UNIVERSITY OF TORONTO
OISE | ONTARIO INSTITUTE
FOR STUDIES IN EDUCATION

Uof T (Sept 2009-Aug 2011)

Ontario Institute for Studies in Education (OISE)
Kids, Family and Place study
Jennifer Jenkins' Lab

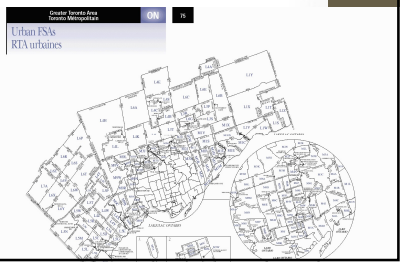
Kids, Family and Place study (KFP)

KFP Research program

- Longitudinal community-based study in the cities of Toronto and Hamilton
- Over 650 families (over 1400 contacted) having a newborn and at least one older siblings
- Children's development in a nested, multilevel framework
  - L1 : longitudinal : from birth to school age. Multiple assessment over 18 months interval (end 2011, wave 4 data fully collected).
  - L2 : multiple siblings
  - L3 : families
  - L4 : neighboordhood, school & community

Measures

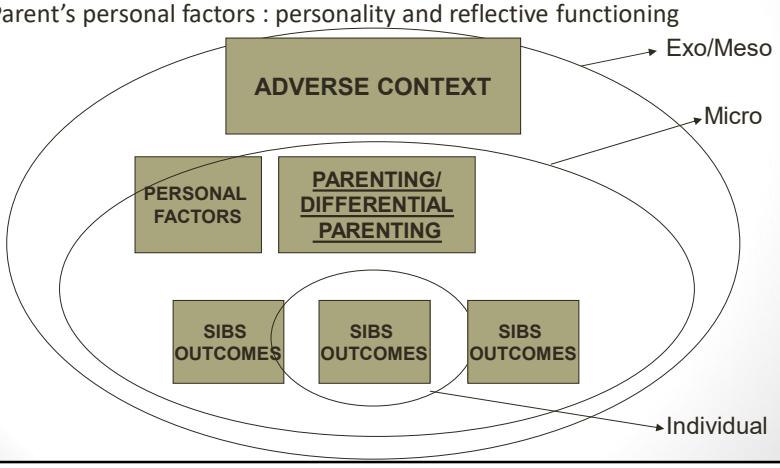
- Demographic
  - Marital status, Ethnicity, Education,…
- Child's measures
  - Perinatal, Medical and genetic, Behavior, social competence and psychopathology, emotional and cognitive dvpt, langage
- Family measures
  - Parents – coparents
    - Biological, genetic and behavioral/psychological
  - Parents-child
    - Parent-child Interaction, Parenting/differential parenting, Attachment and sensitivity
  - Siblings
    - Siblings interactions and relationships
  - Home observation
    - Household chaos,…
- School, neighboorhood, community…
- Census StatCan →



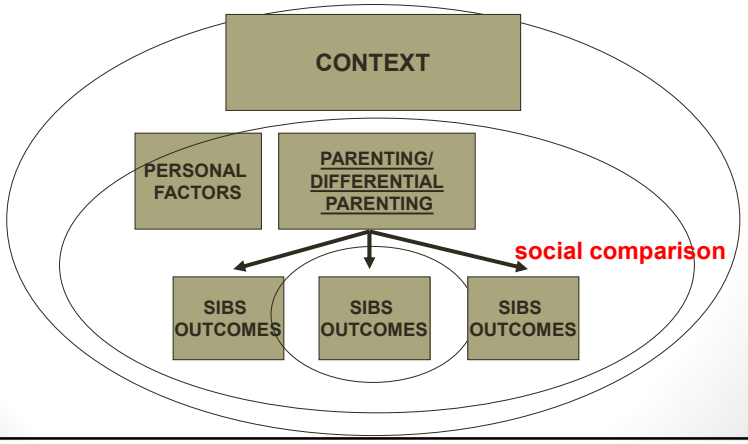
Postdoc research

Approche écosystémique

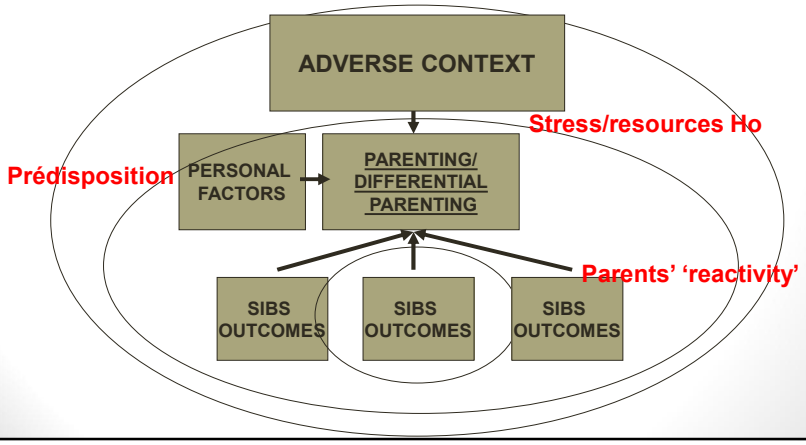
- **Comportements parentaux (parenting/differential parenting (DP))**
- Siblings' psychopathology and social development
- Contextual risk factor
- Parent's personal factors : personality and reflective functioning



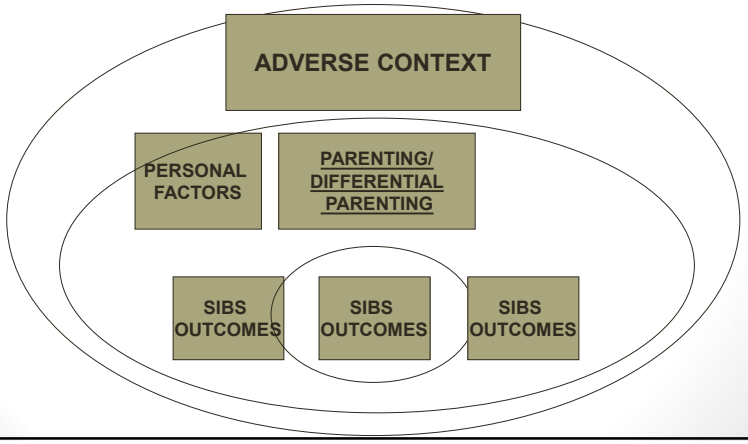
DP as a cause



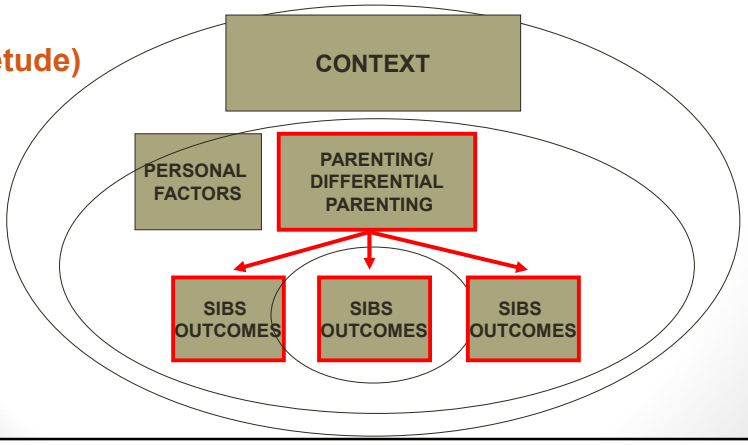
DP as a consequence



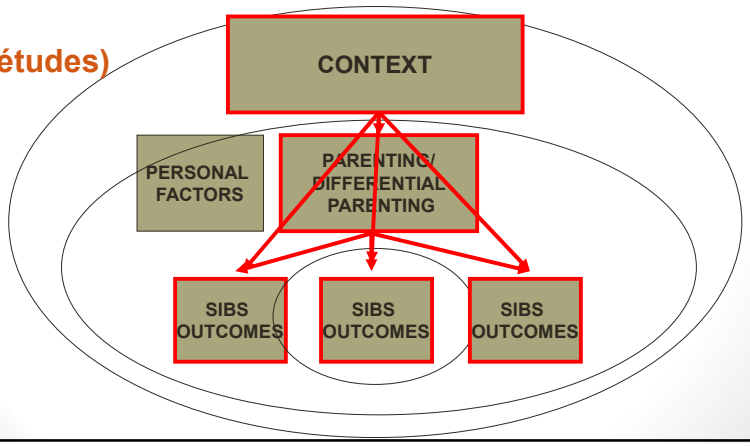
Quatre thématiques de rech.



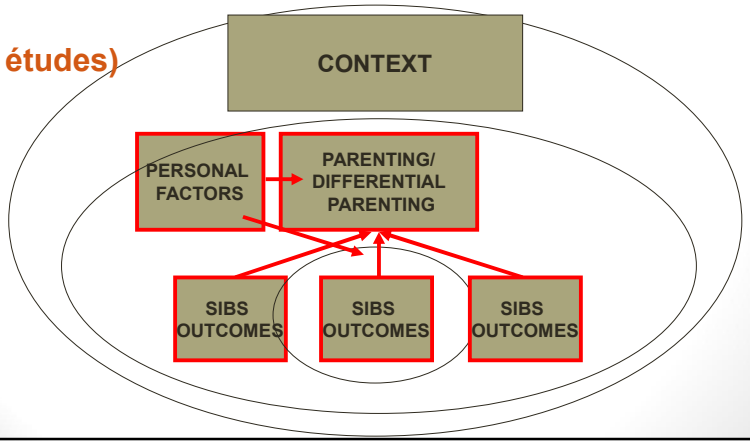
I. (1 étude)



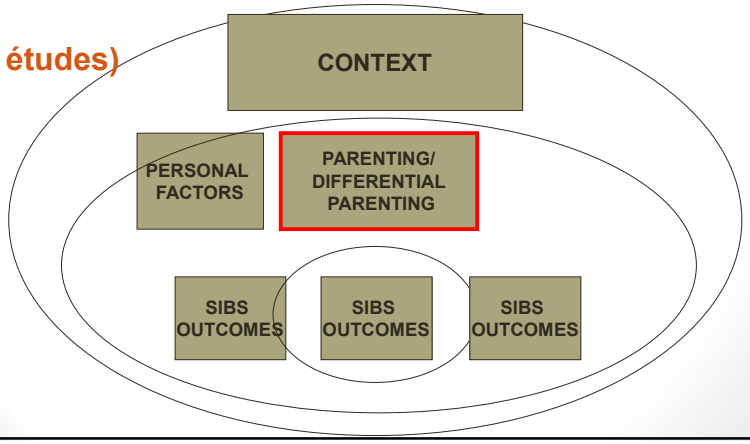
II. (3 études)



III. (3 études)

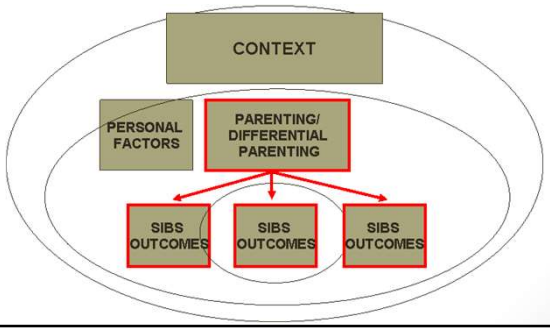


IV. (2 études)



I. Complex relations between DP and siblings' psychopathology

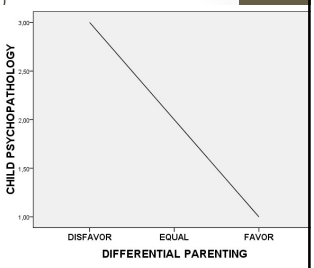
(1 étude)



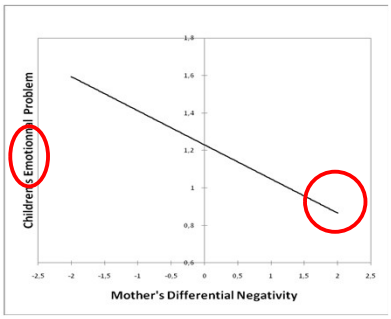
Etude 1*

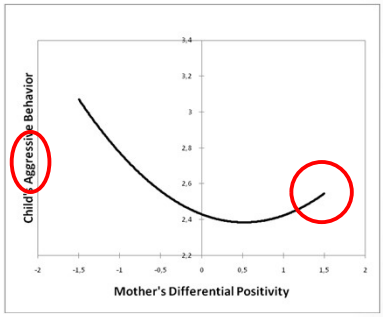
a. Association DP-outcomes ? Lineaire ou curvilineaire ?

- DESIGN
  - Transversal sur 599 familles (Multilevel cross classified)
  - Mères, pères, tous les enfants (échantillon tout venant)
- BACKGROUND
  - Un DP excessif est négatif pour l'enfant défavorisé :
    - OK unanime : social comparison
    - Démontrer dans toutes études par relation linéaire : au + défavorisé au pire les outcomes
  - Mais !!! : DP modéré considéré comme adéquat
    - Effet minimum dans portion médiane
  - Mais !!! : Quid enfant favorisé ?
    - Effet du sentiment de justice (subjectif) > favoritisme (objectif)
    - Justice distributive

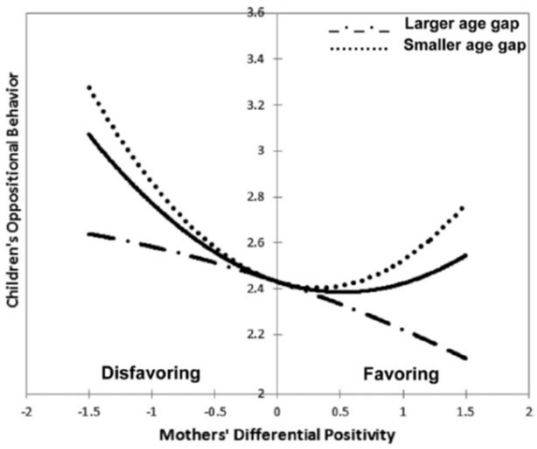


*Meunier, Jenkins & Bisceglia, 2011, *Developmental Psychology*





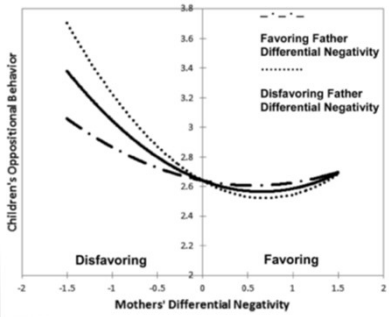
Enfant favorisé : aucune raison de se sentir mal 'émotionnellement' mais plus de marge pour les comportements 'perturbateurs'

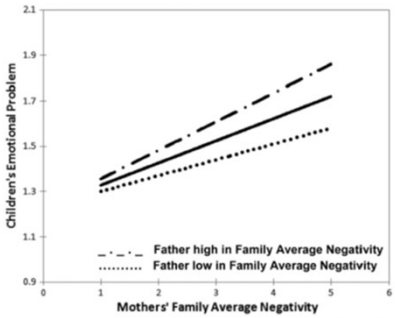


Etude 1*

b. Prendre les deux parents en considération !

- BACKGROUND
  - Effet similaire du parenting maman et papa
    - Parenting-outcome > pour mère
  - Quid si les deux parents considérés ensemble ?
    - Additif ou Potentialisation (modération) ?

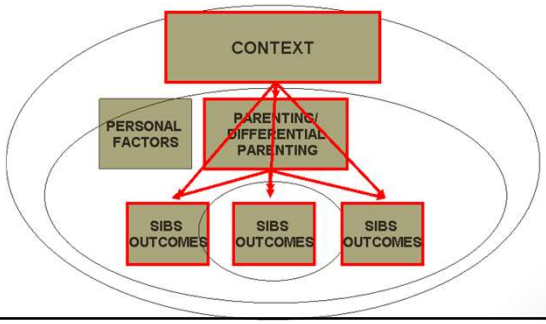




*Meunier, Jenkins & Bisceglia, 2011, *Developmental Psychology*

I. Contextual risk, DP and children's psychopathology

(3 étude)



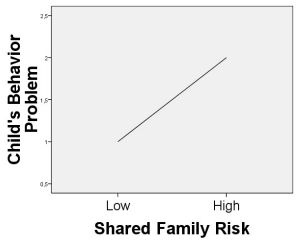
Etude 2*

a. Influence du contexte sur enfants ? Passe par DP ?

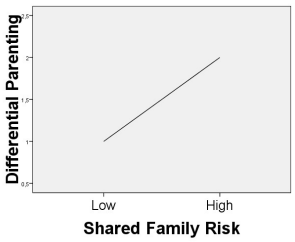
- DESIGN
  - Étude longitudinal sur 397 familles (multilevel moderated mediation)
  - Mères et tous les enfants (échantillon tout venant)
  - Study variables :
    - Predicteur : Risk (6) et cumulative risk index : EL, depression, family type, abuse, chaos
    - Médiateur : DP
    - Outcomes : siblings' aggression, emotional problem, attentional problem, social relationships
- BACKGROUND
  - Débat sur shared-non-shared influences : GC dit Non-shared (DP) +++
    - Qd facteurs génétiques 'contrôlé' frères et sœur aussi différents que n'importe quel enfant
  - En pratique effet non-shared assez minime
    - Influence shared négligé ? Influence shared = non-shared ? **Influence shared → influence non-shared ?**

*Meunier, Boyle, O'Connor, & Jenkins, revised, *Child Development*

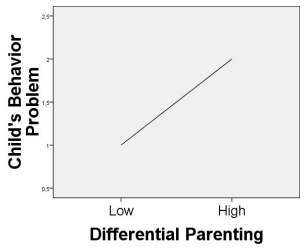
Risk factors-Child's psychopathology



Risk factors-DP

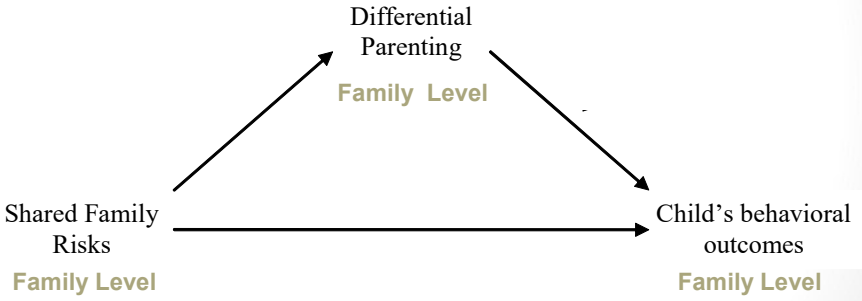


DP-Child's behavior



How are these variables related ?

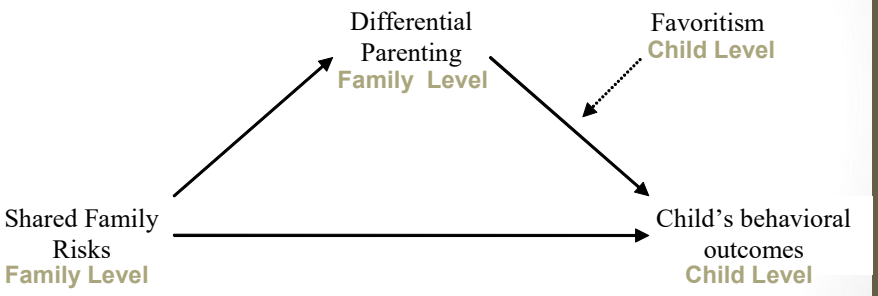
- Children affected by shared family risk factors both directly and indirectly through DP
  - At the ***Family Level*** (mediation)
    - Deleterious for <u>all children</u> in the family (*magnitude* of DP)



trouble émotionnel/comportement prosocial

Ethos familial plus négatif et sentiment d'insécurité dans la fratrie : 'chacun craint pour sa place' (Jenkins et al., 2003)

- Indirect effect through DP should be worst for the disfavored child
  - At the ***Child Level*** (moderated mediation)
    - More deleterious for the disfavored child (*direction* of DP)

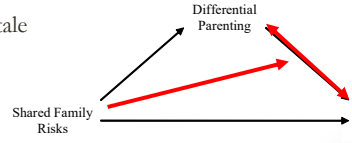


+ aspects externalisés (enfants défavorisés)
opposition, agressivité et agitation

Etude 3*

Enfants plus sensibles au DP en contexte adverse ?

- DESIGN
  - Étude transversale sur 397 familles (Multilevel multiresponse)
  - Mères et tous les enfants (échantillon tout venant)
  - Study variables :
    - Predicteur : DP
    - Modérateur : Risks (11) et cumulative risk index : EL, depression, marital conflict, family type, abuse, household chaos, neighbourhood quality, victimisation and safety,
    - Outcomes : siblings' prosocial behavior, aggression, emotional problem, attentional problem,
      social relationships
- BACKGROUND
  - Risk → limite ressources parentale
  - Risk → dvpt – enfant
  - Causalité ? DP←→ outcome ?

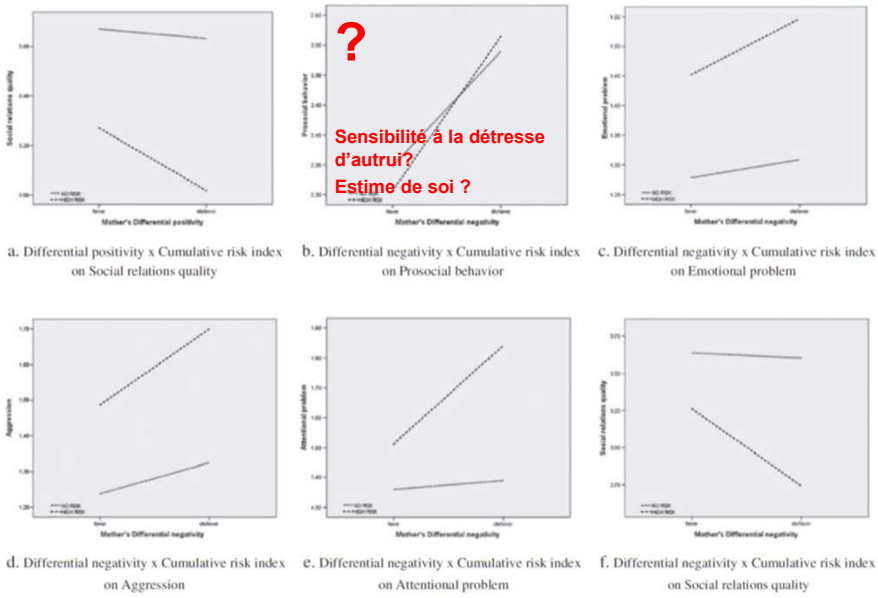


*Meunier, Wade & Jenkins, 2012, *Infant and Child Development*

Table 3. Multivariate multilevel model of moderation between cumulative risk index and mother's differential positivity and negativity in predicting children's outcomes[b]

	Prosocial behaviour	Emotional problem	Aggression	Attentional problem	Social relations quality	Wald test ($df = 5$)
Main effect						
Cumulative risk index	−.011 (.012)	.024 (.006)***	.045 (.008)***	.039 (.010)***	−.081 (.015)***	37.63***
Interactions						
Cumulative risk index × differential positivity	−.025 (.022)	.020 (.013)	−.015 (.015)	.020 (.018)	−.039 (.020)*	8.43
Cumulative risk index × differential negativity	−.038 (.014)**	.022 (.008)**	.021 (.009)*	.049 (.011)***	−.058 (.013)***	33.07***

[a]All models controlling for child's age and gender, sibling age spacing and gender composition, mother's educational level and mother's family–average parenting.
[b]Excepting covariates which were included in all models (cf. [a]), each interaction was tested separately along with its main effects terms (not presented).
$^{\dagger}p < .10$.
$^{*}p < .05$.
$^{**}p < .01$.
$^{***}p < .001$.



a. Differential positivity x Cumulative risk index on Social relations quality

b. Differential negativity x Cumulative risk index on Prosocial behavior

c. Differential negativity x Cumulative risk index on Emotional problem

d. Differential negativity x Cumulative risk index on Aggression

e. Differential negativity x Cumulative risk index on Attentional problem

f. Differential negativity x Cumulative risk index on Social relations quality

Figure 1. Moderations between mother's differential parenting and cumulative risk index in explaining children's behavioural outcomes.

Etude 4*

Potency of risks on siblings ?

- DESIGN
  - Étude transversale sur 397 familles (Multiresponse Multilevel)
  - Mères et tous les enfants (échantillon tout venant)
  - Study variables :
    - Control : age, gender
    - Predicteur : Risk (9) et cumulative risk index : EL, depression, marital conflict, family type, abuse, household chaos
    - Outcomes : siblings' aggression, emotional problem, attention, social relations, langage problems
- BACKGROUND
  - Effects of risk on outcomes
  - Effects of risk on comorbidity
  - Effects of risk on sibling similarity

*Meunier, Pillinger & Jenkins, submitted

Etude 4*

a. Potency of risks on siblings OUTCOMES ?

Table 1

Multivariate multilevel fixed effects model on shared family risk factors predicting children's behavioral outcomes

	Emotional Problem B(SE)	Conduct Problem B(SE)	Attentional Problem B(SE)	Relations Problems B(SE)	Langage Problems B(SE)	Wald test (d.f. = 5)
Family risks						
Step-families	**.414(.166)***	**.612(.169)*****	**.411(.168)***	**.656(.189)*****	**.283(.174) †**	22.095***
$\Delta R^2_{2\ (risk\ vs.\ control)}$	.03	.06	.03	.05	.02	
Lone parent families	**.703(.181)*****	.083(.175)	**.345(.19) †**	**.384(.195) †**	.187(.18)	11.774*
$\Delta R^2_{2\ (risk\ vs.\ control)}$	.09	.01	.02	.01	.00	
Mothers' EL	**-.059(.015)*****	**-.038(.015)****	**-.065(.015)*****	-.019(.017)	**-.062(.016)*****	26.14***
$\Delta R^2_{2\ (risk\ vs.\ control)}$	.08	.03	.09	.00	.11	
Teen motherhood	**.533(.2)****	**.4(.195)***	**.348(.198) †**	**.382(.218) †**	.299(.2)	9.576†
$\Delta R^2_{2\ (risk\ vs.\ control)}$	.04	.03	.02	.01	.02	
History of abuse	**.141(.086) †**	**.238(.085)****	**.275(.082)*****	**.3(.09)*****	.028(.088)	13.313*
$\Delta R^2_{2\ (risk\ vs.\ control)}$	.02	.04	.06	.04	.00	
Mother's depression	**.032(.006)*****	**.028(.006)*****	**.032(.006)*****	**.029(.007)*****	**.015(.007)***	49.269***
$\Delta R^2_{2\ (risk\ vs.\ control)}$	.13	.10	.13	.07	.03	
Marital conflict	.007(.03)	**.153(.03)*****	.035(.03)	**.139(.034)*****	-.03(.032)	16.937**
$\Delta R^2_{2\ (risk\ vs.\ control)}$	.01	.09	.01	.06	.01	
Home order	**-.168(.073)***	-.29(.072)	**-.25(.073)*****	**-.199(.08)***	**-.225(.078)****	23.355***
$\Delta R^2_{2\ (risk\ vs.\ control)}$	.03	.08	.06	.02	.06	
Cumulative risk index	**.132(.029)*****	**.154(.028)*****	**.141(.028)*****	**.162(.030)*****	**.057(.029)***	55.708***
$\Delta R^2_{2\ (risk\ vs.\ control)}$	.12	.14	.13	.10	.02	

Note.
[a]Reference category: boys
† $p<.10$; * $p<.05$; ** $p<.01$; *** $p<.001$

Etude 4*

b. Potency of risks on siblings OUTCOMES COMORBIDITY ?

Table 2

Between-family Residual correlations between children's behavioural outcomes before and after accounting for shared family risk factors

	Baseline model	Specific risk models								Cumulative risk model
	Controlling for age and gender	step	lone	education	teen	abuse	depress	conflict	order	
Emotional-Attentional	.624***	.612***	.613***	.588***	.614***	.618***	.566***	.629***	.611***	.572***
Change				*-.036*			*-.058*			*-.052*
% of change				*5.8*			*9.3*			*8.3*
Conduct-Attentional	.580***	.563***	.585***	.563***	.571***	.560***	.527***	.627***	.550***	.516***
Change							*-.053*	*.047*	*-.030*	*-.064*
% of change							*9.1*	*7.5*	*5.2*	*11.0*
Emotional-Conduct	.497***	.474***	.518***	.475***	.479***	.489***	.433***	.615***	.479***	.424**
Change							*-.064*	*.118*		*-.073*
% of change							*12.9*	*19.2*		*14.7*
Conduct-Relation	.478***	.448***	.479***	.476***	.468***	.456***	.433***	.437***	.458***	.409**
Change		*-.030*					*-.045*	*-.041*		*-.069*
% of change		*6.3*					*9.4*	*8.6*		*14.4*
Attentional-Language	.447***	.435***	.443***	.388**	.437**	.457***	.420**	.420**	.414**	.424**
Change				*-.059*			*-.027*	*-.027*	*-.033*	*-.023*
% of change				*13.2*			*6.0*	*6.0*	*7.4*	*5.0*
Emotional-Language	.274*	.256†	.269*	.199	.255†	.273†	.231†	.239†	.248†	.239†
Change		*-.018*		*-.075*	*-.019*		*-.043*	*-.035*	*-.026*	*-.035*
% of change		*6.6*		*27.4*	*6.9*		*15.7*	*12.8*	*9.5*	*12.8*
Attentional-Relation	.258**	.229*	.245**	.253**	.246**	.219*	.182†	.154	.229*	.164
Change		*-.029*	*-.013*			*-.039*	*-.076*	*-.104*	*-.029*	*-.094*
% of change		*11.2*	*5.0*			*15.1*	*29.5*	*40.3*	*11.2*	*36.4*
Emotional-Relation	.183†	.150	.158	.174†	.163†	.163	.099	.128	.163†	.085
Change		*-.033*	*-.025*				*-.084*			*-.098*
% of change		*18.0*	*13.7*				*45.9*			*53.6*
Wald test (df=10)	42.26***	37.82***	40.71***	36.37***	39.10***	38.45***	30.70***	34.42***	36.69***	29.77**

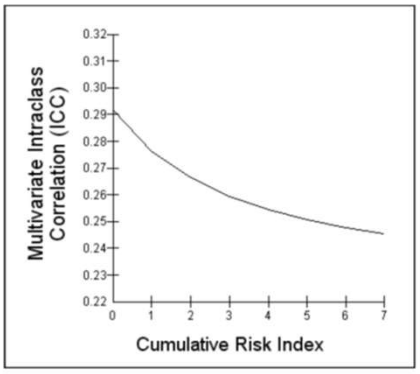
† p<.10 ; * p<.05 ; ** p<.01 ; ***p<.001

Etude 4*

c. Potency of risks on siblings SIMILARITY ?

Figure 1

Change of multivariate intraclass correlation (ICC) as a function of the cumulative risk index



ICC = Between-family variance(L2)/total variance

- Indice du clustering des données
- Indice de corrélation au sein du cluster (intra-familial)

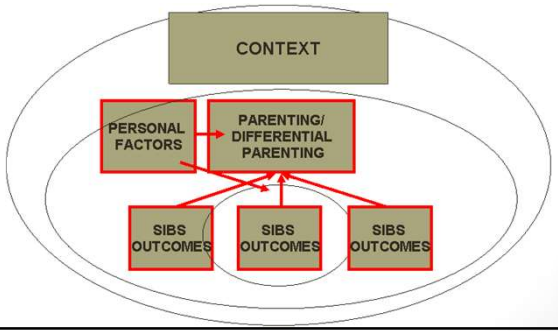
0 pas de clustering

1 pas de variance intra-familiale

Lower sibling similarity with increasing risks

III. Parents' personal characteristics and DP + Differential susceptibility

(3 études)

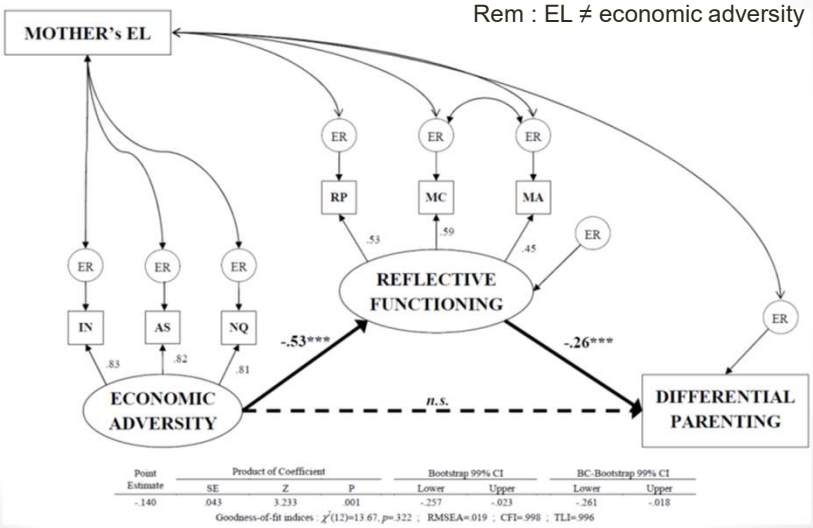


Etude 5*

Reflective functioning and DP ?

- Reflective functioning
  - Insight et regard critique/métacognition sur le rôle de parents
  - FMSS : 5 min sur l'enfant et rôle de parents
- Reflective functioning & parenting
  - Flexibilité et réajustement dans parenting
  - ≈ mindfulness ←→ automatisme, pattern d'interaction rigide
  - Quid DP ? Meilleur ajustement à chaque enfant ? Moins de partialité et de différence ?

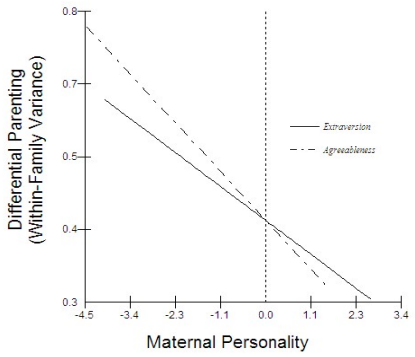
Rem : EL ≠ economic adversity

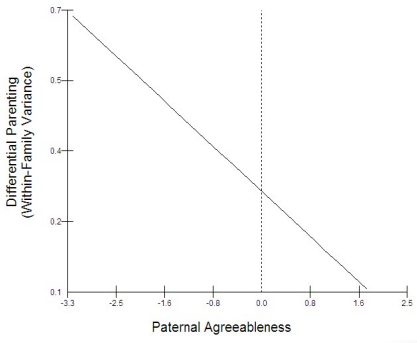


*Jenkins, Meunier, & Boyle, in revision, *Developmental Psychology*

Etude 6*

Personality and DP ?





Agr : - ↓ power assertion and control; ↑ support and sensitive responding (Losoya, Callor, Rowe & Goldsmith, 1997)

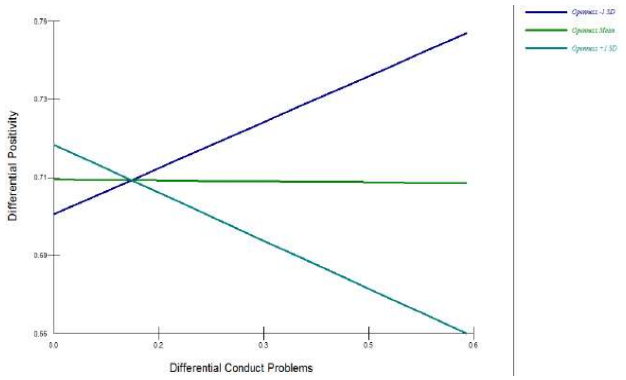
- ↑ social support & ↓ depression : more resources

Extr : - ↑ sensitive, responsive and emotionally engaged (Belsky, Crnic & Woodsworth, 1995).

*Browne, Meunier, O'Connor, & Jenkins, in press, *Journal of Family Psychology*

Etude 7*

Personality as indicator of Differential susceptibility to siblings' differences

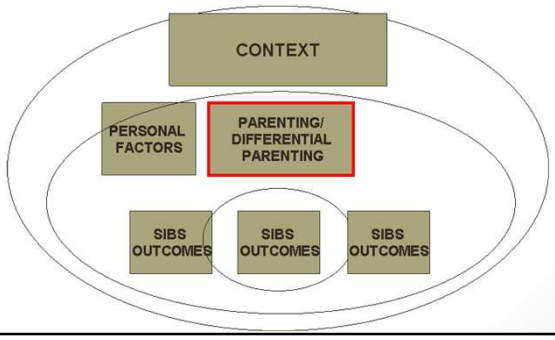


- Differential conduct problem x Extraversion → Dif Pos/Neg
- Differential conduct problem x Open → Dif Pos
- Differential conduct problem x Consc → Dif Pos

*Plamondon, Meunier, Browne, & Jenkins, submitted

IV. Person- and Family-centred approach on DP

(2 études)



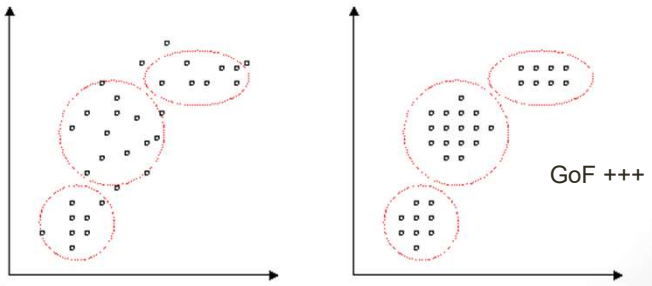
Etude 8 & 9*

- BACKGROUND
  - Explorer typologies de style éducatif à l'échelle du parent (Et. 8)
    - Parenting : positivity & negativity
    - Differential parenting : positivity & negativity
    - Discrepency entre DP posivity et negativity
  - Explorer typologies de style éducatif à l'échelle du couple parental (Et. 9)
    - Parenting
    - Differential parenting
    - Discrepency entre mère et père

*Meunier, Perlman, Plamondon, & Jenkins, submitted

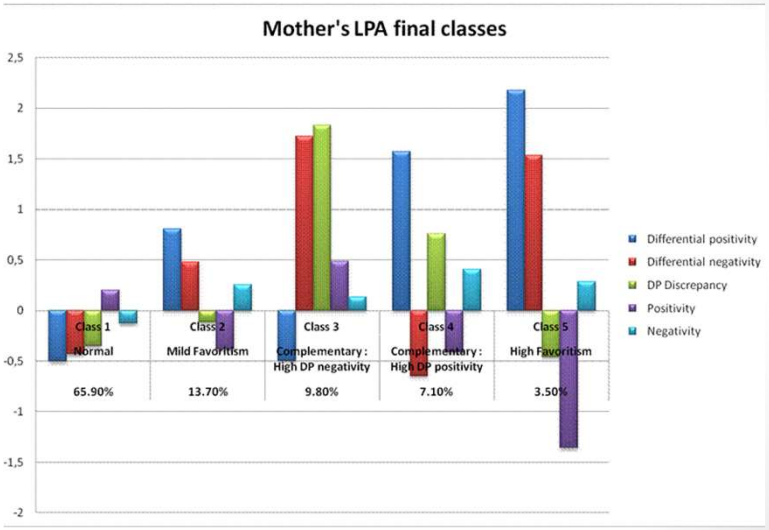
Etude 8 & 9*

- DESIGN
  - Latent Profile Analysis (MPLUS)
    - Comme cluster mais mieux
    1. Model based → goodness of fit
    2. Probabilities au lieu de catégories d'appartenance
    3. Contrôle pour les variables endogènes (ex. age, sex pour P et diff age et sex pour DP).



Etude 8*

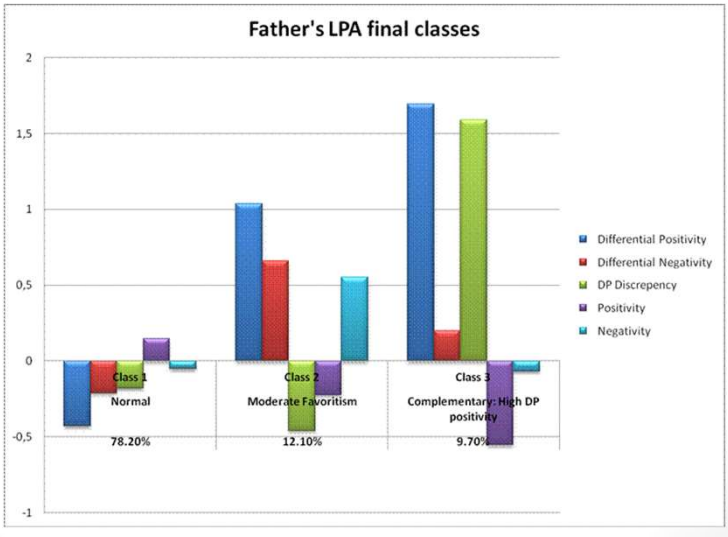
a. Person-centred : Mothers (N=397)



*Meunier, Perlmann, Plamondon, & Jenkins

Etude 8*

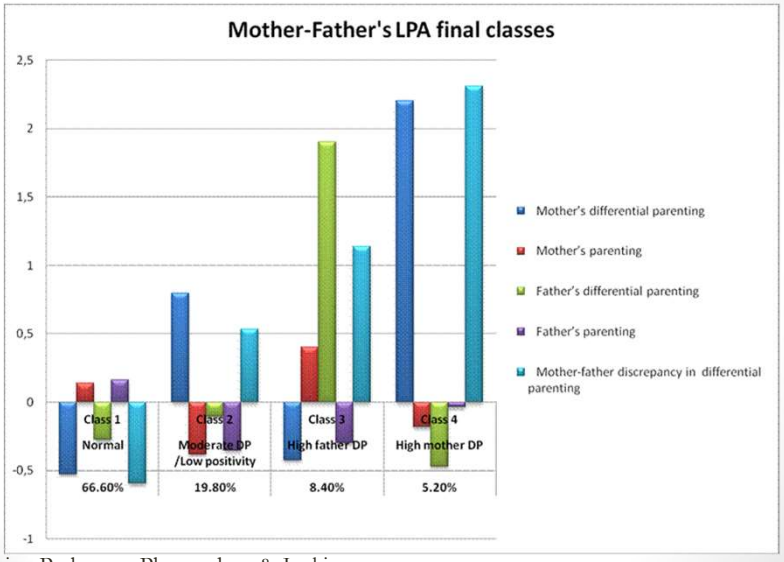
b. Person-centred : Fathers (N=351)



*Meunier, Perlmann, Plamondon, & Jenkins

Etude 9*

Family-centred : mothers-fathers (N=351)



*Meunier, Perlmann, Plamondon, & Jenkins