The Impact of Family Transitions on Children's Well-Being: Results from a Nationally-Representative 14-Year Canadian Study

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A Canadian Portrait (Statistics Canada, 2007)

- In 2006, approximately 60% of children were living in married biological or adoptive families and 4.6% with married stepfamilies.

- As of 2006, single parent households reached their all-time high of 25.8%, with 81% of these children aged 0 to 17 residing with their single mothers.

- Of all Canadian families with children in 2006, 7.28% were headed by two cohabiting biological or adoptive parents and 4.3% by one biological or adoptive parent and one stepparent in a common-law union.
  - The population of the province of Quebec accounts for nearly a quarter of all Canadian cohabitating families (27.5% in QC).

Status of research of multiple family transitions and children's developmental outcomes

- Selection processes of genetic and environmental origins interact with life events to predict specific family-wide and individual developmental outcomes.

- Research in the area of shared vs non-shared family risk highlights the interaction between :
  - Family-level variables (e.g. economic resources, marital conflict, parental functioning, maternal depression), and
  - Individual-level variables (e.g. child internalizing and externalizing behaviour, illicit drug use, child temperament) (*Jenkins & Curwen, 2008; Jenkins, Simpson, Dunn, Rasbah, & O'Connor, 2005; Martini, Root, & Jenkins, 2004; Meunier, Wade & Jenkins, 2012; Pires & Jenkins, 2007; Yaghoub Zadeh, Jenkins & Pepler, 2010*).

- The more damaging family transitions would occur in combination with: a) single motherhood, b) moderate increases in maternal depression, and c) low income-to-needs ratios (*Cavanagh, Schiller & Riegle-Crumb, 2006*)

Status of research of multiple family transitions and children's developmental outcomes

- Recent findings point to earlier family disruptions having the most significant negative impact on children's later behaviour, with later and additional family transitions moderating the overall developmental effects (*Ryan & Claessens, 2012*).

- However, there are few studies that combine a focus on both patterns of risk and resilience, including family- and individual-level predictors, and developmental outcomes tracked over time, especially using non-US population.

The interactionist perspective

- Individual attributes influence a person's social and economic position in a reciprocal process within and across generations (Conger & Donnellan, 2007).

- Both 1) social causes (e.g. socio-economic disadvantages) and 2) social selection mechanisms (e.g. intelligence, personality traits) interact within a family to influence childhood outcomes over time.

This Study

- We used longitudinal prospective data from a representative Canada-wide survey to achieve two objectives.
    - First, we constructed family transition profiles to capture the number and type of changes in family structure that occurred over a 12-year period for young children whose initial age was < 24 months.
    - Second, we examined the long-term impact of various family transition profiles on adolescent behavioural outcomes, while also taking into account the influence of socio-demographic, child, and family variables.

- HYPOTHESES:
    - 1) Earlier and more frequent family transitions will be linked to poorer developmental outcomes,
    - 2) specific child-level and family-level early predictors will be significantly linked to later developmental outcomes; and
    - 3) early predictors and history of multiple family transitions will interact to predict poorer developmental outcomes.

The National Longitudinal Survey of Children and Youth (NLSCY)

- The *National Longitudinal Survey of Children and Youth* (NLSCY) is a nation-wide survey that began in 1994 (cycle 1) with a representative sample of 22,831 0-11 year olds from 13,439 households, representing an overall response rate of 86.3%.

- Households were selected by way of Statistics Canada's Labour Force Survey (LFS), which uses a stratified multistage probability sample design to conduct monthly surveys of approximately 59,000 households that are representative of Canada's population.

- Data collection occurs on a biennial basis, and the primary data collection tool is a personal or telephone interview with the person most knowledgeable (PMK) about the child, which in approximately 90% of cases is the child's biological mother (Statistics Canada and Human Resources Development Canada, 1995).

Our sample

- 1,473 children, where the mean age of children was 11.17 months at cycle 1, and they were evenly divided between girls (49.5%) and boys (50.5%).

- In terms of child ethnicity, the majority were Caucasian (87.4%).

- The majority of families reported an income superior to the Low Income Cut-Off (LICO; 84%), with an average household size of 4.09 (SD = 1.23).

- The average age of mothers at the birth of their first child was 26.60 (SD = 4.40), and the majority of mothers in the sample completed some form of post-secondary education (73.1%).

- The majority of fathers in the sample were employed full-time (87.3%), with 68% of fathers reporting some form of post-secondary education.

Predictor Variables

- *Socio-demographics.* Data were gathered in cycle 1 (1994) when all children were still living in intact families composed of two married or cohabitating biological parents.

- *Child variables.* At cycle 1, child's age, sex, and ethnicity. In addition, data were collected on the child's temperament by way of mother-reported standardized measure.

- *Family variables.* At cycle 1, biological mothers provided information on their parenting practices (positive interactions, hostility/ineffectiveness, consistency), family functioning, and maternal depressive symptoms.

Outcome Variables

- *Behavioural outcomes*. Data were gathered in cycle 8 (2008) through self-reports when children were 14-15 years of age. We focused on four behavioural outcomes, specifically:
  - Emotional problems (anxiety, depression)
  - Inattention/hyperactivity
  - Property offenses
  - Prosocial behaviours.

Objective 1: Tracking Changes in Family Structure Over Time

- First, we began with children aged < 24 months at cycle 1 who were in an intact family (defined as living with married or cohabitating biological parents). We then tracked family structure from cycles 2 through 7 to capture the 93 combinations with frequency data.

- 5 transition profiles:
  - No transition
  - From common law to married
  - From intact to single
  - From intact to single to step
  - More than 3 family transitions

Objective 2a: Predicting Transition Profiles

- We conducted logistic regressions to examine socio-demographic, child and family variables that were theoretically proposed to predict patterns of family transition profiles. Specifically, we examined the following predictors:
    - (a) maternal age at first birth;
    - (b) maternal employment;
    - (c) paternal employment;
    - (d) maternal education;
    - (e) paternal education;
    - (f) household size;
    - (g) family income (LICO);
    - (h) child difficult temperament;
    - (i) mother-child positive interaction;
    - (j) hostile parenting;
    - (k) maternal depressive symptoms and
    - (l) family dysfunction.

Objective 2b: Predicting Developmental Outcomes

- Multiple Linear Regressions were conducted in order to examine the associations between common family transition profiles and later behavioural outcomes (age 14 to 15), while controlling for a series of:
  - **socio-demographic** (i.e., maternal education and employment, household size, family income, mother's age at first birth, province of residence, timing of transitions),
  - **child** (sex, ethnicity, temperament) and
  - **family** (i.e., maternal depression, family dysfunction, hostile parenting and positive interactions) controls.

Main findings: Profile 1 vs 2

	Profile 2: Common Law to Married		
	OR	95%	CI
Maternal age at first birth	0.91	0.81	1.01
Maternal employment	1.40	0.87	2.25
Paternal employment	0.97	0.48	1.94
Paternal education	1.18	0.74	1.91
Maternal education	0.46***	0.28	0.75
Household size	0.28***	0.14	0.57
Family income (LICO)	0.95	0.69	1.32
Child difficult temperament	0.98	0.96	1.00
Mother-child positive interaction	0.92	0.79	1.08
Hostile parenting	0.80	0.58	1.10
Maternal depressive symptoms	1.00	0.90	1.11
Family dysfunction	1.02	0.93	1.11

*Notes. * $p \le .05$; ** $p \le .01$; *** $p \le .001$*

Main Findings: Profile 1 vs 3

	Profile 3: Intact to Single			
	OR	95%	CI	
Maternal age at first birth	1.01	0.96	1.07	
Maternal employment	0.55***	0.39	0.79	
Paternal employment	0.64**	0.45	0.91	
Paternal education	0.64***	0.49	0.84	
Maternal education	0.89	0.66	1.19	
Household size	0.75*	0.57	0.99	
Family income (LICO)	0.92	0.78	1.08	
Child difficult temperament	1.00	0.99	1.01	
Mother-child positive interaction	1.14*	1.01	1.29	
Hostile parenting	1.03	0.87	1.22	
Maternal depressive symptoms	1.08***	1.03	1.13	
Family dysfunction	1.03	0.98	1.09	

*Notes. * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$*

Main Findings: Profile 1 vs 4

	Profile 4: Intact to Single to Step		
	OR	95%	CI
Maternal age at first birth	0.86***	0.80	0.92
Maternal employment	1.14	0.86	1.49
Paternal employment	0.69	0.48	1.01
Paternal education	1.17	0.89	1.54
Maternal education	0.70*	0.52	0.94
Household size	0.77*	0.60	0.99
Family income (LICO)	1.25*	1.03	1.53
Child difficult temperament	1.01	1.00	1.02
Mother-child positive interaction	1.06	0.96	1.17
Hostile parenting	0.81*	0.68	0.97
Maternal depressive symptoms	1.03	0.98	1.09
Family dysfunction	1.03	0.98	1.08

*Notes. * p ≤ .05; ** p ≤ .01; *** p ≤ .001*

Main Findings: Profile 1 vs 5

	Profile 4: More than 3 family transitions			
	OR	95%	CI	
Maternal age at first birth	0.89	0.78	1.01	
Maternal employment	0.82	0.41	1.66	
Paternal employment	1.20	0.57	2.54	
Paternal education	0.63	0.36	1.11	
Maternal education	0.83	0.46	1.52	
Household size	0.52*	0.28	0.96	
Family income (LICO)	0.61***	0.46	0.83	
Child difficult temperament	1.03***	1.01	1.06	
Mother-child positive interaction	1.19	0.92	1.54	
Hostile parenting	0.98	0.71	1.34	
Maternal depressive symptoms	0.97	0.88	1.08	
Family dysfunction	1.17***	1.05	1.30	

*Notes. * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$*

Main Findings: Multiple Regression Models

	Emotional problems		Pro-social behavior		Hyperactivity/inattention		Property offenses	
	β	SE	β	SE	β	SE	β	SE
Family Transition Profiles								
Profile 2	-0.05	0.63	-0.04	0.88	0.02	0.64	-0.01	0.28
Profile 3	0.01	0.37	-0.08**	0.50	0.08**	0.38	0.12**	0.16
Profile 4	0.04	0.36	-0.08**	0.51	0.09***	0.36	011***	0.16
Profile 5	-0.04	0.65	0.03	0.89	-0.01	0.66	0.01	0.29

Family Transition Profiles and Developmental Outcomes

- Even after controlling for a host of early child and family predictors, Profiles 3 and 4 were still significantly and independently linked to developmental outcomes :
  - Poorer Prosocial Behaviors
  - Higher level of Property offenses
  - Higher Inattention/Hyperactivity

- In addition, timing of transitions appears to act as a suppressor variable, which decrease predictive ability of transition profiles, but not of early predictors.

Significant Early Predictors: Child

- <u>Age and gender</u>
  - Girls were more likely to report higher rates of emotional problems; β = -0.22, $p \leq$ .001.
  - Boys and older children were more likely to obtain higher property offense scores; β = 0.07, $p \leq$ .001 and β = 0.09, $p \leq$ .01, respectively.
  - Boys and older children were also more likely to report higher rates of inattention/hyperactivity; β = 0.10, $p \leq$ .05 and β = 0.11, $p \leq$ .05, respectively.

- <u>Temperament</u>
  - Children that were rated by their mothers as having more difficult/fussy temperaments at the age of less than 24 months were found to be more likely to report more emotional problems at the age of 14-15; β = 0.08, $p \leq$ .05.
  - However, difficult/fussy infant temperament was also significantly associated to decreases in self-reported property offenses; β = -0.09, $p \leq$ .05.

Significant Early Predictors: Mother

- Age
  - younger maternal age at the first birth was associated to an increase in self-reported emotional problems at the age of 14-15; β = -0.07, $p \leq .05$.
  - Higher maternal age at the first birth was associated to increases in self-reported pro-social behaviours; β = 0.11, $p \leq .001$.

- Education and Employment
  - Higher maternal education was associated to increases in self-reported inattention/hyperactivity, β = 0.12, $p \leq .001$.
  - Mother reports of employment in the past year (part-time or full-time) when the children were < 24 months (cycle 1) was also associated to increases in later self-reported pro-social behaviours; β = 0.08, $p \leq .01$.

Significant Early Predictors: Mother

- <u>Maternal depressive symptoms</u>

  - Higher rates of maternal depressive symptoms at cycle 1 were significantly associated with higher adolescent self-reported emotional problems at the age of 14-15; β = 0.08, $p \leq .01$, and increases in inattention/hyperactivity scores when children were 14-15; β = 0.15, $p \leq .001$.

- <u>Hostile/Ineffective Parenting</u>

  - Hostile/Ineffective parenting when children were < 2 years old was significantly associated to self-reported emotional problems in adolescence (14-15 years old); β = -0.07, $p \leq .05$, and property offenses; β = -0.07, $p \leq .05$.

Significant Early Predictors: Family

- <u>Income and Household Size</u>

  - Lower family income when children were < 2 years of age was significantly associated to increases in adolescent self-reported property offenses, β = -0.09, $p \leq .01$, and in self-reported inattention/hyperactivity; β = -0.08, $p \leq .01$.

  - Higher household size (collected at < 2 years old) predicted higher scores on inattention/hyperactivity; β = 0.07, $p \leq .05$.

Discussion

- We have found partial support for all 3 hypotheses:
  - 1) Specific patterns of family transitions can be linked to poorer developmental outcomes,
  - 2) specific child-level and family-level early predictors will be significantly linked to later developmental outcomes; and
  - 3) early predictors and history of multiple family transitions will interact to predict poorer developmental outcomes.

Conclusion & Implications

1. Our data lends support to the Interactionnist Perspective.

2. Results are also consistent with current findings that have used US and European data sets.

3. Findings also indicate that past a certain level of family instability, transitions themselves may play a lesser role than child and family predictors.

4. Finally, a number of early predictors showcase the importance of cultivating resilience within families, especially through maternal health care and social solidarity policies.

Thank you!