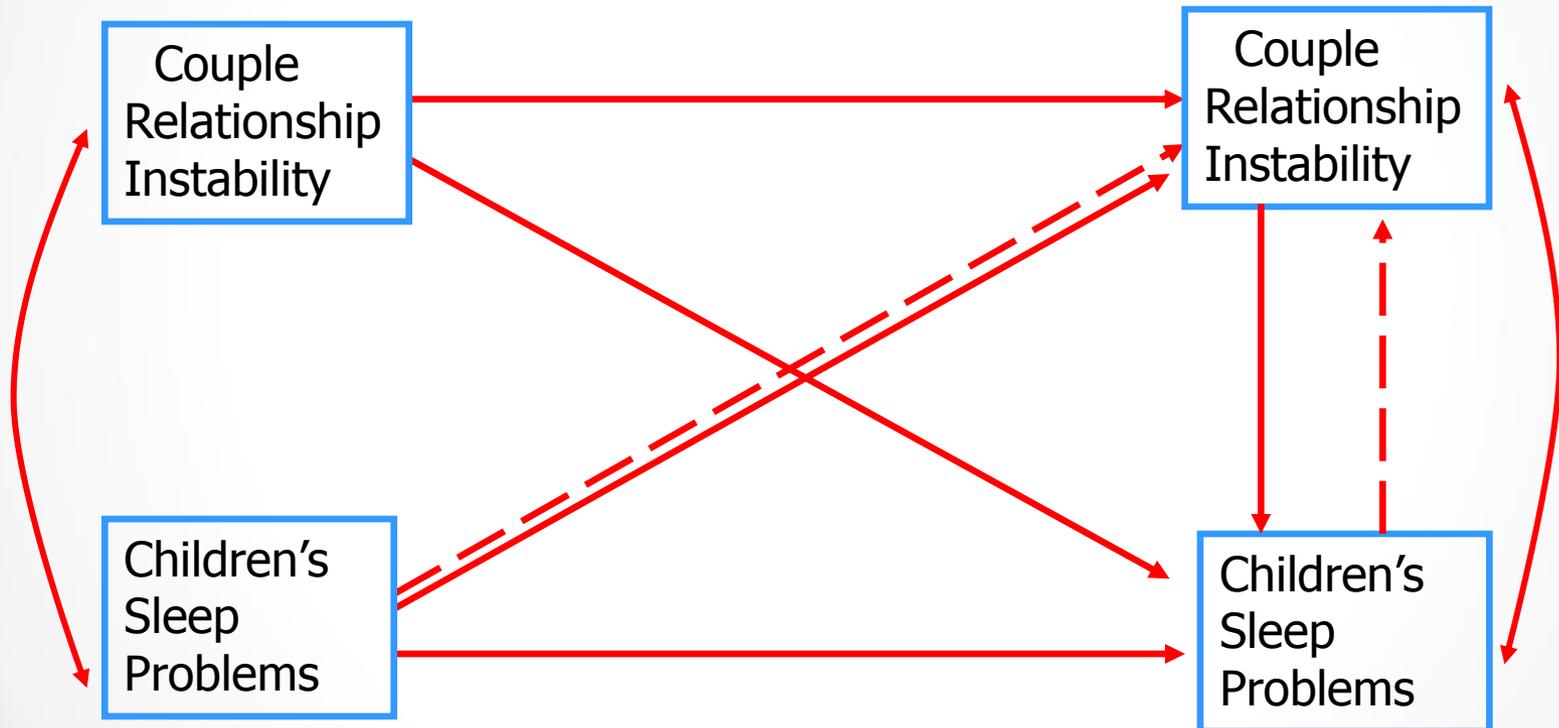
## Method

- Videotaped Observation – adoptive families
  - Child temperament, parent-child interactions, marital interactions video recorded in the home during 3-hour home visits at each wave. Coding for these tasks is on-going
- Questionnaire – adoptive parents
  - Couple relationship, parent-child relationship, symptoms of depression and anxiety, family economic conditions, styles of family interaction, parenting style, children's emotional and behavioural well-being, child sleep problems
- Questionnaire – birth parents
  - Couple relationship, diagnosis and symptoms of psychopathology, drug use, economic conditions, life stress, temperament

# IPC and Children's Sleep Problems

Age 9 Months

Age 18 months



# Summary

- Directions of effects??
  - Relationship instability (inter-parental conflict) affects children, not the other way around
- The role of genes??
  - Sample is an adoption sample
    - Children and parents are not genetically related
    - Association cannot be explained by underlying common genetic factors
- Inter-parental conflict is a salient environmental factor for children's development
  - What factors explain effects on development?
    - Families as systems (maternal and paternal parenting)

# What Explains the Effects of Inter-Parental Conflict on Children?

## The Role of Parenting

Harold, G. T., Leve, L. D., et al., (2013). The Nature of Nurture: Disentangling Passive Genotype-Environment Correlation from Family Relationship Influences on Children's Externalizing Problems. *Journal of Family Psychology*.

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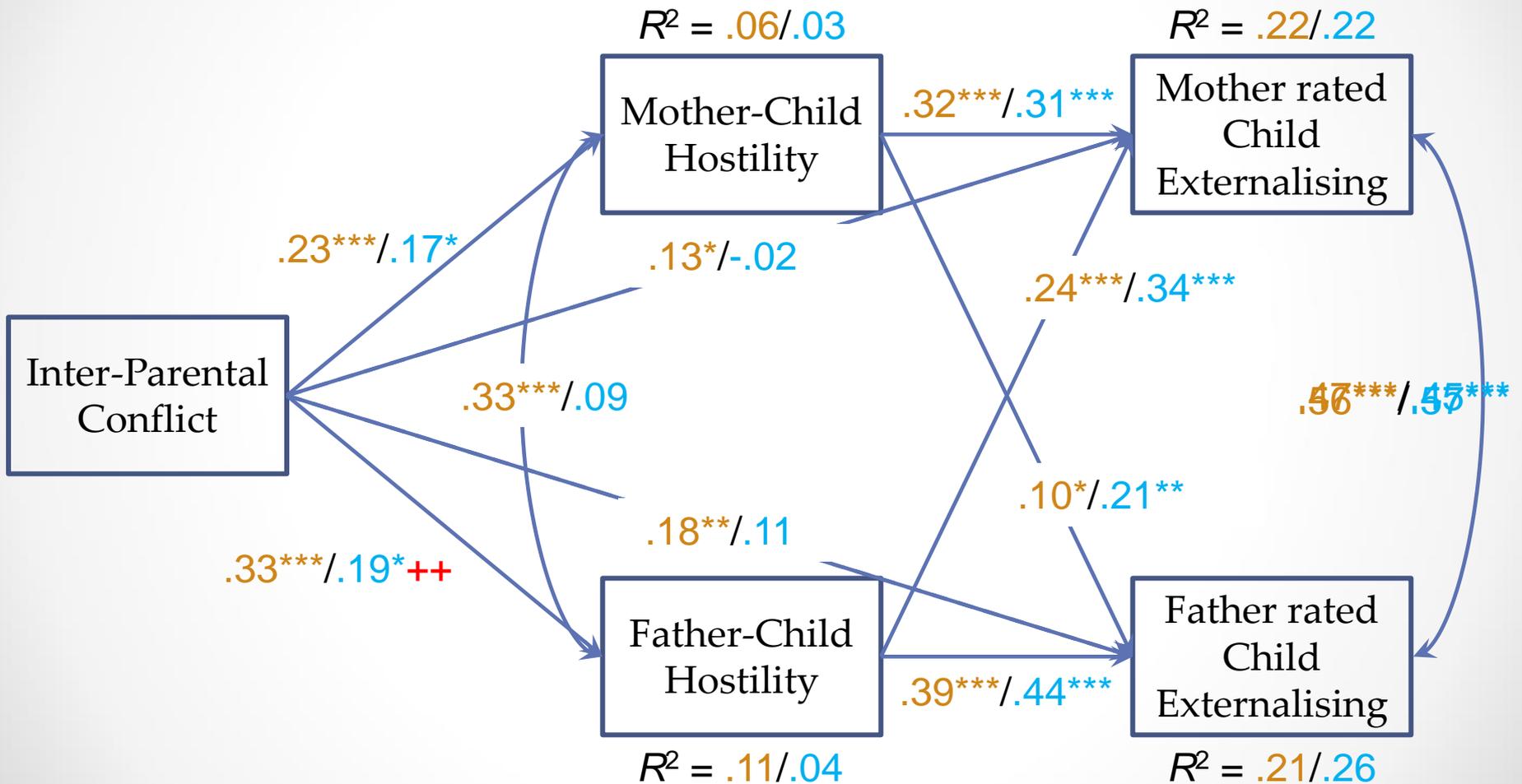
# UK In Vitro Fertilization Study (An Adoption at Conception Design)

- Children born through *in-vitro* fertilisation (IVF)
  - 20 fertility centres within the UK (1 in US)
    - 888 families
      - Homologous IVF N = 444
      - Sperm donation N = 210
      - Egg donation N = 175
      - Embryo donation N=36
      - Gestational surrogacy N=23
  - Families who had a live birth (1994 – 2002)
    - Children aged between 4 – 10 years (mean = 6.80 yrs, SD=1.23)
    - Demographics (family income, parent education, ethnicity)
    - Present sample included children aged 5-8 years old ( $m = 6.49$ ,  $sd = .85$ )
- Genetically related versus unrelated groups
  - Genetically Related
    - Mothers (N=546): Homologous, sperm donation, surrogacy
    - Fathers (N=531): Homologous, egg donation, surrogacy
  - Genetically Unrelated
    - Mothers (N=160): Egg and embryo donation
    - Fathers (N=173): Sperm and embryo donation

# Study Measures (IVF/EGDS)

- Inter-parental Conflict
  - Self report of hostility towards spouse
    - IVF & EGDS: Behavior Affect Rating Scale (mothers,  $\alpha=.89/.88$ ; fathers,  $\alpha=.91/.90$ , Melby et al., 1993)
- Parent-Child Relations (Hostile Parenting)
  - Mother & Father report of hostility toward child
    - IVF & EGDS: IYFP Ratings Scales (mother,  $\alpha=.70/.82$ ; father,  $\alpha=.75/.80$ , Melby et al., 1993).
- Child Externalising Behavior (conduct problems)
  - Mother & Father report of child conduct problems
    - Cardiff IVF: Strengths and Difficulties Questionnaire (mother,  $\alpha=.80$ ; father,  $\alpha=.78$ )
    - EGDS: Externalizing subscale, Child Behavior Check List, (mother,  $\alpha=.88$ ; father,  $\alpha=.90$ )

# Theoretical Model (IVF / EGDS)



\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

# Summary and Considerations

- Family relationship influences on children
  - Inter-parental conflict affects children's externalising (conduct) problems through disrupted mother-child and father-child relationships (spillover)
  - Confound of passive rGE controlled
  - Inter-parental conflict as context may have greater disruptive influence on father-child compared to mother-child relationship
  - Implications for intervention (promoting positive maternal and paternal parenting practices in the context of inter-parental conflict)
- Limitations and considerations
  - Cross-sectional analyses; Rearing (adoptive) parent reports
    - Past longitudinal and experimental evidence; Opposite parent report of child externalizing
  - Role of evocative rGE
    - Genetically informed attributes in the child may evoke disrupted family relationship behaviours/patterns

## Study 3

# Advantages Offered by Complementary Research Designs: Examining Prenatal and Postnatal Stress on Children's Conduct Problems

## Longitudinal Cohort Advantages

Gaysina, D., Fergusson, D., Leve, L., Horwood, J., Neiderhiser, J., Reiss, D., Shaw, D., Natsuaki, M., Elam, K., & Harold, G. T. (2013). Maternal smoking during pregnancy and offspring conduct problems: Evidence from three independent genetically sensitive research designs. *JAMA Psychiatry* 70 (9), 956-963.

# The Christchurch Health and Development Study

- Sample:** Birth cohort of 1265 children born in Christchurch (NZ) in mid-1977
- Assessments:** Annually birth to age 16 years, then at 18, 21, 25, 30 and 35 years.  
Further assessment planned for age 40 (2017)
- Data sources:** Participant and parent interviews, teacher reports, cognitive testing, official records (medical, police, etc.), genetic factors

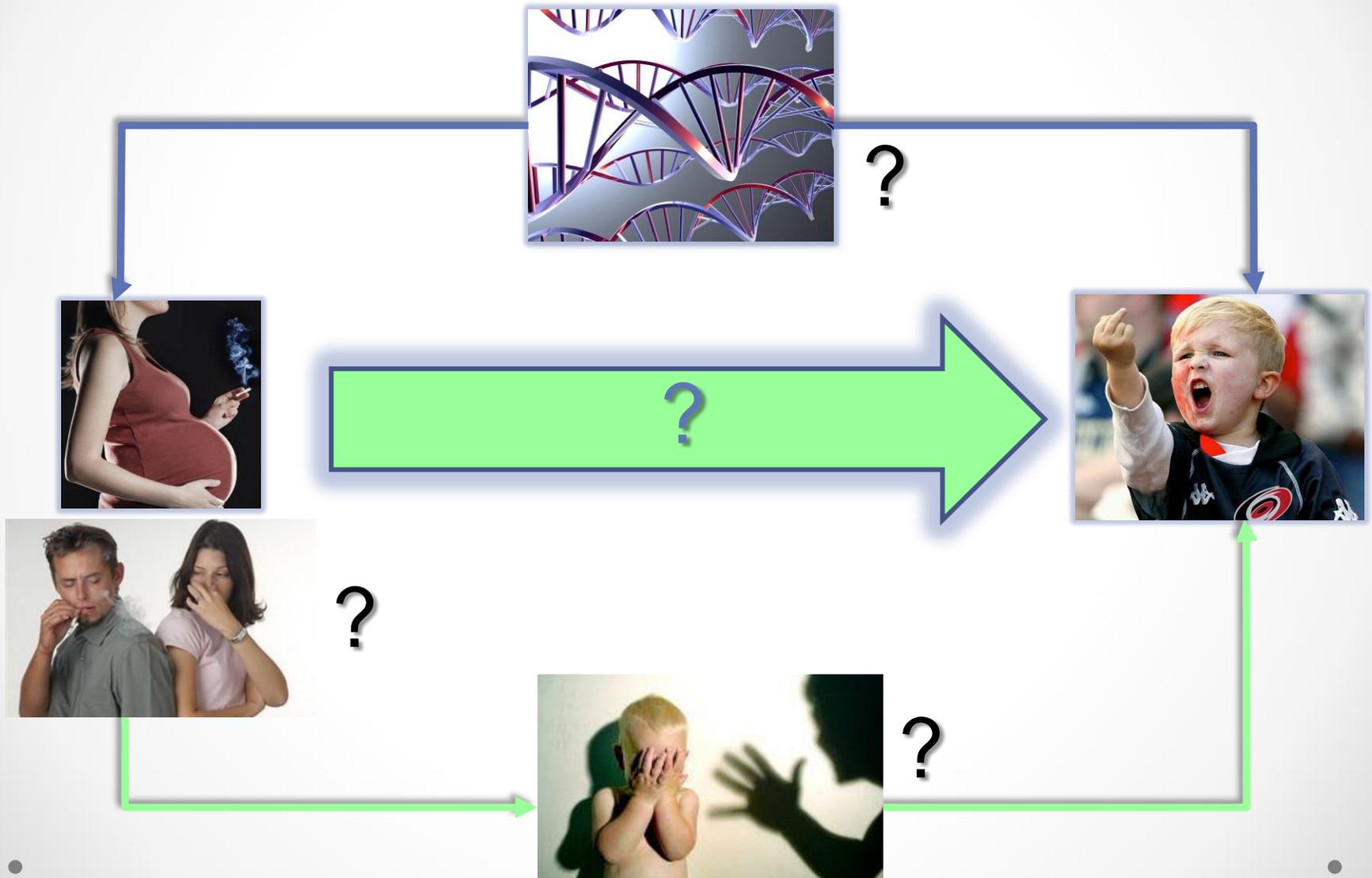
## Unique Study Attributes:

- High sample retention (~80%)
- Detailed assessment of risk/protective factors (social, family, individual, peer, time dynamic stressors)
- Availability of gene chip data
- Comprehensive assessment of mental health and psychosocial phenotypes (depression, anxiety, suicidality, substance use/abuse, antisocial behaviour, social/partner relationships, parenthood, education, employment, etc.) over the life course

# Pregnancy Smoking, Early Parenting and Conduct Problems

- The Christchurch Health and Development Study (CHDS): 1088 children reared by genetically-related mothers and 36 children reared by genetically-unrelated adoptive mothers
- Early Growth and Development Study (EGDS): >500 children reared by genetically-unrelated adoptive mothers
- The Cardiff IVF Study: >800 children reared by genetically-related mothers and 206 children reared by genetically-unrelated mothers

# Prenatal - Postnatal Stress and Child Conduct Problems



# Bringing it All Together

- Highlighting the role of family relationship influences on children 's mental health and development
  - Inter-parental relationship; Parent-child relationships (M and F)
- Testing Hypotheses on Environmental Causal Effects on Behaviour
  - The need to develop research designs that allow examination of “gene free measures of environmental risk” (Rutter, 2001)
  - Inter-parental relationship and parenting “environmental” influences
  - Salience of rearing experiences on children's mental health
- Advantages of utilising a complement of research designs
  - Adoption at birth longitudinal study (US, EGDS)
  - Cardiff IVF Study (UK, C-IVF)
  - Christchurch Health and Development Study (NZ, CHDS)
- Implications for practice and policy
  - Evidence-based guidance as to intervention focus
    - When do we target, who do we target, what do we target?
  - Converting research to policy and practice recommendations

# Longitudinal Evidence to 'Life Chances' Policy

What Works To Enhance I... X +

www.eif.org.uk/publication/what-works-to-enhance-inter-parental-relationships-and-improve-outcc

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## WHAT WORKS TO ENHANCE INTER-PARENTAL RELATIONSHIPS AND IMPROVE OUTCOMES FOR CHILDREN?

EARLY INTERVENTION FOUNDATION

Our assessment of programmes that aim to enhance the inter-parental relationship and improve outcomes for children shows that many of these need more testing

The Early Intervention Foundation have carried out a review of 'What works to enhance inter-parental relationships and improve outcomes for children' for the Department for Work and Pensions.

The review has been led by Professor Gordon Harold, an expert on the role of the family in children's psychological development, and Dr. Ruth Sellers from the Andrew and Virginia Rudd Centre for Adoption Research and Practice at the University of Sussex.

Key findings include:

- » The quality of the inter-parental relationship, specifically how parents communicate and relate to each other, is increasingly recognised as a primary

US UNIVERSITY OF SUSSEX | Department for Work & Pensions

What Works To Enhance Inter-Parental Relationships and Improve Outcomes for Children?

Search the web and Windows

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# UK Mental health and Policy 'Change'

## DWP Local Family Offer

21 September 2016

Sunita Walton  
DWP Family Policy Team

## Relationship Support Policy Objectives

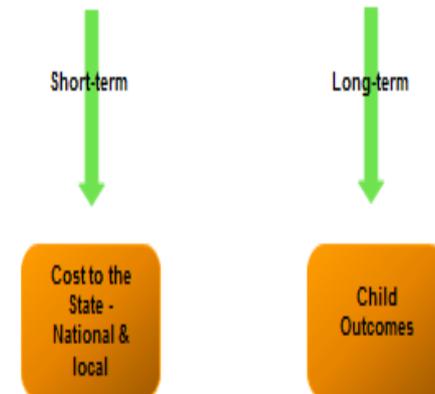
### Overall Objective

To improve outcomes for families and children through a focus on the quality of inter-parental and family relationships in order to improve outcomes for children. This may mean:

❖ Helping parents manage and resolve conflict – whether together or apart

❖ Why does this matter?

❖ Impact of poor quality relationships and relationship breakdown...



# Growing Up in Ireland: A World Class Resource



## Infant Cohort

Random sample drawn from Child Benefit Register  
Population 73,362

9 months

- 11,134
- Interviewed between September 2008 and April 2009
- 69% positive response rate of valid contacts made

3 years

- 9,793
- Interviewed between December 2010 and June 2011
- 87.96% retention rate

5 years

- 9,001
- Interviewed between December 2012 and June 2013
- 91.91% retention rate (from Wave 2; 80.84% from Wave 1)

7 years

- Inter-wave contact, postal questionnaire only
- Will happen between October 2015 and February 2016

9 years

- Full home and school-based assessment
- Will happen between March 2018 and August 2018

Phase 1 - 2006-2014



Phase 2 - 2015-2019



## Child Cohort

Representative sample of 910 primary schools drawn from the national total of 3200 schools - random sample of children drawn from within the 910 schools.

9 years

- 8,568
- Interviewed between September 2007 and April 2008
- Response rates: 82% at school level, 57% at family level

13 years

- 7,400
- Interviewed between August 2011 and February 2012
- 86.37% retention rate

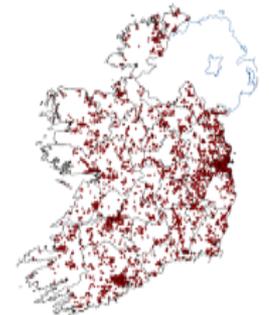
17 years

- Full home based assessment
- Will be interviewed between August 2015 and March 2016
- Linkage to State examination results

20 years

- Will be interviewed between August 2018 and March 2019

Phase 1 - 2006-2014



Phase 2 - 2015-2019

# Growing Up in Ireland: A World Class Resource

- Unique cross-cohort research design
- Multidisciplinary study team
- Natural experimental design (economic impacts on families/children; recent referendum; 'State of the nation' during 'change')
- A member of a global family of cohort longitudinal studies (Growing up 'family')
  - International initiatives – GCRF; CLOSER (ESRC, MRC, Wellcome)
- A nations health/productivity is directly linked to
- investment in research – here's to the next 10 years+