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## 1. **EXECUTIVE SUMMARY**

The Department of Ageing, Disability and Home Care requested the Centre for Developmental Disability Studies, University of Sydney, to undertake a literature review of positive behaviour support programs for families with a child with a disability, with a view to identifying a preferred approach that may be implemented across NSW.

To comprehensively analyse available programs a set of evaluation benchmarks was developed, based on both national and international literature. The evaluation benchmarks were grouped into three broad categories: 1) best practices in designing positive behaviour support programs for families; 2) implementation processes, and 3) outcomes for child and family.

Against these evaluation benchmarks, four programs were reviewed; 1) Triple P (although not applicable to this population, it was included to provide context); 2) Stepping Stones Triple P; 3) Apex Behaviour Management Program, and, 4) Signposts for Building Better Behaviour.

As a result of the review, Stepping Stones Triple P was nominated as the preferred approach. This was based on a number of findings. While all programs reflected significant contributions to family resources, Stepping Stones research was based on either rigorous research methodology (relative to Signposts) or, a complete data set (relative to Apex). Therefore its findings overall are considered more reliable. In terms of best practices in design, Stepping Stones is relatively more family focussed, including home based practise sessions, planning for high risk situations, and multiple outcome measures. It is noted however that Stepping Stones includes a component on time-out for misbehaviour which presumably has implications for DADHC in view of its policy on restricted practices.

For implementation processes, Stepping Stones is preferred because, while it is currently commercially available only in individual delivery format, it is soon

to be offered in group mode. Unfortunately, there are no current plans for delivery by distance mode, though clinically it is understood to be readily adaptable. Because it is embedded within the generic Triple P series currently available across NSW, parents could potentially benefit from a range of additional resources, including general information on parenting, as well as support for high risk family factors including stress and coping, and marital conflict. Further, Stepping Stones is the subject of a comprehensive ongoing research program, and additional resources specifically tailored to families with a child with a disability are about to be released. Accreditation of facilitators is also considered a positive feature of Stepping Stones as it not only assists to ensure program fidelity but also facilitator quality. Finally, the breadth of experience of large scale Triple P implementation both in Australia and internationally is considered a final positive implementation feature of Stepping Stones relative to other programs reviewed.

All programs reviewed reflected good outcomes for child and family, but collectively Stepping Stones outcomes were considered more reliable. No firm conclusions could be drawn on the usefulness of any of the programs in reference to diagnostic sub-groups, specifically Down Syndrome and Autism Spectrum Disorder. However, Stepping Stones is the only one of the programs which is the current subject of such research, with results due for publication within the year. It should be noted that the Apex Behaviour Management program may have utility in the future as an adjunct program for families with a child with Autism Spectrum Disorder. None of the programs have been evaluated for application with families from a range of cultural and linguistic, educational or socio-economic background so no comment was possible on this. Finally, Stepping Stones is evaluated as having a relatively better ability to build not only parental capacity, but local capacity via its accreditation, and mechanisms for local facilitator support.

While Stepping Stones is nominated as the preferred approach, this is offered not without caution. Issues for further consideration include, inclusion of time out as a management procedure and its implications for DADHC policy, awaiting results of imminent research on diagnostic sub-groups, its non-

availability in distance mode and implications for isolated families, and the significant time commitment that families and service providers would have to make for the ten sessions comprising Stepping Stones.

Broader issues pertaining to a large scale state wide roll out also merit consideration. These include the already stretched resources of service providers in the disability sector, and the additional time required for accreditation and program delivery. Further, the possibility that upon completion of a parent program, there will be some families with outstanding needs, and the contingency planning required to service such families effectively. Finally, the experiences of the NSW Department of Health, in its state-wide implementation of the generic Triple P series is considered invaluable not only as a source of expertise, but also potential cross agency collaboration and resource sharing in future service delivery.

## **2. PROJECT PARAMETERS**

To place the current project in context, the project background, aim and requirements, as well as the method for the literature review are given.

(The DADHC Project Brief (2004) full text is given in Appendix I).

### **2.1 Project background and aim**

The aim given by the Department of Ageing, Disability and Home Care for the current project was, “to identify, evaluate and describe resources addressing positive behaviour support that may be implemented across NSW to assist in meeting the behaviour support needs of families of children with a disability” (DADHC “Project Brief”, 2004, p. 1).

The project required the review of, “existing approaches to positive behaviour support for families, with a view to selecting one approach that may be adopted for implementation across NSW disability services, and by DADHC in particular. The project involve[d] a description of each approach, any literature or evidence relating to that approach, including independent evaluations where available” (DADHC “Project Brief”, 2004, p. 2).

For the purposes of this literature review “resources for positive behaviour support...for families of children with a disability” (DADHC “Project Brief”, p. 1) are defined as programs which:

- have the focus of supporting families (commonly parents) to develop practical skills in positive behaviour support;
- include learning outcomes;
- have teaching or resource materials;
- are provided either on an individual or group basis;
- can be delivered via either face-to-face or distance mode; and

- have been implemented and evaluated by the program developers and ideally independently.

The reader's attention is specifically drawn to the use of the term "program". This term is used throughout the review to encompass the definition given above.

The literature review does not include positive behaviour support programs which are referral based, specialist programming services. Neither does it include education sessions that may be local, in-house developed.

The literature review also does not include programs which, though indirectly advantageous to families, do not directly address positive behaviour support resources. An example of this is stress management groups. These are addressed only peripherally in the review.

## **2.2 Method**

Essentially two concurrent approaches were taken to complete the Literature Review:

### **2.2.1 Literature review approach**

A comprehensive review of both national and international literature on the subject was undertaken. This was done by library search through relevant databases, manual searching, and internet search for specific websites across the world. Where appropriate, follow-up correspondence was initiated.

A total of 108 pieces of literature were reviewed (comprising primarily journal articles, conference proceedings and book chapters) and 15 web-sites investigated.

### **2.2.2 Correspondence with Researchers and Service Providers**

Correspondence occurred with both national and international researchers. These included Triple P International, Victorian Parenting Centre, NSW Centre for Parenting and Research, Parenting and Family Support Centre-University of Queensland, University of Kansas, University of Toronto, and Disability Services Commission of Western Australia.

Correspondence was also initiated with service providers from the NSW Department of Ageing, Disability and Home Care, NSW Department of Health, Spastic Centre of NSW, and the Autism Association of NSW.

To comprehensively document the requirements of the project, the remainder of this report is presented in three chapters:

**Chapter Three - Benchmarks for evaluation:** Both national and international literature is reviewed resulting in a set of benchmarks for quality programs in positive behaviour support for families.

**Chapter Four – Description and evaluation of available approaches:** A number of approaches are described and evaluated against the benchmarks developed in Chapter Three. A preferred approach is identified as a result of this evaluation.

**Chapter Five – The preferred approach:** The preferred approach is further critiqued, both in terms of positive features and issues for consideration.

### **3. BENCHMARKS FOR EVALUATION**

DADHC (“Project Brief”, 2004) required that approaches for families be “aligned with existing literature on positive behaviour support” (p. 2). To do this effectively, a set of benchmarks for evaluation has been developed based on both international and national literature. These then form a framework against which to evaluate programs.

This chapter defines and describes these benchmarks with supporting literature as evidence. For efficiency and ease of understanding, they are grouped into three broad categories:

1. best practices in designing positive behaviour support programs for families;
2. implementation processes; and
3. outcomes.

It is important to acknowledge that it would be idealistic to hope that all positive behaviour support programs would measure up perfectly against the benchmarks detailed in this chapter. They will act as a set of guidelines only to give validity to the evaluation presented in Chapter Four.

#### **3.1 Best practices in designing positive behaviour support programs for families**

In the disability field, a vast literature exists to demonstrate the best practices which should be considered when designing quality positive behaviour support programs for families. Five main benchmarks are considered critical. The program should be in keeping with the following:

1. evidence-based;
2. based on an early intervention theme;
3. reflective of current best practice in positive behaviour support;
4. reflective of current best practice in parenting; and
5. embedded in a broader family-centred approach.

Each of these benchmarks is summarised in turn.

### **3.1.1 The program is evidence-based**

A program that is evidence-based effectively uses information from past research in its development. It is well constructed because it is based upon quality research, has itself been evaluated using quality research techniques, and has been subject to rigorous critical analysis (Evidence Network of the United Kingdom, 2004).

The importance of empirically sound research to evaluate positive behaviour support programs for families cannot be overstated. However, the difficulty in achieving this in an applied or real life setting is also apparent. A number of ethical, and sometimes legal issues arise with the implementation of rigorous scientific criteria. For example, random assignment to experimental versus control conditions, precision in measurement of dependent and independent variables, and replication of treatment effects can be difficult to achieve.

Sanders (2003a) proposes that the utility of positive behaviour support programs be examined according to three categories. Firstly *efficacy* is established where both child and parent effects are evaluated under controlled conditions. Secondly, *effectiveness* is evaluated where these same dependent variables are tested in real services. The final evaluation is *dissemination* where the main independent variable is transfer of knowledge to a practitioner or service provider resulting in a change in his/ her behaviour, and co-occurring treatment effects for parent and child.

In this review, the “evidence-based” benchmark will maintain an awareness of the counterbalance between quality research evaluation and the difficulties in conducting efficacy, effectiveness and dissemination trials in applied settings.

### **3.1.2 The program is based on an early intervention theme**

A quality family life is intrinsic to the well-being and positive development of all children. In families with a child with a disability and challenging behaviour there is an abundance of research demonstrating increased stress, poorer parental self efficacy and low satisfaction (Baker, Blacher, Crnic & Edelbrock, 2002; Cann, Rogers & Worley, 2003; Hastings & Brown, 2002; ) all reflective of decreased family quality of life (Poston, Turnbull, Park, Mannan, Marquis & Wang, 2003; Schalock & Alonso, 2002).

It is estimated that up to 40% of children with developmental disability have significant problems with their behaviour (Einfeld & Tonge, 1996). There is not only clear evidence, but it is also common sense that the earlier the support is provided, the better for the family's quality of life, and the well-being of the child (Hudson, Matthews, Gavidia-Payne, Cameron, Mildon, Radler & Nankervis, 2003). Not only will good support attempt to remediate current behaviours, but also give parents the tools that can be embedded in family life to prevent or moderate problem behaviours into the future (Booth & Crisante, 2003; Dean, Myers & Evans, 2003; Mazzuchelli, Roberts, Studman & Sanders, 2002). Importantly, the Department of Ageing, Disability and Home Care recognises the importance of early intervention in its policy for supporting children and their families ("Living in the Community Putting Children First", 2002).

Early intervention is commonly defined in the literature as the first five years of life (Spiker and Hopmann, 1997). However, for the purposes of this literature review it will encompass programs that are suitable for children, those aged under 16 years of age, (Department of Disability, Ageing and Home Care, "Children's Standards in Action", 2004, p. 3) and their families.

While early intervention is preferable, it is not always possible. Therefore, a program should also include levels of training, accounting for different age groups of the child (see 3.2, pp. 15-19 for further detail).

### **3.1.3 The program is reflective of current best practice in positive behaviour support.**

While it is not appropriate to give a full and detailed description of current best practices in positive behaviour support, a brief summary is merited, so that the reader clearly understands how this benchmark is utilised in the literature review.

A quality positive behaviour support program for families acknowledges the ecology or everyday context of the child and family's life (Sigafoos, Arthur & O'Reilly, 2003). As Horner (2000) proposes, "...the signature feature of positive behaviour support (PBS) has been a committed focus on fixing environments, not people" (p. 97).

The program must demonstrate a commitment to ethical practice (Emerson, 2001; McVilly, 2002; Sigafoos et al., 2003). Sigafoos et al. (2003) notes, "a concern to achieve an optimal quality of life, guided by principles of ethical and responsible action, underpins all our efforts at assessment and intervention" (p. 67).

The design and implementation of positive behaviour support programs are founded on the well-researched teaching tool of Assessment → Planning and implementation → Monitoring and evaluation → (feedback cycle), (Westling & Fox, 2000).

Positive behaviour support programs are based on the premise of understanding the function or purpose of challenging behaviour (Carr, Horner, Turnbull, Marquis, McLaughlin, McAtee, Smith, Ryan, Reuf & Doolabh, 1999). Therefore, a quality positive behaviour support program for families must be built on an understanding of the importance of, and skills in functional assessment.

The program should demonstrate the development of a clear plan for support based upon the assessment findings. In the absence of a well planned

intervention, challenging behaviours remain unresolved (Tonge & Einfeld, 1991) and indeed can worsen (Einfeld & Tonge, 1996). The implementation of positive behaviour support programs should be guided by the support plan.

Monitoring and evaluation is a final part of the cycle comprising a good positive behaviour support program. The change agents, in this case primarily parents, require skills in how to track change, and then how to evaluate such change (McVilly, 2002).

The evaluation of multiple outcomes is an important hallmark of quality behaviour support programs for families. While monitoring changes in targeted behaviours is self-evident, the evaluation of other socially valid outcomes should also be incorporated (Carr, Dunlap & Horner, 2002). Some examples for monitoring may include family satisfaction with the program, child inclusion in family life, pro-social behaviours, parental affect and self-efficacy, and broad indicators of quality of life (Cann, Rogers & Worley, 2003; O'Connor, 1995; Ralph & Sanders, 2003).

#### **3.1.4 The program is reflective of current best practice in parenting**

A set of core parenting principles that apply to all families, including those with a member with a disability and behavioural concerns, are summarised by Sanders, Markie-Dadds & Turner (2003a). These are listed below with some examples:

- observation skills: this includes the ability to monitor both child and parental behaviour;
- parent-child relationship enhancement skills: spending time together, talking to children, being affectionate;
- encouraging desirable behaviour: giving praise, being attentive, providing activities;
- teaching new skills and behaviours: setting a good example, using incidental teaching;

- managing misbehaviour: having clear rules, ignoring inappropriate behaviour, clear instructions, natural consequences;
- preventing problems in high-risk situations: advanced planning, providing incentives and activities, consistency;
- self-regulation skills: being aware of strengths and weaknesses, setting personal goals for change, generalizing skills;
- mood management and coping skills: having personal coping methods, developing coping plans for high-risk situations; and
- partner support and communication skills: consistency between partners, conversation, problem solving, giving and receiving feedback.

A quality positive behaviour support program for families should reflect many or all of these core practices.

### **3.1.5 The program is embedded in a broader family-centred approach**

“At the core of the family-centred approaches is the recognition of the centrality of the family – not just the mother – in the life of the child... The goal of family-centred intervention is one of improving the well-being of the family as a whole” (Turnbull, Turbiville, & Turnbull, 2000, p. 638). A family-centred model aims to ensure that parents have ultimate control over decision making about their family members, are treated respectfully and supportively, and are provided with correct information comprehensively and appropriately (King, King & Rosenbaum, 1999, p. 41). Family-centred approaches and family quality of life are inherently linked (King et al., 1999; Schalock & Alonso, 2002).

In real terms, this means two central points for the current evaluation subject. Firstly, the importance of an assessment of not only the individual child’s challenging behaviour (see 3.1.3), but also an assessment of the family’s, a) ideas and reactions regarding hypotheses for the behaviour; b) current family routines and living patterns; c) use of successful strategies to address behaviours; d) goals; e) existence and use of support strategies; and

f) program implementation and contextual fit (Albin, Lucyshyn, Horner & Flannery, 1996). Secondly, the family-centred approach by its nature, dictates the measurement of multiple outcomes so that outcomes reflective of the whole family are monitored and evaluated (Blacher & Hatton, 2001; Roberts, Mazzucchelli, Taylor & Reid, 2003) (see Section 3.1.4 for further detail).

Collectively, the five benchmarks defined and described reflect the features of best practices in designing positive behaviour support programs for families. While the benchmarks summarised thus far give guidance to an evaluation of positive behaviour support programs for families, they are not sufficient. There are a number of implementation processes that also require benchmarking for the evaluation.

### **3.2 Implementation processes**

For the purposes of this review, "implementation processes" refer to those procedures requiring careful examination and which are crucial to the effective operation of positive behaviour support programs. For efficiency, these processes are examined within the following benchmarks:

1. attractiveness and accessibility;
2. levels within the program;
3. costs and Infrastructure requirements;
4. expertise and support of facilitators; and
5. state-wide implementation issues.

#### **3.2.1 Attractiveness and accessibility**

There are a number of features which reflect the attractiveness and accessibility of positive behaviour support programs for families. Some of these are briefly described.

It is not the intent of this literature review to summarise the research on the merits of individual, distance mode and group training approaches. This is well-summarised elsewhere (see for example Cann, Rogers & Worley, 2003; Gavidia-Payne & Hudson, 2002; Hudson et al., 2003, Sanders et al., 2003a). However, it is considered advantageous that positive behaviour support programs for families be available, or at least adaptable to these formats. The research commonly agrees that different modes will suit different family needs. This may depend upon geographic location, personal preference and learning style, or the nature of the individual family situation.

The success of any program lies also in the effectiveness of the relationship between parents and professionals (Roberts, 2003). The importance of well-trained, well-supported professionals is critical to successful implementation of any program (Dempsey & Dunst, 2004) (see 3.2.4, pp. 18-19 for further detail).

DADHC is respectful of the need to address the linguistic and cultural diversity of its clientele (“Living in the Community Putting Children First”, 2002). To this end, it is advantageous that programs support not only any necessary language differences, but are also sensitive to different cultural family traditions (Crisante & Ng, 2003).

For all participants, the importance of easy to read materials should also be apparent (Adkins, Singh, McKeegan & Lanier, 2002, cited in Bochner, 2003). Preferences are reported for programs that are “friendly” and practical, with exercises embedded within everyday, typical family situations (Gavidia-Payne & Hudson, 2002).

### **3.2.2 Levels within the program**

Level of entry within a positive behaviour support program is advantageous for a number of reasons. Broadly, such a program would enable the widest possible population reach because it attempts to capture the range of support needs associated with having a family member with difficult behaviour

(Sanders, Markie-Dadds & Turner, 2003a). It also reflects a family-centred approach, giving families the option of choosing from a suite of resources tailored to best suit their needs.

Entry levels can apply to different age groups. Families commonly report greater satisfaction with resources where case examples are personally relevant to them (Ralph, Toumbourou, Grigg, Mulcahy, Carr-Gregg & Sanders, 2003). This may translate for example to, different resources for families of young children versus teenagers.

Different entry levels can also apply to the intensity of support need. For example, at a broader population level families may benefit from resources aimed at prevention, where there is low risk for problems. More intensive programs may be directed to families where the child or family members are at greater risk. Such intensive resources may address added family risk factors such as stress or conflict management, thereby enhancing positive behaviour support outcomes (Gavidia-Payne & Hudson, 2002; Rhodes, 2003).

Level of entry is also advantageous for service practitioners. It avoids over-servicing, better utilises the range of professional skills, and enables prioritising of service funding at a local level (Sanders, Markie-Dadds & Turner, 2003).

### **3.2.3 Costs and Infrastructure requirements**

Costs and infrastructure needs for the successful implementation of a positive behaviour support program to families requires consideration of a number of issues. Some are more readily apparent than others. These may include:

- cost of development and replication of materials;
- costs to family, both monetary and time;

- access to childcare in the event of face-to-face classes (E. Connellan, Chatswood Assessment Centre, personal communication, June 18, 2004; L. Crisante, NSW Department of Health, personal communication, August 2<sup>nd</sup>, 2004; Raphael, 2003);
- implementation time costs: while group delivery maximises the public health dollar (Hartog, undated d), individual presentation may be required, depending upon the nature of family need;
- practitioner training costs if the program requires accreditation;
- backfill costs may be required while practitioners are trained, or themselves delivering programs to families (Crisante, 2003);
- local coordination costs may include booking registration, resources preparation, telephone usage, sector planning, and practitioner organisation (Dean, Myers & Evans, 2003);
- contingencies in the event of turnover of practitioners and replacement of these (Raphael, 2003);
- adequate local support structures by management to successfully implement program on an ongoing basis (Dean et al., 2003); and
- capacity to enable networking between practitioners and families to facilitate professional development, family support and capacity building.

While many of these are difficult to quantify as they depend on local existing conditions, it is considered important to acknowledge both the apparent as well as potentially hidden cost and infrastructure requirements.

### **3.2.4 Expertise and support of facilitators**

Researchers concur on the proposition that successful implementation of any program of positive behaviour support to families relies heavily on the style and expertise of the facilitator (Dempsey & Dunst, 2004; Gavidia-Payne & Hudson, 2002; A. White, NSW Centre for Parenting and Research, personal communication, June 11, 2004). Implementation reflecting a family-centred approach requires a style that is not dominant, but more attuned towards

supporting the family to become the natural change agents (Case, 2000; Dempsey & Dunst, 2004). Facilitation must be timely, responsive to family and child change, culturally appropriate and accessible.

To achieve this, facilitators require training, and ongoing local support. The provision of such training and support will enhance the professional take-up of the program thereby ensuring the continued capacity of the local service to deliver (Raphael, 2003; Sanders, Markie-Dadds & Turner, 2003).

### **3.2.5 State wide implementation issues**

As Raphael (2003) summarises, “parenting interventions are an effective strategy which can be adopted on a population health basis to prevent...problems and promote mental health and wellbeing” (p. 29). The Project Brief provided by DADHC indicates that an approach may in the future be implemented across NSW (DADHC “Project Brief”, p. 2). Therefore this requires that any program be benchmarked for its ability to roll-out in large scale.

Research involving large scale roll out has demonstrated a number of implementation issues, particularly surrounding evaluation of the program. For example, Booth & Crisante (2003) emphasise the importance of a) a clear understanding of evaluation aims and processes prior to commencement by all sectors involved; b) coordination of the development, handling and analysis of data measures; c) communication between sectors on the ongoing evaluation processes; and d) flexibility in evaluation processes such that local conditions enable changes in implementation of the program.

Sanders (2003b) proposes a number of principles for effective large scale program development and implementation (pp. 8-14). Those principles that

may be particularly relevant for the population defining this literature review include:

- enhance the capacity of primary care services to support parents;
- provide universal parenting programs targeting entire populations at developmentally sensitive transition points (e.g. pre school, primary, high school);
- develop tailored, intensive interventions for parents and children at high risk;
- develop interventions to enable parents to manage work and family responsibilities;
- develop interventions for culturally and linguistically diverse groups; and
- develop effective systems of dissemination and quality assurance.

(Please note that some of these have been addressed in further detail within preceding benchmarks).

Clearly there are a number of important implementation processes. These have been detailed within the benchmarks: 1) attractiveness and accessibility; 2) levels; 3) cost/ infrastructure; 4) expertise and support of facilitators; and 5) state-wide implementation issues. The final, and arguably most important, evaluation point for any positive behaviour support program for families is “Does it achieve outcomes?” It is to this final area that discussion now turns.

### **3.3 Outcomes**

Three benchmarks to guide the evaluation are presented within this category. These evaluate whether a given program:

1. produces outcomes for the child and family;
2. produces outcomes across the heterogeneous population; and

3. builds capacity.

Each of these is addressed in turn.

### **3.3.1 The program produces outcomes for the child and family**

While it should go without saying, it is important that this benchmark not only evaluate the outcomes for the child, but in keeping with a family-centred approach, also the family. The premise of multiple outcomes has been detailed already (see 3.1.5, pp. 14-15). For the purposes of this section, it is proposed that a quality positive behaviour support program for families includes outcomes reflective of the following:

For the child:

- positive behaviour change or at least stabilisation;
- increased child engagement in family life; and
- pro-social behaviours.

For the family, outcomes reflective of quality of life:

- satisfaction with the program;
- improved parental self-efficacy;
- decreased feelings of stress and increased coping; and
- improved family relations.

(Bailey, McWilliam, Darkes, Hebbeler, Simeonsson, Spiker & Wagner, 1998; Roberts, Mazzucchelli, Studman & Sanders, 2004; Schalock & Alonso, 2002).

### **3.3.2 The program produces outcomes across a heterogeneous population**

The heterogeneity of the population defining this literature review comprises not only variation in the child, but also the family.

The DADHC Project Brief requires attention be drawn to two specific populations, children with Down Syndrome and those with Autism Spectrum Disorder (pp. 2-3), while maintaining continued address to the remaining population of children with disabilities. Therefore, this benchmark should examine whether outcomes can be achieved with all children, and specific issues that might pertain to the two specific sub-groups.

Families also reflect significant heterogeneity. Families come from a range of linguistic and cultural backgrounds, live in urban or rural and remote areas, and have different educational backgrounds and socio-economic conditions (Markey, 2000). Therefore, it is advantageous that a program be evaluated for its ability to achieve outcomes across this range of heterogeneity.

### **3.3.3 The program builds capacity**

Building capacity should be addressed at two levels. Firstly, does the program have the ability to build the capacity of the family to address their child's needs? (Bailey et al., 1998). With this in mind, a positive behaviour support program should for example, teach families to generalize their skills beyond the immediate target behaviours, and on towards behaviours that may occur in the future (Martin, 2003).

Secondly, does the program build the capacity of the service to provide continued quality service? Depending upon the local sector conditions, practitioners could comprise not only personnel dedicated to specialist positive behaviour support, but also direct carers, community nurses, case-workers etc. The accessibility of a program to such a range of personnel, clearly builds the overall capacity of the local service (Sanders, 2003b).

This chapter has described and detailed three categories of benchmarks that are useful in evaluating positive behaviour support programs for families. Collectively these are represented by: 1) best practices in designing positive behaviour support programs for families; 2) implementation processes; and 3) outcomes. Chapter Four will utilise this set of benchmarks to evaluate the utility of a range of available positive behaviour support programs.

#### **4. DESCRIPTION AND EVALUATION OF AVAILABLE APPROACHES**

In this chapter a number of selected programs are described and evaluated against the benchmarks developed in Chapter Three. A preferred approach is identified as a result of this evaluation. The programs selected are in keeping with the definition given on pp. 6-7 of this report.

As already outlined, it would be unlikely that all positive behaviour support programs would measure up perfectly against the defined benchmarks. They are intended to guide the evaluation, and provide evidence in “light of best practice information available within the current national and international literature relating to positive behaviour management support” (DADHC “Project Brief”, 2004, p. 2).

The literature review revealed a limited number of existing programs which have either published or unpublished literature and have been subject to evaluation (DADHC “Project Brief”, 2004).

The following programs are presented:

1. Triple P\*;
2. Stepping Stones Triple P;
3. Apex Behaviour Management Program; and
4. Signposts for Building Better Behaviour.

(\*The generic Triple P series provides support to families where the child does not have an intellectual disability. It may therefore be argued that it is not relevant to include in this literature review. However, it is considered appropriate for inclusion for three reasons. Firstly, it includes components of intervention that are common to all family needs, regardless of the presence of a child with an intellectual disability. Secondly, it places Stepping Stones Triple P (described in Section 4.2) within the context of an overall program. Finally, it is difficult to evaluate Stepping Stones Triple P without first providing a description and evaluation of the larger Triple P series).

Each approach is presented within the following descriptors:

1. Aim
2. Content
3. Format
4. Evaluation

In addition, selected overseas programs are briefly summarised. These are presented as context literature only, and as such are given in Appendix II.

#### **4.1 Triple P program**

The Triple P - Positive Parenting Program is a multi-level parenting and family support program developed by Professor Matt Sanders and colleagues at the Parenting and Family Support Centre, School of Psychology, the University of Queensland (Parenting and Family Support Centre, University of Queensland, undated). It provides interventions for families with children from birth to 16 years of age.

##### **4.1.1 Aim**

The Triple P program aims to prevent severe behavioural, emotional and developmental problems in children by enhancing the knowledge, skills and confidence of parents (What is Triple P?, undated).

##### **4.1.2 Content**

Triple P comprises five levels of intervention on a tiered continuum of increasing intensity of support.

**Level 1 - Universal Triple P:** is a media based parent information campaign that has a population wide catchment. Interested parents are provided with useful information via a coordinated promotional campaign using print and

electronic media. Content includes how to solve developmental and minor behaviour problems which are typical in normal child development. It is commonly provided as a generic public health campaign (Sanders, Markie-Dadds & Turner, 2003).

**Level 2 - Selected Triple P and Selected Teen Triple P:** is a brief selective intervention for parents with a specific concern about their child's development or behaviour, for example toilet training or bedtime problems. It involves the provision of specific advice and information about coping with specific child-rearing issues (Sanders, Markie-Dadds & Turner, 2003).

**Level 3 – Primary Care Triple P and Primary Care Teen Triple P:** Identical to Level 2, it involves the provision of specific advice for a discrete problem behaviour (for example tantrums, fighting with siblings). However it is a narrow focus intervention tailored specifically to parents who require more tailored consultations or active skills training (Sanders, Markie-Dadds & Turner, 2003). Level 3 is a brief program, combining rehearsal and self-evaluation. It provides practical advice, assisted by a series of tip sheets and video resources. Session One covers the history and nature of the behaviour and results in the selection of goals and a baseline monitoring system. Session Two identifies conclusions about the behaviour based on baseline data, and the outcome is a specific parenting plan including a personal coping plan. In Session Three, the implementation of the plan is reviewed, with monitoring and evaluation of specific issues, and additional strategies introduced as necessary. Session Four comprises a progress review, troubleshooting, and positive feedback (What is Triple P?, undated).

**Level 4 – Standard Triple P, Group Triple P, Group Teen Triple P, and Self-Directed Triple P:** suits parents requiring intensive training in positive parenting skills, and is for those parents who typically have children with more severe behaviour problems (Sanders, Markie-Dadds & Turner, 2003). This program shares commonalities with Level 3, but it teaches parents to apply the strategies to a broad range of target behaviours in both home and community settings with both the target child and siblings (Triple P

International, undated). Specific generalisation skills such as training with sufficient exemplars and training loosely (Albin & Horner, 1988) are practised across settings, siblings and time.

**Level 5 – Enhanced Triple P:** is a more holistic family focussed set of modules which include parenting skills, mood management, stress coping and partner support skills content. It is suitable for parents with concurrent child behaviour problems as well as family dysfunction, for example parental depression, stress, or partner conflict (Sanders, Markie-Dadds & Turner, 2003). Level 5 comprises three modules, Practice, Coping Skills and Partner support, either offered separately or in combination depending upon family need. The Practice module is provided in the family home building on skills acquired in Level 4, with intensive rehearsal and feedback. The Coping Skills module assists parents to identify dysfunctional thinking patterns, and introduces alternative coping skills, relaxation methods and coping plans. The Partner Support module is designed for two parent families who have problems with the relationship or communication. It teaches listening and speaking, information sharing, problem solving and relationship caring (Triple P International, undated).

#### **4.1.3 Format**

Each of the levels can be offered in flexible delivery formats, enabling the widest possible reach to the population. The formats include individual, group or self-directed delivery modes (Sanders, Markie-Dadds & Turner, 2003).

There are specific formats within each of the levels comprising Triple P:

**Level 1 – Universal Triple P:** This may involve self-directed resources, brief consultation, group presentations, mass media and telephone referral services (Sanders, Markie-Dadds & Turner, 2003). Universal Triple P has been delivered via a 13 episode television series in New Zealand regular newspaper column, radio interview, current affairs programs, community

service announcements and telephone information line (What is Triple P?, undated).

**Level 2 – Selected Triple P and Selected Teen Triple P:** may be offered in either self-directed, telephone assisted, face-to-face individual consultation or group session formats (Sanders, Markie-Dadds & Turner, 2003). It can be provided by primary care services, for example community health centres, general practitioners, preschools, and schools (Triple P International, undated). Level 2 is supported not only by the provision of specific consultation, but agencies also display resource material to prompt parents to request information, or where to go for help. Additionally, it is provided in the context of the media campaign, Level 1 – Universal Triple P.

**Level 3 – Primary Care Triple P and Primary Care Teen Triple P:** is offered in either telephone, face-to-face consultation, or group sessions (Sanders, Markie-Dadds & Turner, 2003). The intervention typically involves four 15 to 30 minute consultations. Similar to Level 2, Level 3 can be provided by community health centres, general practitioners, preschools and schools.

**Level 4 – Standard Triple P, Group Triple P, Group Teen Triple P, and Self-Directed Triple P:** can be offered as self-directed, telephone, or face-to-face individual consultation or group sessions. In Standard Triple P, individual face-to-face consultation in a combination of clinic and home sessions is offered, thus enhancing practice skills with supported observation. Group Triple P (and Group Teen Triple P) follows a similar content to Standard Triple P, but is offered in group sessions with four 15 to 30 minute telephone contact follow ups. In the self-directed program detailed information is provided in a 10 week self-help program augmented with weekly 15 to 30 minute telephone follow-up.

Level 4 is usually provided by mental health and welfare staff, or other allied health professionals who regularly consult with parents about child behaviour.

**Level 5 – Enhanced Triple P:** can comprise up to eleven sessions, depending upon family need. The Practice module, is offered in the home across three sessions of 40 minute duration. The Coping Skills module also comprises three sessions, but of up to 90 minutes. The Partner Support module is offered as three 90 minute sessions (Triple P International, undated). Sanders, Markie-Dadds & Turner (2003) report that Level 5 can be offered in flexible format, that is either individual, group or self-directed.

Level 5 is usually offered by mental health and welfare professionals with appropriate experience.

#### **4.1.4 Evaluation**

A significant set of research, both published and in preparation, examines the efficacy, effectiveness and dissemination of the Triple P program (Sanders, 2003a, 2003b). This research has been conducted in Queensland, Victoria, Western Australia and NSW. The Triple P program is also exported to Switzerland, Hong Kong, United Kingdom, New Zealand, Singapore, Germany and the USA (Crisante & Ng, 2003; Triple P International, undated). It is understood that independent evaluations of its implementation at many of these sites is currently being undertaken (M. Murphy-Brennan, Triple P International, personal communication, July 22<sup>nd</sup>, 2004).

In this literature review the research is critically evaluated according to the three sets of benchmarks described in Chapter Three.

##### **4.1.4.1 Best practices in designing positive behaviour support programs for families**

The Triple P series broadly meets the evaluation benchmarks representing Best Practices in positive behaviour support for families.

**The program is evidence based:** Triple P reflects evidence based practice. It has used past research in its development, for example social learning

models, applied behaviour analysis, child and family behaviour therapy, ecological approaches, social information processing, developmental psychopathology, and population health (Sanders, Markie-Dadds & Turner, 2003).

The Triple P series has also been subject to a series of evaluation and replication studies. A range of randomised control efficacy trials has demonstrated the series is effective in reducing child behaviour problems, and improving parental stress, coping and self efficacy (a full summary of the twenty year research series is given in Sanders, Turner & Markie-Dadds, 2002). Child behaviours have included oppositional behaviour, oppositional defiant disorder, conduct disorder, recurrent abdominal pain, persistent feeding problems, and Attention Deficit Hyperactivity Disorder (Sanders, Markie-Dadds & Turner, 2003).

The series has also demonstrated effectiveness as it has been generalized to a range of real services. These include schools (McTaggart & Sanders, 2003), community health centres (Crisante & Ng, 2003) and pre-schools (Crisante, 2003).

Finally Triple P reflects dissemination in its transfer of skills to practitioners in real settings. For example, Crisante (2003) reports on the successful implementation of Level 3 Triple P by 13 pre-school practitioners with 39 parents in western Sydney. Level 4 Triple P was implemented with 1600 families over three years by Western Australian Community Health services with positive outcomes in child behaviour, parental strategies, and decreased parental depression, anxiety and stress (Lewis & Lopresti, undated). Similar large scale results have been achieved in South East Sydney (Dean, Myors & Evans, 2003), and Western Sydney (Booth & Crisante, 2003).

**The program is based on an early intervention theme:** The Triple P series has been applied to a range of children from toddler-hood to sixteen years of age (What is Triple P?, undated). Ralph & Sanders (2003) reported on the implementation of Level 4 Group Teen Triple P with twenty-seven parents of

twelve to thirteen year olds, with improvements in self-reported conflict with child, parental self-efficacy and partner cohesion. Sanders, Markie-Dadds, Tully & Bor (2000) compared Level 4 (Standard and Self-Directed), and Level 5 to a waitlist control for 305 three year olds showing significant improvements of Standard Triple P and Level 5 compared to wait list control, with maintained gains at 1 year follow-up.

**The program is reflective of current best practice in positive behaviour**

**support:** Triple P has a strong emphasis on the ecology of the family environment, and the importance of teaching parents to use skills in everyday contexts. Many of the programs, for example Level 4 (Standard) and Level 5, have built in practice sessions which are conducted in the family home with facilitator support (Sanders, Markie-Dadds & Turner, 2003).

The more intensive levels of Triple P (Levels Three, Four and Five) are rolled out using functional assessment, support plan development, and evaluation skills as the teaching components (see Section 4.1, pp. 29-32 for detail), all reflective of a positive behaviour support approach to challenging behaviour.

Multiple outcomes measurement is inherent in all research conducted in the Triple P series. In a review paper provided by Sanders, Markie-Dadds & Turner (2003), of the 24 papers summarised, all but one measured both child and parent (or in some cases teacher) outcomes.

A perhaps significant concern for DADHC is the inclusion of time-out as a management strategy for misbehaviour in the Triple P (?) program. Typically in the more intensive Levels this appears as one of many strategies (including diversion, rule setting, and planned ignoring) and Triple P emphasises that these immediate incident response strategies are a small part of the overall positive behaviour support approach (E. Stumbles, Spastic Centre of NSW, personal communication, June 23, 2004; M. Murphy-Brennan, Triple P International, personal communication, July 22nd, 2004). In view of the understanding that DADHC would treat time-out as a **Restricted Practice**, and therefore subject to special permission for use by staff

(“Behaviour Intervention and Support Policy”, 2003), presumably this has implications as to how it would treat a parenting intervention which includes a time-out component.

**The program is reflective of current best practice in parenting:** The content of the Triple P series is based on the foundations of current best practice in parenting. The vast majority of content emphasises the importance of positive parenting, for example enhancing the parent child relationship, and encouraging both existing and new behaviours through teaching. Particular emphasis is given to issues surrounding self-regulation, that is the ability to manage ones own behaviours as a change agent with children. This includes instruction on calm, effective interactions, generalizing skills to new situations, and goal setting (Sanders, Markie-Dadds & Turner, 2003; Triple P International, undated).

**The program is embedded in a broader family-centred approach:** Triple P reflects a family-centred approach because it directly gives skills to parents, such that they are able to make their own decisions about assessing, planning and evaluating behavioural change with their children beyond the life of the intervention program (Sanders, Markie-Dadds & Turner, 2003; What is Triple P?, undated).

In the research it is apparent that though every effort is given to the inclusion of fathers in programs, more commonly outcome measures are taken from mothers only (Sanders et al., 2002; Sanders, Markie-Dadds & Turner, 2003). It is acknowledged that in most two-parent families, mothers are likely to be the primary carer, therefore more readily available as research participants, However, a family-centred approach might advocate outcome evaluation by fathers where appropriate. In addition, the support needs of other family members, e.g. siblings, grandparents, and extended caregivers may also require consideration.

#### 4.1.4.2 Implementation processes

The Triple P series is also evaluated on the benchmarks reflective of implementation processes.

**Attractiveness and accessibility:** A distinguishing feature of the Triple P series is its presentation in individual, group or distance modality depending upon the level. This has enabled parents in both urban and rural areas to access the program. A real life example of remote access is the training of aboriginal community workers under a tree in remote areas of Queensland (E. Stumbles, Spastic Centre of NSW, personal communication, June 23, 2004). Further, Cann, Rogers & Worley (2003) found significant results with telephone assisted, self-directed Triple P (Level 4) provided to 73 families in remote parts of north eastern Victoria.

Reflective of cultural diversity, Crisante and Ng (2003) reported on the conversion of Triple P (Level 4 – Group) to Cantonese and its implementation with 45 parents in Sydney with the support of a bilingual facilitator. It is understood that similar plans are proceeding for programs responsive to the needs of Arabic speaking parents, and one more attractive to Aboriginal people (Sanders, Markie-Dadds & Turner, 2003; What is Triple P?, undated; A. White, NSW Centre for Parenting and Research, personal communication, June 11, 2004).

A common thread of Triple P research evaluations has been consistent reports of parental satisfaction with the program (e.g. Booth & Crisante, 2003; Dean et al., 2003). When perused, the Level 4 parent workbook was easy to read, contained plenty of examples, with multiple opportunities for practising skills in role-plays, as well as homework.

**Levels within the program:** Because of the built in levels of intensity of the Triple P series, the opportunity for building a program that is tailored to family needs is enhanced.

Not only are different levels available to parents, helping professionals, depending upon their background, can receive training in the range of levels. For example, early child workers have been reportedly trained in Level 3 (Crisante, 2003), while psychologists, nurses, teachers and school guidance staff have been accredited in Level 4 (Dean et al., 2003; Ralph & Sanders, 2003).

**Costs and infrastructure requirements:** As previously outlined in the description of this benchmark there are a number of costs and infrastructure requirements which remain unquantifiable (see pp. 17-18 for detail).

The only costs available at the time of this literature review are in relation to accreditation. The use of all Triple P resources requires at the outset, accreditation by Triple P International. As a guide the following costs\* of accreditation are given:

Level of Training	Cost per participant (incl. GST)
Level 2 Selected Group Triple P (2 days training + 2 days accreditation)	\$215.00
Level 2-3 Primary Care Triple P (2 days training + 2 days accreditation)	\$480.00
Level 2-3 Primary Care Teen Triple P (2 days training + 2 days accreditation)	\$480.00
Level 4 Group Triple P (3 days training + 2 days accreditation)	\$565.00
Level 4 Group Teen Triple P (3 days training + 2 days accreditation)	\$565.00
Level 4 Standard Triple P (3 days training + 2 days accreditation)	\$565.00
Level 5 Enhanced Triple P (2 days training + 2 days accreditation)	\$480.00
Combined Level 4 Standard & Level 5 Enhanced Triple P (5 days training + 2 days accreditation)	\$770.00

\*These costs were current as at March, 2004 and were provided by Triple P International.

Additional costs are incurred for purchase of videotape, parent workbooks, and tip sheets.

All the other costs and infrastructure requirements outlined on pp. 17-18 would require additional consideration. These would cover not only the initial set-up and implementation of the program, but also items that provide for the ongoing life of the project.

**Expertise and support of facilitators:** The accreditation of Triple P providers is an effort to ensure the continued quality of not only the programs, but also facilitator delivery (Sanders, Markie-Dadds & Turner, 2003). It is understood that effort is made to ensure that practitioners are taught to use facilitation techniques encouraging maximised parental problem solving (Cann et al., 2003), rapport building, effective interview and communication skills, session structuring, and caring relationships with families (Sanders, Markie-Dadds & Turner, 2003).

Triple P International has in recent years developed a large international network which can be useful for facilitators' ongoing support. This can be accessed through Triple P newsletters, as well as state co-ordinators (Triple P News, 2003).

**State-wide implementation issues:** There is considerable evidence that Triple P has been rolled out in large scale across a number of states in Australia, and more recently overseas. To illustrate, in Western Sydney from October 1998 to April 2003, fifty practitioners were trained in Level 4 Group Triple P who collectively went on to facilitate 150 groups. This represented access by over 1000 families (Booth & Crisante, 2003). Large scale roll-out also was evaluated in South East Sydney (Dean et al., 2003).

In Perth 220 practitioners were trained in Level 4 Group Triple P across 24 health services. A total of 180 groups were subsequently conducted to 1454 families (Lewis & Lopresti, undated).

While these three evaluations reflect large scale roll-out of Group Triple P, there appears to be no evaluations on a similarly large scale of other programs within this level (for example individual or distance mode), or indeed other levels (e.g. Three or Five).

#### 4.1.4.3 Outcomes

**Produces outcomes for the child and family:** As already described in the evaluation of preceding benchmarks, the Triple P series demonstrates outcomes for both child and parent, and in some cases teacher. These results are not further summarised here. Sanders, Markie-Dadds & Turner (2003) provides a good summary of the multiple outcomes achieved in 24 randomized-control trials of a range of Triple P programs.

The issue of long term maintenance effects for Triple P remain unclear. For the purposes of this literature review, long term maintenance measures are defined as one year or more. Of the twenty four papers summarised in Sanders, Markie-Dadds & Turner (2003), five reported data at twelve months follow up and one at twenty four months. Of these all reported continued maintenance of child behaviour, and variation in parental measures. Some measures were self-reported so care in their interpretation should be taken. All remaining papers either reported three, four or six month follow-ups. The need for long term follow-up outcomes of parenting interventions is readily apparent (Raphael, 2003).

**Produces outcomes across the heterogeneous population:** The application of Triple P across a widely heterogeneous parental population has already been evaluated in the context of preceding benchmarks. Briefly, it has been shown to have utility across urban and regional areas, at least one alternative cultural and linguistic group, and to families from a range of educational and socio-economic backgrounds (Cann et al., 2003; Crisante & Ng, 2003; Ralph & Sanders, 2003).

In respect of heterogeneity, the aspect of application to children with Down Syndrome and Autism Spectrum disorder is naturally not applicable to the generic Triple P series. It is addressed in the evaluation of Stepping Stones Triple P (pp. 54-55). Interestingly, there have been anecdotal reports of the implementation of parts of Triple P (Level 4 Group) to parents who do have a

child with an intellectual disability (K. Baker, Department of Ageing, Disability and Homecare, personal communication, June 18, 2004; E. Stumbles, Spastic Centre of NSW, personal communication, June 23, 2004) with only minor adaptation of content. Both practitioners reported that clinical outcomes were achieved for both child and parent.

**Builds capacity:** Results of three large scale roll-out studies, two by the Department of Health in Western and South East Sydney and one by the Health Department in Perth have been reported. These reflect efforts to build capacity at both the parent and service level (see p. 22 for further detail). A distinguishing feature of the Triple P program is its dissemination to local services that are commonly accessed by families.

#### **4.1.5 Summary evaluation of Triple P**

In summary, the Triple P series makes a significant contribution to parenting intervention. Positive features are:

- a wide reaching series of interventions enabling tailored approach for parents of children with problem behaviour;
- inclusion of programs where higher risks are identified, e.g. depression, anxiety, partner conflict;
- a significant body of research showing positive results across level, state, local sector, helping professional, family location, child behaviour, delivery mode, child age, etc.
- while it is not aimed at families with a child with an intellectual disability, by reviewing the Triple P series, the reader gains an awareness of the overall size and scope of the research program conducted over the last twenty years by the University of Queensland. This broad and comprehensive range of research is considered

invaluable to DADHC because it provides a network of expertise in large scale roll-out of programs to the maximum population reach. In addition, it is proposed that many of the features of the Triple P series are of immediate applicability to all families, regardless of whether or not the child has an intellectual disability. In addition, the inclusion of Stepping Stones Triple P within the larger Triple P series enables parent access to not only this specialist program but also potentially the larger series if it is available; and

- the program has been implemented by the Department of Health in NSW therefore giving DADHC more ready access to the generic Triple P programs available in local sector facilities such as child-care centres, preschools, and community health centres.

Issues for consideration:

- Potentially the “independence” of research reviewed may be queried. While the research reported in NSW has independent authorship, that of other states still includes direct involvement of researchers from the Parenting and Family Support Centre, University of Queensland. The reasons for this, primarily monitoring of program fidelity, are understood. This caution is counterbalanced also by the continued replication across a range of conditions.
- The use of “time-out” as a technique for the management of misbehaviour. As already detailed, this is an issue that DADHC will presumably carefully consider in light of its policy on Restricted Practices.
- While the series is for the most part embedded in a broader family-centred approach, consideration could perhaps be given to needs of other family members, e.g. grandparents, siblings, etc.

- Long term maintenance of outcomes requires further appraisal.

## **4.2 Stepping Stones Triple P**

Stepping Stones is a variation of the Standard, individual Level 4 Triple P Positive Parenting Program and is embedded within the larger suite of resources of the Triple P series previously described. Collaboration between the Western Australian Disability Services Commission and the Family Support Centre of the University of Queensland, with repeated draft implementation, feedback and adaptations, resulted in a program more applicable for use with children with disabilities (Sanders, Mazzucchelli & Studman, 2004). It was formally released as a kit in June, 2003 in Queensland (Triple P News, 2003),

It is important to note at the outset that Stepping Stones is currently commercially available only in individual format. It is understood that it has been used clinically in group format, and a randomized control trial evaluation is about to commence (T. Mazzuchelli, Disability Services Commission of Western Australia, personal communication, July 5<sup>th</sup>, 2004)

### **4.2.1 Aim**

Stepping Stones is provided within the framework of the Triple P series aimed at early intervention within a preventative framework.

It focuses "...on parent-child interaction and the application of parenting skills to a broad range of target behaviours" (Triple P News, 2003, p. 4).

The Stepping Stones aims are analogous with the Triple P series. It aims to:

- increase parents' competence in managing common behaviour problems and developmental issues found among children with disabilities;
- reduce parents' use of coercive and punitive methods of disciplining children;
- improve parents' personal coping skills and reduce parenting stress;
- improve parents communication about parenting issues and help parents support one another in their parenting roles, and
- develop parents' independent problem solving skills.

(Sanders, Mazzucchelli & Studman, 2004).

#### **4.2.2 Content**

The Stepping Stones kit comprises practitioner's manual, parents workbook, and videotape titled "Stepping Stones Triple P: A Survival Guide for Families with a Child who has a Disability" (Triple P News, 2003, p.4).

The program comprises ten sessions. The title of each session and a précis of learning outcomes are given below (from Sanders, Mazzucchelli & Studman, 2003b):

##### 1. Welcome:

- describe your concerns about your child's behaviour and development;
- identify things that may be influencing your child's behaviour;
- start monitoring one or two of your child's behaviours (Sanders et al., 2003b, p. 1).

## 2. Observation & Sharing of Assessment Findings:

- describe the nature of your child's behaviour;
- factors that influence your child's behaviour; and
- set goals for change in your child and your own behaviour  
(Sanders et al., 2003b, p. 17).

In this session, children are included and the practitioner observes parent-child interactions. Also covered is how families adapt to having a child with a disability, and issues of grief & loss.

## 3. Promoting Child Development:

- describe positive parenting;
- use the strategies for developing a positive relationship with your child;
- positive relationships with your child;
- use the strategies for teaching new skills or behaviours;
- use the strategies for encouraging desirable behaviour;
- choose two positive parenting strategies to practise for seven days; and
- set up a behaviour chart with rewards for your child (Sanders et al., 2003b, p. 35).

Specific content in this session includes spending quality time, affection, incidental teaching skills, setting a good example, praise, and setting up activities.

## 4. Managing Misbehaviour:

- use diversion to another activity to prevent problem behaviours occurring;
- set appropriate ground rules and discuss them with your family;

- use directed discussion and planned ignoring to deal with mild problem behaviour;
- give clear calm instructions to your children;
- teach your child to communicate what they want, if appropriate;
- back up your instruction with local consequences, blocking, brief interruption, quiet time or time out; and
- put a behaviour chart into practice (Sanders et al., 2003b, p. 59).

#### 5. Practice Session I:

- use positive parenting strategies effectively with your child;
- monitor your use of positive parenting strategies;
- identify your strengths and weaknesses in using positive parenting strategies; and
- set specific goals for further practice (Sanders et al., 2003b, p. 89).

This session is conducted in the family home or clinic with the child. Content includes management of specific behaviours for example management of whining and tantrums.

#### 6. Practice Session II:

- use positive parenting strategies effectively with your child;
- monitor your use of positive parenting strategies;
- identify your strengths and weaknesses in using positive parenting strategies; and
- set specific goals for further practice (Sanders et al., 2003b, p. 101).

This session is conducted in the family home or clinic with the child.

### 7. Practice Session III:

- use positive parenting strategies effectively with your child;
- monitor your use of positive parenting strategies;
- identify your strengths and weaknesses in using positive parenting strategies; and
- set specific goals for further practice (Sanders et al., 2003b, p. 113).

This session is conducted in the family home or clinic with the child.

### 8. Planned Activities Training:

- identify high risk situations at home and in the community where your child is more difficult to manage;
- describe the steps involved in designing a planned activities routine; and
- design, use and monitor your own planned activities routines for two high-risk situations (Sanders et al., 2003b, p. 125).

This session includes preparation in advance, talking about rules, selecting engaging activities, encouraging appropriate behaviour, consequences for misbehaviour and reviewing how things went.

### 9. Implementing Planned Activities:

- use planned activities routines in a variety of situations including when you are busy and when you go out;
- develop, use and monitor planned activities routines for high risk situations as required;
- use positive parenting strategies such as incidental teaching, attention and praise to promote your child's engagement in independent activity;

- use positive parenting strategies to deal with interrupting; and
- accessing information on parenting issues if needed (Sanders et al., 2003b, p. 139).

This session is provided in the family home or clinic with the child. Examples of planned activities include getting ready to go out or while the parent is busy with the facilitator.

#### 10. Closure Session:

- use family survival tips to help make the task of parenting easier;
- Use a range of positive parenting strategies at home and in the community;
- Devise parenting routines for high risk situations;
- Identify changes in your child and your own behaviour since commencing Stepping Stones;
- Maintain the changes made so far; and
- Set goals for further changes you would like to see in your child and your own behaviour and decide how to achieve these goals (Sanders et al., 2003b, p. 151).

As previously noted, Level 4 Stepping Stones is currently offered only in individual format. Its use in a group format is to be the focus of a soon to be commenced evaluation (T. Mazzuchelli, Disability Services Commission of Western Australia, personal communication, July 5<sup>th</sup>, 2004).

At the time of this report the design of a Level 3 Primary Care version of Stepping Stones was nearing completion. It is analogous in content and format to the generic Level 3 Primary Care Triple P (described on p. 26 and 28) with variation to suit a family with a child with a disability. In addition, up to 40 tip sheets are now available covering a range of parental issues to support the Stepping Stones program (Mazzucchelli & Studman, 2000;

T. Mazzucchelli, Disability Services Commission of Western Australia, personal communication, July 5<sup>th</sup>, 2004). As the Level 3 program is not yet available, its evaluation is not detailed further in this report.

It is understood that there are no plans to undertake the development of a self-directed version of either Level 3, or Level 4 Stepping Stones (T. Mazzucchelli, Disability Services Commission of Western Australia, personal communication, July 5<sup>th</sup>, 2004).

#### **4.2.3 Format**

The target audience for Stepping Stones is families who have a pre-adolescent child up to 12 years, with a disability (About Stepping Stones, undated; Sanders, Mazzucchelli & Studman, 2003a).

The 10 session program is delivered to individual parents, or couple supported by a Stepping Stones Triple P accredited facilitator. Each session is between 40 to 120 minutes duration, varying across sessions. Depending upon the session, it is offered either in clinic or at the family home. Family home sessions are encouraged so that parents can practice positive parenting skills in everyday contexts with the support of the facilitator.

Stepping Stones has been designed for delivery through paediatric and community health centres, disability services, schools and other community agencies which are typically accessed by the target population (Triple P News, 2003).

Like other Level 4 Triple P programs, Stepping Stones is offered by local service providers. In this case, psychologists, social workers or other allied health professionals who regularly support families with disabilities and behavioural problems are commonly accredited as facilitators.

#### 4.2.4 Evaluation

The published evaluative research on Stepping Stones is currently based on two randomized control studies (Roberts et al., 2004; Sanders, Plant & McHale, 2002, cited in Sanders et al., 2004), and one self report study (Sofronoff, Whittingham & Sheffield, undated). It is understood that Stepping Stones is a current PhD investigation topic for scholars at both the Universities of Queensland and Western Australia. Additionally, it is the topic of continued investigation by Professor Sanders, Doctor Sofronoff and colleagues with a view to achieving a comprehensive set of evaluation data akin to the larger Triple P series.

Other documentation exists on Stepping Stones, including descriptions in service provider newsletters across the country (e.g. Northern Territory and Queensland), as well as content within literature reviews (e.g. Bochner, 2003).

Personal communication supplemented the review by correspondence with the chief investigators of the randomized control trials, the author and former facilitator of the Stepping Stones accreditation training program, the current training manager of the Stepping Stones program in Queensland, and three practitioners who have been accredited to offer the program.

The evaluation uses the three sets of benchmarks, described in Chapter Three to review Stepping Stones Triple P.

##### 4.2.4.1 Best practices in designing positive behaviour support programs for families

**The program is evidence based:** Within the broader Triple P framework, Stepping Stones has used past research in its development. Prior to commercial release it was subject to refinement via trialling, feedback and randomized control evaluation (Roberts, Mazzuchelli, Studman & Sanders, 2004; Triple P News, 2003).

Both efficacy and effectiveness have been reflected in the randomized control trial reported by Roberts et al. (2004). In this study 48 children participated, allocated to either intervention or wait-list control (with 27 completing to follow-up). Both observed and self-reported improvements in child behaviour were found post treatment, with maintenance at six month follow-up. Both parents demonstrated improvements in parental interaction styles, and maternal stress was reduced. These effects also were maintained at follow-up. Importantly, behaviours were reduced in both targeted and generalization settings, reflecting the effectiveness component of the evaluation (Sanders, 2003a). Interestingly however, corresponding changes in parental behaviour did not occur in generalization settings. Generalization settings included mealtimes, shopping, leaving the child with a babysitter, getting ready to go out, independent play, and visitors (Roberts et al., 2004, p. 11).

Stepping Stones has not yet been subject to an evaluation of dissemination capacity, that is the ability to transfer skills to local service providers (Sanders, 2003a). Anecdotally, those who have been accredited in Stepping Stones report that their skills have indeed been enhanced by the program, and that they regularly use parts of it in every-day practice with families (E. Stumbles, Spastic Centre of NSW, personal communication, June 23, 2004).

**The program is based on an early intervention theme:** The program is designed for pre-adolescent children, and the Roberts et al. (2004) study was undertaken with children aged 2 to 7 years, thereby reflecting an early intervention theme.

Stepping Stones has not yet been evaluated for use with any other age groups, although clinically it has been used with families of children across school age range (E. Stumbles, Spastic Centre of NSW, personal communication, June 23, 2004). It is understood that there are no plans to extend the age group to adolescent children (M. Murphy-Brennan, Triple P International, personal communication, July 22<sup>nd</sup>, 2004; T. Mazzuchelli,

Disability Services Commission of Western Australia, personal communication, July 5<sup>th</sup>, 2004).

**The program is reflective of current best practice in positive behaviour support:** The contents of the Stepping Stones program previously described reflect largely the practices of positive behaviour support, and also reflect the Triple P series. The program is presented consecutively within the framework of functional assessment, planning, implementation, and evaluation (Sanders et al., 2003a & b). It is heavily ecologically focussed, with maximised participation in real-life everyday parenting activities. Five of the ten sessions actively involve the child, and ideally occur in the family home or community.

Again, identical to Triple P, the use of time-out may be of concern to DADHC given its policy on Restricted Practices (“Behaviour Intervention and Support Policy”, 2003). Time-out is covered in Session Four, Managing Misbehaviour, and is presented in the context of other information including, ground rules, planned ignoring, and calm instructions. Incident response strategies, in addition to time-out, include blocking, brief interruption and quiet time. The guidelines given for the use of time-out include placing the child in another, uninteresting room with the door open unless the child leaves the room. From one, up to a maximum of five minutes is proposed as sufficient time (Sanders et al., 2003a, p. 184).

**The program is reflective of current best practice in parenting:** The Stepping Stones program is based on identical positive parenting principles to the Triple P series. Stepping Stones gives particular emphasis to the following 7 principles of positive parenting which may be reflective of the additional issues facing parents of children with disabilities:

- ensuring a safe, interesting environment;
- creating a positive learning environment;
- using assertive discipline;
- adapting to having a child with disabilities;

- having realistic expectations;
- being a part of the community; and
- taking care of yourself as a parent.

(About Stepping Stones, undated)

**The program is embedded in a broader family-centred approach:** Like Triple P, Stepping Stones aims throughout to give parents the skills to support their child, on an on-going basis, beyond the life of the program. This is witnessed by the comprehensive use of both practice sessions, and generalization skill development. The success of this effort is reflective of the maintained child behaviour change in generalization settings and at both post and follow-up, and parental efficacy at six month follow up (though not in to generalisation settings). The real test of course would be continued maintenance evidence at one year follow-up.

While family variables, including parenting stress, satisfaction and efficacy, family functioning, marital satisfaction or inter-parental conflict were measured, the results for these were not so positive, with only maternal stress showing change following intervention and continued at follow-up (see “Outcomes”, pp. 52-55 for further explanation).

Similar to the larger Triple P series, the potential need for support by other family members, for example siblings and grandparents, remain un-researched at the time of this literature review. However in practice other carers, including extended family, are encouraged to participate (T. Mazzuchelli, Disability Services Commission of Western Australia, personal communication, July 5<sup>th</sup>, 2004).

#### **4.2.4.2 Implementation processes**

Stepping Stones is now evaluated on the basis of benchmarks reflective of implementation processes. This part of the review is also limited by the

relatively short period of time since the release of Stepping Stones. There has been little time to explore varied implementations.

**Attractiveness and accessibility:** Currently, Stepping Stones is available only in an individual face-to-face format, and has not been evaluated in either group or distance modality. As previously described, a group modality evaluation is about to commence, with a view to providing the program in group format commercially in the future. While it is understood there are no current plans to design a distance mode program, Sanders et al., (2004) note that Stepping Stones could at least clinically be delivered in a variety of formats, including telephone assisted or self-directed mode. This suggests that such flexibility is inherent in the program.

The participants in the Roberts et al. (2004) study were of white Caucasian ethnic origin. Therefore it is not possible to comment yet on the accessibility of Stepping Stones by parents of different cultural or linguistic groups. Clinically, Stepping Stones has been provided with the support of interpreters, specifically Vietnamese and Arabic (T. Mazzuchelli, Disability Services Commission of Western Australia, personal communication, July 5<sup>th</sup>, 2004)

Perusal of the Stepping Stones Triple P Family Workbook (Sanders et al., 2003b) showed that it was clearly presented and easy to read. Sessions were easily distinguishable with everything written in a personalised, and user friendly fashion. Homework requirements were clearly outlined, with worksheets included. Practice exercises were also comprehensively presented.

**Levels within the program:** Stepping Stones does not of itself comprise levels into which participants can enter according to need. However, as previously discussed, it is built in to Level 4 of the Triple P series. The usefulness of this structure is witnessed by its direct use in the Roberts et al. (2004) study. In addition to Stepping Stones, 21 individuals received the coping skills module of Level 5, and 24 received the partner support module (T. Mazzuchelli, Disability Services Commission of Western Australia,

personal communication, July 5<sup>th</sup>, 2004). Further one of the authors of the Stepping Stones workbooks, a current PhD scholar, is developing a variation of Level 5 addressing parental adaptation to disability. (T. Mazzuchelli, Disability Services Commission of Western Australia, personal communication, July 5<sup>th</sup>, 2004).

For professionals, Stepping Stones is a single level program and at this stage the proponents recommend that it is only facilitated by those who have direct experience in supporting families who have a child with disabilities and behavioural problems, for example psychologists or educators. The utility of its facilitation by other allied health professionals remains unknown.

**Costs and infrastructure requirements:** As already outlined, there are a number of costs and infrastructure requirements that remain unquantifiable. For detail see pp. 17-18. Only costs for materials and accreditation are given here.

As at 10<sup>th</sup> March, 2004 the cost of accreditation in Stepping Stones was \$565.00 and involves 3 days training and 2 days accreditation. In addition, Practitioner Kits (including the practitioner's manual and one family workbook) costs \$149.95. Additional family workbooks are priced at \$24.95. The videotape, "Stepping Stones Triple P: A survival guide for families with a child who has a disability" costs \$139.95. All costs given are inclusive of GST.

All other cost and infrastructure requirements described on pp. 17-18 would require factoring in. These requirements not only sustain the initial implementation of the project but also its ongoing life.

**Expertise and support of facilitators:** Stepping Stones requires accreditation of providers. This aims to ensure both continued program fidelity, as well as the expertise of facilitators. The hallmarks of quality facilitator practice, reflected in the Triple P series, are also inbuilt in to the accreditation requirements for Stepping Stones. These include maximising parental problem solving (Cann et al., 2003), rapport building, effective

interview and communication skills, session structuring, and caring relationships with families (Sanders, Markie-Dadds & Turner, 2003).

The facilitators in the Roberts et al. (2004) study were clinical developmental psychologists, who were directly involved in the development of the Stepping Stones curriculum and received additional training from Professor Matt Sanders, the author of the Triple P series. As the program has yet to be disseminated to local service providers it is not possible to comment on its transfer to service providers across disability sectors.

**State-wide implementation issues:** Stepping Stones, unlike the other Standard Level 4 Triple P, has not yet been subject to an evaluation of large scale roll out here in Australia. However, it is understood that internationally, it has been utilised in large numbers and evaluations are currently being undertaken. For example, in Hong Kong 600 plus families have completed the program. Recently South Carolina committed to a roll out with 4500 families, to be independently evaluated by the South Carolina Centre for Disease Control (M. Murphy-Brennan, Triple P International, personal communication, July 22<sup>nd</sup>, 2004).

#### **4.2.4.3 Outcomes**

**Produces outcomes for the child and family:** In the Roberts et al. (2004) study, child behaviour change outcomes were achieved at both post and follow-up compared to a waiting list control. Change was also demonstrated across generalization settings. Observed parental interactions also positively changed and maintained at follow-up (for targeted behaviours only, and not in generalization conditions) (Roberts et al., 2004). On the basis of these findings, at this early stage the potential for Stepping Stones to be a useful approach is considered positive.

Of parental well being variables, while maternal stress was reportedly improved following intervention and maintained at follow-up, as Roberts et al. (2004) summarise "...the Stepping Stones intervention did not appear to

impact upon any of the other family variables, such as parenting satisfaction and efficacy, family functioning, marital satisfaction or inter-parental conflict” (p. 30). Separate outcome analyses were conducted for mothers and fathers. It is not within the constraints of the current literature review to report the complex detail of this data set and relative reasons for this lack of change. However, Roberts et al. do propose it is possible that Stepping Stones is “not strong enough to impact upon more global family outcomes such as parenting sense of competence and family functioning” (p. 33). This is considered an important statement as it supports the literature’s proposal that a parental intervention program is potentially just one component of the range of supports that families may require to maintain family quality of life (King et al., 1999; Poston et al., 2003; Schalock & Alonso, 2002). For some parents, interventions may not always contribute to family well-being, instead sometimes acting as a negative influence (Cummins & Baxter, 1997). Understanding the importance of appropriate behavioural interventions within the contexts of larger family systems is highlighted (Rhodes, 2003).

Unfortunately the trial resulted in a relatively high attrition rate of 43.7%. The reasons for drop-out included family re-location, alternative treatments and family crises. The outcome may have been that those families with more risk factors for child behaviour were not represented in the follow-up data. The effectiveness of Stepping Stones with those families who potentially may have a greater need for support is not known (C. Roberts, Curtin University of Technology, personal communication, March, 2004). However, as already discussed, this area is the subject of current additional Stepping Stones research with the development of a Level 5 program aimed to address parental adaptation to disability, combined with other risk factors.

29% of participating families had one or both parents with a history of mental health problems. It is not known what proportion of this sample was represented at follow-up, again raising the possibility that those with the greatest need were not present. The continued investigation of Stepping Stones with families with more significant support needs is clearly merited and indeed, is in train.

Sanders et al. (2002, cited in Sanders et al., 2004) also reported that Stepping Stones intervention reduced parental report of difficult behaviour. For families who undertook an additional six session care-giving stress module, the maintenance of self reported difficult behaviour at twelve months follow-up was better.

**Produces outcomes across the heterogeneous population:** Although it is understood that Stepping Stones was primarily designed for children with more severe intellectual disability, the participants of the Roberts et al. (2004) trial comprised children with mild developmental delays.

The Stepping Stones program has been used with children who have Down Syndrome in the Roberts et al. (2004) study. Of the 48 participants in the Roberts et al. (2004) study, 8 had Down Syndrome. No separate analyses of this sub-group were conducted, but there was nothing in the results or discussion of the paper to suggest that the outcomes achieved were any different for this group.

The investigation of outcomes for specific sub-groups is a current topic of research at the University of Queensland (K. Sofronoff, University of Queensland, personal communication, August 24, 2004). Specifically, the application of the program for children with Autism Spectrum Disorder is of particular interest. Sofronoff, et al. (undated) have investigated the question of how 42 parents of children with autism rated Stepping Stones in terms of acceptability, usability and likelihood of using the strategies. Overall, parents indicated that Stepping Stones was acceptable and usable. The simplest strategies were the most frequently endorsed. However parents still indicated that some specific strategies would not be usable with children with autism. The further research work in this area is to develop an adjunct package to supplement the Stepping Stones program for parents of children with Autism Spectrum Disorder, and a randomized control trial (Sofronoff et al., undated; K. Sofronoff, University of Queensland, personal communication, August 24, 2004). This research is synchronous with literature suggesting that a more

intensive approach is required, including individualised and intensive strategies for behaviour management, for example functional communication training (Roberts, 2003). Indeed there are other proponents of Triple P who postulate that some of the intervention strategies within the Triple P approach (such as time out or planned ignoring) may in fact be reinforcing for some children with autism (C. Roberts, Curtin University of Technology, personal communication, March, 2004).

The Stepping Stones program has yet to be trialled across the widely heterogeneous parental population. Clearly it requires investigation for utility in both urban and regional contexts, across culturally and linguistically diverse populations, and to families from a range of educational and socio-economic backgrounds.

**Builds capacity:** Information is not yet available on the program's ability to build capacity for both parents and local service sectors, though as earlier noted, international large scale roll outs are in train, thus will provide information on capacity building in the near future. Again, comment cannot be provided because of the relative newness of Stepping Stones. Certainly however, in its design and implementation, Stepping Stones makes every effort to empower families to become their own decision makers in the assessment, implementation and evaluation of positive behaviour support needs for their children. The emphasis upon planned activities training and generalization skills within its content are reflections of its intent to build capacity.

#### **4.2.5 Summary evaluation of Stepping Stones**

As would be expected given the recent release of the Stepping Stones program, there have been little publication by other researchers on its application. A number of projects are currently in train. Therefore, conclusions about its utility are given with some caution. The current, early research does suggest that Stepping Stones is a program that makes an

important contribution to parenting intervention, particularly when it is taken within the context of the Triple P series.

Positive Features include:

- existence of at least two comprehensive research studies in Australia demonstrating significant results in positive child and family outcomes;
- the direct relationship to the larger Triple P series gives it enhanced face validity. The Triple P program already has “runs on the board” meaning Stepping Stones might be favourably perceived by local services who know the larger series;
- the inclusion of Stepping Stones within the larger Triple P series potentially enables more streamlined use of the other resources in the suite, including where higher risks are identified, e.g. depression, anxiety and partner conflict;
- offering Stepping Stones within the Triple P series reflects directly the important principles of Inclusion (Cummins & Lau, 2003; Dore, Wagner, Dore & Brunet , 2002) and Supports (Butterworth, 2002). Stepping Stones is not singled out as a separate program, and instead is directly embedded within the larger generic set;
- as for Triple P, the invaluable experience of the researchers at the Parenting and Family Support Centre, University of Queensland is considered a very positive network from which to seek advice, particularly surrounding issues of large scale roll-out;
- although Stepping Stones, at the date of this report, is only available in individual presentation format, the soon to be available group format means that it may be a particularly cost-effective option for delivering parental programs; and

- the early research with specific diagnostic sub-groups, demonstrating variable findings, has resulted in further current research aimed at developing adjunct programs where necessary. Specifically, for parents of children with autism, this may be particularly relevant.

Issues for consideration:

- the limited research surrounding Stepping Stones means that the literature review is restrained in its assessment of the reliability of the program. It has not yet been evaluated across the range of conditions occurring with the Triple P series. It is however important to acknowledge that it is likely that further publications are imminent as both local and international research nears completion. Also, it is clear that, like Triple P, a comprehensive, longer term research program is planned for Stepping Stones, ensuring a thorough and comprehensive investigation;
- the limited results on parental outcomes in the Roberts et al. (2004) study, though disappointing, are still informative. These support the contention that parenting intervention is just one of a suite of resources families may require to assist with the maintenance of family quality of life;
- the possibility that the high attrition rate in the Roberts et al. (2004) study meant that those families in most need were not represented in follow-up. This raises the question of how useful Stepping Stones may be with those families who have higher risk factors. This is not assessable with the current literature. Again however, the reader is reminded that this topic is the subject of current research and the publication of such studies is in train; and

- the high attrition rate in the Roberts et al. (2004) study also reflects the importance of understanding behavioural interventions in the context of the larger family system. Potentially there will be families for whom other competing issues and stressors impact upon their ability to participate and use the strategies arising from parenting interventions (Rhodes, 2003).

### **4.3 Apex Behaviour Management Program**

The Apex Behaviour Management program began its life as a pilot research study funded by an Apex research grant. It piloted the use of a group parent intervention based on a functional communication training approach (Carr & Durand, 1985). Functional communication training heavily draws upon the research and its utility as a support program for children with disabilities, behaviour problems, and limited communication is well evidenced (Didden, Duker, & Korzilius, 1997).

The Apex Behaviour Management Program is currently the subject of a National Health and Medical Research Grant (NHMRC) (Chief Investigators, Professor Trevor Parmenter, Associate Professor Stewart Einfeld, and Professor Jeff Sigafos). It is co-ordinated at the Centre for Developmental Disability Studies, University of Sydney.

As the NHMRC research project is still in its infancy, there is limited publicly available material upon which to draw conclusions about its utility. Early results however are encouraging, and form the basis of this section of the literature review.

#### **4.3.1 Aim**

The general aim of this individually focused, parent mediated program, is to teach alternative communication skills and related adaptive behaviours to replace a child's challenging behaviour (Hartog, undated a).

The research program is offered in either group or individual format. The NHMRC research hypothesis is that group training will be as effective as individual training, therefore demonstrating the efficacy of a cost-efficient program. As proposed by the chief investigators of the research, “To maximise the public health benefits...it is critical to demonstrate effective and practical ways of teaching parents how to implement...” (Hartog, undated d, p.1).

#### **4.3.2 Content**

The contents of the three session program comprise:

Session One:

- introduction and overview of program;
- how to describe the problem;
- crisis management; and
- between sessions parents are requested to complete cards which each describe the problem behaviours (Hartog, undated c, p. 1).

Session Two:

- how to work out the purpose behind the problem behaviour;
- how to select an alternative to problem behaviour; and
- how to teach an alternative(Hartog, undated c, p. 1).

Session Three:

- teaching your child to tolerate a delay in reinforcement - “waiting”;
- creating opportunities;
- choice making;
- generalization;

- maintenance; and
- problem solving – now and in the future (Hartog, undated c, p. 1).

#### **4.3.3 Format**

The Apex Behaviour Management program is available to families who have a child between the ages of 3 to 6 years, with severe intellectual disability, and/ or autism.

It comprises three face-to-face sessions, each of four hour duration in groups versus two hours when individually offered. Sessions are facilitated by a clinical psychologist who is the project manager of the NHMRC grant. A total of between 6 to 12 hours training therefore comprises the program. Sessions are provided fortnightly, and occur in places central to the parents' locale. The three sessions are complemented by weekly individual follow-up phone contacts of approximately 10 to 15 minutes duration.

As much as possible, in two-parent families, both parents are encouraged to attend. A maximum of three to four couples/ single parents comprise a group.

Evaluation measures are taken pre, post and at two follow-up points (three and six months). Measures comprise both direct observation and self-report standardised assessments of both child and family outcomes. For the child ninety minute videotaped direct observation is combined with standardised measures of behaviour and adaptive functioning. For the parents, measures include satisfaction with the program, family functioning, and resources and stress.

The project ultimately will serve 36 families, of which 18 will be randomly allocated to either the individual or group program. As at the date of this literature review, approximately two thirds of data measures have been

collected, with more families currently being recruited (S. Hartog, University of Sydney, personal communication, June 23, 2004).

#### **4.3.4 Evaluation**

Because the project is in its infancy, and there is limited early information available on its progress, it is not considered fair to conduct a full evaluation, of the kind detailed previously. Currently, there is insufficient data to report firm findings (S. Hartog, University of Sydney, personal communication, June 23, 2004). Instead, a general evaluation summary is presented below.

##### **4.3.4.1 Best practices in designing positive behaviour support programs for families**

The program is evidence based, focussing on the strong literature arising from early functional communication training research (Carr & Durand, 1985; Didden et al., 1997). Further, because it encourages the involvement of families with quite young children, it is reflective of an early intervention focus.

The content of the Apex program is based on the practices of positive behaviour support, incorporating the techniques of functional assessment, intervention planning, and implementation and monitoring.

Perhaps considered a positive of this program, relative to Triple P and Stepping Stones, is that all incident response strategies are positive, with no restrictive practices incorporated (S. Hartog, University of Sydney, personal communication, June 23, 2004).

It may be argued, that because of its clear focus on the individual child, it is not embedded within a broad family-centred approach. It does indeed aim to give parents a set of strategies that they use, beyond the life of program participation. It is too early yet to tell if this has been done successfully because there is insufficient follow up data. However, the Apex program, because it stands alone, does not have the capacity to support additional risk

factors in the way that the larger Triple P series does. Further, unlike the content of Stepping Stones, there is no facilitator supported direct practice of skills in home or community settings.

#### **4.3.4.2 Implementation processes**

It is too early to comment on many of the implementation processes of the Apex Behaviour Management Program. It has not yet been evaluated across either rural versus urban, or different cultural or linguistic groups.

As already stated, it is a “stand-alone” program, without any levels for entry or exit. Further, as it is early stages, no costs have been attached as yet to its implementation, nor processes for training and supporting facilitators. Finally, no advice can be provided on state-wide implementation issues.

#### **4.3.4.3 Outcomes**

The results of the initial Apex pilot research, where group intervention was offered, found that the program was highly acceptable to parents, and that the behaviour of four of the six children improved (Sigafoos, 2002).

The progress of the current NHMRC grant has also demonstrated positive results, though the numbers are yet insufficient to conduct statistical comparisons. Data on twelve families so far demonstrate that some children are displaying fewer challenging behaviours, and instead using communication aides such as picture boards. Parental report of the program generally and the specific strategies, is very positive (Progress report, NHMRC grant, undated).

The limited numbers who have yet participated in the program make comments on its applicability to children with Down Syndrome or autism tentative. However, currently more than half of the children have diagnoses of autism. At this stage there is no perceived difference in the trends for change of this sub-group compared to other children (S. Hartog, University of

Sydney, personal communication, June 23, 2004). These results are offered in the context of the review of studies by Mirenda (1997), which showed that for those participants with autism, a functional communication training intervention resulted in a significant positive impact upon challenging behaviour.

#### **4.3.5 Summary evaluation of Apex Behaviour Management Program**

Given that the Apex Behaviour Management Program is so early in its life, it is possible that it has limited application to DADHC's immediate needs. However, there are both positive features to which attention is drawn, as well as issues that require raising for consideration.

Positive features include:

- relative to Triple P and Stepping Stones, the Apex program does not include any restrictive practices in the coverage of incident response strategies;
- data from the initial Apex research grant, and the early data arising from the NHMRC progress have indicated positive results for child behaviour change, and parental satisfaction with the program;
- while only early data is available and has not yet been thoroughly analysed, there is some suggestion that children with autism may achieve similar positive behavioural change to others in the group studied. However caution with this early assessment is recommended; and
- it is proposed, pending further confirmed results arising from the completion of the NHRMC research, the Apex program may have usefulness as an adjunct program to Stepping Stones, catering for

those children with autism who may have difficulties with communication.

Issues for consideration:

- because the program is in its infancy, evaluation comments should be interpreted with caution. Evaluation of individual versus group parenting intervention is currently in progress with only very early results available;
- Apex may be less family-focussed than either the larger Triple P series, or Stepping Stones. As a stand-alone program it does not enable families with higher risks to be provided with additional supports; and
- the infancy of the program has not enabled evaluation across a range of conditions (for example, different geographic areas, cultural and linguistic groups).

#### **4.4 Signposts for Building Better Behaviour**

Signposts for Building Better Behaviour is a program to assist families of children aged from 3 to 16 years who have a developmental delay or an intellectual disability and difficult behaviour (Signposts for Building Better Behaviour brochure, undated). It is coordinated by the Victorian Parenting Centre and has been implemented across the state for approximately three years now (C. Wade, Victorian Parenting Centre, personal communication, June 18, 2004).

#### **4.4.1 Aim**

Signposts has the aim of helping families to use positive strategies to promote acceptable behaviour and manage difficult behaviour (Signposts for Building Better Behaviour brochure, undated).

#### **4.4.2 Content**

The program comprises:

- a set of eight written modules;
- a video linked to module contents;
- parent workbook; and
- facilitator's manual and CD with instructions for different modality delivery (see Format below).

The contents of the eight modules are:

- introduction;
- dealing with stress in the family;
- your family as a team;
- module 1: measuring your child's behaviour;
- module 2: systematic use of daily interactions;
- module 3: replacing difficult behaviour with useful behaviour;
- module 4: planning for better behaviour;
- module 5: developing more skills in your child;
- final five modules cover methods for parents to design their own program to replace challenging behaviour with more socially appropriate behaviour.

#### **4.4.3 Format**

The program is available in different modalities depending upon family need. It can be offered in a self-directed fashion without practitioner support, by distance mode with telephone support, or with face-to-face group facilitation (Signposts for Building Better Behaviour brochure, undated).

The differential outcomes of the program across different modalities has been the subject of research reported by Hudson et al. (2003) (see Evaluation for detail).

In group mode, groups convene on a fortnightly basis with each meeting of approximately two hours duration. It is understood that sessions are conducted in locally accessible places like schools (Hudson et al., 2003).

Telephone assisted mode typically requires phone calls of about twenty minute duration on a fortnightly basis, following regular mail-out of booklets.

In self directed mode, booklets are mailed fortnightly, and parents work through the materials with no support.

#### **4.4.4 Evaluation**

The evaluation of Signposts is limited to the one published research paper examining varied delivery mode, self-directed, telephone assisted or group facilitated (Hudson et al., 2003), supplemented by personal communication with the Victorian Parenting Centre. The evaluation is therefore offered with some restraint.

##### **4.4.4.1 Best practices in designing positive behaviour support programs for families**

**The program is evidence based:** The program was influenced strongly in its development by the work of well respected researchers in positive

behaviour support and families (for example the separate works of Dunlap, Koegel & Koegel, Lutzker, and O'Neill, cited in Hudson et al., 2003).

The Hudson et al. (2003) study demonstrates that Signposts has some efficacy. Mothers reported decreased stress, increased parental self-efficacy, less hassles about meeting own needs, and improvements in child behaviour. This was so regardless of whether they participated in the self-directed, telephone assisted or group facilitated mode (pp. 244-245). It is noted however that mothers were not totally randomly assigned to each condition. Some mothers self-appointed to either of the distance modes because of travel requirements if they had to participate in the group condition.

Signposts has not yet been formally evaluated for its effectiveness (that is where it is tested in real services, Sanders, 2003a). However, it is understood that even though this has not been researched, Signposts is in fact rolling out across state services (C. Wade, Victorian Parenting Centre, personal communication, June 18, 2004).

Signposts also has not yet been evaluated for its dissemination capacity, that is the ability to transfer skills to local service providers (Sanders, 1993).

**The program is based on an early intervention theme:** The program is made available to parents of children who range in age from 3 to 16 years. This is a broader catchment than either Stepping Stones (up to pre adolescence) or Apex (3 to 6 years).

**The program is reflective of current best practice in positive behaviour support:** It is not possible to comment on whether the program is reflective of current best practice in positive behaviour support without viewing the relevant materials. On the basis of the session titles listed earlier, it appears that the program aims to give parents skills in functional assessment, planning and intervention, and evaluation. It is understood also that the program does not include any incident response strategies which may be

considered restrictive (C. Wade, Victorian Parenting Centre, personal communication, June 18, 2004).

**The program is reflective of current best practice in parenting:** It is not possible to comment on whether the program is reflective of best practices in parenting, as program contents have not been seen.

**The program is embedded in a broader family-centred approach:** Signposts was designed specifically within the broader family-centred framework, including issues not just pertinent to the child's behaviour, but also larger parental risk factors such as dealing with stress and the family as a team (Hudson et al., 2003).

However, the research evaluation only reported implementation and outcome measures with mothers and their children. This is unfortunate, particularly given the paucity of research involving outcome measures of fathers.

#### **4.4.4.2 Implementation processes**

**Attractiveness and accessibility:** The program has been run in both urban and rural areas, although to date no research has been published on its relative success (C. Wade, Victorian Parenting Centre, personal communication, June 18, 2004).

A two year pilot study, commissioned by the Commonwealth Department of Family and Community Services, has recently been completed where the program was run with parents who have an intellectual disability. The results of this are currently being reported but are not as yet publicly available (C. Wade, Victorian Parenting Centre, personal communication, June 18, 2004).

**Levels within the program:** Like Apex, the Signposts program is a "stand alone". However, being embedded in a family-centred approach, it is commended for containing elements that may be of additional concern to families, for example family stress and teamwork strategies. It is also

favourable for its mixed mode delivery, enabling parents to choose from participating alone, with telephone support, or as part of a group.

**Costs and infrastructure requirements:** Accredited training in the Signposts program is offered by the Victorian Parenting Centre. Training is provided free of charge including all program materials.

Attendance and receipt of program materials is provided free of charge to parents attending a Signposts program (C. Cameron, Victorian Parenting Centre, personal communication, December 22, 2004).

Similar to programs previously evaluated in this report, it is important to note that there are a number of costs and infrastructure requirements that remain unquantifiable (see pp. 17-18 for detail).

**Expertise and support of facilitators:** The facilitators of the Hudson et al. (2003) study were psychologists who were trained at either masters or doctoral level. All had significant relevant field experience.

At the local level Signposts can only be delivered by accredited facilitators. This aims to ensure the continued quality of not only the program, but also the facilitators. Accredited facilitators comprise professionals with a psychology, special education or welfare background from a range of both government, and non-government services (C. Cameron, Victorian Parenting Centre, personal communication, December 22, 2004).

In addition to initial training, the Victorian Parenting Centre offers a period of co-facilitation with an experienced mentor, though this is not mandatory. Further, accredited facilitators receive on-going telephone support as needed (C. Cameron, personal communication, December 22, 2004)

**State-wide implementation issues:** The Signposts program recently received an additional \$4 million of federal monies to continue a roll-out across disability services in the state, with a particular emphasis on regional

areas (C. Wade, Victorian Parenting Centre, personal communication, June 18, 2004; C. Cameron, Victorian Parenting Centre, personal communication, December 22, 2004). To date, in excess of 400 professionals across Victoria have been accredited as Signposts facilitators (C. Cameron, Victorian Parenting Centre, personal communication, December 22, 2004). There is no available data on how many groups these trainers then go on to train. Further, The Victorian Parenting Centre does not have the capacity to track the number of parents who receive training, only the number of copies of the program distributed to facilitators. This is considered unfortunate, as it is therefore not possible to determine the real “reach” of the program to parents. It is understood however, that the additional federal monies recently received mandates an evaluation, possibly enabling the tracking of such data in the future.

#### **4.4.4.3 Outcomes**

**Produces outcomes for the child and family:** The Hudson et al. (2003) investigation of three delivery modes of Signposts (group, telephone supported, and self-directed) was based on self report data, therefore the usual caution with interpretation is taken. Mothers who received Signposts reported less stress, increased parental self-efficacy, decreased hassles with selves, and improved child behaviour, all maintained at follow up (between four and six months). There were no differences between group, telephone supported or self-directed modalities across these measures. A high level of satisfaction with the program was also reported.

In the Hudson et al. (2003) study a 57% attrition rate was reported. This relatively high attrition rate is not dissimilar to that reported earlier in the Stepping Stones evaluation. In the current study, the reasons for drop-out were not reported. It is unclear whether these families completed the program, and just didn't complete the measures, or whether they dropped out during the course of the program.

**Produces outcomes across the heterogeneous population:** In the Hudson et al. (2003) study, the 115 children participating all had an intellectual disability, ranging from mild to severe. 16% of participants had an additional diagnosis of autism, and 19% a diagnosis of Down Syndrome (p. 241). Other sub-groups included cerebral palsy, vision or hearing impairment, or epilepsy. Interestingly, of the 57% who dropped out of the study, the only demographic variable related to drop out was if the mother had a child with autism. Of the 19 children with autism, 13 (68%) dropped out of the study. The authors proposed that “it can only be surmised that this is because the parents of children with autism perceived the materials as less relevant to their needs...” (p. 247). However, it was also additionally noted that all vignettes in accompanying videotape were of children with Down Syndrome. No additional separate analyses of child outcomes was undertaken, therefore it is not possible to comment on whether differential outcomes were achieved between diagnostic groups.

No research is available on Signposts capacity across the heterogeneity of the parent population, that is different geographical areas, cultural and linguistic groups, socio-economic or educational background.

**Build capacity:** There is currently insufficient data to confidently evaluate Signposts ability to build local capacity. Although in excess of 400 facilitators have been accredited, there is no existing data to determine if these facilitators then go on to train, and ultimately how many parents receive the program.

#### **4.4.5 Summary evaluation of Signposts for Building Better Behaviour**

The Signposts program is another parenting intervention that makes a significant contribution to supporting families who have a child with a disability and difficult behaviour. However, it is difficult to draw strong conclusions as to its usefulness as an effective program for potential across the state in the absence of data. Both positive features and issues for consideration are listed below.

Positive features include:

- Signposts has been designed to directly reflect a family-centred approach, and although like the Apex program, it is a “stand alone”, it directly builds in family components including dealing with stress and the family working as a team; and
- it has an advantage over Stepping Stones and Apex in that the recommended age range is broader, from three to sixteen years.

Issues for consideration:

- the Hudson et al. (2003) study, based on self-report data from mothers only, means some caution regarding the veracity of conclusions drawn about Signposts. The future evaluation required with the provision of recent Federal monies will be an important contribution to the research in this area.
- it is possible that the high attrition rate of the Hudson study meant that those families who were the most in need were not represented in post or follow-up measures. If this were the case, the usefulness of Signposts for parents with most need is not known; and
- it is possible that, the dropouts from the program largely comprised mothers of children with autism, Signposts may have limited applicability to this sub-group. This proposition is offered with caution, as no analyses of reasons for drop out were undertaken. Further investigation in this area may be merited.

This chapter has presented a summary evaluation of four programs for parents with a child with a disability and challenging behaviour. The programs evaluated were Triple P, Stepping Stones Triple P, Apex Behaviour Management Program and Signposts for Building Better Behaviour. The review utilised three benchmarks to compare the four programs, resulting in a

summary of both positive features of each program as well as issues for consideration. As a result of this review a preferred approach arises. The Stepping Stones Triple P program is considered to be the preferred approach. There are a number of reasons identified for this, and these are detailed in the following fifth chapter of the literature review.

## **5. THE PREFERRED APPROACH**

In this chapter the preferred approach arising from the literature review is given. The reasons for the identification of the preferred approach are detailed, together with issues for consideration. As it would be naïve to consider any one approach would perfectly fit the needs of both the service delivery sector and families, the issues for consideration are considered of particular importance. A final summary and conclusion is given to close this fifth and final chapter.

From the review of Triple P, Stepping Stones Triple P, Apex Behaviour Management Program and Signposts for Building Better Behaviour, Stepping Stones Triple P arises as the preferred approach.

### **5.1 Reasons Stepping Stones Triple P is the preferred approach**

There are a number of reasons that contribute to the nomination of Stepping Stones Triple P as the preferred approach. A summary of these reasons is presented below based on the evaluation benchmarks, comparing programs where necessary. The reader will note that Stepping Stones does not stand out on all benchmarks, but collectively it does do better. It is again emphasised that while Stepping Stones is offered as the preferred approach, it is not made without caution that there are outstanding issues worthy of consideration.

The reader is referred to Chapter Four for more comprehensive detail of how each program rates according to the three identified sets of evaluation benchmarks.

### **5.1.1 Best practices in designing positive behaviour support programs for families**

**The program is evidence based:** Stepping Stones Triple P, relative to other programs reviewed, has the largest body of evaluative research. The two completed randomized control studies reflect positive outcomes for both child and family. Further research on Stepping Stones is currently occurring, with additional research plans in the future. Additionally, Stepping Stones is embedded within the comprehensive research program of the larger Triple P series which of itself has demonstrated a significant contribution to parenting. In terms of evaluated outcomes, it is still too early to comment on Apex's contribution, though indeed it appears promising. Signpost's research, again also showing positive outcomes, is limited to one self-report measured evaluation, with no further research planned.

**The program is based on an early intervention theme:** All programs are merited for addressing the needs of children, in support of an early intervention theme. While Stepping Stones is recommended for children up to twelve years of age, there are no plans to extend it to post primary aged children. Signposts, which includes children up to 16 years of age may be argued as capturing a larger age group than both Stepping Stones and Apex (which is aimed at the 3 to 6 year age group).

**The program is reflective of current best practice in positive behaviour support:** While all programs are assessed positively in this area, both Stepping Stones and Signposts include presentation on time-out as a procedure for managing misbehaviour. It is stressed that for both programs, this is a small part of a number of strategies recommended to manage misbehaviour. While Apex does not include any strategies for managing misbehaviour that could be considered restrictive, it does not spend as much time as other programs detailing, and practising strategies.

**The program is reflective of current best practice in parenting:** All programs are assessed positively in this area. Each program clearly

emphasises the importance of a positive and nurturing parent/child relationship. All have strong reference to teaching new skills, and managing misbehaviour consistently. Further, all encourage good communication skills and use of personal resources.

**The program is embedded in a broader family-centred approach:** While all programs clearly aim to give parents skills in managing their own program for challenging behaviour, it is believed that Stepping Stones does this the most comprehensively. This is reflected in a number of ways, the inclusion of home based practice sessions with facilitator support, identifying and responding to high risk situations, personal goal setting, and multiple outcome measures. Further, by its inclusion in the larger Triple P series, access to other modules for families with higher support needs (e.g. mood management, marital conflict, stress and coping, all offered at Level 5), is presumably more readily streamlined. Stepping Stones also is currently researching the development of a Level 5 option specifically related to parental adaptation to disability. Relative to Stepping Stones, Apex is more individually client focussed and does not address these broader potential family issues. While Signposts clearly includes more family centred learning outcomes, e.g. stress and family teamwork, it does not include home based practice sessions, nor the specific modules on parenting skills, stress and coping, etc.

### **5.1.2 Implementation processes**

**Attractiveness and accessibility:** While it is the case that Signposts is the only program that currently is available in a number of modalities (that is, distance, individual and group), there are plans for Stepping Stones to also be available in group mode in the future, as well as its current individual mode. It is noted that there are no current plans for it to be offered by distance mode. Apex meanwhile, is currently the subject of evaluative research for group versus individual mode.

Stepping Stones is particularly merited for its stringent training of facilitators, so as to ensure not only program fidelity, but also the quality of the facilitator, and the importance of interpersonal skills when supporting families.

In terms of cultural and linguistic accessibility, none of the programs have been formally evaluated, so little comment can be made on this. However the larger Triple P series, in which Stepping Stones is embedded, has been the subject of significant research in this area, with positive outcomes demonstrated.

**Levels within the program:** Only Stepping Stones demonstrates the capability for parents to enter at a level suited to their needs. This is currently available within the context of Level 1 through 5 of the generic Triple P series. Additionally specifically linked to Stepping Stones, an equivalent Level 3 program is at completion, and a Level 5 program, for families with additional risk factors, is currently in development. Neither Signposts or Apex currently have this facility.

**Costs and infrastructure requirements:** It is not possible to draw any real comparisons between programs on costs. Apex, as it is the subject of NHMRC funding for research, is currently free and it is not clear what costs will be attributed to it in the future. The Victorian Parenting Centre plans to continue providing Signposts free of charge in the foreseeable future, both to facilitators for accreditation as well as to parents, but it does not have the capacity to comprehensively track program fidelity, facilitator quality or outcomes for parent and child. Stepping Stones, while it does have accreditation and materials costs, has good capacity to monitor this important data. These benefits are considered to outweigh cost.

All programs would be subject to similar infrastructure costs, ensuring the smooth running of the on-going program for families.

**Expertise and support of facilitators:** Stepping Stones more comprehensively addresses this area compared to other programs reviewed.

In addition to initial accreditation, there are infrastructure support mechanisms to provide on-going support to facilitators through the Triple P Network which now operates internationally. Additionally, because Triple P has rolled out across NSW health sectors, area co-ordinators are established, who could potentially provide local across agency support. Apex, because of its young age, has not yet addressed this area at all. It is understood that Signposts facilitators gain local support through usual supervisory channels, but a state-wide network does not appear to be built in.

**State wide implementation issues:** While Signposts is currently being rolled out across Victoria, it is believed that Stepping Stones has a more comprehensive track record in this area both in Western Australia, as well as overseas experiences. In addition, the experience of the large scale roll-out of Triple P in NSW is considered a very useful one. None of the programs reviewed have published research available on the outcomes achieved with large-scale roll out, comparative to the NSW Triple P effort. However, Stepping Stones is the only one where there are plans to conduct such an evaluation, at an international level.

### 5.1.3 Outcomes

**Produces outcomes for the child and family:** All programs make a very significant contribution in demonstrating outcomes for child and family. Because Stepping Stones is the only one to have completed fully randomized control trials, with both observation and self-report outcome measures, its data is considered relatively more robust. Signposts data is based on a semi-randomized, self-report data set, and it is still too early to judge outcomes on the Apex program.

**Produces outcomes across a heterogeneous population:** The data on outcomes for diagnostic sub-groups is variable, and complex. No clearly defined research in this area has been conducted, and it would be inappropriate to draw firm conclusions based on the current research.

Stepping Stones researchers however are currently investigating outcomes

for specific diagnostic sub-groups including both children with Down Syndrome and Autism Spectrum Disorder. The early research data on Apex and its positive outcomes with children with Autism Spectrum Disorder is merited however. It may be perceived as an important adjunct program to Stepping Stones for relevant parents.

It is also important to note the relatively high attrition rates reported for both Stepping Stones (43.7%) and Signposts (57%). While neither research was able to arrive at conclusions for these rates, it may be important to acknowledge that parent programs are not suitable for all parents. Instead, perhaps they should be perceived as part of a suite of resources upon which parents can draw.

As none of the programs have been subjected to evaluative research across the variable cultural and linguistic, educational, and socio-economic status of families, it is not possible to draw comparative conclusions on this question either.

**Builds capacity:** While all programs demonstrate the ability to build parental capacity, it is argued that both Stepping Stones and Signposts do this better relative to Apex, because of their inclusion of family system issues including stress and coping, and partner support. As already summarised, Apex is a program more firmly focussed on the child's needs, particularly in relation to communication.

Relative to the other programs, Stepping Stones demonstrates better methods to build local area capacity. Evidence of this includes, accreditation and built in support mechanisms for facilitators, recent completion of the Level 3 program, and current development of Level 5, both specific to parents of children with disabilities. Also, the experience of Triple P in building capacity cannot be under-estimated as a valuable resource in developing effective local area supports.

In summary then, Stepping Stones Triple P performs relatively better than either Signposts or Apex on a number of the evaluation benchmarks. It is important however to highlight issues that may require further consideration in relation to potential employment of Stepping Stones, particularly in large scale format.

## **5.2 Issues for Consideration**

There are two sets of issues that may require consideration. These are addressed firstly with specific reference to Stepping Stones Triple P, identifying those factors which may be highlighted for current discussion, or further future investigation as the program's research continues. The second set of consideration issues pertain to the broader issue of large scale roll out of parenting programs by DADHC. These issues came about through examination of the literature as well as communication with researchers and service providers.

### **5.2.1 Issues specific to Stepping Stones**

The areas that remain of either concern, or require further investigation and follow up are as follows:

- presumably the inclusion of time out for misbehaviour within the Stepping Stones program has implications for DADHC as this procedure would be considered a restrictive practice;
- Stepping Stones has no current plans to configure the program for distance mode/ self directed delivery. Clinically, it is understood that it has been offered this way, and on perusal it would not appear at all difficult to do, so this is not considered a significant barrier. However, in terms of a potential licensing agreement with Triple P International to buy the program, and evaluation of a large scale roll-out, it is unclear whether

there may be implications for families who want to undertake a distance mode program;

- the relatively high attrition rate of the Stepping Stones trial requires further discussion with the principal investigators of the Western Australian randomized control trial. Whether there are clear reasons for this, or whether the service delivery sector has to accept such an attrition rate as a reality, remains unclear. The current Stepping Stones research on diagnostic sub-groups will likely throw further light on this issue;
- commitment to a ten session program is quite significant, and this of itself may be one of the contributing factors to attrition. It is unclear whether assistance with child care may help with the relatively lengthy program, or whether there are other extenuating circumstances which cannot be supported;
- the research on Stepping Stones is still in train, and it may be prudent to wait for further research findings to make a final decision on the utility of the program for DADHC services in reference to diagnostic sub-groups, particularly those with Autism Spectrum Disorder; and
- it is important to acknowledge that even if all manner of supports were provided to assist families to commit to a parent program, it is not going to suit everyone. The understanding that parent programs should be perceived as one of a suite of resources cannot be overstated.

### **5.2.2 Issues regarding potential large scale roll out**

In terms of large-scale roll out of parenting programs in general, a number of issues came to light, which though not central to the requirements of the current literature review, are worth highlighting:

- inevitably personnel, though professionally appropriate to conduct a parent training program, will be concerned that resources are already stretched to the limit. It is understood that DADHC is well aware of the very real issue of the time required to commit to both accreditation and then facilitation of programs on an ongoing basis;
- it is possible that were such a parent program taken up by families, at completion there will still be a portion with outstanding needs. This may be particularly so for those families with higher risk-factors (e.g. mental health needs, marital stress, coping problems), or significantly complex child behaviour. Prior to commencement of any potential roll-out, it would be ethical to consider this possibility and develop contingency plans, particularly as it is understood that DADHC already has a waiting list for some services; and
- the experience of the Department of Health in its roll out of Triple P across NSW would be considered an invaluable resource upon which to draw. It is understood that the Department of Health could advise on a number of issues, based on its own experience, which would well inform any DADHC plans for a roll-out of parent training programs. Additionally, the current resources of both departments, may at a local level be available for resource sharing where appropriate.

### **5.3 Summary and Conclusion**

The literature review examining parent positive behaviour support programs for possible implementation across NSW revealed a limited number of available programs. Four programs were identified, Triple P, Stepping Stones Triple P, Apex Behaviour Management Program, and Signposts for Building Better Behaviour. Programs were evaluated against three categories of benchmarks. These were, 1) best practices in designing positive behaviour support programs for families, 2) implementation processes, and 3) outcomes. The evaluation revealed that Stepping Stones Triple P is the

preferred approach. It is important to highlight that Stepping Stones did not measure up better on all benchmarks. However, collectively it stood out as more comprehensive than the other programs examined. While Stepping Stones is nominated as the preferred approach, this is offered with some caution as there are a number of issues that require responsible consideration in its potential selection as a program for implementation across NSW. These pertain not only to further investigations of the applicability of Stepping Stones, but also to broader issues on state wide implementation of a program.

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Australian Institute of Family Studies. [www.aifs.gov.au](http://www.aifs.gov.au)

Beach Center on Disability, an affiliate of the University of Kansas.  
[www.beachcenter.org](http://www.beachcenter.org)

Centre for Developmental Psychiatry and Psychology.  
[www.med.monash.edu.au](http://www.med.monash.edu.au)

Commonwealth Department of Family and Community Services  
[www.facs.gov.au](http://www.facs.gov.au)

Department of Ageing, Disability and Home Care [www.dadhc.nsw.gov.au](http://www.dadhc.nsw.gov.au)

Down Syndrome International. [www.down-syndrome-int.org](http://www.down-syndrome-int.org)

Down Syndrome NSW. [www.dsansw.org.au](http://www.dsansw.org.au)

Elizabeth M. Boggs Centre on Developmental Disabilities, University of  
Medicine and Dentistry of New Jersey, Robert Wood Johnson Medical  
School, Department of Pediatrics. <http://rwjms.umdnj.edu/boggscenter/>

Families First. [www.familiesfirst.nsw.gov.au](http://www.familiesfirst.nsw.gov.au)

Family Support Services Association of NSW. [www.fssansw.asn.au](http://www.fssansw.asn.au)

Hanen Center, University of Toronto, Canada “More than Words” program for  
families with a child with autism. [www.hanen.org](http://www.hanen.org)

Learning Links. [www.learninglinks.org.au](http://www.learninglinks.org.au)

NSW Centre for Parenting & Research. [www.parenting.nsw.gov.au](http://www.parenting.nsw.gov.au)

Victorian Parenting Centre for Developmental Disability Studies.

[www.vicparenting.com.au](http://www.vicparenting.com.au)

**APPENDIX I – Department of Ageing, Disability and Home Care, Project Brief, Positive Behaviour Support Programs for Families, 28<sup>th</sup> June, 2004.**

**Project Aim**

To identify, evaluate and describe resources addressing positive behaviour support that may be implemented across NSW to assist in meeting the behaviour support needs of families of children with a disability.

**Background**

Behaviour is an identified risk factor that may cause families to consider out of home care. “Living in the Community: Putting Children First” stresses the importance of growing up in a family environment, and the importance of family-centred practice.

This literature review relates to ‘positive behaviour support training programs’ for families with children with developmental disability, for implementation across NSW. Existing approaches to providing ‘Positive Behaviour Support’ for families will be identified, evaluated and described according to effectiveness, practical implications, and costs. Approaches already developed (such as the Stepping Stones Program (Triple P adaptation), the APEX Behaviour Support Model, among others) will be included in the evaluation in this literature review.

**Scope**

This project will include the review of existing approaches to positive behaviour support for families, with a view to selecting one approach that may be adopted for implementation across NSW disability services, and by DADHC in particular. The project involves a description of each approach, any literature or evidence relating to that approach, including independent evaluations where available.

## **The project will involve:**

### **1. Evaluation of Approaches**

The Triple P 'Stepping Stones' Approach and the APEX Behaviour Support Model along with other well researched models of positive behaviour support for families will be evaluated in relation to any published or un-published review material. This will include evaluation from those developing the approach and independent review wherever available. Applicability and acceptability by parents of children with specific diagnoses such as Autism and Down Syndrome will be investigated.

The models will be considered in the light of best practice information available within the current national and international literature relating to positive behaviour management support.

The review will include an analysis as to the preferred model to best address a broad range of family support issues for families with children with a disability from across NSW.

### **2. Description of Approaches**

Each approach will be described in terms of aims, content and expected outcomes; that is, what the approach involves for DADHC, and for participants (parents of children with disability). The preferred approach will be analysed in terms of its applicability, suitability, and acceptability to families as a positive behaviour support approach. This will involve:

#### **1. A review of documents**

The literature search will be conducted in order to find information relating to evaluations of each approach and identifying any other approaches that may be suitable for review. The review of documents

will identify evaluative research, and consider applicability for children with specific diagnosis (e.g. autism). This will include:

- information from Published and Unpublished Literature (dependent and independent of each approach). Information available from the proponents of each approach will be sourced, along with independent published evaluations or descriptions of each approach. This will be aligned with existing literature relating to positive behaviour support in order to arrive at what is considered a good approach to adopt in positive behaviour support in families of children with developmental disability.
- the use of support programs such as:
  - Stepping Stones Triple (an adaptation of Triple P parenting program for families with a child with a disability); and
  - the APEX Behaviour support model (which CDDS are already piloting).

## **2. A description of reviewed approaches**

This is done in order to present information relating to the range of approaches and to select one approach that might be suitable for more detailed description. This will include:

- a summary of the content, aims and format of each approach;
- the collation, critique and summary of available data and evidence relating to each approach's effectiveness, practicability and acceptability to users;
- selection of one approach for further investigation re applicability; and
- a summary of the features of the positive behaviour support approach relating to service delivery and outcomes.

## **3. Production of Draft Final report**

The final report will outline the results and analysis of information reviewed and collated throughout the study. The report will include an executive summary and all findings of the research from the review of

documentation and provide summary descriptive information about each of the approaches evaluated.

**4. Review of the Final Report** by DADHC and request for final revisions.

**5. Production of Final Report**

## **APPENDIX II – Additional Local and International Programs**

The following programs are presented as additional contextual information to the literature review. While the first two are offered in Australia, all others are offered at overseas sites.

### **Parent Education and Skills Training Early Intervention for Children with Autism – Monash University, Melbourne, Australia.**

This is a current NHMRC funded research project at Monash University. Chief investigators are Professor Bruce Tonge and Dr. Avril Brereton. The aim of the research is to investigate which components of the parent program are successful in early intervention. It is a 20 week program, comprising 10 small group, and 10 individual sessions. Outcome measures include parental mental health, family functioning, child psychopathology, cognitive, adaptive behaviour and language skills. The intention is to follow-up at one and two years. Recent preliminary results suggest better adjustment and development in children (further information at Centre for Developmental Psychiatry and Psychology [www.med.monash.edu.au](http://www.med.monash.edu.au)).

### **Hanen Programs – originating in Toronto, Canada**

A range of programs for parents and educators, aimed at creating and taking advantage of everyday opportunities for language development. Programs are available to parents of children with Autism Spectrum Disorder. While the program originated in Canada, it is understood that it is also available in Australia (further information at The Hanen Center, University of Toronto, Canada, [www.hanen.org](http://www.hanen.org)).

**Transforming parent-child interaction in family routines - New Jersey, USA.**

A current national research study on behaviour support for families with a child with developmental disabilities and problem behaviour within a family-centred model (further information at the Elizabeth M. Boggs Centre on Developmental Disabilities, University of Medicine and Dentistry of New Jersey, Robert Wood Johnson Medical School, Department of Pediatrics. <http://rwjms.umdnj.edu/boggscenter/>).

**Operation Positive Change: PBS in an urban context - Louisiana, USA.**

This is part of a current research program supported by the University of Kansas, aimed at parent training in positive behaviour support to families of culturally and linguistically, educationally and socio-economically diverse backgrounds (further information at Beach Center on Disability, an affiliate of the University of Kansas. [www.beachcenter.org](http://www.beachcenter.org)).

**NAS Early Bird program – originating in The United Kingdom.**

NAS Early Bird is an early intervention program of three months duration for families with a child with autism. Emphasis is given to developing parent-professional partnerships. Content includes information about autism, communication and challenging behaviour. It comprises both group training and individual home visits. The program is also funded for evaluation in New Zealand (further information in Shields, 2001; and Autism Spectrum Disorder Information Network. [www.azdin.org.nz](http://www.azdin.org.nz) ).