Educational trajectories of Canadian children in care in primary school and the early years of secondary school

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Background

- 67,000 children and adolescents in Canada in out-of-home care (Mulcahy & Tromé, 2010)
  - Higher rates of grade retention (Zima et al., 2000)
  - Increased rates of learning disabilities (Nasstrom & Koch, 1996)
  - 30-50% receive special education (vs. 11.5% of children in the general population) (Zetlin et al., 2012)
  - Low rates of high school completion in the usual time (Blome, 1997)
  - 53% living below the poverty line after leaving care (Cook et al., 2001)

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Background

- The extent to which children in out-of-home care exhibit educational difficulties is influenced by a number of variables: e.g.,
  - History of maltreatment (Pears et al., 2010)
  - Mental health (e.g., ADHD)
  - Placement stability
  - Aspiration to succeed (Shin, 2003)

- Majority of studies are retrospective or descriptive
- Few longitudinal and even fewer trajectory studies
Research Objectives

1. To identify *developmental trajectories* of educational performance across a 3-year period for youth in out-of-home care
   - Younger children (5-9 years)
   - Older children (10-14 years)

2. To identify time stable (e.g., gender) and time varying (e.g., internal assets) *predictors* of trajectory group membership
OnLAC Project

- **Ontario Looking After Children (OnLAC) project**
- Data collection mandated across all local Children’s Aid Societies in Ontario, Canada since 2006
  - Canadian adaptation of the Assessment and Action Record (AAR-C2-2010) (Flynn, Miller, Desjardins, Ghazal, & Legault, 2010)
- **Assesses eight developmental domains:**
  - Health
  - Education
  - Identity
  - Family and social relationships
  - Social presentation
  - Emotional and behavioral development
  - Self-care skill
  - Developmental assets
Participants

Two groups of children in out-of-home care:

1. “Younger children”, 5-9 years in 2009 (N = 511)
   - Mean age = 7.66 years
   - 58.3% males; 41.7% female
   - Reasons for admission to care: neglect (77.5%); emotional harm (45%); physical harm (29.7%); abandonment/separation (12.9%); problematic behavior (8.6%); sexual harm (8%)

2. “Older children”, 10-14 years in 2009 (N = 1170)
   - Mean age = 12.24
   - 56.0% males; 44.0% female
   - Reasons for admission to care: neglect (74.4%); emotional harm (41.8%); physical harm (31.9%); abandonment/separation (16%); problematic behavior (11.5%); sexual harm (9.9%)
Educational Performance

- **Academic Performance Scale** (Statistics Canada & Human Resources Development Canada, 1999)
  - Reading and other language arts (e.g., spelling)
  - Mathematics
  - Science (when relevant)
  - Overall
- Response options: *Poorly or very poorly, average, well or very well*
- Rated by foster parent
- Higher total score indicates better academic performance
- Internal consistency: Cronbach’s alpha = .70 (acceptable)
Methodology

- Two groups of children were analyzed separately

Objective 1
- Trajectories for the total score on the Academic Performance Scale was modelled across a 3-year period from cycle 10 (2010-2011) to 12 (2012-2013) using a SAS procedure called PROC TRAJ

Objective 2
- Time-stable and time-varying predictors of trajectory group membership were investigated using logistic regression
Predictors: Time Stable

- Child-level
  - Sex
  - Age at first placement
  - Ethnicity
  - Placement type (foster care, kinship care)
  - Number of adverse life experiences (e.g., severe poverty)
  - Cognitive impairment index
  - Number of school changes since birth
  - Repeated grade since birth
- Caregiver-level
  - Caregiver training (e.g., foster parenting techniques)
  - Caregiver years of experience
Predictors: Time Varying

• Child-level
  – Number of internal assets (e.g., responsibility)
  – Number of external assets (e.g., youth programs)
  – Total problematic behaviors (Strengths and Difficulties Questionnaire [SDQ])

• Caregiver-level
  – Number of caregiver changes
  – Positive parenting practices
Trajectories: Younger Children

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Significant **Time-Stable** Predictors (p < .05): Younger Children

- **Probability of being in the higher (i.e., average, stable) academic performance trajectory group:**
  - Kinship care *3 times* more likely than foster care
  - Caregiver years of experience:
    - Caregiver has 4-9 years experience *5 times* more likely than caregiver with < 1 year experience
    - Caregiver has 10+ years experience *4 times* more likely than caregiver with < 1 year experience
  - Has not repeated a grade *2.5 times* more likely than children who have repeated a grade
Significant **Time-Varying** Predictors (p < .05): Younger Children

- **Probability of being in the higher (i.e., average, stable) academic performance trajectory group:**
  - Each additional internal asset (e.g., interpersonal competence): *15% more likely*
  - Each additional external asset (e.g., caring school environment): *19% less likely*
  - Each additional problem behavior (e.g., often loses temper): *10% less likely*
Educational trajectories of Canadian children in care
Significant Time-Stable Predictors (p < .05): Older Children

- **Probability of being in the higher (i.e., above average) academic performance trajectory group:**
  - Girls 53% more likely than boys
  - Ethnicity:
    - “Other” ethnic group: 86% more likely than European-Canadians
    - “Mixed” ethnic group: 46% more likely than European-Canadians
  - For every increase in cognitive impairment, 18% less likely
Significant Time-Varying Predictors (p < .05): Older Children

- Probability of being in the higher (i.e., above average) academic performance trajectory group:
  - Each additional internal asset (e.g., motivation to achieve): 24% more likely
  - Each additional problem behavior (e.g., often lies or cheats): 8% less likely
Strengths & Limitations / Future Directions

• Strengths
  – One of the first studies to assess educational trajectories for children in care
  – Assessed time-stable and time-varying predictors
  – Large samples

• Limitations
  – Preliminary results
  – Reliance on caregiver and case worker reports
  – Educational outcomes are basic
  – Other variables should be assessed as possible predictors
Take Home Messages

• Different trajectories for younger and older children in care

• Importance of assessing academic outcomes as early as possible

• Findings can help inform future prevention and interventions for poor academic performance of children in care
  – E.g., increase internal assets, decrease problematic behavior

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Thank you!

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References