The Promotion of Self-Regulation through Parenting Interventions

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#### Abstract

The capacity for a parent to self-regulate their own performance is argued to be a fundamental process underpinning the maintenance of positive, nurturing, non-abusive parenting practices that promote good developmental and health outcomes in children. Deficits in self-regulatory capacity which have their origins in early childhood are common in many psychological disorders and strengthening self-regulation skills is widely recognised as an important goal in many psychological therapies and is a fundamental goal in preventive interventions. Attainment of enhanced self-regulation skills enables individuals to gain a greater sense of personal control and mastery over their life. This paper illustrates how the self-regulatory principles can be applied to parenting and family-based interventions at the level of the child, parent, practitioner and organisation. The Triple P—Positive Parenting Program, which uses a self-regulatory model of intervention, is used an example to illustrate the robustness and versatility of the self-regulation approach to all phases of the parent consultation process.

#### The Promotion of Self-Regulation through Parenting Interventions

A parent's capacity to change their own behaviour in response to cues and information about the current needs of their children is fundamental to successful adaptation to the role of being a parent. Although a parent's approach to raising their children is strongly rooted in the social, economic and cultural context surrounding parenthood, ultimately individual parents have the capacity to decide how they wish to raise their children. Parents can determine the specific behaviours, skills and values they wish to promote, and the methods of parenting they adopt including how they will encourage desirable behaviours and discourage problem behaviours (e.g., limit setting and methods of disciplining their children).

The rationale for focusing on self-regulation is compelling. First, the capacity for selfregulation is associated with various positive life outcomes such as academic achievement, income, savings behaviour, physical and mental health, better interpersonal relationships and happiness (e.g., Duckworth & Seligman, 2005; Mischel, Shoda, & Peake, 1988; Moffitt et al., 2011; Shoda, Mischel, & Peake, 1990; Tangney, Baumeister, & Boone, 2004; Tsukavama, Toomey, Faith, & Duckworth, 2010). Second, deficits in self-regulation are found in a large number of personal and social problems and psychological disorders including aggression, anxiety, criminal behaviour, depression, and impulse control problems such as binge eating and alcohol abuse (e.g., Avakame, 1998; Baumeister, Heatherton, & Tice, 1994; Moffitt et al., 2011; Tangney et al., 2004; Tremblay, Boulerice, Arseneault, & Niscale, 1995). Third, self-regulation seems to be an important mechanism in the success of many psychological interventions including acceptance and commitment therapy (ACT, Hayes, Stroshal, & Wilson, 1999), behavioural activation (BA; Martell, Addis, & Jacobson 2001; Martell, Dimidjian, Herman-Dunn, 2010), dialectical behaviour therapy (DBT, Linehan, 1993), problem solving therapy (Nezu, 1986) and self-control therapy (Rehm, 1977) and in some positive psychology interventions (Kashdan & Rottenberg, 2010; Mazzucchelli, Kane, &

Rees, 2010). Finally, deficits in self-regulation in early childhood predict adult health, economic and social behaviour (Moffitt et al., 2011).

The capacity to change one's parenting behaviour in a planned, self-initiated and deliberate way involves parents recognising that a change in their behaviour may be necessary. Sometimes the changes required of parents can be relatively minor, such as attending more frequently to a specific child behaviour they wish to encourage, while other changes can be more difficult to execute such as refraining from reacting to problem behaviour. Self-initiated change involves a complex but ill-defined interplay of cognitive, behavioural and affective processes; these changes include the capacity to plan and anticipate, to regulate one's own emotions, to solve problems, and where necessary to collaborate with significant others involved in the care or education of children (e.g., partners, child carers, teachers, grandparents). It also involves a set of planned actions, the execution of the plan, a review of whether the plan worked and, if necessary, further tailoring of the plan until the goal is attained. Despite the hypothesised importance of self-regulation to parenting (see Moffitt et al., 2011) little attention has been devoted to the issue of reliably measuring parents' capacity to self-regulate or to promote self-initiated behaviour change. This paper seeks to fill that gap by defining the concept of parental self-regulation, by discussing the theoretical basis of the construct, and the clinical application and empirical basis of parental self-regulation. Finally we discuss the implications of self-regulation for practice, policy and future research on parenting intervention.

Although this paper focuses particularly on parental self-regulation, the ultimate goal is to build children's self-regulatory capacity so as to function optimally. It is suggested that parents modelling self-regulation and using specific parenting practices may best accomplish this goal. At the next level, to assist parents to acquire self-regulation, practitioners must model and use similar practices with parents. Further, the same self-regulatory principles

also apply to organisations supporting practitioners delivering parenting interventions. Consequently, in the course of our paper we attempt to illustrate that the self-regulatory principles can usefully be applied at all levels of the parent consultation process.

#### Self-Regulation: A Unifying Framework for Strengthening Parenting

We have argued previously that the development of an individual's capacity for selfregulation should be a central goal of parenting interventions (Sanders, 2008). Self-regulation is a process whereby individuals acquire the skills they need to change their own behaviour and become independent problem solvers and controllers of their own destiny. Capacity for self-regulation can be enhanced in a broader social environment that supports parenting and family relationships (Karoly, 1993). The approach to self-regulation discussed here is derived from social-cognitive theory. According to Bandura, the development of self-regulation is related to personal, environmental and behavioural factors; these factors operate separately but are interdependent (Bandura, 1986; Bandura, 1991). Self-regulation has an important role in the delay of gratification, emotional expression, moral development, compliance, adjustment, social competence, empathy and academic performance (Eisenberg, 2004). Social-cognitive learning is the route to developing good self-regulatory skills (Bandura, 1977b).

Bandura's cognitive social learning theory describes both the processes by which individuals can change their behaviour and the social interactional contexts that promote the capacity to change. Self regulation is usefully defined by Karoly (1993) as:

...those processes, internal and or transactional, that enable an individual to guide his/her goal-directed activities over time and across changing circumstances (contexts). Regulation implies modulation of thought, affect, behavior, or attention via deliberate or automated use of specific mechanisms and supportive metaskills. The processes of self-regulation are initiated when routinized activity is impeded or when goal

directedness is otherwise made salient (e.g. the appearance of a challenge, the failure of habitual action patterns, etc). (p.25)

In the case of parents learning to change their parenting practices, the self-regulation process is operationalised as a multi-component process involving five key elements.

Self-management tools. Parents learn to utilise different tools and skills to change their parenting practices. These skills include self-determination of parenting goals (what changes parents seek to make), self-monitoring of specific parent and child behaviours over the course of an intervention (how often specific target behaviours occur), self-selection of change strategies (a specific parenting plan to execute), self-evaluation of whether a parent achieved some performance criterion (what they set out to achieve) and self-reward (parent congratulates themselves for goal attainment). In this approach each parent is responsible for choosing from a range of options introduced in a parenting program which aspects of their own and their child's behaviour they wish to change.

**Parental self-efficacy.** Many parenting interventions seek to increase parents' confidence in their capacity to solve personally relevant problems. Parents of children with significant behavioural and emotional problems often enter parenting programs with low self-efficacy in their capacity to handle specific behaviours (e.g., aggression, tantrums, child's fearfulness). They also tend to have lower task specific self-efficacy in managing their daily parenting responsibilities (Sanders & Woolley, 2005). Over the course of a parenting program parents' self-efficacy typically improves as they experience mastery and accomplish their goals. Parents develop global and task specific positive expectations that they have the knowledge and skill to change their child's and their own behaviour. Such positive expectations are associated with attempting to change behaviour in the future, persistence, and recovery from setbacks and disappointments (Bandura, 1977a, 1994).

**Personal agency.** Parents develop explanations as to why change did or did not occur during a parenting intervention. A self-regulation approach encourages parents to "own" the change process. This involves encouraging parents to attribute changes or improvements in their family situation to their own or their child's efforts rather than to chance, age, maturational factors, the practitioner's skills or efforts or other uncontrollable events (e.g., a spouse's poor parenting or genes). It is tempting for practitioners to feel reassured and pleased when a parent says that their child is so much better since coming to see the therapist. The practitioner should prompt the parent to identify what they are doing differently that has enabled the child's behaviour to change.

**Self-sufficiency.** The ultimate goal of a parenting intervention is that the parent becomes an independent problem solver who has the personal resources, knowledge and skills to maintain any gains achieved and to tackle future problems with the same child or other children in the family. Self-sufficient parents are not heavily reliant on others to successfully execute their daily parenting responsibilities and have the necessary resilience and personal resources to parent effectively with minimal or no additional support from services or social networks. This pursuit of self-sufficiency does not mean that parenting is undertaken in a disconnected way from essential support networks (e.g., childcare, good health care) or is viewed as an insular, private activity even though most parenting is undertaken in the privacy of peoples' homes. On the contrary, parents are encouraged to build healthy support networks including extended family support and other people from within their community. However parents are encouraged to view most of the key parenting decisions they take with their children as their own responsibility and as an exercise of personal judgement and choice.

**Problem solving.** Successful parenting requires parents to become troubleshooters and active problem solvers. Intervention equips parents to define problems more clearly,

formulate options, develop a parenting plan, execute the plan, and evaluate the outcomes achieved and to revise the plan as required. However, an intervention process needs to assist parents to generalise the knowledge, principles and skills they have learned so they can apply them to future problems, at different points in a child's later development, and to other relevant siblings in a family.

These self-regulation principles are very robust and apply equally to all program participants including parents and children, service providers, disseminators, program developers and researchers. The self-regulation skills outlined above can be taught to children by parents in developmentally appropriate ways. For instance, attending and responding to child-initiated interactions and prompting, modeling and reinforcing children's problem solving efforts promotes emotional self-regulation, independence, and problem solving in children. Self-regulation principles can also be applied in the training of service providers to deliver different levels of the intervention, in troubleshooting implementation difficulties, or staffing problems within an organisation (Sanders & Turner, 2005).

#### Parental Self-Regulation in Action: Towards an Operational Definition

In order to further operationalise the concept of self-regulation as it applies to parenting it is useful to consider the characteristics of a parent who has strong self-regulatory capability. Such a parent would have a clear sense of the sorts of behaviours, skills and values she wishes to manifest in herself as a parent and adult, instil in her child, and foster in her home and broader community. She would have realistic expectations of herself, of others in a caring role for her child, and knowledge as to what she could reasonably expect of her child at different points of his or her development. Monitoring her performance against these standards would be automatic, rather than conscious or deliberate (Papies & Aarts, 2011).

Upon detecting a discrepancy between a personal standard and current performance (be it performance of herself, her child, or a significant other), goal-relevant habitual behaviour would be brought under her volitional control. Deliberately attending to these behaviours would provide information from which she develops hypotheses as to why the discrepancy has come about and clarity with regard to her objectives. The parent would have a rich repertoire of knowledge and skills from which to draw on when formulating options and developing a plan or new way of responding. These would not only include parenting and interpersonal skills (such as clear instructions, descriptive praise, planned ignoring), but also personal management skills (such as verbal self-cueing, attentional control, and ideas on how to arrange her environment to prompt and reinforce her own behaviour). The parent would proceed to execute the plan and evaluate the outcome, revising the plan as required until a desirable outcome has been achieved. At this point the parent would allow the new behaviour(s) to come under the control of new environmental stimuli—that is, her behaviour would again become automatic.

The self-regulating parent would have positive expectations that she could successfully enact her plan and bring about future positive outcomes. She would be self-reflective, open to and capable of identifying personal strengths and weaknesses, successes and failures, without being unhelpfully critical. Her self-evaluations and attributions would be constructive and serve to increase her competence and confidence for addressing future challenges.

As parents attempt to achieve their goals, they are frequently confronted with potentially emotion-arousing situations. Affect is naturally linked to goal-directed behaviour. Diverse feeling states arise as a result of success, failure, frustration, slowing, or delay in the pursuit of goals (Carver & Scheier, 2011). But feelings can also be elicited by stimuli as a result of respondent conditioning. The self-regulating parent would be capable of accepting, ignoring, or down-regulating emotions that might otherwise interfere with successful goal

pursuit (Koole, van Dillen, & Sheppes, 2011). However, and importantly, rather than ploughing through life with a stony grimness she would mostly enjoy the process. Having genuinely high self-regulatory capacity she would have the ability to deploy her conscious self-regulation skills when required and suspend them when they're not required. On occasion she would let go of her end-state-cognitions in order to enjoy the moment, experience contentment and flow (Csikszentmihalyi, 1990).

In summary, parents with strong self-regulatory capacity: (a) are self-sufficient in that they have the personal resources, knowledge and skills to parent effectively with minimal support from others; (b) show good self-management and problem solving skills, at times setting clear goals for their children, reflecting upon and evaluating their interactions, and selecting and implementing change strategies; (c) have a sense of agency, believing that they can influence their child's and their own behaviour; and (d) believe that they are able to implement behaviour change strategies and that good outcomes will occur as a result.

### **Deficits in Parent Self-Regulation**

In contrast to this description of a parent with strong self-regulatory capacity, it is also illuminating to consider, from a self-regulatory perspective, the behaviour of parents of children with disruptive behaviour problems who resist change. Patterson and Chamberlain (1994) developed a model to describe and explain the avoidance behaviour that they observed when practitioners attempted to change these parents' parenting practices (see Figure 1). These parents said things like, "I won't do that, it won't work" or "I can't do that. It's hopeless," or, they nodded in agreement, said very little, and then failed to follow through with homework tasks. Patterson and Chamberlain speculated that these parents had a learning history of failure where day-after-day, week-after-week, and year-after-year they were unsuccessful in obtaining a compliant response from their child. This history accounted for the strong negative affect that parents displayed during discussions about discipline

practices. Parents can express anger and contempt that their child's behaviour is so difficult, sadness that parenthood is not the happy experience they hoped it would be, and fear as to what's going to happen in the child's future—school drop-out, teenage pregnancy, drugs, crime. To avoid these unpleasant emotions, Patterson and Chamberlain suggested that parents may try to avoid future confrontations with their children, and as an extension of this, avoid practitioner efforts to support them to go back and try again. Eventually, parents may develop a story that explains why their child has difficult behaviour and doesn't respond to discipline and typically this explanation is likely to be removed from themselves. The story will implicate intrinsic characteristics of the child (e.g., "He's just like his father, he's inherited his father's genes"), or to their child's school or peers ("It's the school's fault, they should do something about it"), or to early sickness, rather than stemming from parent-child interactions.

From a self-regulatory perspective, Patterson and Chamberlain (1994) are describing parents who: (a) have underdeveloped or are unwilling to use their self-management skills, parents who are reluctant to set goals for their children or their own behaviour or find it difficult to reflect on and evaluate their interactions; (b) have low self-efficacy, parents who don't believe that they would be able to implement new strategies or that they would have good outcomes; (c) in terms of personal agency, parents who attribute their child's and their own behaviour to factors outside of their control; and (d) are low in terms of self-sufficiency, parents with a tendency to look to others to solve their problems.

Patterson and Chamberlain (1994) also found that there were other sources of parental resistance for these families including certain parental characteristics, such as being depressed, antisocial, and stressed, and contextual factors, such as whether parents were socially disadvantaged in various ways. Also, when a parenting intervention got under way, the behaviour of the practitioner became another source for resistance. Practitioners' efforts

to either teach or confront increased the probability that the next reaction of the parent would be resistant. If the practitioner adopted a nondirective stance and didn't teach, the effect would be to radically reduce the level of resistance. Patterson and Chamberlain noted that a delicate balancing act is required where practitioners and interventions must find an optimal level of teaching and confronting for each individual parent or couple to move them to change their family management practices. Indeed, when practitioners attempt to help parents change their parenting practices, they are likely to encounter some unpleasant emotions and be faced with a variety of techniques for avoiding behaviour change. In fact, a practitioner's efforts to help parents may be effectively punished or extinguished by parents' behaviour. Given this, we suggest that it is very likely that the same model of resistance also applies to practitioners (see Figure 2).

#### The Importance of Self-Regulation in Practitioners

Practitioner resistance can be thought of as avoidance behaviour, expressed in terms of rewarding parents for resistant behaviour (e.g., by discussing irrelevant topics); avoiding managing resistance (e.g., failing to confront process issues such as arriving late to sessions); or blame (e.g., blaming parents for not doing their homework rather than understanding where the obstacles lie and troubleshooting ways to make compliance more likely). Practitioner resistance can be influenced by many factors including their history of working with parents and their emotions. Just like parents, practitioners have a history of interactions where they have attempted to change parent behaviour, but where, at times, they have not experienced success. When practitioners are prompted once again try to influence a parent's behaviour it can lead to some unpleasant emotions that they wish to avoid. Like parents, practitioners can develop unhelpful explanations for why parents behave the way they do. In summary, it is likely that practitioners can experience "resistance" like parents—it is understandable and normative. Practitioners need to be aware of these influences on their

behaviour, seek support from colleagues and foster their own self-regulation skills to manage their emotions and behaviour.

#### The Development of Self-Regulation

The capacity for self-regulation including parental self-regulation emerges in a developmental context at a very young age. Emergence of self-regulation capacity in early childhood is a strong predictor of long-term developmental outcomes for children. For example, Moffitt et al. (2011) found that a composite measure of children's self-control (that included independent observation of children's behaviour) assessed at age three predicted a wide variety of indices of adult wellbeing at age thirty after controlling social class and the child's IQ. These outcomes included their physical health, their adult income, substance abuse and criminal behaviour. Furthermore, children who had improved their self-control by age 11 had significantly better longer-term developmental outcomes for children through early intervention could be a common pathway to prevention of a variety of adverse developmental outcomes in young people and adults.

Kopp (1982) has described the emergence of self-regulation abilities in young children. From birth infants modulate their arousal and exhibit reflexive patterns of behaviour such as hand-to-mouth movements that permit thumb sucking. From 3 months of age, infants can be observed changing their behaviour in response to events and stimuli in the environment (e.g., reaching and grasping). From between 9 and 12 months children begin to show an awareness of the social demands of caregivers and the ability to initiate, maintain, and cease behaviour accordingly. By 24 months, they show the ability to delay an act on request and to behave according to caregiver requests even in the absence of external monitors. At 36 months, children begin to show flexibility of control processes that meet changing situational demands and these processes continue to mature from this age.

Neuroscientists study self-regulation as executive functions, or cognitive processes that manage other cognitive processes, such as working memory, inhibition and attention (Chan, Shum, Toulopoulou, & Chen, 2008; Senn, Espy, & Kaufmann, 2004). Inhibitory control and working memory are among the earliest functions to appear, with initial signs observed in infants, 7 to 12-months-old (Anderson, 2002; De Luca & Leventer, 2008). From this age children display spurts in their performance in tasks of these and other executive functions, suggesting that the development of these functions does not necessarily occur in a linear fashion. Executive functioning development corresponds to the neurophysiological developments of the frontal lobes and other interconnected regions (Anderson, 2002; De Luca & Leventer, 2008). Capacity for self-regulation has been demonstrated to be under both genetic and environmental influences (Bouchard, 2004) and genes associated with self-control are beginning to be identified (Ebstein, 2006).

Although there may be some inherited elements, there is evidence that self-regulatory capacity is a learned skill and can be strengthened with practice and training (e.g., Gollwitzer, 1999; Muraven, Baumeister, & Tice, 1999). There is also evidence that parental behaviours are associated with the development of self-regulatory capacity in children (e.g., Avakame, 1998; Finkenauer, Engels, & Baumeister, 2005; Karreman, van Tuijl, van Aken, & Dekovic, 2008; Sanders, 1998; Valiente, Lemery-Chalfant, & Reiser, 2007). Building self-regulatory capacity and skills in children is important and lays the foundation for self-regulatory capacity as an adult. If parents can help children develop self-regulatory skills, they will equip them with powerful and important life tools to alter their behaviour and responses and overcome undesirable genetic, peer and other social influences throughout life. Table 1 provides examples of specific parenting practices that, theoretically, should promote self-regulatory strategies in children and adolescents.

### **Consulting Practices that Promote the Self-Regulation of Parents**

There are a range of ways parents can enhance children's self-regulation skills, but a parent's capacity to regulate his or her behaviour is essential to consistently model and apply these strategies. It is therefore important that parenting interventions enhance parents' own self-regulatory capacity.

The preceding discussion on parent and practitioner avoidance indicates how parents and practitioners reciprocally influence each other, potentially disrupting the acquisition of parenting skills and the change process. This, along with the importance of parents building their self-regulatory capacity, has implications for how a practitioner should interact with a parent over the course of an intervention. We propose that the goal of the practitioner should be to develop a collaborative relationship with the parent because this type of relationship is likely to be mutually positively reinforcing and increase the likelihood that the parent will acquire skills relevant to managing their own and their child's behaviour. Triple P recommend a range of consulting practices that aim to simultaneously build a collaborative relationship and enhance a parent's self-regulation skills.

**Conveying respect in an emotionally supportive context.** Practitioners need to respect parents and view the consultation process as a genuine sharing of knowledge and expertise. However, practitioners can anticipate that some of the materials discussed in consultation sessions are likely to generate unpleasant emotions at times. Of course, for behaviour change to occur, attention must be paid to those areas that are the focus of change. When parents experience unpleasant emotion practitioners need to empathically support parents to accept and manage the emotion before returning the focus to behaviour change and skills development. It is interesting to note that breaking patterns of experiential avoidance and modifying action tendencies in response to emotional dysregulation is an approach that has been emphasised in a number of newer behaviour therapies such as ACT, BA and DBT

(Barlow, Allen, & Choate, 2004) and may be considered an important component of self-regulation.

**Building an optimistic outlook.** It's important that practitioners convey optimism that change is possible. This can be done by using questions that presuppose that things will change for the better and that there are strategies that the parent can use to help build such preferred realities, "Which of these strategies are relevant to pursuing your goal?" These kinds of prompts are likely to help build parents' sense of self-efficacy.

Using a guided participation approach. Effective parent consultation involves creating conditions for independent problem solving. This may be achieved by using prompts to guide the discussion while simultaneously encouraging the full participation of the parent, "Can you think of any reasons why your child is hitting?... How could you manage it?... Do you see any similarities between this situation and the one we worked on in the last session?" This process uses self-discovery methods and encourages parents to take responsibility for their decisions (Sanders & Lawton, 1993; Sanders, Mazzucchelli, & Ralph, 2012).

**Challenging beliefs about needing to be rescued.** Sometimes parents express the desire for practitioners to just "fix" their child or they demand instant answers. It is important that practitioners don't fall into the trap of simply rescuing parents as this would foster dependency. Unfortunately, the risk is that this does not assist parents to learn how to resolve problems by themselves in the longer term. If practitioners notice this pattern it is useful to comment on it and challenge the parent to come up with solutions themselves. Practitioners then have the opportunity to listen, summarise and pick out a part that they can encourage.

**Challenging self-defeating behaviour.** During parent consultation, parents can exhibit a range self-defeating behaviours including the failure to complete homework, arriving late, off-topic conversations, being overtalkative, being overly upset. A partnership implies that

both the parent and practitioner are doing their share; practitioners need to be prepared to challenge their partners when these sorts of problematic behaviours occur. Practitioners must be prepared to discuss how the behaviour is getting in the way of the parent's goals, develop an understanding as to why it's occurring, and prompt the parent to come up with ideas as to how to manage the difficulty. This process is similar to the functional analysis approaches adopted by other behavioural approaches such as DBT and BA and may equip parents with useful knowledge and skills for changing their own behaviour.

**Establishing expectancies that promote self-regulation.** By making expectations clear to parents before hand, it is easier for them to do what is expected of them, "When I ask how things went, I'd like you to tell me some aspects that worked well and some that didn't work so well" or "At this stage in the intervention I really expect you to be coming up with your own ideas as to how to manage your child's behaviour." The use of rules in this fashion can promote both self-regulation and collaboration (Malott, 1988).

#### Specific Techniques that Promote the Self-Regulation of Parents

In addition to the consulting practices described above, we propose a number of specific techniques that may be useful in promoting parental self-regulation.

**Modelling.** Parenting practitioners have an opportunity to demonstrate the skills that they wish to instil in parents. These include being organised and prepared for sessions, negotiating goals for the intervention as a whole and for each session, and monitoring and reviewing progress in a systematic fashion during sessions. When obstacles or problems arise practitioners can attempt to understand the difficulty in a nonjudgmental way, generate ideas to overcome the issue, formulate a plan and enact it before reviewing the outcome. All this can be done while conveying optimism that change is possible and encouragement for both the parent's and the practitioner's own efforts.

**Instruction in social learning principles.** Parenting interventions based on social learning principles provide parents with explicit information regarding why children behave the way they do (e.g., Sanders, 1999; Webster-Stratton, 1998). These principles are then reinforced by instruction in how they may be applied in a parenting context through a range of adaptive parenting strategies. If parents have an understanding of these principles and strategies they may then recognise that these principles and strategies do not just apply to parents and children, but to all human behaviour including one's own.

**Reinforce generalisation of parenting skills across settings and tasks.** When practitioners notice or parents comment that they've generalised their parenting skills to different places or tasks, practitioners can comment, "So you found the behaviour correction routine not only works at home for destructive behaviour, but in the car for fighting too." Generalising skills is precisely what parents need to be doing to be self-sufficient and can be reinforced directly (see Stokes & Baer, 1977).

**Encouraging self-evaluation.** Self-evaluation is an important part of self-regulation. Practitioners can encourage parents to attribute successes and failures to their own actions using least-to-most prompts like, "How did that go?... What did you do well?" (Sanders, Mazzucchelli et al., 2012).

Use a graduated prompting format to strengthen self-regulation skills. Parenting competence and self-regulatory capacity can be enhanced simultaneously through a feedback process that adopts a "least-to-most" structured prompting format (Sanders, Mazzucchelli, et al., 2012). In this model a parent's parenting and self-regulatory knowledge and skills are constantly assessed and the least amount of prompting and information is provided that is necessary for the parent to successfully manage their own performance. For instance, after practising a particular parenting skill, if a parent does not spontaneously evaluate his or her performance and identify goals for change, the practitioner would provide the least amount of

prompting to assist them to constructively do so. Over successive sessions this prompting would be faded so that the parent independently engages in these self-evaluation, planning and goal setting skills.

**Praise use of specific self-regulatory skills.** Descriptive praise can be powerful reinforcement (Allen, Hart, Buell, Harris, & Wolf, 1964). When parents demonstrate the use of self-regulatory skills, practitioners can comment on what they've done, particularly if it's an emerging skill, "I'm impressed that you were able to identify a few things that you did well and something specific you could improve. I didn't even have to prompt you to do so."

**Provide guidance through the change process.** As parents participate in a behavioural parenting intervention they are supported through a definite sequence in behaviour change. They are provided guidance in: (a) specifying the behaviours to be targeted for change and selecting a goal, (b) making observations about these target behaviours, (c) selecting parenting strategies and formulating a parenting plan, (d) reviewing progress and making adjustments to the plan as required, and finally (e) taking steps to ensure that desired changes are maintained. Over the course of a parenting intervention, there is often the opportunity for a number of target behaviours to be worked on in this manner. Thus the principle of sufficient exemplars is employed whereby the goal is for parents to have worked through a sufficient number of examples to facilitate the generalisation of this process (see Stokes & Baer, 1977).

Apply the principles of the minimally sufficient intervention. Practitioners should tailor the level of support offered to parents over the course of an intervention. As the parent becomes proficient at encouraging themselves and linked-in to the natural reinforcers for using effective parenting and self-regulatory strategies, practitioners should decrease (or thin) their praise and encouragement. Attention and praise from the practitioner is not going to be

available once the intervention finishes and it is important that the parent does not become dependent upon such reinforcement.

Use "signalled" fading of support. Sometimes as practitioners fade their prompts and thin their encouragement, the skills parents were displaying also disappear; practitioners stop prompting parents to evaluate how they went after practising a skill and the parents stop evaluating. A useful strategy to overcome this is to alert parents in advance that prompts and encouragement will be reduced, but that it is expected that they will continue to use the skills and ideas. Again, the use of rules in this fashion can lead to the maintenance of both self-regulatory and parenting strategies (Malott, 1988).

Ask parents to share their rationale for decisions. Asking parents to share their rationales for their decisions communicates that parents have options and control over their behaviour and, we suggest, strengthens all facets of self-regulation.

#### **Promoting Self-Regulation and Workforce Development**

Another potential application of self-regulation principles relates to the clinical supervision of practitioners (Sanders, McGee, Loureio, & Murphy-Brennan, 2013). The successful translation into practice of evidence based interventions requires practitioners to be able to deliver interventions competently. Competent delivery of programs requires a workplace culture that values evidence based practices, organisational support from line management and access to supervision. Parenting interventions are delivered by a wide range of practitioners many of whom do not have a workplace culture of regular supervision. Even in disciplines that have such a culture, as in clinical psychology and social work, supervision is not always available and the traditional model of having an experienced and expert clinical supervisor available is rarely attained.

An alternative is the use of a peer support self-regulation approach to supervision. Sanders et al. (2013) described the Peer Assisted Supervision and Support (PASS) system

that utilises self-regulation principles. In the PASS approach structured peer supervision sessions are conducted in small groups (4-5 practitioners) who are led by a rotational peer facilitator. Each practitioner is assigned on a rotational basis to be the leader and to structure the sessions. Each member of the group has to bring along a videotape or audiotape of an interview with a parent and be prepared to review the tape with the assistance of peers.

In undertaking PASS the practitioner whose tape is being reviewed previews the tape and then begins a formal process of self-evaluation and reflection. For example, "What were my goals?... What did I do well?... What should I do differently?... What are my practice goals for next time?..." At each stage of the process the peer facilitator prompts the practitioner to review their own performance then invites comments and suggestions from other group members to assist the practitioner identify future practice goals. This process parallels closely the process parents go through in individual coaching sessions with a therapist.

#### **Applying Self-Regulation to Organisations**

Self-regulation principles also have relevance to organisations providing parenting support. It is not uncommon for an organisation to lack coherence in its aims and practice, and to be managed in a "top-down" fashion with decisions regarding services being imposed on service delivery staff being made in the absence of consultation, input or ownership by those staff. This can increase resistance to policy decisions (Webster-Stratton & Taylor, 1998). A lack of consultation between staff and management can also result in logistical barriers to service provision going unresolved. Further, often there are no mechanisms in place to feedback outcomes being achieved with families. This can lead to a continuation of services that are not demonstrably effective and management to rely on organisational "spin" to satisfy consumer, political and media demands for accountability.

In contrast, organisations adopting self-regulation principles have a clear mission in supporting procedural guidelines and performance targets that are collaboratively determined with staff. Mechanisms are in place to collect output and outcome data and measures of program fidelity. Reviews of performance targets are undertaken on a routine and regular basis to inform training and support efforts and to inform decision making at a policy level. Staff accomplishments in delivering services are recognised and celebrated and, if necessary, management assist staff to identify and overcome barriers to the implementation of services. These organisations support staff by ensuring access to adequate training, supervision and resources, providing strategies and materials for service promotion (e.g., brochures, posters and press releases). Organisational management take action to support the financial, organisational and human resources required to support the work of practitioners. These organisations are also likely to be proactive in seeking to influence the future development of programs in which they have invested. Organisations might provide feedback to program developers and researchers regarding implementation successes and difficulties, and how programs could be developed to better meet the needs of specific client groups. Collaboration with research groups to examine field-generated questions are typically encouraged (Fixsen et al., 2005, 2009; Sanders & Turner, 2005).

Programs or new innovations may not be adopted if there is a lack of congruence between its theory or practical implementation and the orientation and practices of an organisation (Backer, Liberman, & Kuehnel, 1986; Sanders, Prinz, & Shapiro, 2009). Consequently, the dissemination of empirically supported parenting programs must not only involve adequately training practitioners in the content and processes of an intervention, it must also engage participating organisations to ensure that the accurate delivery of the intervention is supported.

#### Promoting Self-regulation via Parenting Interventions: Advantages and Opportunities

There is evidence that self-regulatory capacity as measured in early childhood predicts a wide variety of indices of social competence and wellbeing in adolescence and adulthood (e.g., Mischel et al., 1988; Moffitt et al., 2011; Shoda et al., 1990; Tremblay et al., 1995). This, combined with the absence of any evidence that one can have too much selfregulatory capacity (Grant & Schwartz, 2011), has implications for policy-makers who seek to enhance the physical, mental and financial health of the population and reduce the crime rate. Large-scale or universal interventions aimed at enhancing self-regulation may improve the welfare of the entire population and reduce a range of problems that burden modern society.

While a range of psychological and behaviour change interventions increase participants' self-regulatory skills, there may be advantages to building self-regulatory capacity through a parenting intervention. Parenting interventions can be made universally available, making participation normative and increasing the likelihood that large portions of the population will be reached (Sanders et al., 2008; Prinz, Sanders, Shapiro, Whitaker, & Lutzker, 2009). Developmentally, these interventions can target children during critical periods of their development such as the early childhood period and adolescence when they are most likely to have a beneficial impact (Knudsen, Heckman, Cameron, & Shonkoff, 2006; Smart et al., 2005). Further, the costs of establishing the infrastructure to implement a public health parenting intervention are modest and substantially less than the amount of government expenditure it would save (Foster, Prinz, Sanders, & Shapiro, 2008; Mihalopoulos, Sanders, Turner, Murphy-Brennan, & Carter, 2007).

The benefits of parenting interventions may also extend beyond children who have more adaptive skills and less problem behaviour. For reasons discussed earlier parenting interventions may enhance parent's self-regulatory capacity and, as a result, lead parents to reap additional benefits. Parents who participate in parenting programs typically report fewer

personal adjustment problems and higher relationship satisfaction (e.g., Dadds, Schwartz, & Sanders, 1987; Sanders & McFarland, 2000; Zubrick et al., 2005). We have also observed apparent cascading effects such that some parents generalise their self-regulatory skills to other life domains. For instance one parent, as she neared completion of a parenting program, demonstrated enhanced interpersonal skills with adults by making an appointment with her child's teacher at school and raising concerns regarding bullying in a clear and nonescalatory fashion. Another parent, after achieving improvements in his child's behaviour, brainstormed and followed through on solutions to a number of obstacles that had previously prevented him from obtaining employment.

The potential of parenting interventions to have a range of collateral benefits for parents and families suggests a whole new research agenda. How far reaching are the benefits of parenting interventions? What strategies might be further incorporated within a parenting intervention to enhance these benefits? How can we best assess self-regulatory capacity and evidence of collateral benefits in a parenting context?

#### **Efficacy of a Self-Regulation Approach to Parenting**

The early demonstration of the role of the self-regulation approach to parenting was reported in the early eighties by Sanders and Glynn (1981). They trained five parents of preschoolers with disruptive behaviour problems to modify their own behaviour through the use of self-regulation skills (goal setting, self-monitoring, monitoring of implementation of a parenting plan to enable self-evaluation). When parents were taught self-management skills they were more likely to generalise their skills to untrained childcare situations than when they simply received instruction and feedback. This early study was a foundation study for the development of the Triple P-Positive Parenting Program which is a tiered multilevel system of parenting intervention using a self-regulation approach within a public health model of intervention. A large number of studies have attested to the efficacy of this

approach to working with parents and several independent meta-analyses have been published demonstrating positive child and parent outcomes (see Nowak & Heinrichs, 2008).

More recently the self-regulation approach has been successfully applied to media and technology assisted approaches to parenting. For example, Sanders, Baker, and Turner (2012) recently evaluated the effects of an eight-session Online-version of Triple P that employed a self-regulation approach and demonstrated a significantly greater sustained improvement in the Online conditions compared to controls on measures of conduct problems, parenting self-efficacy, dysfunctional parenting and parental anger. The same process of promoting self-regulation can also be employed in running parenting groups, individually administered therapy, parenting interventions delivered over the phone and through self-help text based interventions.

#### **Future Directions**

Although the clinical methods for delivering parenting interventions using a selfregulation framework have been well articulated in practitioner manuals (e.g., Sanders, Turner, & Markie-Dadds, 1998), there continues to be a gap in how to best measure selfregulation processes. Although measures of task specific parental and practitioner selfefficacy have been developed and validated and shown to be sensitive to the effects of intervention (e.g., Sanders & Woolley, 2005; Turner and Sanders, 1999 cited in Sanders, Murphy-Brennan, & McAuliffe, 2003), it is only recently that measures of other aspects of the self-regulation approach articulated here have begun to be developed (e.g., Hamilton, Matthews, & Crawford, 2012) and these are yet to be demonstrated to be valid and sensitive in an intervention context. Table 2 summarises a number of self-regulation measures to assess self-regulation competence of children, parents and parenting practitioners. Selfregulation measures are required to assess the occurrence of competencies used as part of a method of producing behaviour change and an explanation for that change. Do practitioner

strategies that theoretically should promote parental self-regulation (e.g., prompting of parental goal setting) actually do so, and does change in self-regulatory capacity mediate changes in desired parenting and/or child outcomes? Research is needed to develop sound measures of the components of self-regulation processes (e.g., goal setting, self-evaluation, self-monitoring).

#### Conclusions

Self-regulation predicts future health, wealth, and social behaviour. Enhancing selfregulation at a population level is likely to benefit society by improving citizens' health and wealth and reducing a range of societal problems. Parenting programs based on cognitivebehavioural and social learning principles would seem to represent a viable way of achieving these goals. They have been demonstrated to be capable of promoting positive health and developmental outcomes in children, capable of being disseminated at a universal level, and with a desirable cost-benefit ratio.

Parents who have strong self-regulatory capacity and who use positive parenting practices are likely to benefit their children by promoting their children's self-regulation skills. We have argued that the integration of a self-regulation perspective into parenting interventions is a powerful method of training parents to change their parenting practices. The approach enables parents to become less reliant on others to produce and maintain change. Further, it is argued that self-regulatory principles are robust and apply to all other participants of the parent consultation process including service providers, managers, program disseminators, program developers and researchers.

A self-regulation perspective to parenting has a range of implications for practice and leads to a number of predictions that are yet to be empirically tested. However, in order to test these predictions sound measures of the components of self-regulation processes need to be developed.

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## Table 1

# Parenting Practices and the Development of Self-Regulation in Children

| Self regulation skill being | Specific parenting  | Parent-child interaction   | Application                | Likely outcome           |
|-----------------------------|---------------------|----------------------------|----------------------------|--------------------------|
| promoted                    | strategy            | situation                  |                            |                          |
| Independent problem         | Incidental teaching | When a 7-year-old child    | Child: "Mum, how do you    | Child solves the problem |
| solving of homework         |                     | asks for help, the parent  | spell necessary?"          | with minimal parental    |
|                             |                     | pays attention and prompts | Mother: "How do you        | assistance.              |
|                             |                     | the child to solve a       | think you spell it? Have a |                          |
|                             |                     | problem for themselves by  | try yourself               |                          |
|                             |                     | giving a clue without      | You've got the beginning   |                          |
|                             |                     | giving the answer.         | right, what about the      |                          |
|                             |                     |                            | ending? Is it ery or ary?  |                          |
|                             |                     |                            | That's right ary. Well     |                          |
|                             |                     |                            | done!"                     |                          |

| Independent brushing of | Ask-Say-Do | Parent initiates an          | Mother: "What's the first   | Child more likely to try |
|-------------------------|------------|------------------------------|-----------------------------|--------------------------|
| teeth                   |            | interaction to teach a child | thing you do when you       | again in the future      |
|                         |            | to brush their teeth and     | brush your teeth?"          |                          |
|                         |            | uses the least intrusive     | Child: "I don't know."      |                          |
|                         |            | prompt needed to help the    | Mother: "Well you get       |                          |
|                         |            | child execute the task       | your toothbrush and         |                          |
|                         |            |                              | squeeze some toothpaste     |                          |
|                         |            |                              | on the brush. Can you do    |                          |
|                         |            |                              | that?"                      |                          |
|                         |            |                              | Child: "No. I can't do it." |                          |
|                         |            |                              | Mother: "Having trouble     |                          |
|                         |            |                              | are you? I squeeze the      |                          |
|                         |            |                              | paste up here" (using       |                          |
|                         |            |                              | manual guidance prompt,     |                          |
|                         |            |                              |                             |                          |

# with parent hand over

child's hand). "That's

# right. Well done."

| Emotion regulation     | Positive attending to        | Parent provides positive    | "James, I really like the | Child learns to develop a |
|------------------------|------------------------------|-----------------------------|---------------------------|---------------------------|
|                        | child's attempts to regulate | attention following a child | way you ignored Aaron     | plan to deal with other   |
|                        | emotion                      | showing restraint in a      | when he was teasing you   | children who are annoying |
|                        |                              | situation of provocation    | just then."               | or irritating.            |
|                        |                              | from sibling.               |                           |                           |
| Self monitoring of own | Prompting the child to       | Parent asks child to review | Parent: "How many         | Child learns to track and |
| behaviour              | review or reflect on own     | and report on how they      | stickers have you got on  | report on their own       |
|                        | performance or               | have been going with the    | your chart now?" or "Tell | behaviour.                |
|                        | achievement                  | practice of a skill or a    | me what you have done to  |                           |
|                        |                              | behaviour                   | get all those stickers."  |                           |
| Self evaluation of     | Asking child to describe     | Child approaches parent to  | Parent: "Well now, that   | Child learns to describe  |
| accomplishments        | their accomplishment         | show them a painting they   | does look like an         | their own                 |

|                       | while listening carefully to | have just completed.        | interesting painting. Tell    | accomplishments and self-   |
|-----------------------|------------------------------|-----------------------------|-------------------------------|-----------------------------|
|                       | child's statements           |                             | be about it What about        | evaluate what they have     |
|                       |                              |                             | this part up here?"           | accomplished. Becomes       |
|                       |                              |                             |                               | less reliant on praise or   |
|                       |                              |                             |                               | attention.                  |
| Creating a positive   | Parent asks child to talk    | After a discussion with a   | Parent: "Do you think you     | Child anticipates they can  |
| expectancy for change | about their child's          | 9-year-old on how to deal   | can use your plan             | follow the plan and that it |
|                       | expectation                  | with teasing at school, the | tomorrow?"                    | will work.                  |
|                       |                              | parent conveys their        | Child: "I think so."          |                             |
|                       |                              | confidence in the child's   | Parent: "I agree with you,    |                             |
|                       |                              | capacity to deal with the   | I think you really can do it. |                             |
|                       |                              | situation.                  | Sounds like it's sure worth   |                             |
|                       |                              |                             | a try."                       |                             |

## Table 2

# Measures of Child and Parent Self-Regulation

| Name and primary          | Description                  | Norms   | Reliability                       | Validity                    |
|---------------------------|------------------------------|---|-----------------------------------|-----------------------------|
| reference                 |                              |   |                                   |                             |
| Child Measures            |                              |   |                                   |                             |
| Self-Control Rating Scale | 33-item teacher and parent   | In the original study,                              | The SCRS has high                 | The SCRS correlated         |
| (SCRS)                    | rating scale to assess self- | norms were reported for                             | internal consistency ( $\alpha =$ | significantly with          |
| Kendall & Wilcox          | control in children based    | 110 typically developing                            | .98). The SCRS also has           | behavioural observations,   |
| (1979)                    | on a cognitive-behavioural   | 3 <sup>rd</sup> - through 6 <sup>th</sup> -graders. | high test-retest reliability      | has been found to be        |
|                           | definition of self-control.  |   | of .84 over a three to four       | sensitive to changes        |
|                           |                              |   | week period.                      | produced by cognitive-      |
|                           |                              |   |                                   | behavioural self-control    |
|                           |                              |   |                                   | training programs (Kendall  |
|                           |                              |   |                                   | & Wilcox, 1980; Kendall     |
|                           |                              |   |                                   | & Zupan, 1981), and         |
|                           |                              |   |                                   | differentiate among patient |

|                           |                            |  |   | populations (Robin,        |
|---------------------------|----------------------------|--|---|----------------------------|
|                           |                            |  |   | Fischel, & Brown, 1984).   |
|                           |                            |  |   | The correlation between    |
|                           |                            |  |   | teacher and parents'       |
|                           |                            |  |   | ratings was .66 (Kendall & |
|                           |                            |  |   | Braswell, 1982).           |
| Child Self-Control Rating | 33-item self-report scale  | The CSCRS has been                                 | High internal consistency                         | The CSCRS correlated       |
| Scale (CSCRS)             | modelled after the SCRS.   | studied with 103 typically                         | $(\alpha = .90)$ and 6- to 8-week                 | significantly with teacher |
| Rohrbeck, Azar, &         |                            | developing 3 <sup>rd</sup> - and 5 <sup>th</sup> - | test-retest reliability (r =                      | ratings on the SCRS and    |
| Wagner (1991)             |                            | grade students.                                    | .84).   | child ratings on the       |
|                           |                            |  |   | Nowicki-Strickland         |
|                           |                            |  |   | Internal-External Locus of |
|                           |                            |  |   | Control Scale for          |
|                           |                            |  |   | Children.                  |
| Behavior Rating Inventory | 86 item teacher and parent | The BRIEF Parent Form                              | Satisfactory consistency                          | The BRIEF correlates       |
| of Executive Function     | rating scale designed to   | has been studied with 1419                         | $(\alpha = .80 \text{ to } .98) \text{ and } 2$ - | significantly with other   |

| (BRI | EF)                  | measure components of     | children and adolescents   | week test-retest reliability | measures of emotional and   |
|------|----------------------|---------------------------|----------------------------|------------------------------|-----------------------------|
|      | Gioia, Isquith, Guy, | executive functioning.    | aged between 5 and 18      | (r = .79  to  .88).          | behavioural functioning     |
|      | & Kenworthy (2000)   | The measure comprises     | years. The BRIEF           |                              | such as the Attention       |
|      |                      | eight empirically derived | Teacher Form has been      |                              | Problem scale on the Child  |
|      |                      | scales and three broad    | studied with a similar     |                              | Behavior Checklist and      |
|      |                      | indexes.                  | sample of 720 children and |                              | items assessing inattention |
|      |                      |                           | adolescents.               |                              | and hyperactivity-          |
|      |                      |                           |                            |                              |                             |

impulsivity on the ADHD Rating Scale IV. The BRIEF has also been shown to discriminate between children with a range of developmental disorders (Gioia, Isquith, Kenworthy, & Barton, 2002).

### General Adult Measures

| Self-Control Scale (SCS) | 36-item instrument         | The SCS has been studied      | High internal consistency           | Higher scores on SCS        |
|--------------------------|----------------------------|-------------------------------|-------------------------------------|-----------------------------|
| Tangney, Baumeister,     | designed to assess trait   | with two undergraduate        | ( $\alpha = .89$ and .83 to .85 for | correlated with higher      |
| and Boone (2004)         | self-control. It samples   | student samples ( $n = 351$   | the long and short forms            | grade point average, better |
|                          | controlling thoughts,      | and <i>n</i> = 255).          | respectively) and 3-week            | adjustment (fewer reports   |
|                          | feelings, impulses, and    |                               | test-retest reliability (r =        | of psychopathology,         |
|                          | performances, as well as   |                               | .89 and .87 for the long            | higher self-esteem), less   |
|                          | breaking bad habits. A 13- |                               | and short form                      | binge eating and alcohol    |
|                          | item short form has also   |                               | respectively).                      | abuse, better relationships |
|                          | been developed.            |                               |                                     | and interpersonal skills,   |
|                          |                            |                               |                                     | secure attachment, and      |
|                          |                            |                               |                                     | more optimal emotional      |
|                          |                            |                               |                                     | responses.                  |
| Self-Control and Self-   | 16-item instrument         | The SCMS has been             | The self-monitoring, self-          | The SCMS obtained           |
| Management Scale         | designed to assess trait   | studied with a multiethnic    | evaluation, self-reinforcing        | significant moderate to     |
| (SCMS)                   | self-control and self-     | student sample ( $n = 302$ ). | and total scales all show           | high correlations with      |

| Mezo (2009)                 | management skills. Three   |                             | satisfactory internal              | other measures of self-     |
|-----------------------------|----------------------------|-----------------------------|------------------------------------|-----------------------------|
|                             | dimensions are             |                             | consistency ( $\alpha = .74, .75,$ | control and psychological   |
|                             | measured—self-             |                             | .78, and .81 respectively).        | distress. The SCMS did      |
|                             | monitoring, self-          |                             | The SCMS has a 2-week              | not correlate significantly |
|                             | evaluation, and self-      |                             | test-retest correlation of         | with any of the             |
|                             | reinforcing.               |                             | .75.                               | discriminant constructs     |
|                             |                            |                             |                                    | (social desirability, moral |
|                             |                            |                             |                                    | beliefs, religious beliefs, |
|                             |                            |                             |                                    | irrational beliefs).        |
| Parenting Specific Measures | 8                          |                             |                                    |                             |
| Parenting Sense of          | 17-item scale to assess    | The PSOC was originally     | The satisfaction, efficacy,        | Significant inverse         |
| Competence Scale (PSOC)     | parenting self-esteem.     | used with parents of        | and total scales all show          | relationships were found    |
| Gibaud-Wallston &           | Two dimensions are         | infants, but was            | satisfactory internal              | between PSOC and            |
| Wandersman (1978,           | measured: satisfaction and | subsequently studied with   | consistency ( $\alpha = .75, .76,$ | perceptions of child        |
| cited in Johnston &         | efficacy.                  | a sample of 297 mothers     | and .79 respectively). Six-        | behavior problems. For      |
| Mash, 1989)                 |                            | and 215 fathers of 4- to 9- | week test-retest                   | mothers, reported child     |

|                           |                             | year old boys and girls.    | correlations for the scales | behavior problems related    |
|---------------------------|-----------------------------|-----------------------------|-----------------------------|------------------------------|
|                           |                             |                             | and for the total score     | to parenting satisfaction.   |
|                           |                             |                             | ranged from .46 to .82.     | For fathers, child behavior  |
|                           |                             |                             |                             | problems related both to     |
|                           |                             |                             |                             | satisfaction and efficacy as |
|                           |                             |                             |                             | a parent.                    |
| Parental Locus of Control | 47-item scale designed to   | The PLOC was originally     | Alpha coefficients for the  | Correlations between the     |
| Scale (PLOC)              | assess parental locus of    | used with 105 parents of    | individual subscales were   | five PLOC subscales and      |
| Campis, Lyman, &          | control. Five subscales     | elementary school-age       | .79 (Parental               | the validation measures      |
| Prentice-Dunn             | comprise the PLOC:          | children—60 parents who     | Responsibility), .66 (Child | suggest that people with     |
| (1986)                    | parental efficacy, parental | did not report experiencing | Control), .70               | external parental locus of   |
|                           | responsibility, child       | any difficulties in the     | (Fate/Chance), .71          | control orientation had low  |
|                           | control, fate/chance,       | parenting role and 45       | Parental Control), and .44  | self-efficacy accompanied    |
|                           | parental control.           | parents who had requested   | (Parental Efficacy).        | by frustration and a sense   |
|                           |                             | services for parenting      |                             | of being dominated by        |
|                           |                             | problems.                   |                             | their child's demands.       |

|                       |                             |                           |                           | Also, less commitment to     |
|-----------------------|-----------------------------|---------------------------|---------------------------|------------------------------|
|                       |                             |                           |                           | occupation and a general     |
|                       |                             |                           |                           | belief in fate and chance as |
|                       |                             |                           |                           | determinants of life events. |
|                       |                             |                           |                           | Three of the PLOC            |
|                       |                             |                           |                           | subscales discriminated      |
|                       |                             |                           |                           | between the theoretically    |
|                       |                             |                           |                           | different groups of parents. |
| Parenting Self-Agency | 5-item measure of           | The PSAM has been         | Scale alpha coefficients  | For the Anglo group,         |
| Measure (PSAM)        | parenting self-agency,      | studied with a sample of  | for the Anglo and Mexican | PSAM was positively          |
| Dumka, Stoerzinger,   | defined as parents' overall | English speaking, middle- | immigrant groups were .70 | related to measures of       |
| Jackson, & Roosa      | confidence in their ability | income, Anglo mothers (n  | and .68 respectively.     | active coping and            |
| (1996)                | to act successfully in the  | = 90) and Spanish         |                           | parenting acceptance,        |
|                       | parental role.              | speaking, low-income,     |                           | negatively related to        |
|                       |                             | Mexican immigrant         |                           | parenting inconsistent       |
|                       |                             | mothers $(n = 94)$ .      |                           | discipline, and not related  |

to acceptance coping. For the Mexican immigrant group, PSAM was positively related to positive reinterpretation coping and parenting acceptance and not related to acceptance coping. Results also confirmed the functional and scalar equivalence for these two cultural groups. The SEPTI has been The achievement, The SEPTI total and studied with 145 mothers recreation, discipline, parent-outcome of 5- to 12-year-old nurturance, health and fullexpectations scale children. converged with other scales all showed

50

Self-Efficacy in Parenting

Coleman & Karraker

Tasks Index (SEPTI)

(2000)

36-item scale designed to

self-efficacy in parents of

assess domain specific

elementary school age

|                           | children. Five subscales    |                          | satisfactory internal               | measures of self-efficacy    |
|---------------------------|-----------------------------|--------------------------|-------------------------------------|------------------------------|
|                           | comprise the SEPTI:         |                          | consistency ( $\alpha = .74, .82$ , | and with measures of child   |
|                           | facilitating child's        |                          | .86, .77, .73 and .91               | temperament and              |
|                           | achievement in school,      |                          | respectively). Six-week             | satisfaction with parenting. |
|                           | supporting child's need for |                          | test-retest correlations for        |                              |
|                           | recreation including        |                          | the scales and for the total        |                              |
|                           | socializing with peers,     |                          | score ranged from .46 to            |                              |
|                           | provision of structure and  |                          | .82.                                |                              |
|                           | discipline, provision of    |                          |                                     |                              |
|                           | emotional nurturance, and   |                          |                                     |                              |
|                           | maintenance of child's      |                          |                                     |                              |
|                           | physical health.            |                          |                                     |                              |
| Parenting Tasks Checklist | 28-item checklist designed  | The PTC has been studied | The behavioural self-               | The PTC discriminated        |
| (PTC)                     | to assess parents' task-    | with mothers of 2- to 8- | efficacy scale and the              | between clinic and non-      |
| Sanders & Woolley         | specific self-efficacy.     | year-old children with   | setting self-efficacy scale         | clinic mothers. In the       |
| (2005)                    | Two dimensions are          | conduct problems (clinic | both show good internal             | sample as a whole self-      |

|                         | measured: behavioural     | group, $n = 45$ ) and non- | consistency ( $\alpha = .97$ and   | efficacy measures were      |
|-------------------------|---------------------------|----------------------------|------------------------------------|-----------------------------|
|                         | self-efficacy and setting | clinic mothers from the    | .91 respectively).                 | significant predictors of   |
|                         | self-efficacy.            | community (non-clinic      |                                    | maternal discipline style   |
|                         |                           | group, <i>n</i> = 79).     |                                    | after controlling for other |
|                         |                           |                            |                                    | parent, child and risk      |
|                         |                           |                            |                                    | factors. Of the self-       |
|                         |                           |                            |                                    | efficacy variables          |
|                         |                           |                            |                                    | behavioural self-efficacy   |
|                         |                           |                            |                                    | was the best predictor of   |
|                         |                           |                            |                                    | mothers' discipline style.  |
| The Early Intervention  | 16-item instrument        | The EIPSES has been        | The parent outcome                 | The EIPSES total and        |
| Parenting Self-Efficacy | designed to assess        | studied with the primary   | expectations scale,                | parent-outcome              |
| Scale (EIPSES)          | parenting efficacy in the | female caregivers of 117   | competency scale, and              | expectations scale          |
| Guimond, Wilcox, &      | context of early          | infants and toddlers (3-34 | full-scale score showed            | converged with measures     |
| Lamorey (2008)          | intervention. Two         | months) receiving early    | moderate to acceptable             | of child receptive          |
|                         | dimensions are measured:  | intervention services.     | consistency ( $\alpha = .64, .75,$ | communication and           |

|                                 | Parent outcome               |                            | and .80 respectively).             | internalizing,             |  |  |  |
|---------------------------------|------------------------------|----------------------------|------------------------------------|----------------------------|--|--|--|
|                                 | expectations and parent      |                            |                                    | externalizing, and         |  |  |  |
|                                 | competence.                  |                            |                                    | dysregulation behaviours.  |  |  |  |
| Me as a Parent (MaaP)           | 16-item scale designed to    | The MaaP has been          | The self-efficacy, personal        | The MaaP self-efficacy     |  |  |  |
| Hamilton, Matthews,             | measure parents' global      | studied with parents (220  | agency, self-management,           | and total scale converged  |  |  |  |
| & Crawford (2012)               | beliefs about self-efficacy, | mothers, 80 fathers) of    | and self-sufficiency, and          | with the efficacy subscale |  |  |  |
|                                 | personal agency, self-       | infants (6 months to 2     | total scales all show              | and total scale of the     |  |  |  |
|                                 | management, and self-        | years) through to young    | adequate to good internal          | PSOC.                      |  |  |  |
|                                 | sufficiency.                 | adolescents (11-15 years). | consistency ( $\alpha = .75, .63,$ |                            |  |  |  |
|                                 |                              |                            | .72, .65, and .85                  |                            |  |  |  |
|                                 |                              |                            | respectively). Three-              |                            |  |  |  |
|                                 |                              |                            | month test-retest                  |                            |  |  |  |
|                                 |                              |                            | correlations for the total         |                            |  |  |  |
|                                 |                              |                            | score was .71.                     |                            |  |  |  |
| Parenting Practitioner Measures |                              |                            |                                    |                            |  |  |  |
| Parent Consultation Skills      | 22-item checklist designed   | The PCSC has been          | The PCSC has high                  | PCSC scores showed a       |  |  |  |

| Checklist (PCSC)   | to measure practitioner's   | studied with 300 general   | internal consistency ( $\alpha =$ | significant increase after    |
|--------------------|-----------------------------|----------------------------|-----------------------------------|-------------------------------|
| Turner and Sanders | self-efficacy or confidence | medical practitioners who  | .92)                              | participating in Triple P     |
| (1999 cited in     | in conducting behavioural   | volunteered to participate |                                   | Provider Training Courses.    |
| Sanders, Murphy-   | family interventions with   | Triple P Provider Training |                                   | Participants of this training |
| Brennan, &         | parents. This checklist     | Courses.                   |                                   | have been observed to         |
| McAuliffe, 2003)   | contains items assessing    |                            |                                   | show significantly greater    |
|                    | perceived proficiency in    |                            |                                   | use of targeted parent        |
|                    | core skills including       |                            |                                   | consultation skills than      |
|                    | assessment, active skills   |                            |                                   | untrained GPs (Sanders,       |
|                    | training, dealing with      |                            |                                   | Tully, Turner, Maher, &       |
|                    | process issues and clinical |                            |                                   | McAuliffe, 2003).             |
|                    | application of positive     |                            |                                   |                               |
|                    | parenting strategies.       |                            |                                   |                               |



*Figure 1*. A model of parental resistance. Adapted from "A functional analysis of resistance during parent training therapy," by G. R. Patterson and P. Chamberlain, 1994, *Clinical Psychology: Science and Practice, 1*, p. 55. Copyright 1994 by the American Psychological Association.



Figure 2. A model of practitioner avoidance.