

## A comprehensive meta-analysis of Triple P-Positive Parenting program using hierarchal linear modeling: Evidence and implications for public health

### Review on which this evidence summary is based:

Nowak,C., & Heinrichs,N..(2008). A comprehensive meta-analysis of Triple P-Positive Parenting program using hierarchal linear modeling: Effectiveness and moderating variables. *Clinical Child and Family Psychology Review*.11(3) 114-144.

### Review Focus

- P** Parents and their children with or without identified behavior problems
- I** Triple-P Parenting Program (delivered as standardized by the University of Queensland or a precursor-format) with the aim to change a child's problem behavior by modifying the family environments that reinforce the problem behavior
- C** Usual care
- O** Primary Outcomes: Categorized into the following: Parenting Skills, Child Problem Behaviors, Parents' Relationship Quality, and Parent/child Wellbeing

**Review Quality Rating:** 8 (strong) *Details on the methodological quality are available [here](#).*

### Considerations for Public Health Practice

#### Conclusions from Health Evidence

This methodologically strong review is based on 55 moderate quality studies.

**Triple P Parenting Program** is effective in improving three outcome categories: Parenting, Child Problems, and Parental Well-Being.

The effect was seen at post intervention and sustained at follow up for Child Problems, Parenting, Parental Well-Being and [only at follow up]) for Parent Relationship Quality.

**The following moderators positively impact outcomes post intervention and/or at follow-up:**

- Clinically elevated child status (pre-intervention child scores on ECBI/CBCL/SDQ) on Child Problem Behavior
- higher intensity of program delivery (level 4 or 5) on Parenting and Child Problems
- younger age of child (less than 5.5 years) on all outcomes

#### General Implications

The overall findings suggest that the Triple P Parenting Program should be implemented to improve Parenting, Child Problem Behaviors, Parental Well-Being and Parent Relationship Quality outcomes.

The Triple P parenting program is likely to achieve more positive outcomes when children enter the program with elevated clinical status, when they are less than 5 years of age, and when the program is delivered at higher intensity (level 4 or 5).

The program is less likely to achieve or maintain positive effects when fathers deliver the program, when more than 61% of participants are boys, and as time from active intervention increases.

Initial extent of child problem behavior or attrition rates are not likely to affect program success.

At this time program delivery format (i.e. self

**The following moderators negatively impact outcomes post intervention and/or at follow-up:**

- fathers delivering the program on Parenting, Parental Well-Being and Child Problems
- greater proportion (>60.8%) of boys in the group on Parents Relationship Quality
- increasing time post intervention on Parenting outcomes

**The following moderators demonstrate inconsistent effects:**

- program delivery format (i.e. self directed, individual, group, or via media)

Effects were not moderated by:

- initial extent of child problem behavior or attrition rate

directed, individual, group, or via media) may or may not impact outcomes. If programs are implemented, program delivery format should be evaluated.

**Evidence and Implications**

**What's the evidence?**

**Implications for practice and policy**

**Triple P Parenting Program (55 studies: 29 RCT, 11 CCT, 15 uncontrolled studies includes a sample of 11,797 families)**

**Overall effect of the program is positive** for three outcome categories: Parenting, Child Problems, and Parental Well-Being (difference (*d*) ranges between 0.17 and 0.48 – representing a small to large effect) The effect was seen at post intervention and sustained at follow up for Child Problems, Parenting, Parental Well-Being and [only at follow up]) for Relationship Quality

**Variables which positively moderate program effects:**

- Child status classified as clinically elevated resulted in greater impact on Child Problem Behavior at follow up
- Higher intensity of program delivery (level 4 or 5) resulted in significantly greater effects at post intervention and follow up on Parenting and Child Problem outcomes
- Younger age of child resulted in more positive effects on all outcome measures

**Variables which negatively moderate program effects:**

**Triple P Parenting Program** should be implemented to improve Parenting, Child Problem Behaviors, Parental Well-Being and Parent Relationship Quality outcomes

- 1. Greater impact** may be expected:
  - on Child Problem Behavior among children with clinically-elevated status
  - on Parenting and Child Problems when delivered at higher intensity (level 4 or 5)
  - on all outcomes when delivered for younger children (younger than 5.5 years)
- 2. Lesser impact** may be expected:
  - On Parenting, Parental Well-Being and Child Problems when the program is delivered by fathers compared to mothers or teachers
    - 1.1. on Parents Relationship Quality when delivered to groups with more boys
    - 1.2. on Parenting outcomes with increasing number of months following intervention
- 3. Program delivery format** should be rigorously evaluated, however:
  - 3.1. Program may be delivered in self directed formats to improve Child Behaviour, in

- Fathers delivering the program resulted in lower (but still positive) improvements in Parenting, Parental Well-Being and Child Problems compared to delivery by mothers or teachers
- When more boys were in the program (>61%), Parents Relationship Quality was lower
- Positive improvements in Parenting outcomes declined as months passed post intervention

**Variables which inconsistently moderate effects:**

- Delivery Method. Program delivery format (i.e self directed, individual, group, or via media) resulted in inconsistent effects on various outcomes:
  - group delivery resulted in smaller positive effects for **Child Problems** at post intervention and follow up compared to self-directed, individual or media/ information campaign formats
  - self directed formats yielded smaller short term effects for **Parenting** compared to all other formats and yielded reduced long term effect sizes on **Parental Relationship Quality**
  - self-directed and group formats resulted in greater **Parental Well-Being** compared to individual sessions
  - self administered formats do not affect child behavior but are comparable in effectiveness to individual and group sessions for improving parent outcomes
- Country of study had no effect on Child Behaviour Problems and Parenting outcomes; significantly better outcomes for Parental Well-Being and Relationship Quality were found in studies done outside Australia

**Variables which did not moderate program effects:**

- Initial extent of child problem behavior on Parenting outcomes
- Attrition rate had no impact on any outcomes

self-directed, individual or group sessions to improve parent measures, in self-directed, individual or media/ information campaign rather than group formats to improve Child Problems, and in self-directed and group formats compared to individual sessions to improve Parental Well-Being, and in self directed formats compared to all other formats to improve Parenting in the short term and Parental Relationship Quality in the long term

4. Initial extent of child problem behavior or attrition rates are not likely to affect program success.

**Legend:** Population; I – Intervention; C – Comparison group; O – Outcomes; CI – Confidence Interval; OR – Odds Ratio; RR – Relative Risk; ECB – Eyberg Child Behavior Inventory; CBCL - Child Behavior Checklist; SDQ - Strengths and Difficulties Questionnaire

\*\* for definitions please see the [healthevidence.org glossary of terms](http://www.healthevidence.org/glossary.aspx) <http://www.healthevidence.org/glossary.aspx>

**Why this issue is of interest to public health in Canada**

It is well established that the first years of a child’s life are crucial in forming a strong foundation for healthy growth and development, and parent-infant interactions impact a child’s developmental outcomes.<sup>1,2</sup> Early childhood experiences have long lasting effects on health, wellbeing and competence which are shown to be linked to an adult’s sense of identity and ability to cope with stress and problems.<sup>3</sup> Children learn how to

communicate, cope with stress, have healthy relationships, develop learning skills and a sense of self in the first five years of life.<sup>3</sup> Parents who are engaged and interactive with their child and provide positive, consistent parenting at an early age may face fewer problems with adolescent mental health.<sup>1</sup> However, parental stress and mental wellbeing may affect parent-child interactions and learning outcomes.<sup>2</sup> Children exposed to chaotic, violent and insecure environments may secrete excessive stress hormones when faced with stress as an adult.<sup>3</sup> Support for parenting programs with the aim of reducing parental stress, anxiety and depressive symptoms aligns with Health Canada's prioritization of interventions targeting the early years.<sup>1</sup>

1. Health Canada. (2011). *Healthy Living: Parenting*. Retrieved from <http://www.hc-sc.gc.ca/hl-vs/child-enfant/parent/index-eng.php#start>
2. Magill-Evans, J. & Harrison, M. (2010). Parent-child interactions, parenting stress and developmental outcomes at 4 years. *Children's Health Care*. 30(2) 135-150. Retrieved from [http://dx.doi.org/10.1207/S15326888CHC3002\\_4](http://dx.doi.org/10.1207/S15326888CHC3002_4)
3. Public Health Agency of Canada. (2011). *Can experiences in early childhood affect a person's health during adulthood?* Retrieved from <http://www.phac-aspc.gc.ca/hp-ps/dca-dea/parent/support/welcome-bienvenu/experience-eng.php>

**Other quality reviews on this topic are available on [www.healthevidence.org](http://www.healthevidence.org)**

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### **Suggested citation**

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*This evidence summary was written to condense the work of the authors of the review referenced on page one. The intent of this summary is to provide an overview of the findings and implications of the full review. For more information on individual studies included in the review, please see the review itself.*

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