



# Can Changing Parental Knowledge, Dysfunctional Expectations and Attributions, and Emotion Regulation Improve Outcomes for Children?

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## **Topic**

*Parenting skills*

## **Introduction**

The broader parent training literature has increasingly incorporated explicit consideration of cognitive and affective elements of the parenting role in explanations of parenting difficulties and in descriptions of how to intervene successfully with parents.<sup>1,2</sup> To some extent, the notion that parents need to understand what is age-appropriate to develop reasonable expectations of children has been assumed. However, the evidence supporting the idea that early childhood parenting programs that explicitly target cognitive and affective changes result in better outcomes than more behaviourally skills-based programs is less clear. The present paper examines the conceptual and empirical basis for strategies such as increasing parents' knowledge of development norms, reducing age-inappropriate expectations or dysfunctional attributions, and increasing parents' capacity to regulate their own emotions.

## **Subject**

The strongest potentially modifiable risk factor contributing to the development of behavioural and emotional problems in children is the quality of parenting a child receives. Evidence from behaviour genetics research and epidemiological, correlational, and experimental studies shows that parenting practices have a major influence on children's development.<sup>3</sup>

## **Problems**

While the research has examined parental knowledge as a risk factor for poorer child development across a range of domains, a clear understanding of the mechanisms by which parental knowledge impacts on children's development and behaviour is lacking. Furthermore, studies that have specifically assessed for changes in parenting knowledge have been limited methodologically and have not delineated the processes by which parental knowledge changes, and whether in fact the change in knowledge is associated with changes in child development and behaviour or whether other factors mediate the effect.

Similarly, there is currently no clear explication of the link between parental knowledge, parenting behaviour, parental mood and parenting efficacy, and especially how these change as a function of intervention. While the literature supports the idea that parenting knowledge, competence and efficacy are not necessarily related,<sup>4</sup> the processes that underpin the development of discrepancies between the cognitive, affective and skills domains are unclear. For example, how do parents feel or believe they are competent in their role as a parent, when objective evidence suggests poor parenting skills and low knowledge about children's development?

The emphasis in the literature, and particularly in relation to parenting behaviours, has been on children's externalizing behaviour, non-compliance and psychopathology, and several models of coercive family processes leading to child externalizing behaviour have been delineated and supported.<sup>5</sup> There is a paucity of research examining child competencies, both in terms of behaviour and developmental competencies (social, cognitive, emotional) and how parenting behaviours, parental knowledge, mood and self-efficacy interact with and impact on these competencies. As a result, while a number of interventions have been demonstrated to change parenting skills and child behaviour,<sup>1</sup> in general these studies have not focused on outcomes in terms of parental knowledge of children's development.

### **Research Context**

A number of intra-organismic factors influence child development; however, many of the skills children acquire are fundamentally dependent on their interactions with their caregivers and the broader social environment. In addition to intrinsic factors, such as low birth weight, prematurity, and fetal alcohol exposure, a range of environmental risk factors have been identified as contributing to poor child developmental outcomes. For example, poverty has been identified as a risk factor for lower child cognitive test scores and more child behaviour problems.<sup>6</sup> The effects of poverty are mediated and moderated through poor neighbourhoods, poor schools, poor basic services, greater environmental health risks, and via the stress these cause for the parent, impacting on the parent-child relationship.<sup>7,8</sup> In general, risk factors in the care-giving environment are transmitted through the child's experiences in their primary care-giving relationship.<sup>9</sup>

### **Key Research Questions**

1. What are the mechanisms by which parental knowledge impacts on children's development and behaviour?
2. Is a change in parent knowledge associated with changes in children's development or do other factors mediate the effect?
3. What is the link among parental knowledge, parenting behaviour, parental mood and parenting efficacy, and how do these change as a function of intervention?
4. How do parenting interventions impact on children's developmental competencies?
5. How can the impact of parenting interventions be strengthened?

### Recent Research Results

The family environment is one of the most important potential contributors to children's development. Bradley<sup>10</sup> concluded that in general, correlations between Home Observation for Measurement of the Environment (HOME) Inventory scores, which include the provision of learning materials, language and learning stimulation, variety in experience and active stimulation, and measures of children's developmental status and intelligence, are low to moderate (.2 to .6) during the first two years and moderate (.3 to .6) from three to five years of age. Similarly, Jackson and Schemes<sup>11</sup> found that preschool children whose mothers were more warm and supportive and provided cognitive stimulation at home had better language abilities as rated by their school teachers. More specifically, when parents are more supportive and less authoritarian, their children's verbal and intelligence scores are higher, when examined prospectively.<sup>12,13</sup> Similarly, small to medium effect sizes have been found through meta-analysis for the relationship between mother-child attachment and children's peer relations,<sup>14</sup> and there is evidence that attachment style predicts differing trajectories in terms of the child's emotion regulation.<sup>15</sup>

Parental knowledge of child development has often been mentioned as a factor related to child development outcomes. It can be defined as understanding of "developmental norms and milestones, processes of child development, and familiarity with caregiving skills."<sup>16</sup> Parental knowledge is thought to provide a global cognitive organization for adapting to or anticipating developmental changes in children.<sup>17</sup> Mothers who are knowledgeable respond more sensitively to their child's initiations,<sup>18</sup> while mothers with inaccurate expectations about their child's development tend to be more harsh.<sup>19,20,21</sup> Studies have indicated that when mothers have higher knowledge of infant and child development, they show higher levels of parenting skills,<sup>16,22,23</sup> their children have higher cognitive skills,<sup>16,24</sup> and there are fewer child behaviour problems.<sup>16</sup> Furthermore, a positive association has been found between parental self-efficacy and parenting competence when knowledge of child development is high. However, mothers who report high parental self-efficacy but low knowledge are least sensitive in their interactions with their infants.<sup>4</sup>

In general, there is scant research on parents' knowledge and particularly on the link between parental knowledge and other skills, such as behaviour management skills, parenting efficacy, parental mood and parenting conflict. In addition, the majority of research has focused on high-risk samples, specifically adolescent mothers and/or low birth weight and premature infants. A number of studies have examined whether parenting and family interventions increase parental knowledge, and there is evidence that this is the case.<sup>25,26,27,28</sup> However, in general these studies have been uncontrolled, with small sample sizes, examining very high risk samples, and with no examination of the mechanism of action between increased knowledge and potential child outcomes.

Parents' beliefs about child development and the nature and causes of their child's behaviour have also been examined as factors related to child developmental outcomes. There is evidence that parents' inaccurate beliefs or overestimation of their child's performance actually undermine the child's performance,<sup>29,30,31</sup> and that expectations

have an effect on parenting behaviours.<sup>32</sup> For example, adolescent mothers who reported more positive, more realistic and more mature expectations about parenting, children and the parent-child relationship had children with better coping skills, as rated through observation.<sup>17</sup> Realistic expectations about child abilities have been related to greater child socio-emotional and cognitive competencies.<sup>33</sup> However, this association may work indirectly through parenting behaviours,<sup>34</sup> such that the mother's expectations affect her own behaviour, which in turn impacts on the child's developmental competencies.

Specific parenting behaviours and skills have been examined, particularly in relation to the development of aggressive and disruptive behaviour. Parents of aggressive children are characterized as highly punitive and critical of their children<sup>35,36</sup> and more likely to attribute their children's misbehaviour to more dispositional, intentional and stable causes compared to parents of non-problem children.<sup>37,38,39</sup> These attributional processes tend to become more pronounced over time.<sup>40</sup>

Parent-child interactions affect many different domains of development.<sup>41,42,43</sup> Child-focused, responsive and moderately controlling parenting attitudes have been positively associated with self-esteem, academic achievement, cognitive development and fewer behaviour problems.<sup>44,45</sup> Furthermore, high warmth and contingent responsiveness promote a wide range of positive developmental outcomes.<sup>46,47,48,49</sup> Parental management style and affective involvement may be especially salient for children's prosocial development, self-control and internalization of behaviour standards.<sup>41</sup> The quality of parenting has been found to be important for child socialization,<sup>50,51</sup> and parenting variables show direct links with child adjustment.<sup>52</sup>

The research on parental mood indicates that maternal mood disturbance and stress are associated with more child behaviour and emotional problems,<sup>53,54,55</sup> and this finding has also been demonstrated for fathers.<sup>56</sup> In general, however, the link is higher for maternal than paternal psychopathology.<sup>57</sup> Higher depressive symptoms in the postpartum period have also been related to less accurate knowledge of infant development.<sup>58</sup> The link between parental mood and stress and children's behaviour is somewhat unclear, as a number of studies have failed to find a mediation effect of parenting behaviour between stress and child outcomes.<sup>53,59</sup>

There is less evidence to support a link between parental mood disturbance and children's cognitive development. For example, Kurstjens and Wolke<sup>60</sup> concluded that maternal depression has negligible effects on the child's cognitive development (at six years), but may be more relevant long-term if depression is chronic, the child is a boy and there are neonatal risk or social risks in family. Nevertheless, parenting stress in the preschool years has been related to preschool teacher ratings of social competence, as well as internalizing behaviour and externalizing problems.<sup>59</sup> In addition, Schmidt, Demulder, and Denham<sup>61</sup> found that more family stress during the preschool years was associated with greater child aggression, and anxiety and lower social competence in kindergarten.

*The value of parenting interventions in improving parenting practices*

Parent Management Training (PMT) interventions, derived from social-learning, functional analysis, and cognitive-behavioural principles, are considered the interventions of choice for conduct problems in young children.<sup>62,63,64</sup> PMT programs have also been proven efficacious in prevention studies.<sup>65,66</sup> Positive effects for PMT interventions have been replicated many times across different studies, investigators and countries, and with a diverse range of client populations.<sup>1</sup> In PMT programs, parents are typically taught to increase positive interactions with children and to reduce coercive and inconsistent parenting practices. Studies demonstrating the *efficacy* of PMT interventions show improvements in parental perceptions and parenting skills, improvements in children's social skills and school adjustment, and reductions in behaviour and attention problems.<sup>66,67</sup> PMT interventions are associated with large effect sizes,<sup>68</sup> the effects often generalize to a variety of home and community settings,<sup>69,70</sup> they are maintained over time,<sup>71</sup> and are associated with high levels of consumer satisfaction.<sup>72</sup> PMT has been successfully used with two-biological-parent families, step-parents and single parents. There is mounting evidence that a variety of delivery modalities can produce positive outcomes for children,<sup>1</sup> including individually administered face-to-face programs,<sup>73</sup> group programs<sup>74,75,76</sup> telephone-assisted programs<sup>77,78</sup> and self-directed programs.<sup>79,80</sup> In addition, a number of *effectiveness* trials of PMT interventions have demonstrated meaningful effects for children with conduct problems.<sup>81,82</sup>

**Conclusions**

Although parenting programs based on social learning models have been remarkably successful in assisting parents to change their children's behaviour and improve their relationships with their children, there is still a great deal to learn about how to promote concurrent change across the cognitive, affective and behavioural domains of parenting. Greater understanding of the cognitive and affective mechanisms that may underpin parents becoming more positive and less negative with their children is needed.

**Implications**

*Strengthening the impact of parenting interventions*

Despite the strength of the evidence for PMT cited above, there are several potentially important future directions that might further strengthen the population reach and impact of parenting interventions.

The use of modelling and demonstration of core parenting skills is likely to be a core feature of any effective intervention on parenting. Research on the value of observation learning and video-based modelling<sup>83,84,85</sup> validates the importance of this approach. But key elements from attitude and behaviour change models (cognitive social learning theory, social influence theory and acceptance-based models) are still underutilized. Bandura's<sup>83,84</sup> cognitive social learning theory is a useful conceptual framework for the development of media interventions, as it highlights the importance of both external and internal factors, including associated cognitive mechanisms that influence human behaviour. This theory points to the importance of using strategies that increase parental self-efficacy and that create favourable outcome expectancies, which in turn increase parents' behavioural intentions, their setting of personal performance standards and their

self-evaluation of their performance. The social influence model<sup>86</sup> is also a useful conceptual framework to guide development of media interventions, as it highlights the core principles that promote successful persuasion and influence; for example, to the extent that interventions make use of the power of social validation by similar or liked others (i.e. “others like me are doing it”) and of humans’ tendency to act in accordance with prior commitments to others and to deep-seated values, they are likely to have more influence on viewers’ attitudes, intents and behaviours. Finally, acceptance-based models of behaviour change<sup>87</sup> emphasize the importance of managing distressing thoughts and feelings in such a way that they do not interfere with taking effective action.

To strengthen the impact of a parenting skills intervention, various elements from cognitive social learning theory, social influence theory and acceptance theory could be used to enhance changes in parental behaviour, affect and cognition. Parents are more likely to learn the skills, increase their intentions to implement them and actually implement and maintain them when targeted parenting skills are modelled and demonstrated, *and also* (a) dysfunctional attributions or beliefs about the reasons for children’s behaviour are changed; (b) positive expectancies and parenting self-efficacy are increased; (c) social supports are activated; and (d) parents learn to manage distressing affect that interferes with effective parenting.

**To learn more on this topic, consult the following sections of the Encyclopedia:**

- [How important is it?](#)
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