

ÉLDEQ/QLSCD: a valuable tool to document and evaluate Early Childhood Education

Michel Boivin
CRC Child Development
GRIP, École de psychologie
Université Laval

Learning to care: Lessons for the transitions to integrated early childhood program delivery
 U of Toronto, October 2012

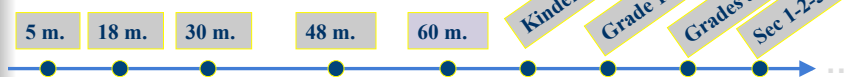


A family of birth cohorts from Québec

QLSCD/ÉLDEQ: (1) Pilot (1995); (2) main (1998)

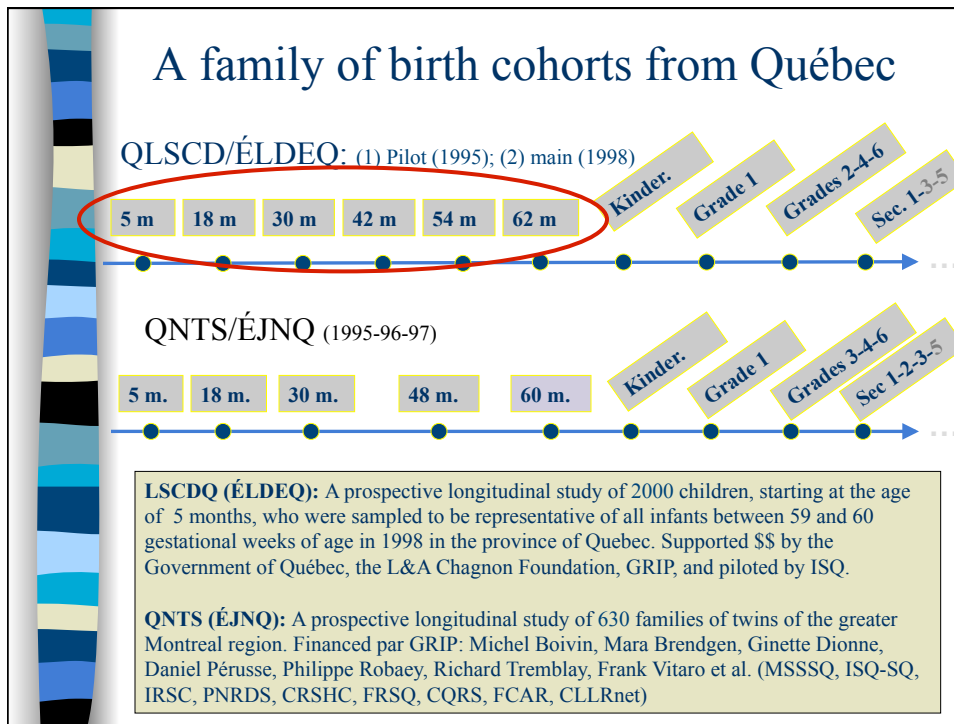


QNTS/ÉJNQ (1995-96-97)

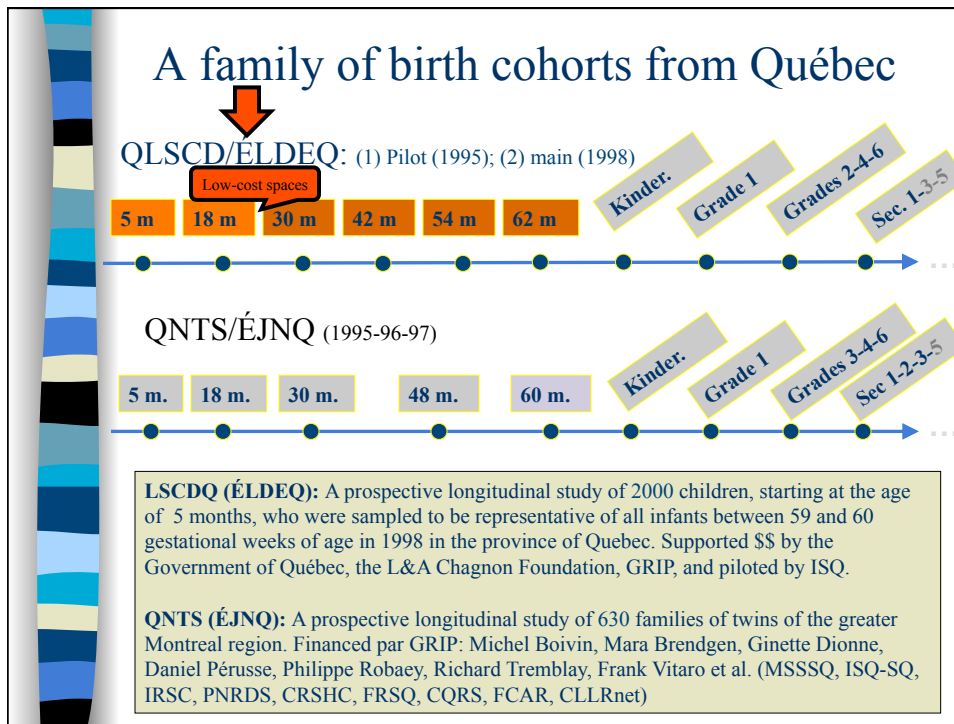


LSCDQ (ÉLDEQ): A prospective longitudinal study of 2000 children, starting at the age of 5 months, who were sampled to be representative of all infants between 59 and 60 gestational weeks of age in 1998 in the province of Québec. Supported \$\$ by the Government of Québec, the L&A Chagnon Foundation, GRIP, and piloted by ISQ.

QNTS (ÉJNQ): A prospective longitudinal study of 630 families of twins of the greater Montreal region. Financed par GRIP: Michel Boivin, Mara Brendgen, Ginette Dionne, Daniel Pérusse, Philippe Robaey, Richard Tremblay, Frank Vitaro et al. (MSSSQ, ISQ-SQ, IRSC, PNRDS, CRSQC, FRSQ, CQRS, FCAR, CLLRnet)



- ## Important milestones in the establishment of the Québec subsidized low-cost childcare system
- 1997 : Creation of The Ministère de la Famille et de l'Enfance (MFE) and new family policy measures including the gradual implementation of educational childcares for young children, school daycares and full-time kindergarten.
 - Children aged 4 (1997), Children aged 3 (1998), Children aged 2 (1999)
 - **Children aged less than 2 (2000) become eligible for low-cost subsidized childcare (\$5 / day)**
 - 2004 : Contribution of parents raised to 7\$/day
 - 2006 : New universal parental leave program (more accessible, more flexible and more generous in \$\$).
 - 2012: total of 217,842 spaces in regulated/subsidized childcare (235K in 2016)
 - 1435 CPE (85,046) , 651 daycares (41,171), 164 offices family-cares (91,626)
 - 596 non-subsidized daycares (31,935)
 - A learning program centered on **play**, aimed at the **multifaceted components of development**: e.g., socioemotional, language, motor, **adjusting to the child's pace**, with **linkages** with the family and other services.



Assessing childcare in ÉLDEQ

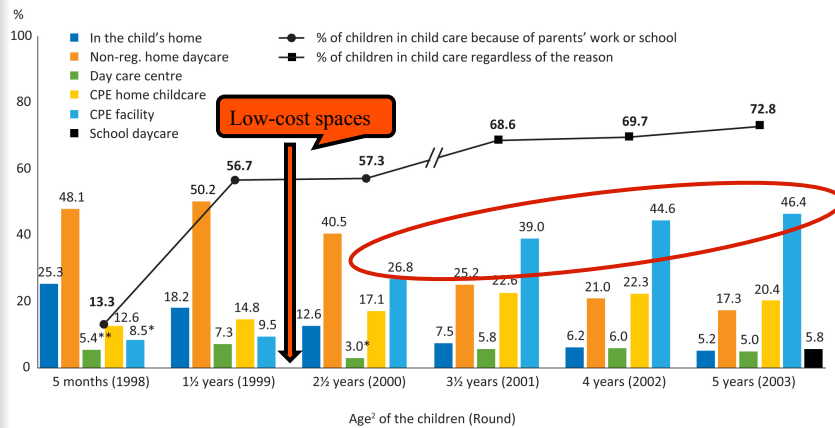
- Source: PMK (i.e., mothers)
- Computerized Questionnaire Completed by the Interviewer
- Most questions adapted from NLSCY
- Questions about the use of childcare, the type of childcare, the number of hours/week
- These questions can then be used to compute specific scores related to the use/type of childcare

ÉLDEQ / QLSCD

Describing the use of childcare



Proportion of ÉLDEQ children attending various types of childcare 1998-2003

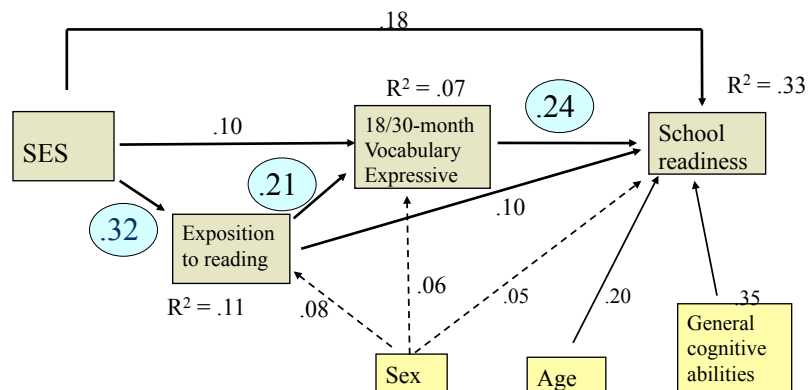


QLSCD/ÉLDEQ

Daycare as a protective factor for children from disadvantaged families.

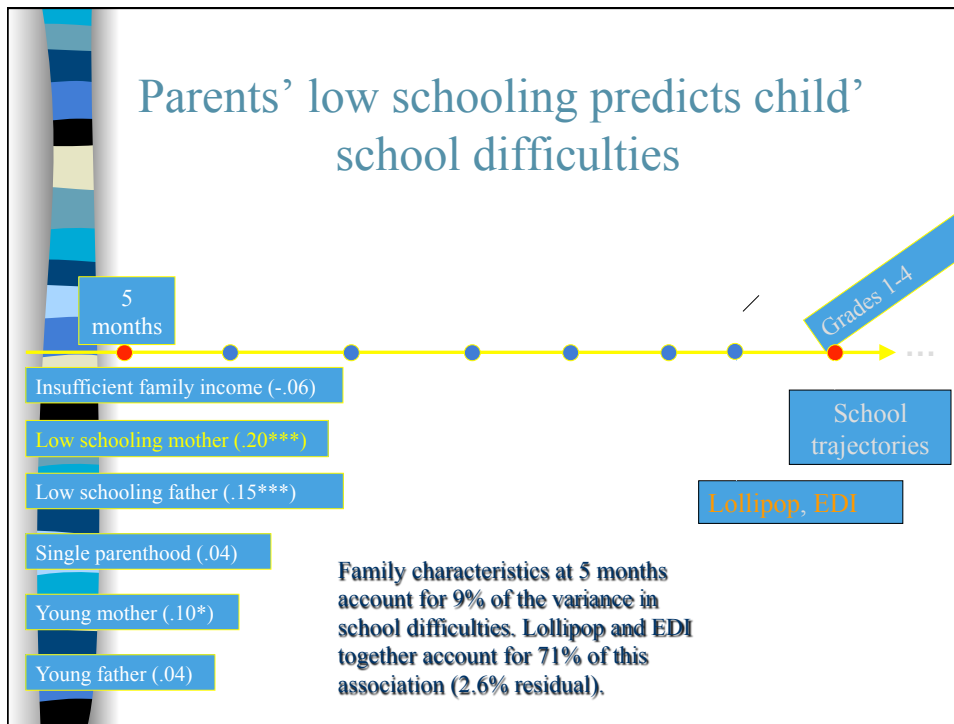
1. Early school readiness and achievement

Exposition to reading, language development and school readiness (QNTS)



Note. $c^2 = 10.18$ (DF = 7), $p = .18$; RMSEA = .03 (90% C.I.: .00 - .06); CFI = .99; AIC = 66.18.
Non-significant ($p > .05$) paths are indicated by a dotted line. Relevant correlations between exogenous variables are omitted for simplicity.

Adapted from Forget-Dubois et al., Child Development, 2009



QLSCD/ÉLDEQ

Daycare as a protective factor for children from disadvantaged families.

2. Early school readiness and achievement

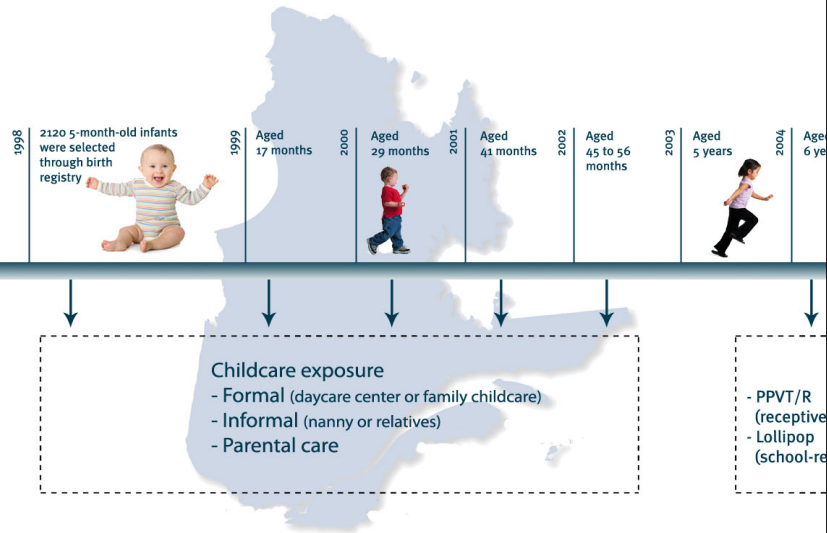
THE JOURNAL OF CHILD PSYCHOLOGY AND PSYCHIATRY
Journal of Child Psychology and Psychiatry 51:12 (2010), pp 1359-1367

doi:10.1111/j.1469-7610.2010.02316.x

Closing the gap in academic readiness and achievement: the role of early childcare

Marie-Claude Geoffroy,¹ Sylvana M. Côté,^{2,3,4} Charles-Édouard Giguère,^{4,5} Ginette Dionne,⁶ Philip David Zelazo,⁷ Richard E. Tremblay,^{2,3,4,8} Michel Boivin,⁶ and Jean. R. Séguin^{4,9}

Québec Longitudinal Study of Child Development [QLSCD/ÉLDEQ]



Method

Primary childcare arrangements

- PMK; i.e., mothers assessments of time spent averaged over years), then classified into three broad categories:
 - (1) **Formal childcare**: by nonrelative in residential/nonresidential 'school-like' settings;
 - (2) **Informal childcare**: by relatives in a residential home, or by a non-relative in children's own home (e.g., nanny);
 - (3) **Parental care**: not in childcare, was used here as the reference category.

Analyses

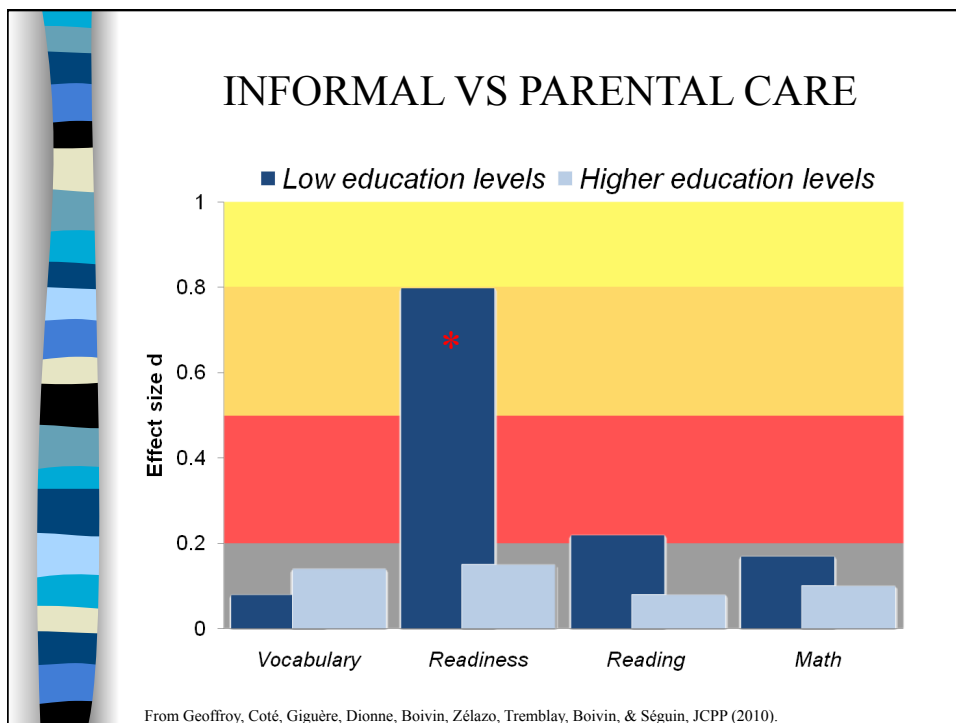
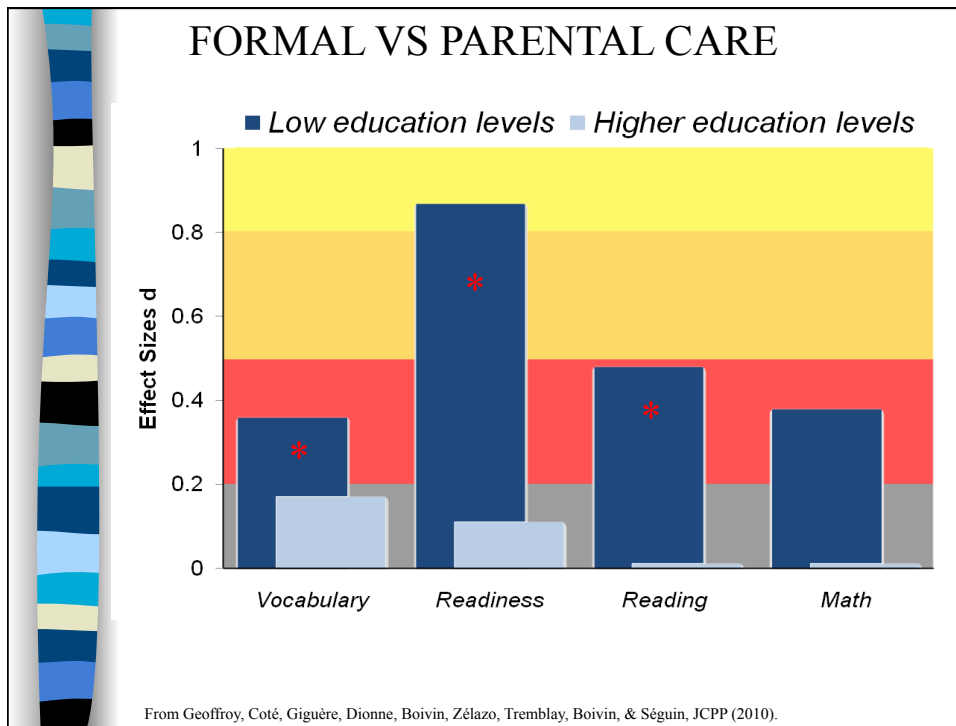
Maternal education levels: low 15% sample ; higher 85% sample
Childcare exposure (formal/informal/parental care)

*Maternal education*childcare exposure*

Potential Confounding Factors

Sex, birth weight, breastfeeding, birth order, insufficient income, maternal age, maternal verbal skills, depressive symptoms, home levels of stimulation, overprotection, parental impact.

From Geoffroy, Coté, Giguère, Dionne, Boivin, Zélazo, Tremblay, Boivin, & Séguin, JCPP (2010).



QLSCD/ÉLDEQ : Daycare as a protective factor for children from disadvantaged families.

2. Physical aggression

ORIGINAL ARTICLE

The Role of Maternal Education and Nonmaternal Care Services in the Prevention of Children's Physical Aggression Problems

Sylvana M. Côté, PhD; Michel Boivin, PhD; Daniel S. Nagin, PhD; Christa Japel, PhD; Qian Xu, MSc; Mark Zoccolillo, MD; Marianne Junger, PhD; Richard E. Tremblay, PhD

Context: Physical violence is an important health problem, and low maternal education is a significant risk for the development of chronic physical aggression (PA). We hypothesized that nonmaternal care (NMC) services could prevent the development of childhood PA problems, depending on the age at which the services are initiated.

Methods: Children who followed a trajectory of atypically frequent PA between 17 and 60 months of age among a population sample of 1691 Canadian families were identified. Maternal education and NMC were considered in predicting group membership while controlling for confounding family characteristics.

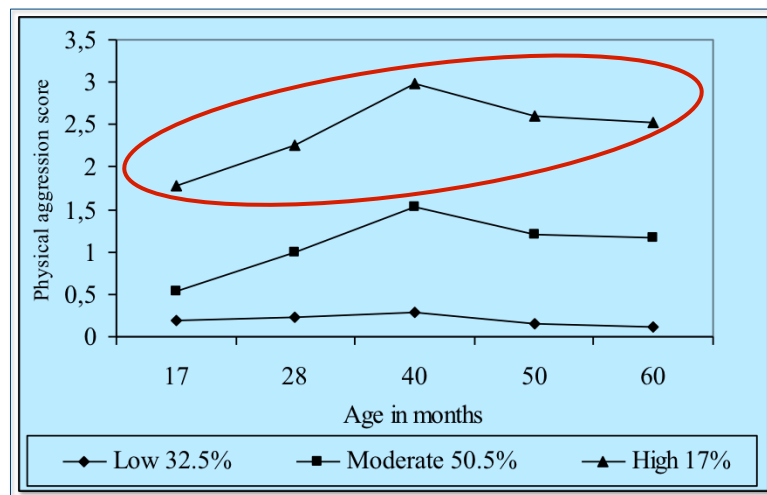
Results: Children of mothers with low education levels (ie, no high school diploma) were less likely to receive NMC. Those who did receive such care had sig-

nificantly lower risk of a high PA trajectory. Results from logistic regressions indicated that NMC reduced the risk of high PA, especially when initiated before age 9 months (odds ratio: 0.20; 95% confidence interval: 0.05-0.90). Children of mothers who graduated from high school were less at risk of PA problems, and NMC had no additional protective effect.

Conclusions: Nonmaternal care services to children of mothers with low levels of education could substantially reduce their risk of chronic PA, especially if provided soon after birth. Because children most likely to benefit from NMC services are less likely to receive them, special measures encouraging the use of NMC services among high-risk families are needed.

Arch Gen Psychiatry. 2007;64(11):1305-1312

Trajectories of physical aggression between 17 and 62 months (N = 1758)



From Côté, Boivin, Nagin, Japel, Xu, Zoccolillo, Junger, & Tremblay, AGP (2007).

Method

Primary childcare arrangements

- PMK; i.e., mothers assessments of time spent in different childcare arrangements between 3 and 31 months of age.
- NonMaternal Care categories distinguished among children who initiated NMC at different time points.
 - (1) *NonMaternal care at/after 9 months*: 79,6% (n = 1346);
 - (2) *NonMaternal care before 9 months* : 13,8% (n = 234);
 - (3) *Parental care*: not in childcare ever in preschool : 6.6% (n = 111).

Analyses

Maternal education levels

Childcare exposure (NMC before 9 / NMC after 9 / Never)

*Maternal education*childcare exposure*

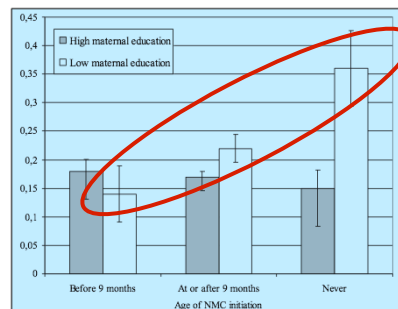
Potential Confounding Factors

Sex, birth weight, breastfeeding, birth order, insufficient income, maternal age, maternal verbal skills, depressive symptoms, home levels of stimulation, overprotection, parental impact.

From Geoffroy, Coté, Giguère, Dionne, Boivin, Zélazo, Tremblay, Boivin, & Séguin, JCPP (2010).

Maternal Education and Timing of Non-Maternal Care Initiation predict High Physical Aggression Trajectory (n= 1691)

Controls



- Mother age (21 and less), Maternal antisocial (fighting, stealing in high school), **Mother depression** (at least one major dep life), Drinking (max in one occasion), **Maternal work/study** (or not)
- Child sex, temperament, preterm birth, birth weight and birth health.
- **Insufficient income, marital status, n of siblings**
- Family dys(function), parental perceptions and behaviors (self-efficacy, hostile-raeactive behavior, overprotection, perception of impact)

From Côté, Boivin, Nagin, Japel, Xu, Zoccolillo, Junger, & Tremblay, AGP (2007).

