

Longitudinal Analysis of Preschool Child-Parent Attachment in Association to Externalizing Behaviours in School-Aged Children

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Introduction

- Prior research identifies attachment as an important correlate in child social adaptation, especially externalizing behaviours (e.g., conduct problems, hyperactivity) (Bureau et al., 2017 ; DeKlyen & Greenberg, 2008).
- A secure mother-child attachment is termed as a focal point for the healthy development of the child's social and emotional skills.
- However, recent studies have presented findings highlighting the importance of a secure father-child attachment and suggest that fathers could play a central role in the formation of children's externalizing problems (Bureau et al., 2017).
- This longitudinal study aims to determine whether specific patterns of attachment within child-parent dyads, detected in the preschool period, can predict externalizing behaviours occurring in middle childhood.

Objectives

Objective 1: To explore the associations between preschool attachment quality and externalizing behaviours in school-aged children.

Hypotheses:

- It is expected that markers of insecurity (i.e., avoidance, ambivalence, disorganization and role-reversal) will be associated to higher externalizing scores.
- Attachment insecurity toward fathers will show stronger association to externalizing symptoms than insecurity toward mothers.

Objective 2: To examine the differential predictive power of child attachment to mothers and fathers.

Hypothesis: The established associations between father-child attachment and externalizing symptoms will remain significant even after the inclusion of the relevant control variables and the mothers' scores for the corresponding sub-scales of attachment in a stepwise regression analysis.

Methodology

Participants

- 85 intact families composed of heterosexual couples (mother, father) and the target child
 - **Phase 1:** 35 boys, 50 girls ($\bar{x}_{age} = 3.88$ years, $SD = 0.69$)
 - **Phase 2:** 35 boys, 50 girls ($\bar{x}_{age} = 8.83$ years, $SD = 0.99$)
- Recruitment of anglophone and/or francophone families from the Ottawa-Gatineau Region using advertisements in newspapers, magazines, on the radio and the Lab website.

Procedure

Phase 1: The child-parent dyads engaged in a modified version of a separation-reunion laboratory procedure for preschool children (Cassidy & Marvin, 1992) which includes 5 distinct stages, lasting five minutes each:

- 1 free-play interaction and 2 series of Separation and Reunions
- This procedure was recorded by a video-camera

Phase 2: Each parent filled out the Strength and Difficulties Questionnaire (SDQ: Goodman, 1997) about their child's social behaviour.

Measures

Phase 1: The Preschool Attachment Rating Scales (PARS; Moss, Lecompte & Bureau, 2015) measured the quality of attachment to both parents separately during their laboratory visit.

- The PARS yields the following six sub-scales of attachment in regards to the mothers or fathers: Security, Avoidance, Ambivalence, Disorganization, Caregiving and Punitiveness.

Phase 2: The SDQ contains 25 items and yields 4 sub-scales linked to problematic behaviours.

- In the current study, only those pertaining to Externalizing symptoms will be used: Conduct problems and Hyperactivity/Inattention.

Results

- A preliminary analysis revealed that the combination of mothers' and fathers' scores for each sub-scales of the SDQ is a more effective tool in measuring the parents' responses on the questionnaire rather than the individual scales.
- The Chronbach's Alpha values for the parents' combined scores are acceptable (0.76 - 0.85), insuring that the combined score is of sufficient coherence.
- The Correlation Coefficient between the mothers' and fathers' scores are in the moderate to strong range (0.54 - 0.79), insuring that their responses in regards to their child's emotional and social behaviour are both aligned in the similar direction.
- The preliminary analyses also included the identification of control variables that could significantly influence the results and were therefore incorporated in the regression analyses:
- T-tests were conducted to measure the effect of child gender on all seven SDQ factors.
- Correlation analyses were completed to verify the effect of fathers' education, mothers' education, family income, and child age on all seven SDQ factors.
- Results identified child gender and fathers' education as the two pertinent control variables for this study.

Research Question 1

- Tables 1 and 2 present the correlation between attachment scales and child externalizing scales for separately for each parent-child dyads.

Table 1. Associations between the quality of attachment to the father in preschool years and externalizing behaviours in middle childhood (n = 85)

	Conduct Problems	Hyperactivity	Externalizing Behaviours
	Correlation ¹ (r)	Correlation (r)	Correlation (r)
Security	- 0.11	- 0.24*	- 0.23*
Avoidance	- 0.12	0.07	- 0.01
Ambivalence	0.25*	0.20	0.26*
Disorganization	0.03	0.05	0.05
Caregiving	- 0.15	- 0.13	- 0.16
Punitiveness	0.23*	0.02	0.12

* p < 0.05

¹ Pearson Correlation between attachment to the father and externalizing behaviours

Table 2. Associations between the quality of attachment to the mother in preschool years and externalizing behaviours in middle childhood (n = 85)

	Conduct Problems	Hyperactivity	Externalizing Behaviours
	Correlation ¹ (r)	Correlation (r)	Correlation (r)
Security	- 0.04	- 0.13	- 0.11
Avoidance	- 0.16	0.08	- 0.02
Ambivalence	0.18	0.04	0.11
Disorganization	0.06	0.10	0.09
Caregiving	0.03	- 0.01	0.01
Punitiveness	- 0.01	0.09	0.06

* p < 0.05

¹ Pearson Correlation between attachment to the mother and externalizing behaviours

- As presented in the tables, the quality of the child-father relationship is significantly associated to the following SDQ scales:
 - 1) Security to the father is inversely correlated with externalizing behaviours and hyperactivity
 - 2) Ambivalence towards the father is positively correlated with externalizing behaviours and conduct problems
 - 3) Punitiveness towards the father is positively correlated with conduct problems

Results (cont'd)

Research Question 2

- Results from the regression analyses confirm that these associations remain marginally significant even after the inclusion of the relevant control variables and the mothers' scores for the corresponding sub-scales of attachment.
 - 1) Security and externalizing behaviours: $\beta = -0.18$ ($p = 0.08$)
 - 2) Security and hyperactivity: $\beta = -0.18$ ($p = 0.07$)
 - 3) Ambivalence and externalizing behaviours: $\beta = 0.18$ ($p = 0.09$)
 - 4) Ambivalence and conduct problems: $\beta = 0.19$ ($p = 0.08$)
 - 5) Punitiveness and conduct problems: $\beta = 0.20$ ($p = 0.06$)

Discussion

- These results suggest that a child-father insecure attachment in the preschool years can promote externalizing problems during middle childhood, even when mother-child attachment is taken into account.
- This confirms the recent body of literature showing similar results using various assessment modalities at various developmental stages (see Bureau et al., 2017 for a discussion).
- Not only does this research distinguish the effects of secure and insecure child-attachments with each parent, it allows for a further examination of the specific insecurities that can be present in child-parent relationships such as ambivalence and punitiveness which are associated with particular externalizing behaviours such as conduct problems and hyperactivity.
- Both of these insecurity patterns imply resistance and hostility toward the parent that varies from mild to extreme.
- These associations could be explained by the fact that fathers generally occupy an authoritarian role in many North American households, where directly confronting the father with hostility and opposition could be seen as more unusual and indicative of more general behavioural issues.
- Another important contribution of the current study lies in its longitudinal design ensuring that the observed associations are not only concurrent but are maintained in time.

Limits

- The sample size is limited, yielding marginal results and making it difficult for inferences to be made on a larger population.
- The sample is normative and generally of low risk SES, therefore reducing the individual differences between subjects.

References and Acknowledgements

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