



# ***Predictors of development of vulnerable children in protection and prevention services***

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# THEORETICAL CONTEXT

- **Home environment and emotional support → positively associated with indicators of child development** (Harden & Whittaker, 2011; Jaffee, 2007; Rijlaarsdam et al., 2012; Stahmer et al., 2009).
- **Young maternal age at childbirth, number of children in the family, and economic insecurity → low cognitive, social, and behavioural performance in children** (Harden & Whittaker, 2011; McKenzie & al. 2011 ; Park, Fertig, & Allison, 2011; Slack et al., 2011).
- **Emotional negativity, parental stress, family conflict → strongly related to risk of maltreatment (MT)** (Slack et al., 2011; Stith et al., 2009)
- **Child victims of MT are more likely to have physical, psychological, cognitive, and behavioural problems in childhood and adulthood** (Gilbert, Kemp & al., 2009; (Gilbert, Widom, & al., 2009 ; Nikulina, Widom & Czaja 2011).
- **Accumulation of risk factors makes a difference** (Appleyard, Egeland, van Dulmen, & Sroufe, 2005).





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## **AIM OF THE STUDY**

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**Identify the best predictors of social-emotional and cognitive/language development from a group of vulnerable children and their families**

*From an intervention project implemented in Québec.*





# SAMPLE

- **184** children aged from 2 to 120 month ;
  - Mean age (SD) : 49.4 (31.9)
  - Male : 59% ; Female : 41%
- Recruited through institutions providing protection (n=103) and prevention services (n=81) ;
- 68% of children recruited through preventive services were reported (mostly neglect).



# DATA COLLECTION (HOME VISIT)

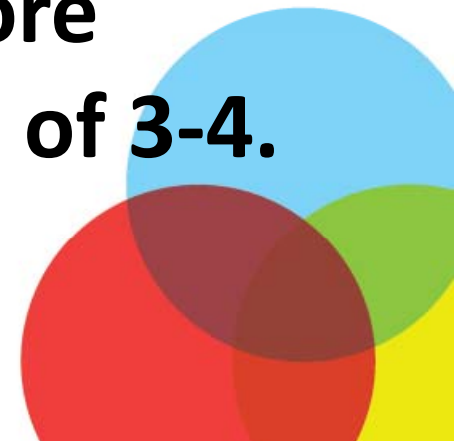
|  | Dimensions (n=184)   | Sources/Collection methods   |
|--|--|--|
| <p><b>Predictor 1</b></p> <p style="text-align: center;">Socio-demographic characteristics</p> | <ul style="list-style-type: none"> <li>• Age of the parent, education level</li> <li>• Number of children 18 years and under at home, occupation density, family income</li> </ul>   | <p>Parent</p> <ul style="list-style-type: none"> <li>• In-house questionnaire (Family information)</li> </ul>  |
| <p><b>Predictor 2</b></p> <p style="text-align: center;">Family environment</p>                | <ul style="list-style-type: none"> <li>• Child victimisation</li> <li>• Adaptation of parental figures to their role and exercise of their responsibilities toward the child</li> <li>• Quality of the family environment to which the child is exposed</li> </ul> | <p>Parent</p> <ul style="list-style-type: none"> <li>• Child Abuse Potential Inventory (CAPI)</li> <li>• Parental stress index (PSI)</li> <li>• Family support inventory (FSI)</li> <li>• Home Observation for Measurement of the Environment (HOME)</li> </ul>                                    |
| <p><b>Outcome</b></p> <p style="text-align: center;">Development of the child</p>              | <ul style="list-style-type: none"> <li>• Cognitive/language (N=181)</li> <li>• Behavioural and emotional (n=184)</li> </ul>  | <p>Child</p> <ul style="list-style-type: none"> <li>• Grille d'évaluation du développement (GED)(≤ 5 ans)</li> <li>• Peabody Picture Vocabulary Test (PPVT) (≥ 5 years)</li> </ul> <p>Parent</p> <ul style="list-style-type: none"> <li>• Child Behaviour Checklist (CBCL) (≥ 18 month)</li> </ul> |



## SCORES CREATION

### *Predictor - Socio-demographic characteristics*

- **Socio-Economic Risk Index varies between 0 (no risk) and 8 (very high risk)**
- **88% of the sample obtained a score between 0-2. 12% obtained a score of 3-4.**





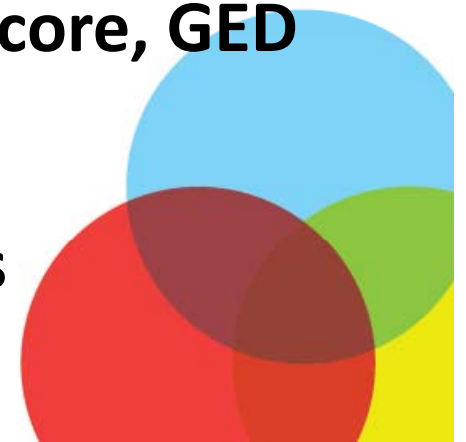
...SCORES CREATION

## ***Outcome: development of the child***

- **Z score (Derived from the mean and standard deviation)**
- **Cognitive and language development (PPVT normalized score, GED weighted score)**

**Socio-emotional development (CBCL raw score, GED weighted score)**

- **The higher the score, the better the child's development in all spheres**

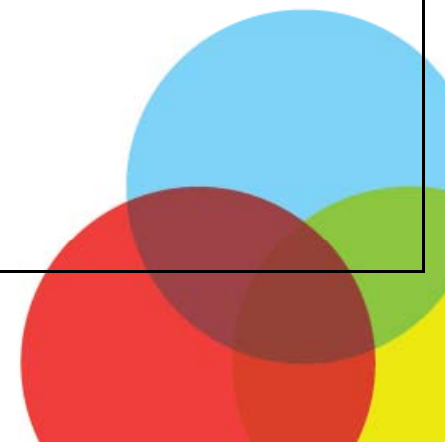




## **SAMPLE DESCRIPTION**

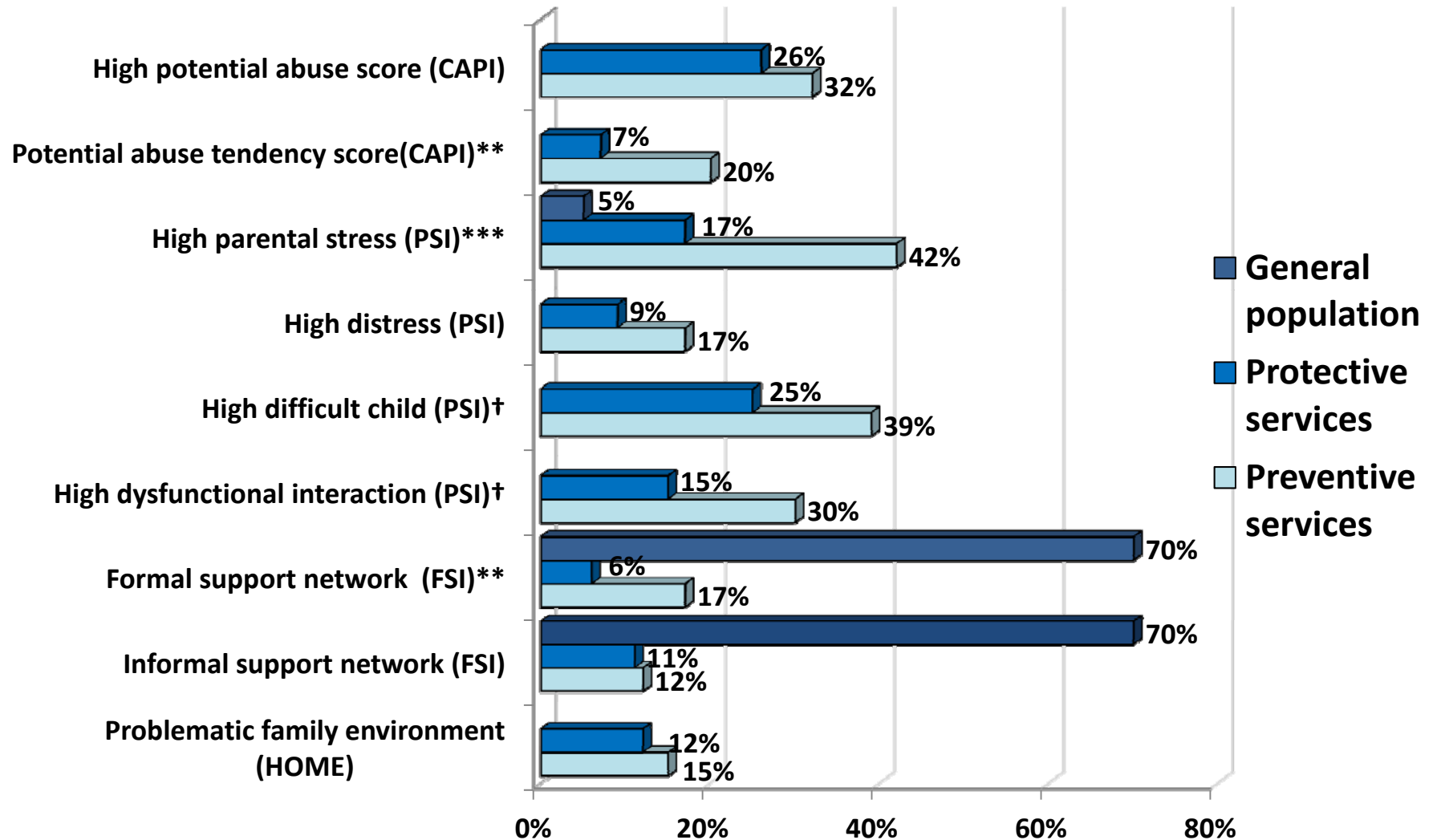
### **PREDICTOR 1 - SOCIO-DEMOGRAPHIC CHARACTERISTICS**

|               |  |
|---------------|--|
| <b>Parent</b> | <b>Mean age (SD) : 30.3 (7.4)</b><br><b>Secondary school not completed : 61,2%</b>   |
| <b>Family</b> | <b>Average number of children : 2.1 (1.2)</b><br><b>High occupational density : 10%</b><br><b>Annual family income:</b><br><b>&lt; \$15K : 50.3%</b><br><b>\$15-24K : 23.8%</b><br><b>\$24-40K : 19.3%</b><br><b>&gt; \$40K : 6.6%</b> |

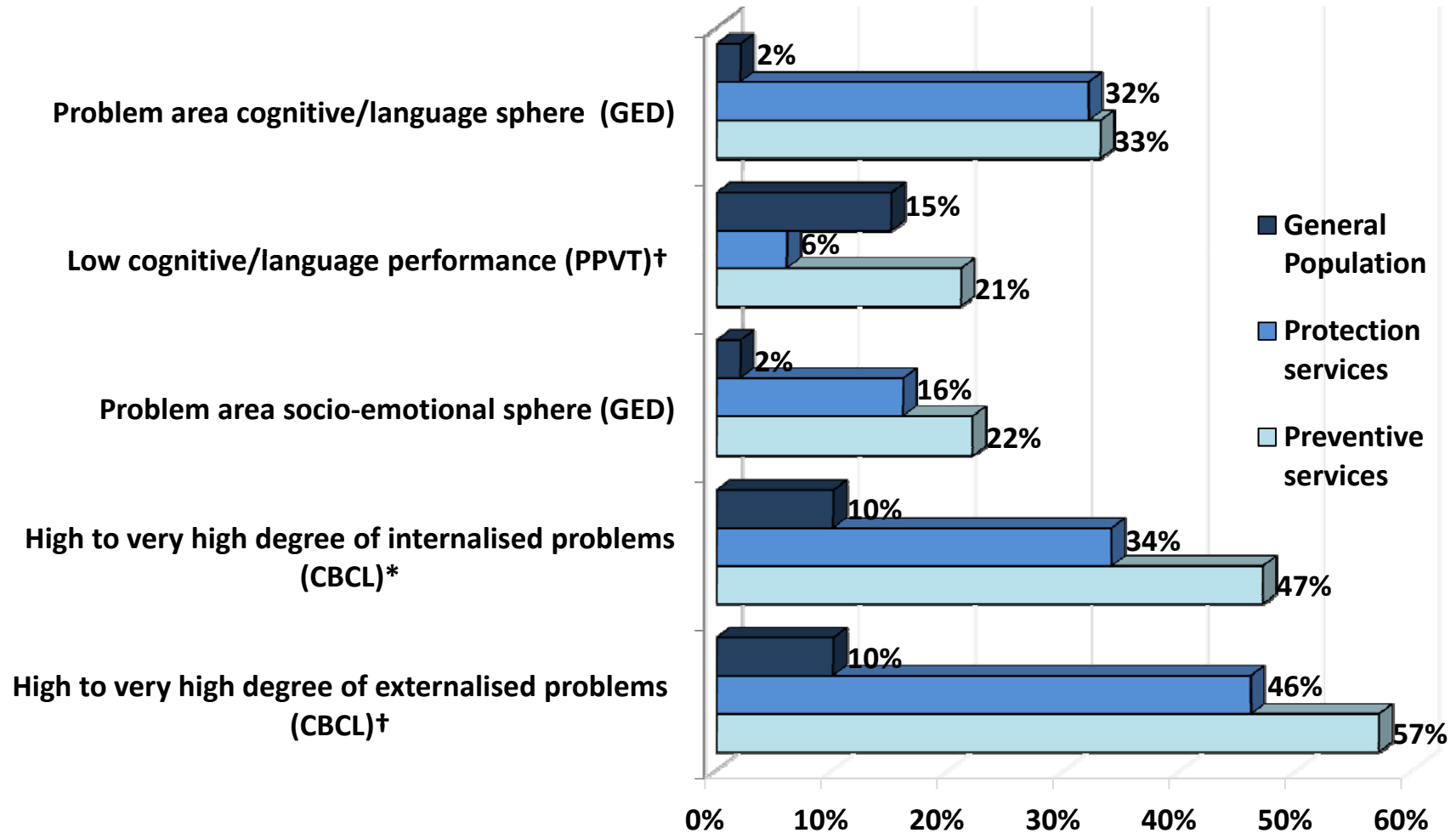




# PREDICTOR 2 - FAMILY ENVIRONMENT



# OUTCOME: DEVELOPMENT OF THE CHILD



# RESULTS

## Bivariate analysis

|   | <b>Socio-emotional dev.<br/>(N=184)</b> | <b>Cognitive/language dev.<br/>(N=181)</b> |
|---|---|--|
| Parental stress distress                      | <b>-0.37***</b>                         | <b>-0.05</b>                               |
| Parental stress/<br>dysfunctional interaction | <b>-0.37***</b>                         | <b>-0.22**</b>                             |
| Parental stress – child with<br>difficulty    | <b>-0.47***</b>                         | <b>-0.09</b>                               |
| Parental stress – total                       | <b>-0.48***</b>                         | <b>-0.13</b>                               |
| CAPI  | <b>-0.29***</b>                         | <b>-0.04</b>                               |
| HOME  | <b>0.19**</b>                           | <b>0.16*</b>                               |
| Socio-economic risk                           | <b>-0.01</b>                            | <b>-0.11</b>                               |

*\* p < 0.05; \*\* p < 0.01; \*\*\* p < 0.001*

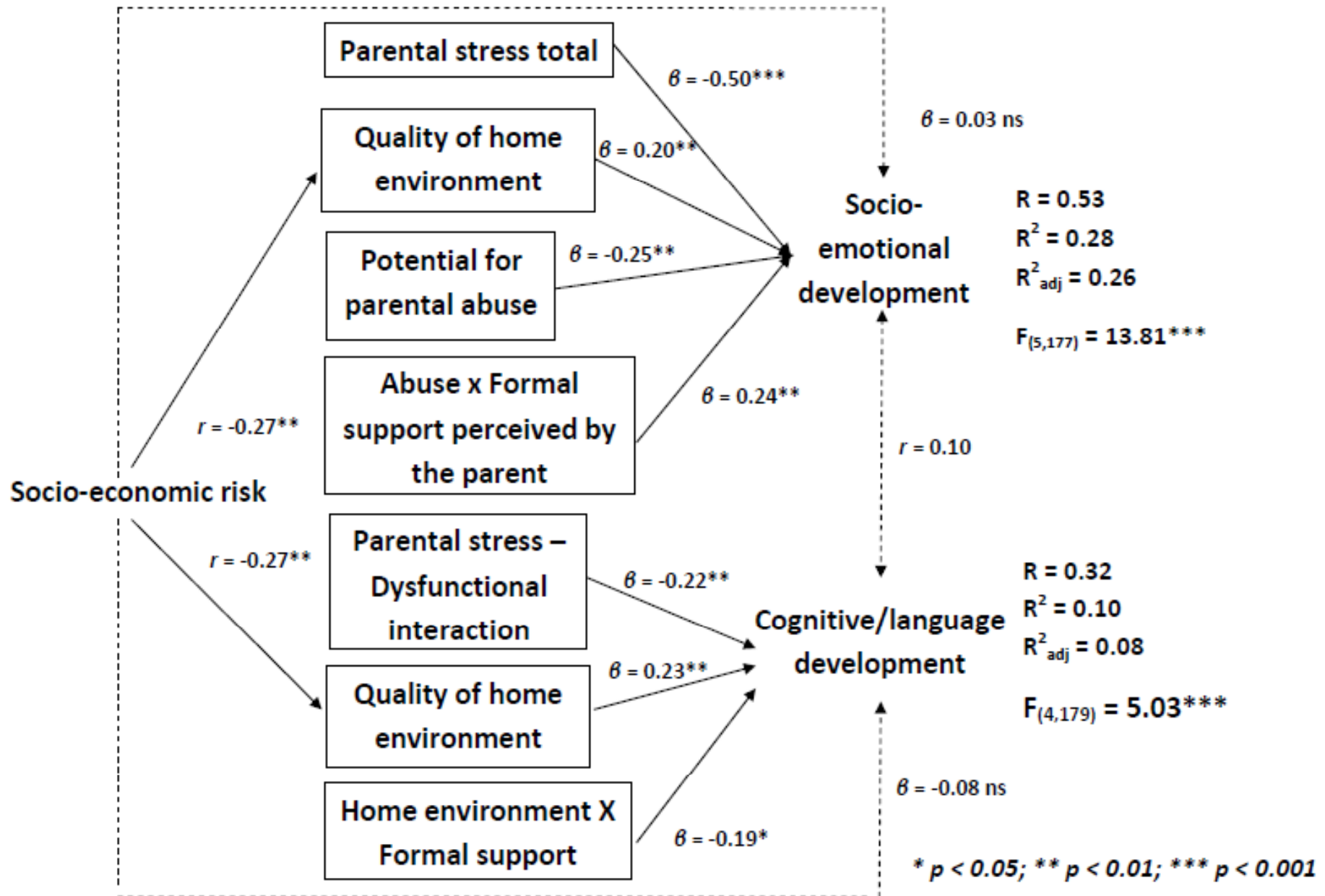
## Relationship with development of the child on the basis of social support scores

|         | Socio-emotional development |                 |             |             | Cognitive/language development |             |             |             |
|---------|-----------------------------|-----------------|-------------|-------------|--------------------------------|-------------|-------------|-------------|
| Support | Formal                      |                 | Informal    |             | Formal                         |             | Informal    |             |
|         | ↘<br>(n=87)                 | ↗<br>(n=96)     | ↘<br>(n=96) | ↗<br>(n=88) | ↘<br>(n=87)                    | ↗<br>(n=96) | ↘<br>(n=96) | ↗<br>(n=88) |
| CAPI    | -0.16                       | <b>-0.45***</b> | -0.30**     | -0.29**     | -0.14                          | 0.04        | -0.17       | 0.11        |
| HOME    | <b>0.32**</b>               | <b>0.07</b>     | 0.20*       | 0.10        | <b>0.31**</b>                  | <b>0.08</b> | 0.26*       | 0.10        |

*Correlation pairs in bold are those in which the difference was significant.*

*\*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$*

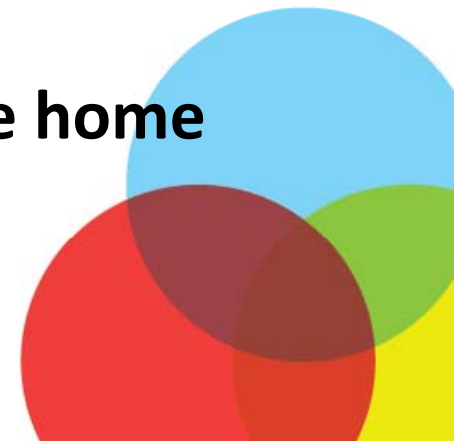
## Path analysis of determinants of socio-emotional and cognitive/language





## FINDINGS/CONCLUSION

- ***Social-emotional development*** : influenced by degree of perceived stress in exercising the parental role, potential for maltreatment, and quality of the home environment (regardless of socio-economic risk);
- ***Cognitive/language*** : influenced by stress of the parental figure with respect to interactions with the child, and quality of the home environment (regardless of socio-economic risk);
- ***Socio-economic risk*** : related to quality of the home environment.





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## FINDINGS/CONCLUSION

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### Formal social support is a moderating factor

#### *Socio-emotional development and the potential for victimisation*

More formal support is perceived by the parent as being helpful, the more the potential for abuse by the parent has a negative influence on the socio-emotional development of the child (relationship not observed when formal social support is perceived as being little helpful.)





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## FINDINGS/CONCLUSION

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### Formal social support is a moderating factor

#### *Cognitive/language development and the quality of home environment*

The less formal support is perceived by the parent as being helpful, the more the quality of the home environment parent has a positive influence on the cognitive/language development of the child. (relationship not observed when formal social support is perceived as being helpful)







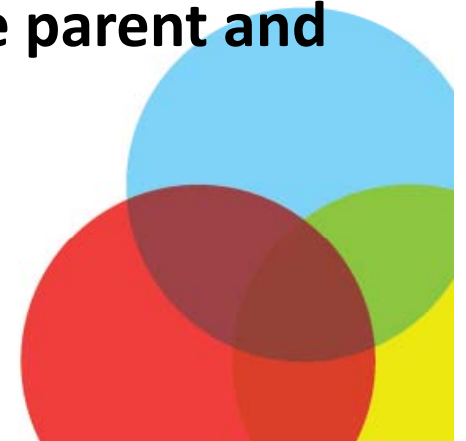
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## **FINDINGS/CONCLUSION**

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### ***Planning of support to families at several ecological levels***

- ✓ **Reduce the effects on children's development**
- ✓ **Reduce parental stress and distress (interactions with the child)**
- ✓ **Help the parent better structure the home environment (sensitive and stimulating environment)**
- ✓ **Provide support focused on the needs of the parent and the child**
- ✓ **Reduce socio-economic risk factors**



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