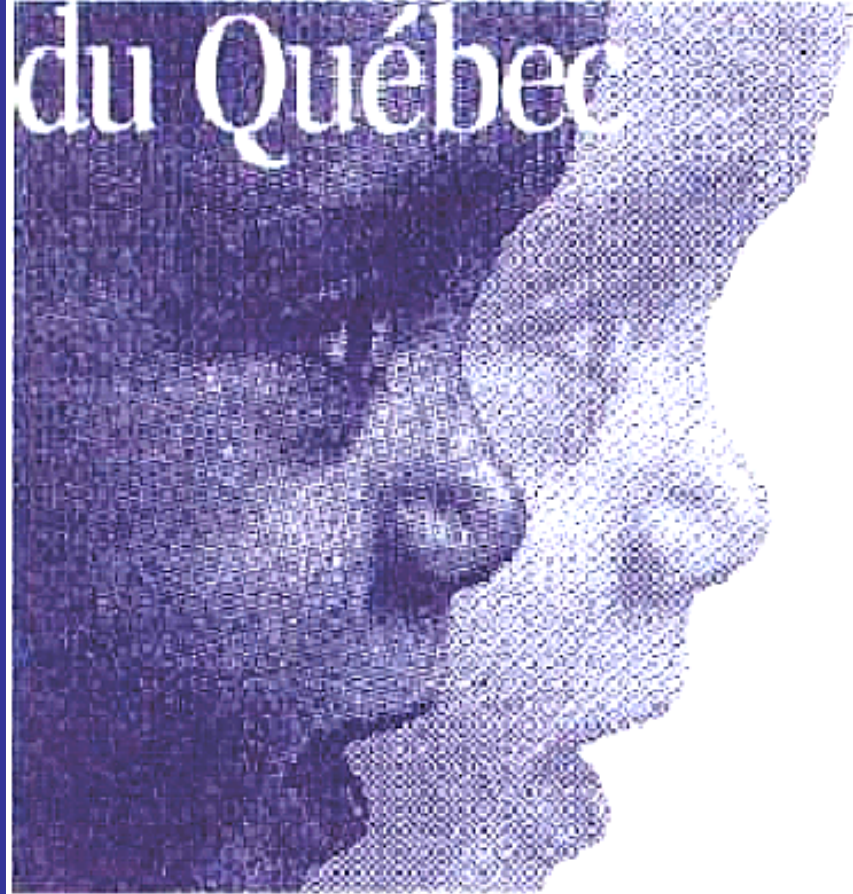


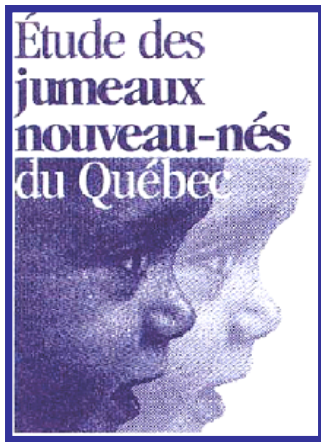
Étude des
jumeaux
nouveau-nés
du Québec



Groupe de recherche
sur l'inadaptation
psychosociale chez l'enfant

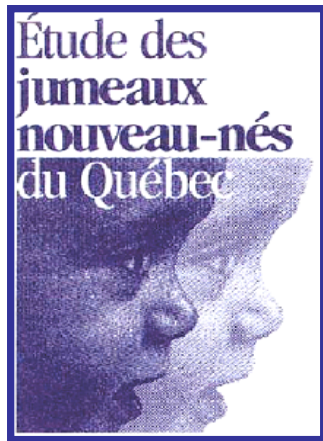
GRIP

**The Quebec
Newborn Twins
Study:
16 years into the
adventure...**

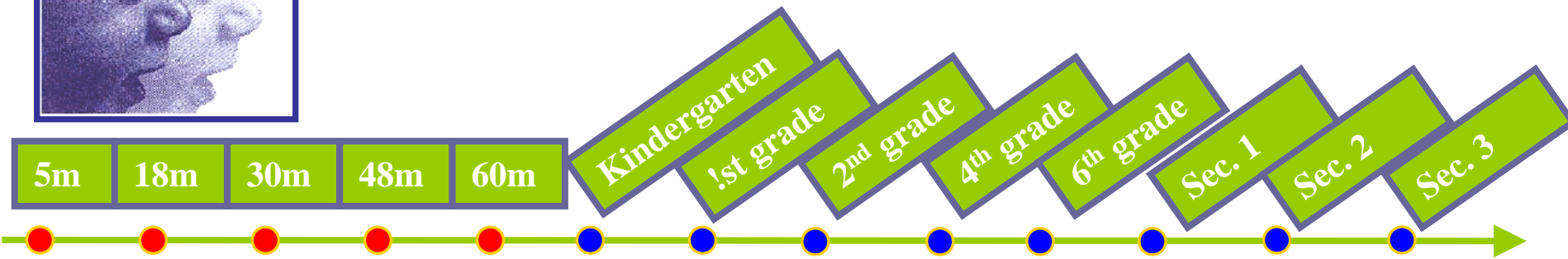


QNTS

- **Population-Based Birth Cohort**
- **Twins born between November 1995 and July 1998 in the Greater Montreal area**
- **715 families initially enrolled (twins, parents + twins' friends)**
- **13th data wave is ongoing**

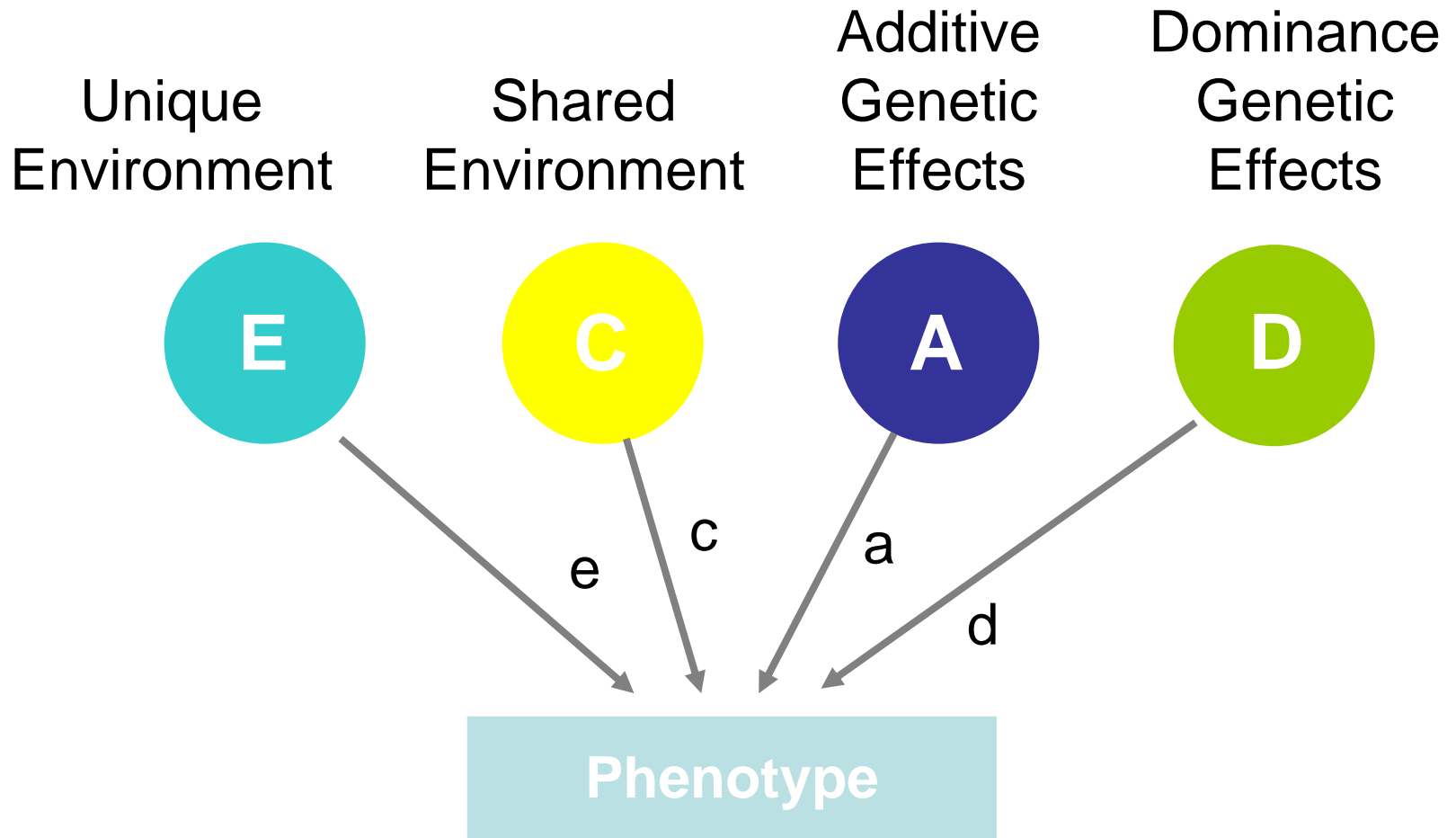


- **Data wave based on gestational age**
- **Data wave based on school level**



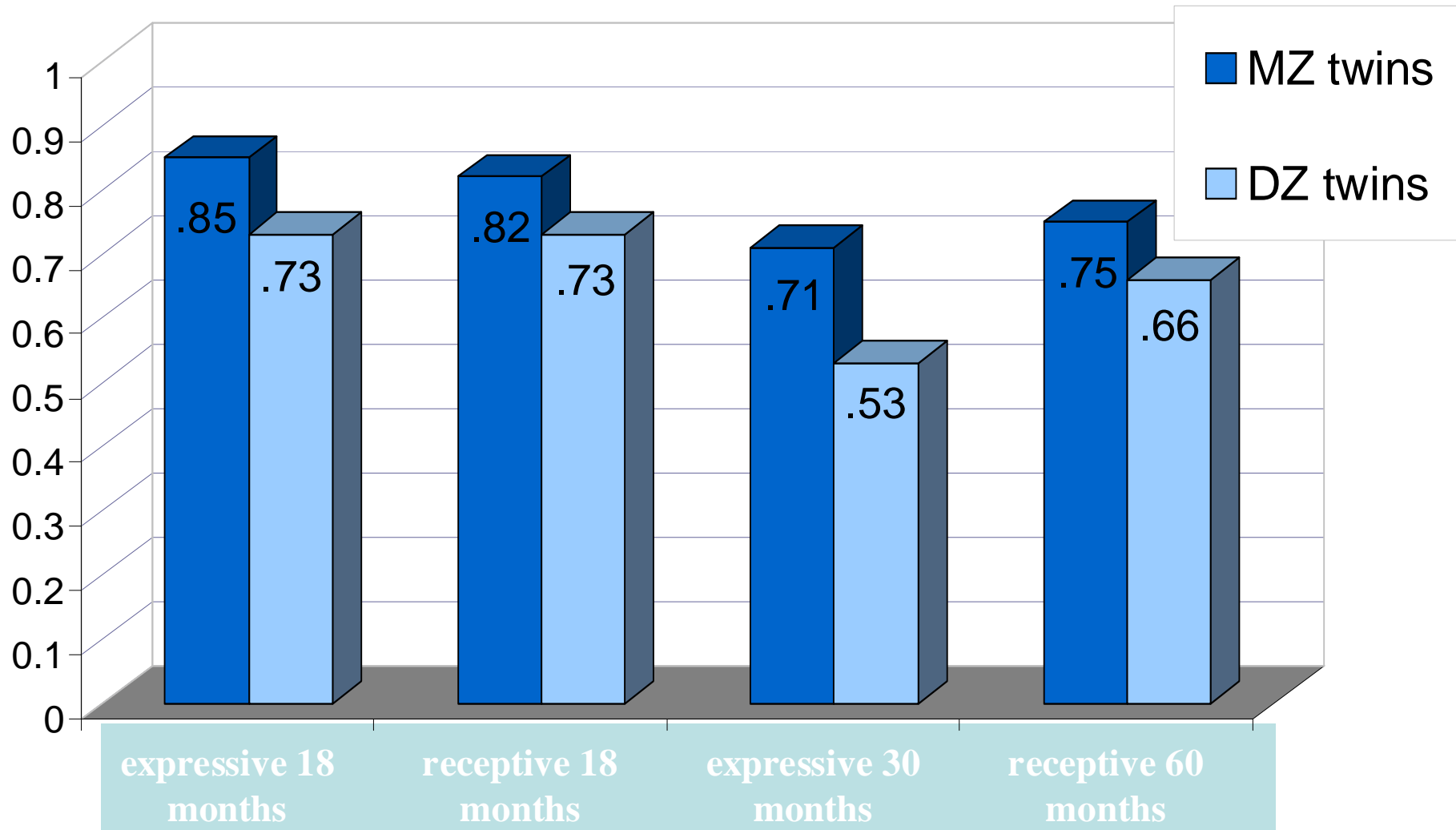
- **3 yearly cohorts**
 - **Preschool : 5 completed time points**
 - **Primary School: 5 completed time points**
 - **High School: 3 ongoing data waves**
- **Team: 4 core researchers, 30+ collaborators, 30+ graduate students and postdocs, coordinators and statisticians, 30+ research assistants yearly**

Why Twins?

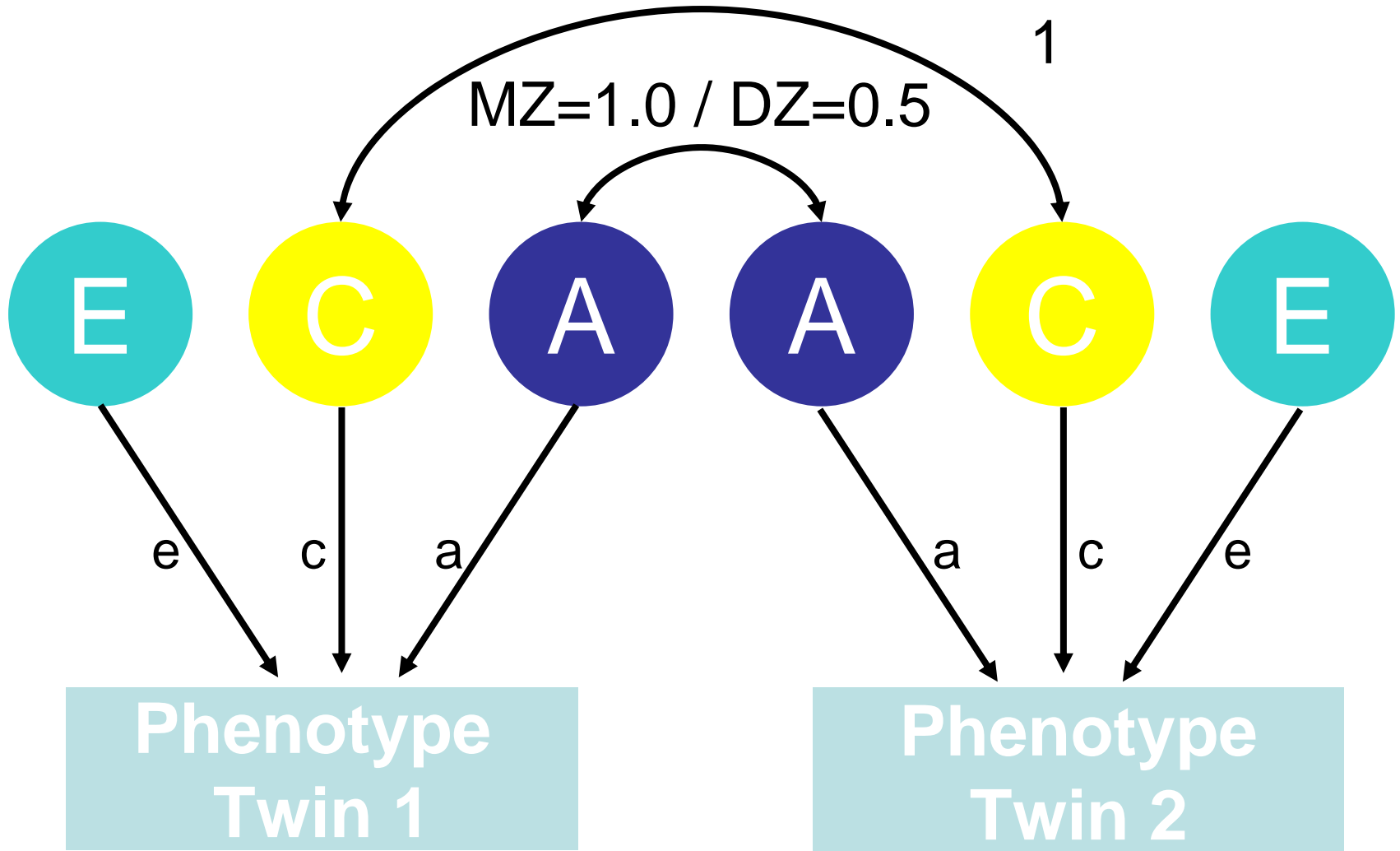


$$P = eE + aA + cC + dD$$

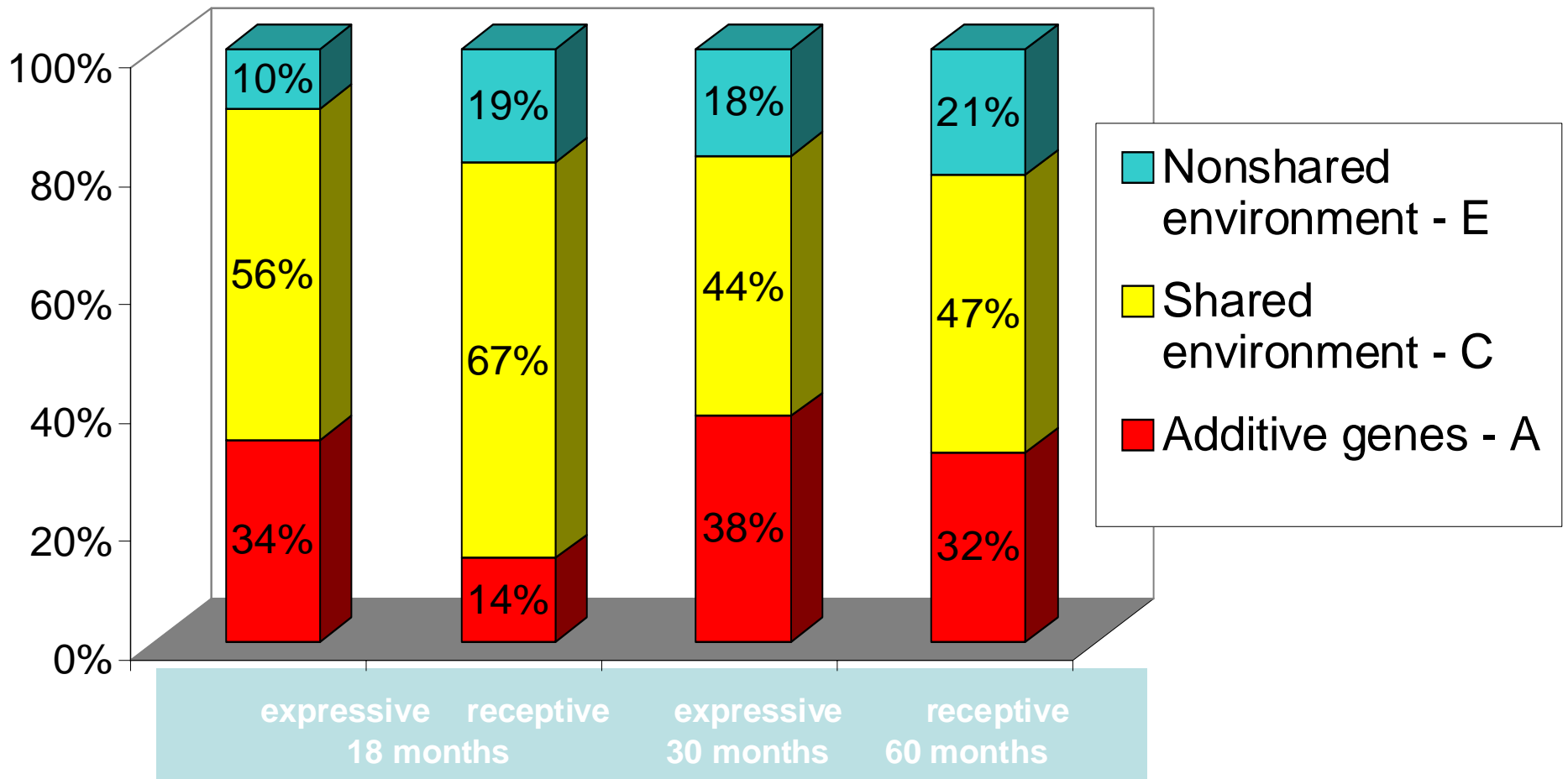
MZ and DZ correlations - Language



Variance decomposition of twin data

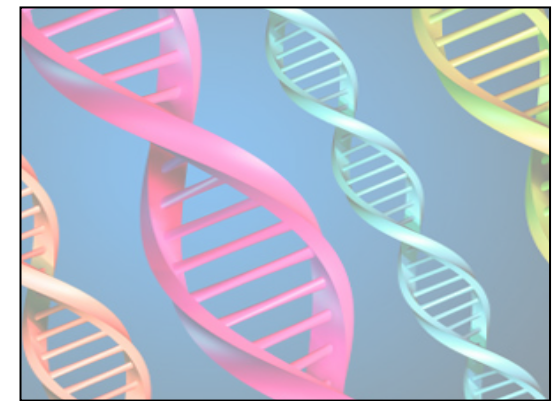
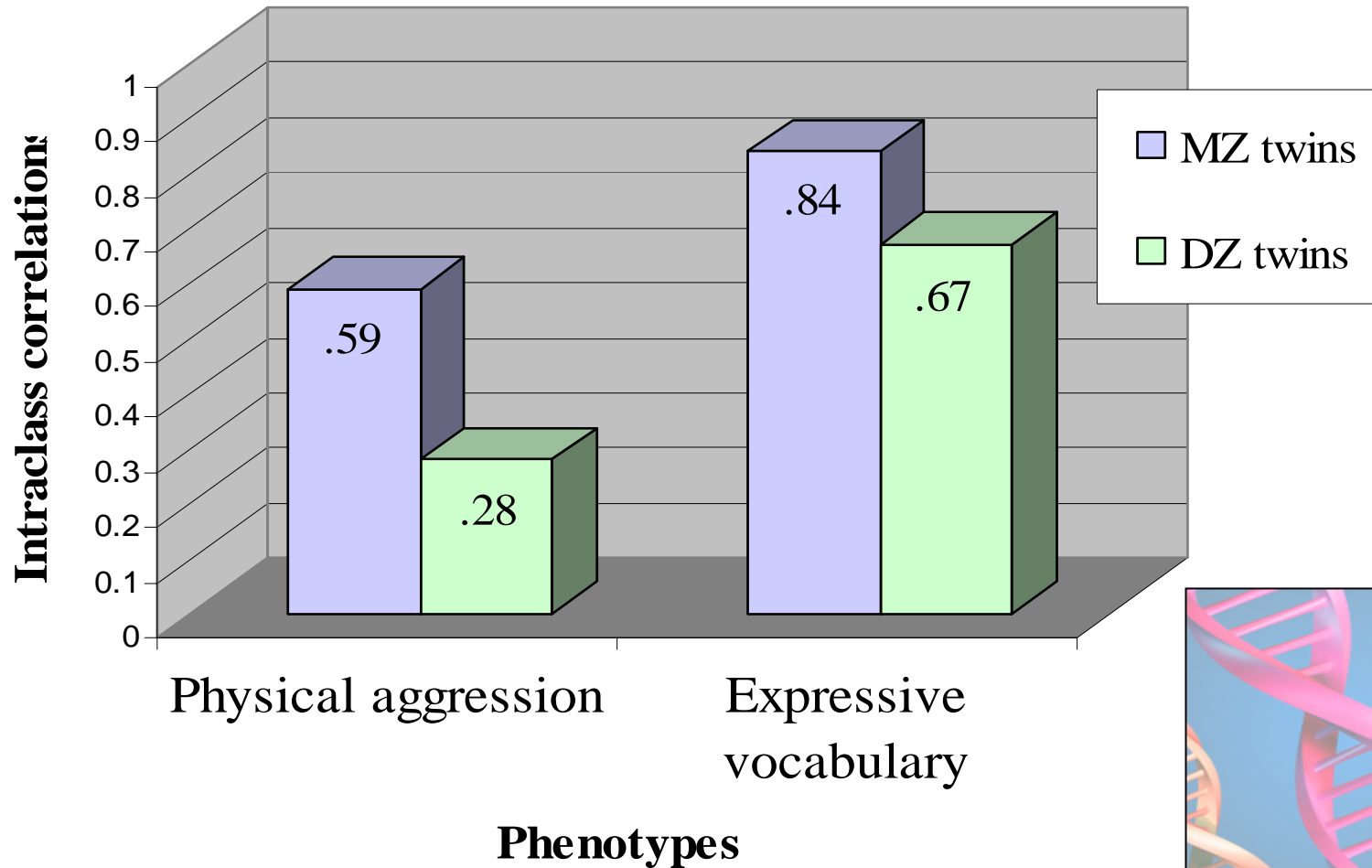


Variance estimates

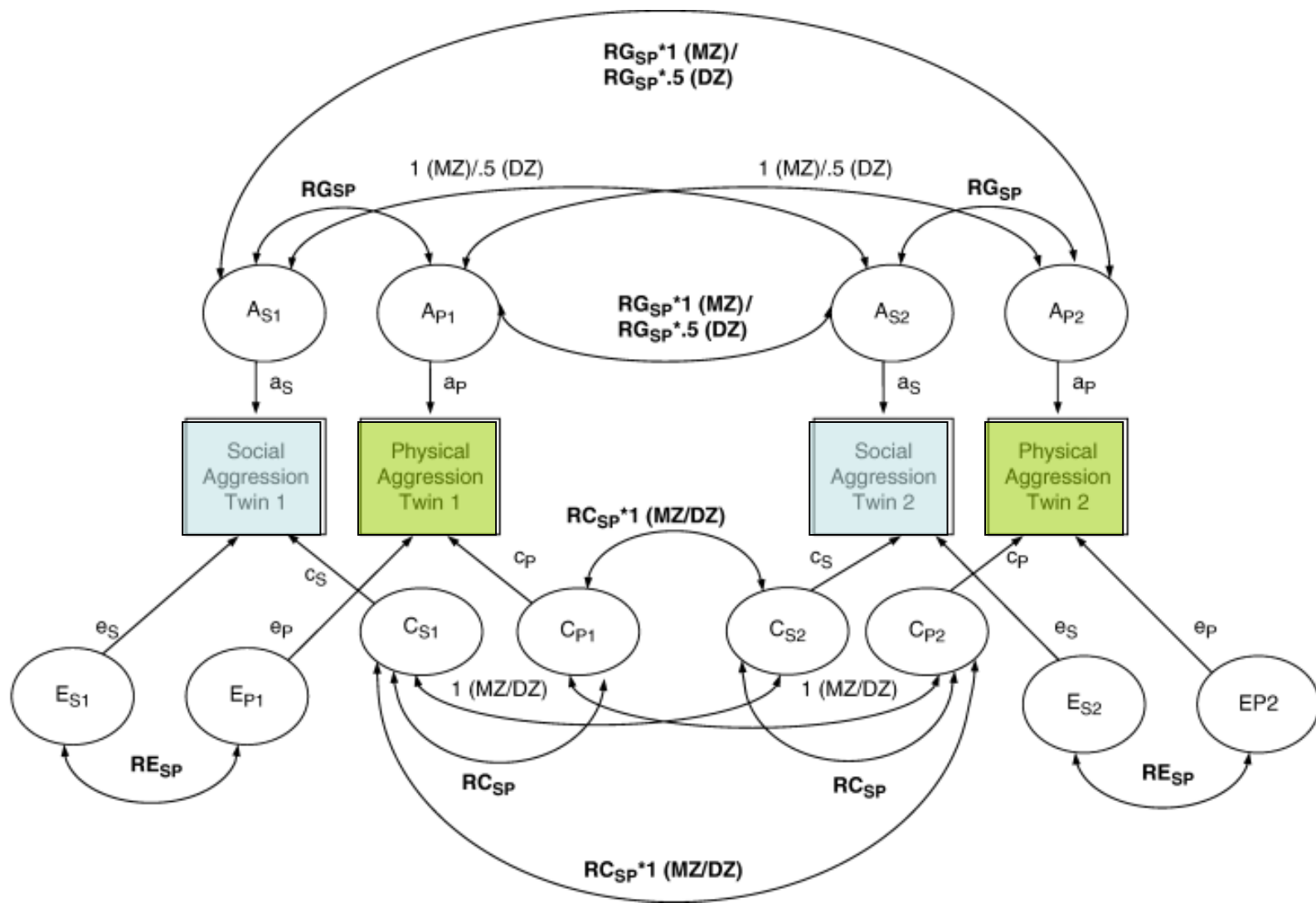


Aims

GE Etiology (Quantitative and Molecular)



GE Etiology of Covariation

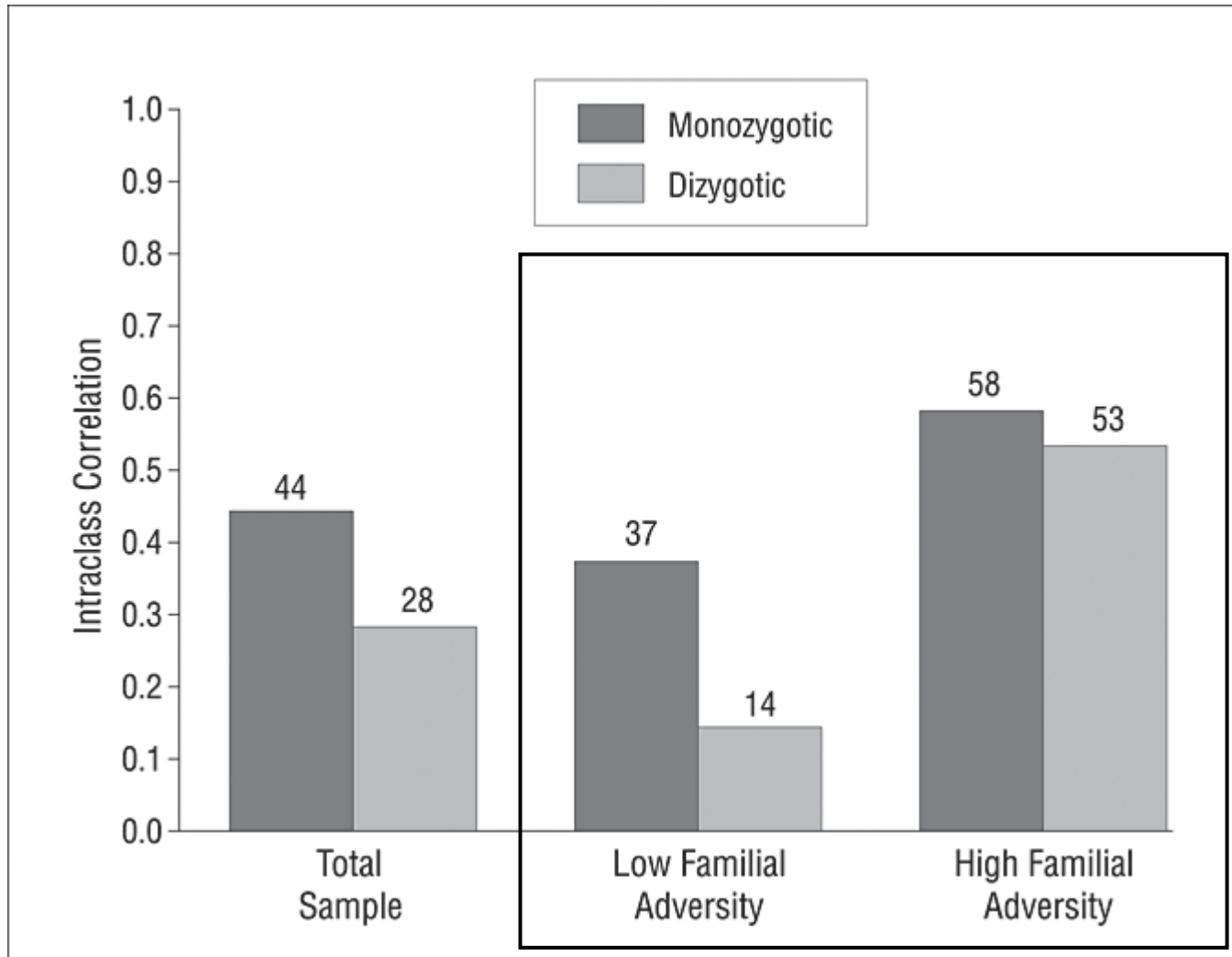


GE Correlations

Table 5. Intraclass correlations for the four maternal assessments of parenting in the QNTS

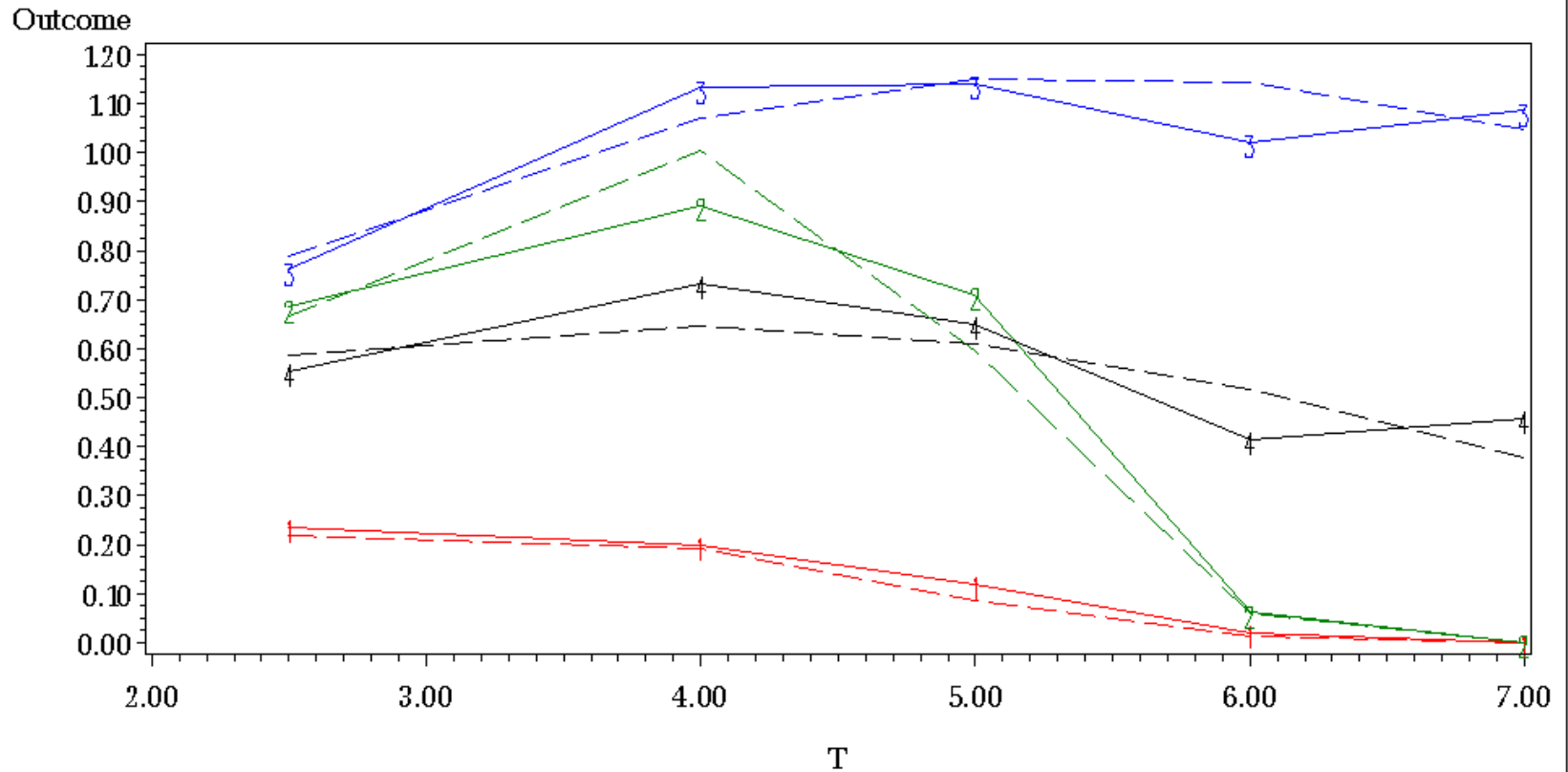
Dimensions	MZ twins	DZ twins
Parental self-efficacy	.71	.81
Perceived parental impact	.68	.70
Parental hostile-reactive beh.	.83	.66
Parental overprotection	.86	.86

GE Interactions



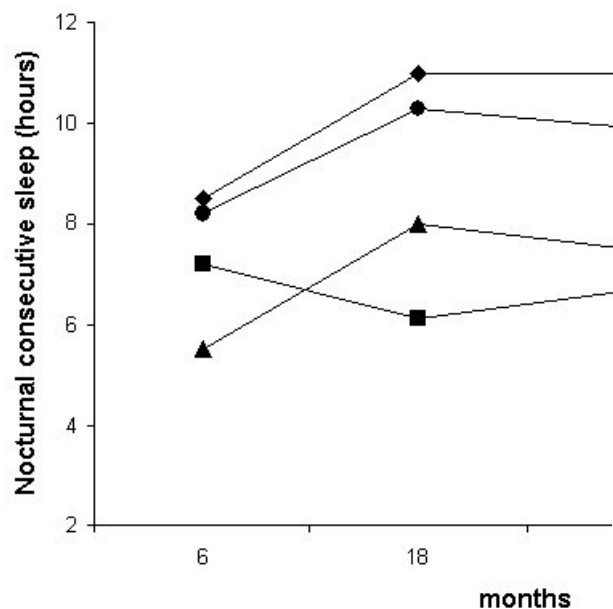
Developmental Trajectories

Trajectoires sur Agressivite

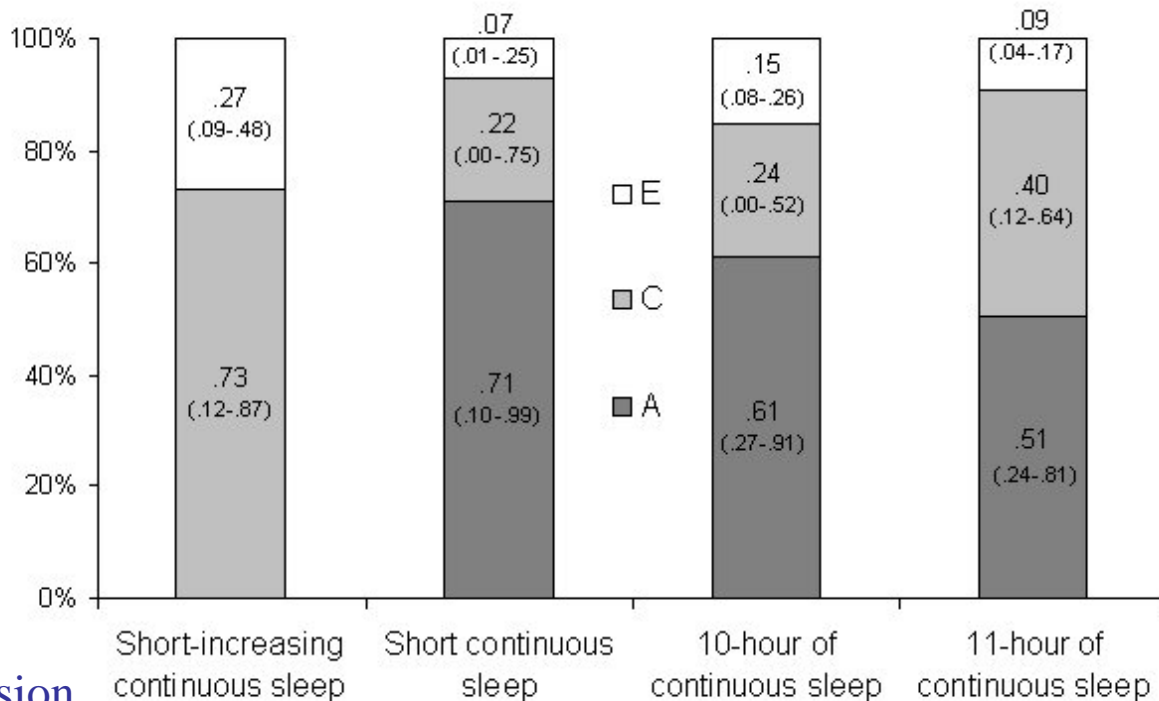


Group Percents - - - 15.9 - - - 41.3 - - - 11.8 - - - 31.1

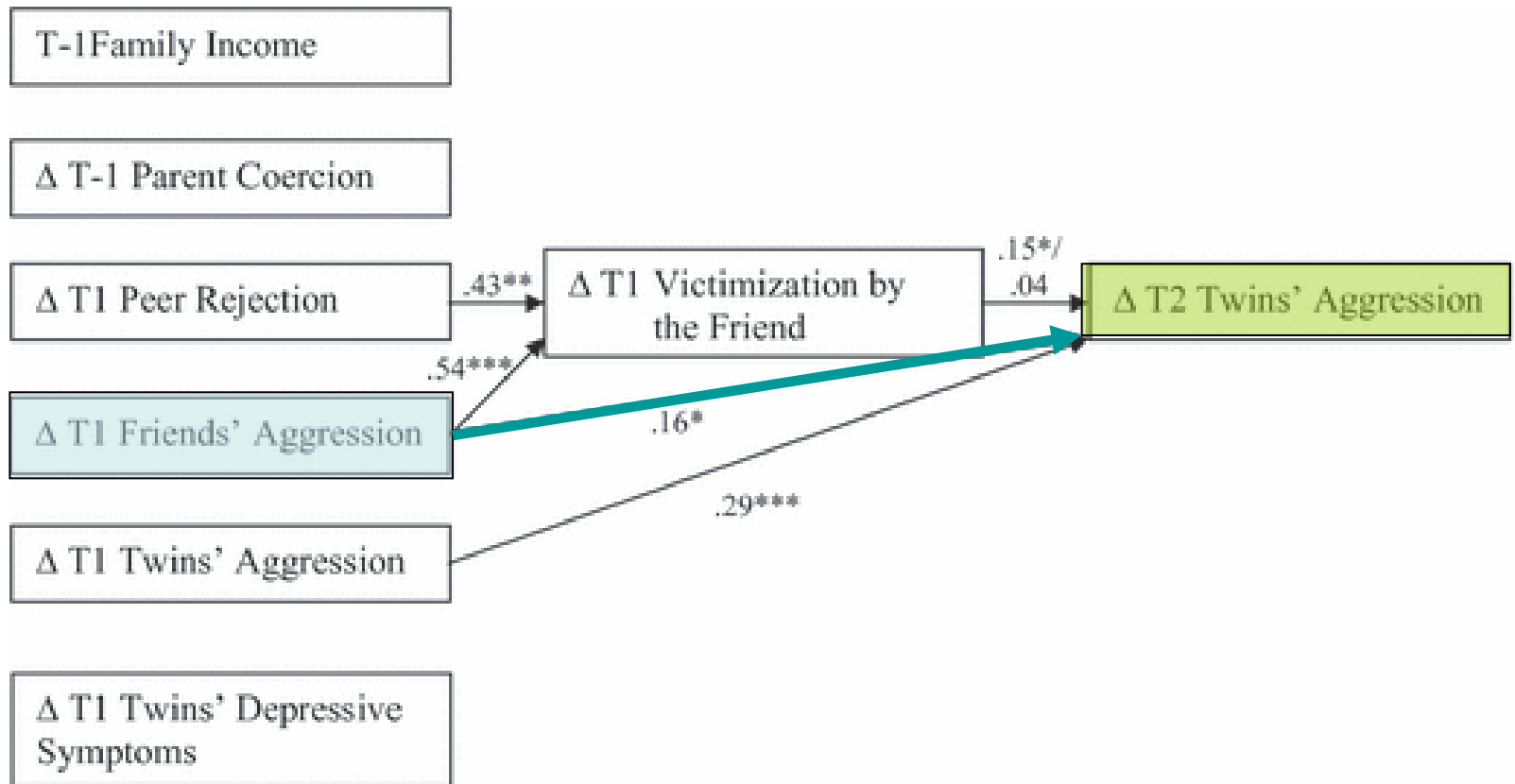
GE Etiology of Trajectories



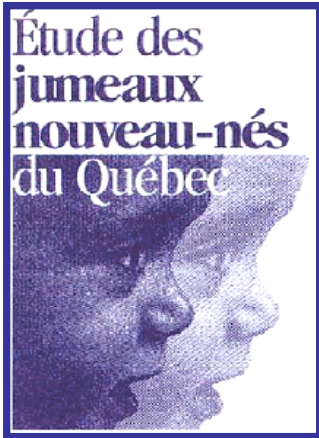
Nocturnal Sleep Durations 6 to 48 months



MZ Twin Differences



Design



Multiple Informants



Parent Reports

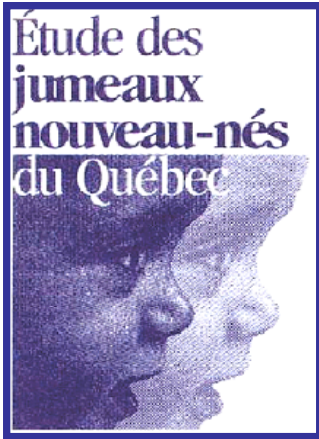
Direct observations

Physiological measures (Blood, ECG, BMI, Saliva etc)

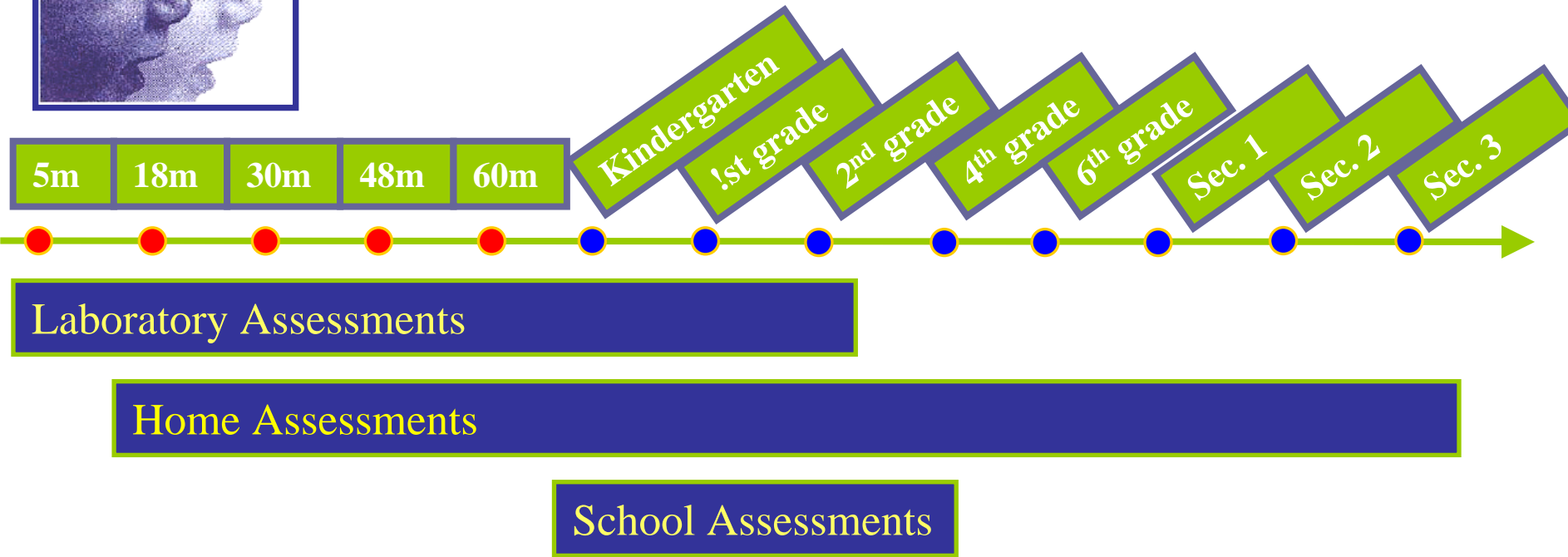
Teacher Reports

Self Reports

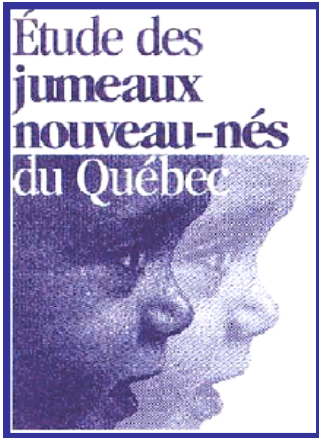
Peer/Friends' Reports



Multiple Settings



Themes



Psychosocial Development

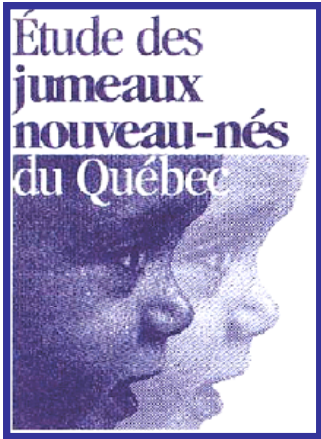


Temperament

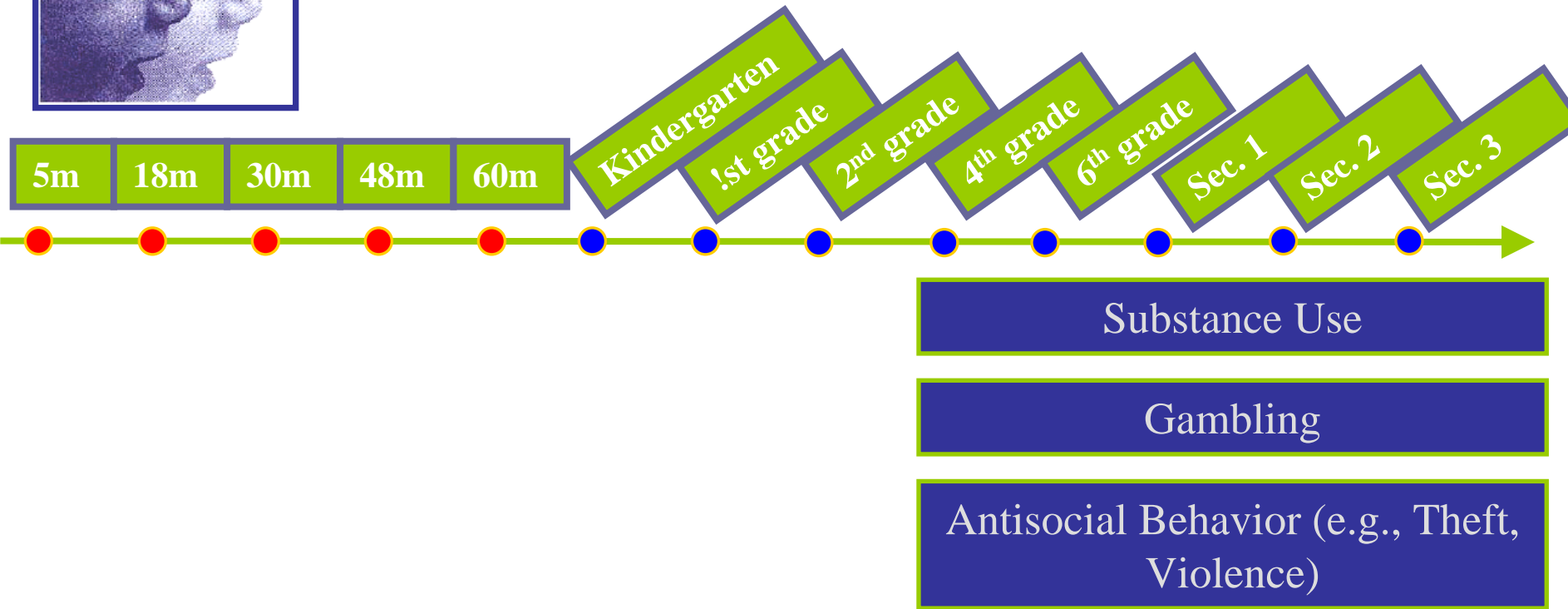
Externalizing Problems (e.g. Aggression, Hyperactivity, Opposition etc)

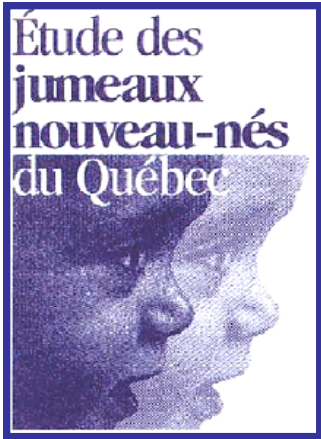
Internalizing Problems (e.g. Anxiety, Depression, etc)

Social Competence (e.g. Prosocial Skills, Peer Rejection, Leadership, etc)

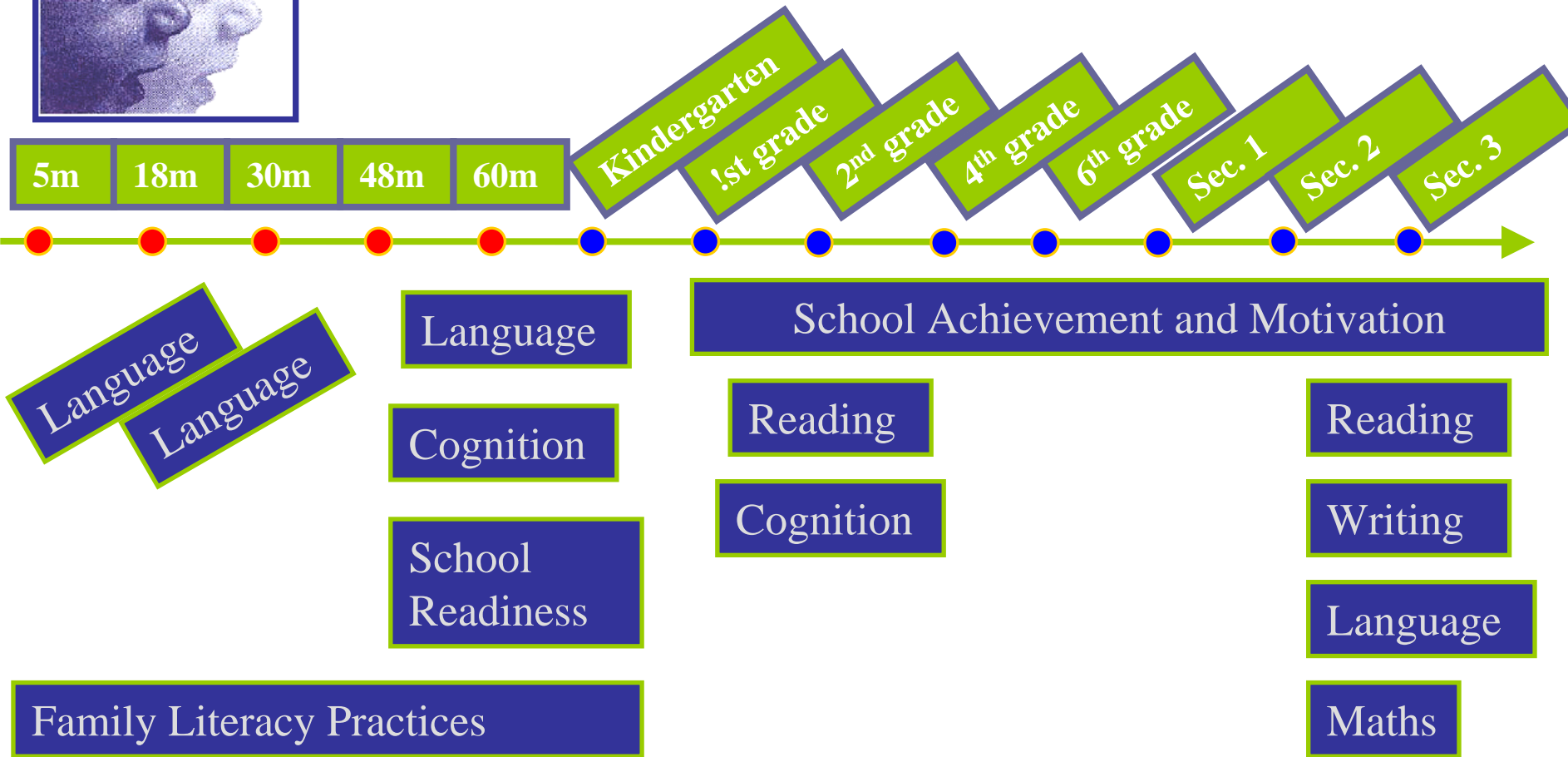


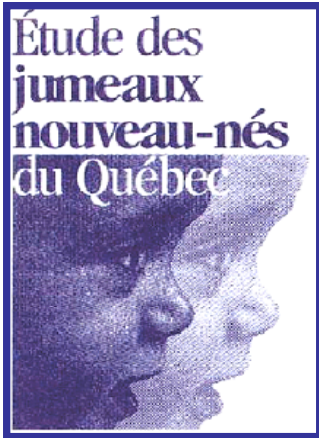
Delinquency





Cognition and Achievement





Physical Health

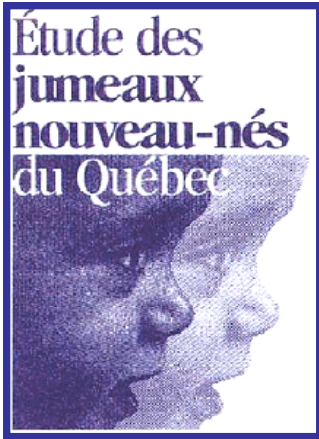


Perinatal Health Indicators, Physical Growth and BMI

Sleep Patterns

Brain Imaging

Pubertal Development



Family Environments: Shared and Nonshared



Family Structure, SES

Parental Cognitions and Practices (e.g. discipline, warmth, support etc.)

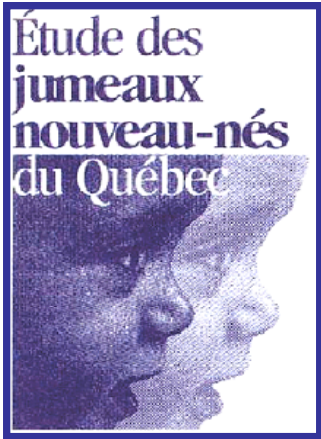
Child-Care Exposure

Family Literacy Practices

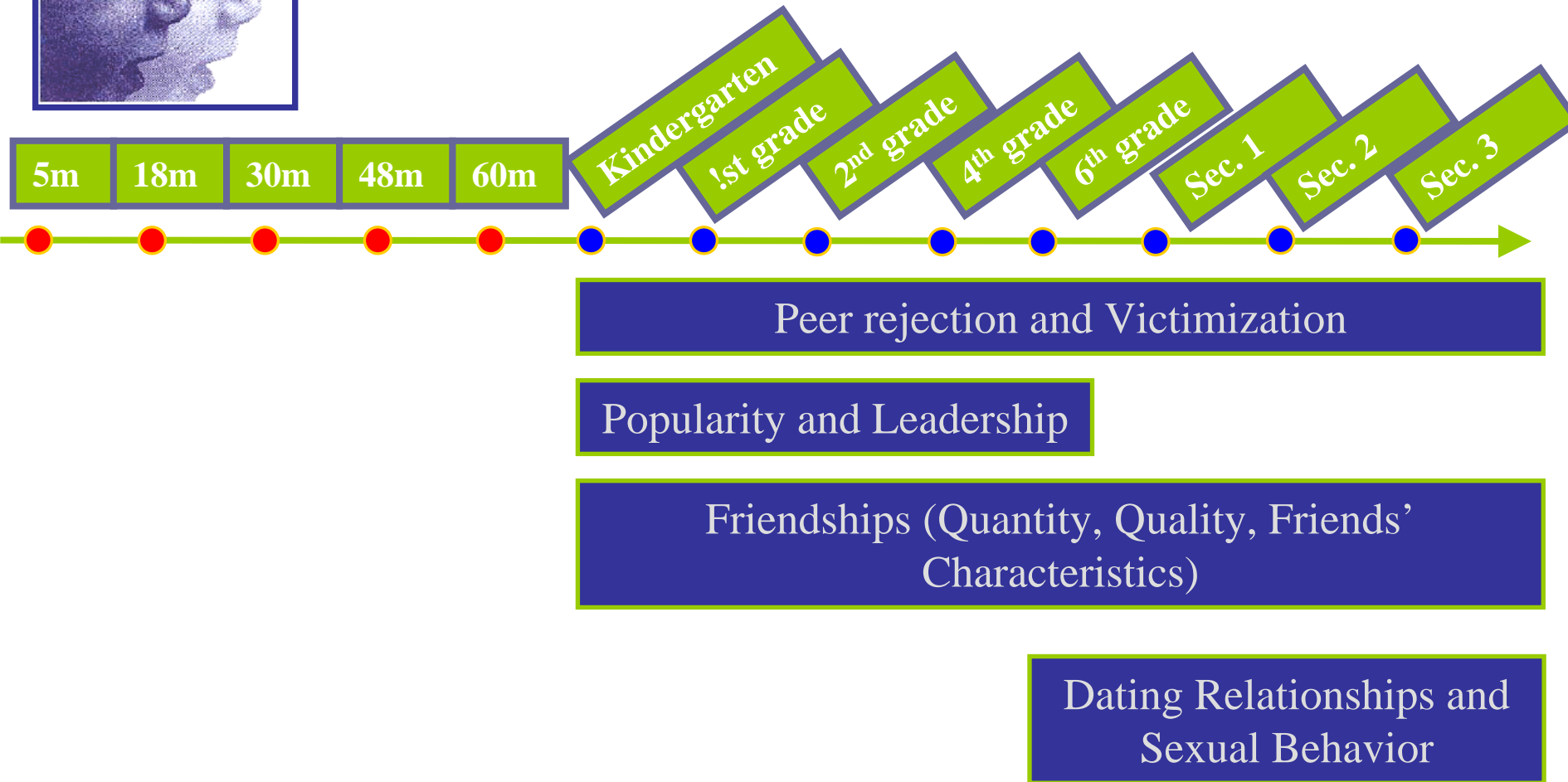
Parental Mental Health

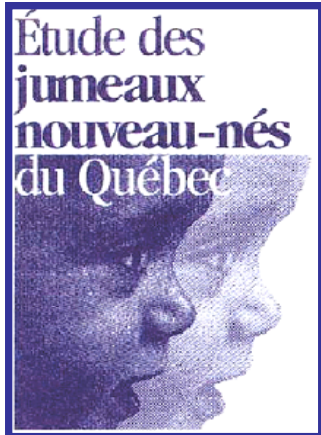
Parental School Experience

Parental IQ



Peer Relationships





What's next?



- **Last school follow-up in secondary 5**
- **Follow-up into young adulthood?**
- **A new twin study?**