



Quality of exposure to the AIDES social innovation and developmental outcomes of the children and parents

presented

by

Claire Chamberland, Ph. D., Marie-Ève Clément, Ph.D., Carl Lacharité, Ph. D. and Véronique Bouchard

BAPSCAN 2012

This project is financed by the (Canadian) National Crime Prevention Center (NCPC). We thank the GRAVE and the GRIN research groups for the support they have given us since 2003.

Formation of the experimental group+

- Population per protocol → n=44
- Child cases most closely matching the experimental intervention, based on two criteria:
 - 1) Quality of completion of the Needs Analysis Workbook for the child
 - 2) Quality of exposure to the intervention (training, support received, number of families referred to the project).

Statistical analyses

- Three hypotheses: differential proximal effects, differential intermediate effects, differential final effects.
- Repeated-measures ANOVA examining the effects Group x Time.

Significant differences between the AIDES+ and control groups at pre-test

	AIDES+	Control
Characteristics of the children	Tend to be younger on average†	
Characteristics of the families	Are more likely to live in cramped housing conditions*	
Cognitive, language, behavioural, and emotional development of the child	Are more likely to experience difficulties in three areas of their development (DAT)*	Are more likely to have high levels of internalising problems (CBCL) **
Victimisation	Are more likely to be at high risk for being victim of abusive behaviours of a chronic nature by the responding parent (CAPI)*	
Adaptation of the parental figures to their role, and exercise of their responsibilities toward the child	Are more likely to report high dysfunctional interaction with the child targeted by the study (PSI) **	Are more likely to report normal levels of dysfunctional interaction with the child targeted by the study (PSI) **
Quality of the family environment to which the child is exposed	<i>No significant difference</i>	
Perception of the parental figures regarding the quality of collaboration with the assigned practitioner		Are more likely to report high quality collaboration with the assigned practitioner (QPPC)*

(p < 0.1† p ≤ 0.05* p ≤ 0.01** p ≤ 0.001***)

Outcomes of differential proximal effects

Mean change over time for measures of proximal effects

Measures of proximal effects (expected direction)	Mean change (T2 - T1)		<i>p</i>
	<i>AIDES +</i>	<i>Control</i>	
HPS – Helping Practices Scale (↗) (scale of 1-5)	-0.11 (0.73)	0.01 (0.74)	<i>ns</i>
(PCAS) – Personal Control Appraisal Scale (↗) (scale of 1-10)	0.14 (1.66)	0.37 (2.70)	<i>ns</i>
QPPC – Perceived quality of parent/practitioner collaboration (↗) (scale of 1-5)	-0.15 (0.59)	-0.19 (0.58)	<i>ns</i>

Outcomes of differential intermediate effects

Mean change over time for measures of intermediate effects

Measures of intermediate effects (expected direction)	Mean change (T2 - T1)		<i>p</i>
	<i>AIDES +</i>	<i>Control</i>	
PSI – Parental stress (↓) (Additive score: 36-180)	-1.37 (18.81)	1.11 (14.89)	<i>ns</i>
FSS – Informal family support (↗) (Mean score: 1-5)	0.30 (0.77)	0.03 (0.72)	*
FSS – Formal family support (↗) (Mean score: 1-5)	- 0.04 (0.73)	0.01 (0.76)	<i>ns</i>
FSS – Total family support (↗) (Mean score: 1-5)	0.15 (0.58)	0.02 (0.60)	<i>ns</i>
CAPI- Abuse potential from parent (↓) (Weighted score: 10-370)	-24.33 (60.46)	-14.00 (55.73)	<i>ns</i>
HOME – Family environment (↗) (Variable score ^a)	4.14 (4.93)	2.46 (5.54)	*

* $p \leq 0.10$

^aVaries by age group of children (0-45 for 0-36 months; 0-55 for 3-6 years; and 0-59 for 6-10 years)

Outcomes of differential final effects

Mean change over time for measures of final effects

Measures of final effects (expected direction)	Mean change (T2 - T1)		<i>p</i>
	<i>AIDES +</i>	<i>Control</i>	
DAT* - Cognitive development (↗) (Variable score)	1.97 (5.37)	1.29 (5.22)	<i>ns</i>
DAT* - Motor development (↗) (Variable score)	1.67 (3.85)	2.29 (2.73)	<i>ns</i>
DAT* - Emotional development (↗) (Variable score)	0.77 (2.80)	0.76 (1.87)	<i>ns</i>
PPVT** - Language development (↗) (Additive score: 0-170)	15.78 (10.99)	17.90 (14.10)	<i>ns</i>
CBCL – Internalising problems (↘) (Normalised score: 33-83)	0.91 (8.75)	-0.57 (7.24)	<i>ns</i>
CBCL – Externalising problems (↘) (Normalised score: 32-83)	-1.40 (8.48)	0.78 (7.54)	<i>ns</i>
CBCL - Total (↘) (Normalised score: 32-80)	0.37 (7.14)	-0.31 (6.36)	<i>ns</i>

* Only 68 children of the control group and 53 children of the AIDES group (including 35 from the AIDES+ group) completed the DAT.

** Only 31 children of the control group and 23 children of the AIDES group (including 9 from the AIDES+ group) completed the PPVT.

^a Variable scale depending on age group of children (14 versions based on age blocks of 3-6 months)

**Main effects on the child, the parent,
and the family environment
(greater for AIDES group than for control group):**

- Improvement in quality of formal support for the parent;
- Improvement in quality of family environment

Other changes or effects observed in the AIDES* group (no difference with CONTROL group)

- Decrease in victimisation potential of parent toward child
- Decrease in parental stress
- Improvement in cognitive and social-emotional development of the child (compared to children of same age group)
- Decrease in emotional and behavioural problems.

****Children in the AIDES group presented more difficulties compared to children in the control group.***

Limitations

- Inability to randomly distribute subjects in the AIDES and control groups → No equivalence of groups at pre-test;
- Issues related to measures (proximal effects);
- Small sample size per protocol;
- Decision to reassess children's and parents' situations after a period varying between 12 and 24 months following pre-test;
- Degree of exposure of children and parents to expected protocol.