Life Span and Disability / XIII, 2 (2010), 109-128

Comments on a study of the social validity of the developmental disability parent training program Stepping Stones Triple P

Trevor G. Mazzucchelli,[1] *Lisa J. Studman,*[2]
Koa Whittingham[3] *& Kate Sofronoff*[4]

Abstract

Probst, Glen, Spreitz, and Jung (2010) described an evaluation of the social validity of the parenting intervention Stepping Stones Triple P (SSTP). In this evaluation, 33 masters-level psychology students viewed one of the program resources and rated the strategies of quiet time and time out as lacking in both ethical acceptability and practical applicability. On the basis of this, the authors recommended revisions to the content of SSTP. The present paper provides additional information about SSTP to correct possible misconceptions, and provide further comments on Probst and colleagues' (2010) findings. SSTP has been demonstrated to be effective with a range of parents of children with diverse developmental disabilities and there is considerable support for the validity and effectiveness of the specific elements in question. Given this, it is argued that while there will inevitably be variations in how individuals accept program content, rather than altering program, it may be more appropriate to address those variables related to the acceptability of content. To this end, it is suggested that future research could usefully investigate

* *Received*: 11 June 2010, *Revised*: 29 October 2010, *Accepted*: 07 November 2010.

[1] School of Psychology, University of Queensland; Brisbane, Queensland 4072, Australia. Fax: +61 8 9228 0554. E-mail: trevom@iinet.net.au

[2] Triple P International, Brisbane, Australia; E-mail: lisa@triplep.ne

[3] Queensland Cerebral Palsy and Rehabilitation Research Centre, School of Medicine, University of Queensland; E-mail: koawhittingham@uq.edu.au

[4] School of Psychology, University of Queensland. E-mail: k.sofronoff@psy.uq.edu.au

The authors thank Alan Ralph for his useful comments on a draft of this manuscript. Thomas Dirscherl and Barbara Hirche for their assistance in accessing practitioner data and Grace Sweeney for her assistance with analysing these data.

influences on perceptions of content and, in particular, practical strategies to overcome barriers to the acceptance of socially valid and empirically supported methods.

Keywords: Parent training, Developmental disability, Stepping Stones Triple P, Social validity, Time out

Study of the social validity of the developmental disabiliy parent training program Stepping Stone Triple P

In a recent paper that appeared in this Journal, Probst, Glen, Spreitz, and Jung (2010) described an evaluation of the social validity, in a German context, of some of the content of the parenting intervention Stepping Stones Triple P (SSTP; Sanders, Mazzucchelli, & Studman, 2004, 2010). In this evaluation, 33 masters-level psychology students viewed one of the program resources (*Stepping Stones Triple P: A survival guide* video; Sanders, Mazzucchelli, & Studman, 2005) and rated the content in terms of its ethical acceptability and practical applicability. A total of 24 of these students provided further qualitative comments on the video. The authors reported that 21 of the 25 strategies depicted on the video were evaluated positively both in terms of ethical acceptability and practical applicability. However one strategy, "planned ignoring", was evaluated neither positively nor negatively in terms of its ethical acceptability, the strategy "diversion to another activity" was evaluated negatively on practical applicability, and the strategies of "quiet time" and "time out" were evaluated negatively both in terms of ethical acceptability and practical applicability. On the basis of this subjective evaluation and the qualitative feedback from masters-level psychology students the authors made suggestions regarding the partial revision of program materials. The present paper provides additional information about SSTP to correct some possible misconceptions regarding the program, and provides further comments on the interpretation and implications of Probst *et al.*'s (2010) findings. It also presents evaluation data from an international sample of professionals and paraprofessionals who have undergone training in the use of SSTP. This data reflects practitioners' satisfaction with training, program content and self-reported confidence in conducting parent consultations pre-and post-training.

What is the Stepping Stones Triple P-positive parenting program?

SSTP is a multilevel system of parenting intervention designed to improve the quality of parenting advice available to parents of children who have a developmental disability (Sanders *et al.*, 2004, 2010). SSTP represents a parallel version of the core Triple P-Positive Parenting Program, which was developed for children who are developing typically (Sanders, 1999). The Triple P system aims to foster positive, caring relationships between parents and their children, promote children's development, and prevent behavioural and emotional problems in children by enhancing the knowledge, skills, and confidence of parents.

The suite of multilevel programs includes intensive individually delivered face-to-face interventions, group interventions, more cost- and time-effective brief interventions, large group seminars and media based interventions (see Sanders, 1999, for an overview of Triple P). The rationale for this tiered multilevel system is that there are different levels of difficulty in the behaviour problems of children, and parents have differing needs and desires regarding the type, intensity and mode of assistance they may require. This flexibility enables parents to participate in parent education in ways that suit their individual circumstances, and the level of support provided to parents can be increased or decreased as indicated. This multilevel strategy is designed to maximize efficiency, contain costs, avoid waste and over servicing, and ensure the program has a wide reach in the community.

Positive parenting with children with a developmental disability

SSTP is based on a number of contemporary theoretical perspectives in psychology including learning theory and applied behaviour analysis (Baer, Wolf & Risley, 1968), developmental research on social competence (Hart & Risley, 1974, 1995), research on risk and protective factors (Patterson, 1982; Rutter, 1990), cognitive social learning theory (Karoly, 1993; Bandura, 2000), and normalisation and social role valorisation (Wolfesnberger, 1983; Nirje, 1985). Seven core positive parenting principles form the basis of the program: (a) safe and engaging environment, (b) positive learning environment, (c) assertive discipline, (d) adaptation to a child with a disability (e) realistic expectations, (f) community participation, and (e) parental self-care. These principles were selected to address specific risk and protective factors known to predict developmental and mental health outcomes in children with developmental disabilities. They are operationalised into a range of specific parenting strategies (Sanders *et al.*, 2004, 2010). The 25 strategies within SSTP are drawn from the disabilities research literature. Only strategies that have been empirically demonstrated to be reliably effective for children with developmental disabilities are included (e.g., incidental teaching, McGee, Krantz, & McClannahan, 1985; teaching backwards, Hagopian, Farrell, & Amari, 1996; teaching your child to communicate what they want, Tait, Sigafoos, Woodyatt, O'Reilly, & Lancioni, 2004; brief interruption, Azrin, Besalel, Jamner, & Caputo, 1988).

Process: Self-regulation of parenting skills

A central goal of Triple P is the development of an individual's capacity for self-regulation. Self-regulation is a process whereby individuals change their own behaviour and become independent problem solvers

(Karoly, 1993). Consultation processes are employed in SSTP such that parenting competence is enhanced while simultaneously building parents' capacity for self-regulation (e.g., Sanders & Lawton, 1993; Sanders, Mazzucchelli, & Ralph, in press). These consultation processes result in SSTP being "family-centred" in that parents set their own goals and play an active role in the assessment and intervention process. Parents choose the child behaviours they wish to target and monitor, develop hypotheses as to why the behaviour is (or is not) occurring, and select the specific parenting strategies they wish to use. SSTP emphasises the teaching of functional skills for children, rather than suppressing unwanted behaviour. Parents are taught a range of prevention and planning skills to facilitate the development of multifaceted parenting plans which incorporate changes to the environment as well as changes to the antecedents and the consequences of behaviour. The implementation of a plan is monitored and parents are encouraged to review progress with their practitioner within one to two weeks.

Practitioner training

Practitioner training is a requirement for use of SSTP materials. SSTP practitioner training has two attendance components. The initial component provides instruction in both the theory and practice of providing parenting and behaviour management advice to parents who have a child with a disability. The second attendance component is a competency-based accreditation workshop in which practitioners demonstrate their knowledge of and skill in delivering SSTP. Practitioner training provides opportunities for practitioners to develop a thorough understanding of the rationale and principles of SSTP content, and competence in the effective and appropriate delivery of the program (Mazzucchelli & Sanders, 2010). Almost 1,800 practitioners from ten countries have been trained to provide SSTP interventions since 2006, with Australia (705), Canada (439) and England (375) having had the most practitioners trained. Practitioners from other countries who have been trained include those from Belgium (16), Germany (99), Hong Kong (32), Ireland (19), Netherlands (49), Scotland (19) and Singapore (40). Regardless of their nationality, practitioners consistently rate the content of SSTP practitioner training between good (5) and excellent (7) and their overall satisfaction with SSTP training between satisfied (5) and very satisfied (7) on seven-point Likert-type scales (mean ratings of 6.17 and 6.19 respectively, see Table 1). Practitioners also report an increase in self-efficacy in a range of parent consultation tasks, such as conducting effective behavioural rehearsal with parents. Table 2 presents participant responses to a 20-item questionnaire on proficiency in parent consultation skills for samples of practitioners from various countries trained since 2006. Responses range from 1 (not at all proficient and would like assistance) to 7 (extremely profi-

Table 1 - *Mean ratings for satisfaction with workshop content and overall satisfaction of practitioner training*

		Content		Overall	
Level of Triple P	*n*	*M*	*SD*	*M*	*SD*
Australia					
Level 3 Primary Care SSTP	36	5.92	0.86	5.86	0.95
Level 4 Group SSTP	78	6.22	0.83	6.22	0.77
Level 4 Standard SSTP	304	6.36	0.73	6.20	0.87
Belgium					
Level 4 Standard SSTP	15	6.07	0.59	6.13	0.64
Canada					
Level 3 Primary Care SSTP	18	5.95	1.18	5.84	0.96
Level 4 Standard SSTP	282	6.27	0.84	6.24	0.92
England					
Level 4 Standard SSTP	306	6.10	0.84	6.26	0.82
Germany					
Level 4 Group SSTP	78	5.87	0.88	6.36	0.83
Hong Kong					
Level 4 Standard SSTP	40	5.35	.80	5.48	0.85
Netherlands					
Level 4 Standard SSTP	19	5.95	.70	5.84	0.96
Scotland					
Level 4 Standard SSTP	22	6.32	0.78	6.45	0.67
Republic of Ireland					
Level 4 Group SSTP	17	6.00	1.17	5.88	1.05
Singapore					
Level 4 Group SSTP	39	6.28	0.67	6.15	0.71

Note:

Ratings for content were based on a seven-point Likert-type scale where 7 = excellent, 5 = good, 3 = fair, and 1 = poor. Ratings for overall satisfaction were based on a seven-point Likert-type scale where 7 = very satisfied, 5 = satisfied, 3 = dissatisfied, and 1 = very dissatisfied.

Table 2 - *Mean ratings for overall proficiency in parent consultation skills before and after practitioner training*

		Pre-training		Post-training		Follow-up		F ratio for Time Effect	
Level of Triple P	*n*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*	*p*
Australia									
Level 3 Primary Care SSTP	30	3.97	1.15	5.49	0.73	5.71	0.46	37.67	< .001
Level 4 Group SSTP	67	4.35	1.18	5.50	0.68	5.73	0.56	63.10	< .001
Level 4 Standard SSTP	186	4.42	0.95	5.65	0.67	5.86	0.62	249.13	< .001
Belgium									
Level 4 Standard SSTP	14	4.96	0.57	5.56	0.38	5.62	0.30	18.64	< .001
Canada									
Level 3 Primary Care SSTP	19	5.30	1.31	5.93	0.82	6.07	0.51	8.43	.003
Level 4 Standard SSTP	237	4.67	0.91	5.75	0.64	5.87	0.60	327.44	< .001
England									
Level 4 Standard SSTP	219	4.11	1.22	5.41	0.91	5.52	0.85	168.34	< .001
Germany									
Level 4 Group SSTP	73	3.96	1.54	5.20	1.01	5.40	1.00		

		Pre-training		Post-training		Follow-up		F ratio for Time Effect	
Level of Triple P	*n*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*	*p*
Hong Kong									
Level 4 Standard SSTP	39	4.46	0.57	5.48	0.58	5.78	0.43	80.25	< .001
Netherlands									
Level 4 Standard SSTP	18	4.74	0.88	5.24	0.69	5.66	0.27	10.78	< .001
Republic of Ireland									
Level 4 Group SSTP	14	3.22	1.21	5.27	0.73	5.54	0.63	32.28	< .001
Scotland									
Level 4 Standard SSTP	21	3.84	1.12	5.35	0.58	5.76	0.55	33.74	< .001
Singapore									
Level 4 Group SSTP	39	3.97	0.83	5.26	0.52	5.38	0.53	65.98	< .001

Note:

Ratings for overall proficiency in parent consultation skills were based on a seven-point Likert-type scale where 7 = extremely proficient, no assistance required, and 1 = not at all proficient and would like assistance.

cient, no assistance required). Measures were taken pre-, post- and at a follow-up to training. Significant improvements over time for all levels of training are indicated. Corresponding to improvements in self-reported proficiency, Triple P training has been demonstrated to result in improved parent consultation skills as assessed by independent behavioural observation (Sanders, Tully, Turner, Maher, & McAuliffe, 2003).

Program materials

A range of program materials exists to support the delivery of SSTP. These include practitioner manuals, training manuals, parent workbooks, a DVD, and topic specific booklets that include comprehensive behaviour support plans. Practitioner manuals include detailed descriptions of how to undertake various intervention tasks including assessment, delivery of SSTP content, and the management of process issues. Training manuals include information beyond what is included in practitioner manuals about how to prepare for and implement the intervention. Parent materials provide enough detail so that the parent can decide whether each individual strategy is acceptable to them, can follow suggested parenting plans, and can generalise the strategies to other situations. Relevant to this commentary, the SSTP Survival Guide video that was used in Probst *et al.*'s (2010) evaluation presents a subset of the parenting skills included in SSTP and is typically used to complement consultations with a trained SSTP provider, and in conjunction with other SSTP parent materials. The SSTP Survival Guide DVD is not intended to be delivered as a stand-alone intervention; rather, it is supplementary material to a complete intervention, which incorporates functional assessment assisted by an accredited practitioner. Some of the qualitative feedback given by participants in Probst *et al.*'s (2010) evaluation indicates that they may have misunderstood this and instead judged the DVD as a stand-alone intervention. For example, it was stated that concepts such as "realistic expectations" are not adequately defined in the video. This concept is introduced in the DVD and then practitioners discuss it in a manner relevant to each family's context. This misunderstanding may have affected the participants' qualitative feedback on SSTP broadly.

Effectiveness of SSTP

SSTP has been subjected to a series of randomised controlled trials and has been demonstrated to be acceptable to parents and effective in changing risk and protective factors and producing better mental health and developmental outcomes in children than comparison conditions. Participants in existing research have included parents of children with intellectual, physical, and sensory disabilities and pervasive developmental disorders including autistic disorder and Asperger's syndrome (Harrison, 2006; Roberts, Mazzucchelli, Studman, & Sanders, 2006; Whittingham, Sofronoff & Sheffield, 2006; Plant & Sanders, 2007;Whittingham, Sofronoff, Sheffield, & Sanders, 2009b; Hampel, Hasmann, Schaadt, Holl, Petermann, & Hasmann, 2010; Hampel, Schaadt, Hasmann, Petermann, Holl, & Hasmann, 2010). Although most of these studies have been conducted in Australia, one has been conducted in Germany to good effect

(Hampel, Hasmann *et al.*, 2010; Hampel, Schaadt *et al.*, 2010), and there is good reason to suggest that the program will also be acceptable and effective in other countries and contexts as well. Triple P, from which SSTP was adapted, has demonstrated effectiveness for a diverse range of clinical and high-risk populations, within a range of countries and cultural contexts. These countries include Hong Kong (Leung, Sanders, Leung, Mak, & Lau, 2003), Germany (Heinrichs, Hahlweg, Bertram, Kuschel, Naumann, & Harstick, 2006), Japan (Matsumoto, Sofronoff, & Sanders, 2009) and Switzerland (Bodenman, Cina, Ledermann, & Sanders, 2008). Trials have also shown Triple P to be acceptable and effective with Australian aboriginal families (Turner, Richards, & Sanders, 2007). Additional efficacy trials of SSTP are presently underway in Belgium, Holland, and New Zealand.

Acceptability of SSTP

The acceptability of parenting strategies is an important issue since the perceived lack of acceptability or practical applicability of an intervention could act as a barrier to the uptake of empirically supported interventions. Parents who view strategies as unacceptable or impractical may not attempt potentially useful and effective strategies. Similarly, practitioners who view strategies as unacceptable or impractical may not be convincing advocates for a potentially effective program, withhold program content from parents, or actively discourage parents from using strategies. It is worth noting, however, that low acceptability of a specific intervention on the part of parents and professionals does not necessarily mean that this intervention should be changed. If an intervention has been shown to be effective it may be more appropriate to educate parents and professionals to correct misunderstandings and reduce barriers to program implementation.

Previous research investigating the acceptability of SSTP with parents of children who have a developmental disability have reported high ratings for SSTP's acceptability (Roberts *et al.*, 2006; Whittingham *et al.*, 2006; Plant & Sanders, 2007; Whittingham, Sofronoff, Sheffield, & Sanders, 2009a; Whittingham, Wee, Sanders, & Boyd, in press). However, these data seem at odds with those of Probst *et al.*'s (2010) study where acceptability and usability ratings by masters level psychology students with little experience consulting parents of children with developmental disabilities appeared to be lower generally. It should be noted that it is not without precedent that a lack of correspondence has been found between the ratings of strategies by practitioners and parents. For instance, Morawska (2010) reported that practitioners rated Triple P strategies as substantially less acceptable and useful for culturally and linguistically di-

verse parents than those parents rated the same strategies for themselves. Whittingham *et al.* (in press) recently reported a similar discrepancy specifically in relation to time out between practitioners and parents of children with cerebral palsy.

It should also be noted that the evaluations of the masters level psychology students may change as they acquire clinical experience using strategies with families. This also is not without precedent. Parents of children with ASD who viewed the SSTP Survival Guide video expressed concerns about using the strategy time out as well as strategies that use physical touch such as physical guidance (Whittingham *et al.*, 2006). However, the majority of parents of children with an autism spectrum disorder who received SSTP in a randomised controlled trial chose to use the strategies of time out (75%) and physical guidance (81.8%) and reported them to be effective (Whittingham *et al.*, 2009a). Thus, the opinions of parents and professionals on the acceptability and usability of parenting strategies following a brief viewing of program materials cannot be relied upon to indicate how acceptable and usable they will find the strategies once they have been adequately trained in their implementation in the context of a complete parenting intervention.

Inclusion of time out

Probst *et al*. (2010) reported that the non-exclusionary quiet time, and exclusionary time out procedures were the only strategies to be evaluated negatively by the students with regard to their ethical acceptability. In the light of these ratings, qualitative reports from students, and the opinions of some who have previously commented on time out (e.g., Harris, 1998; Bregman, Zager, & Gerdtz, 2005), Probst *et al.* (2010) recommended that these procedures should be marked as a unique and last-resort intervention to be used only if all less restrictive methods have failed. However, research evidence does not support the notion that time out should be a restricted procedure or presented in this way.

Although most of the existing research has been done with samples of children who are developing typically, there is considerable evidence that time out, when used in combination with other positive parenting methods, can be an effective strategy for reducing child noncompliance and aggressive behaviour over and above the effects of praise, rewards, use of effective instructions and other behaviour management strategies (Roberts, Hatzenbuehler, & Bean, 1981; Hobbs, Walle, & Caldwell, 1984; Ford Olmi, Edwards, & Tingstrom, 2001; Fabiano, Pelham, Manos, Gnagy, Chronis, Onyango *et al.*, 2004; Kaminski, Valle, Filene, & Boyle, 2008). Furthermore, time out has the additional benefit of assisting children to regulate their emotions, by providing an opportunity for the child to calm down,

and to learn to manage difficult and frustrating situations (Morawska & Sanders, in press).

It should also be noted that time out is used as one of a number of strategies in most evidence-based parenting programs for parents of young children including Parent-Child Interaction Therapy (Eyberg, 1988), Parent-Management Training Oregon model (Patterson, 2005), and The Incredible Years Program (Webster-Stratton, 1998). Over the three decades in which time out has been used as part of these programs, no evidence has emerged that these programs are damaging or create subsequent childhood behaviour problems. On the contrary, there is good evidence that such programs prevent the development of more severe problems (Cunningham, Bremner, & Boyle, 1995; Webster-Stratton, 1998; Zubrick, Ward, Silburn, Lawrence, Williams, Blair *et al.*, 2005).

Time out has the support of many professional societies such as the American Academy of Pediatrics (1998). It is widely used by parents (Sanders, Tully, Baade, Lynch, Heywood, Pollard *et al*., 1999), and parents who have been trained in the use of time out rate it as an acceptable and effective strategy including parents of children with autism spectrum disorders (Hobbs *et al.*, 1984; Roberts *et al.*, 2006; Whittingham *et al.*, 2009a). Children also rate time out as an appropriate strategy for parents to use (Dadds, Adlington, & Christensen, 1987).

Concerns about time out are often based on the assumption that the strategy is used in isolation (Morawska & Sanders, 2010). However, SSTP, along with other evidence-based parenting programs, only use time out in combination with other strategies and in the context of a positive parent-child relationship. SSTP provides parents with a framework to understand why behaviour occurs, the principles by which time out and other strategies are effective, and the contexts in which time out might be useful. Parents are provided with information on how to use time out appropriately, what they might expect if they use time out, and how to minimise pitfalls. If parents decide to use time out, they are encouraged to monitor their use of the procedure and the behaviour they are seeking to modify. They are also provided with instructions on what to do should their parenting plan (whether it includes time out or not) not be effective.

Probst *et al*. (2010) quote from an Australian review of positive behaviour support programs by Weise, Stancliffe and Hemsley (2005) that suggested that the use of time out might be of concern to the Department of Ageing, Disability and Home Care (DADHC) in New South Wales, Australia. DADHC commissioned this review in order to identify a preferred approach to be adopted within the agency. The reviewers set evaluation benchmarks based on national and international literature to compare programs based on best practice in designing positive behaviour support programs for families, implementation processes, and outcomes for child and family. They concluded that SSTP was the preferred program with

many merits over other programs. However, it was noted that the use of time out might have implications for DADHC given its (2003) policy on restrictive practices. The 2009 Behaviour Support Policy (Office of the Senior Practitioner, NSW DADHC, 2009) supersedes the 2003 policy (DADHC, 2003) and outlines minimum requirements for DADHC service providers with respect to behaviour support. Within the current policy a number of practices including exclusionary time out and response cost are recognised as strategies that require *additional* safeguards when service providers incorporate them into documented behaviour support plans; namely, conditions that must be met for each of these strategies to be recommended. These conditions are consistent with the way that the strategies are taught and supported during SSTP interventions. Over 115 practitioners have been trained and accredited in SSTP in NSW, Australia, since 2006 (McWilliam, 2010).

It is important that misinformation about time out and its adverse effects on children does not lead to parents being denied access to potentially effective interventions, especially for a population at substantially greater risk of developing emotional and behavioural problems (Tonge & Einfeld, 2000; Dekker, Koot, van der Ende, & Verhulst, 2002; Emerson, 2003; Taanila, Ebeling, Heikura, & Jarvelin, 2003; Dekker & Koot, 2004).

Depiction of strategies in the DVD

Probst *et al.* (2010) criticises five scenes in the SSTP Survival Guide DVD, which depict the use of discipline strategies. Criticisms included that the problem behaviour did not justify the strategy (quiet time used to back up an instruction after a child continues to throw toys), it was not clear why the discipline strategy was being used (depiction of a child being taken to and later brought out from time out, child placed in time out after pinching mother), that the depiction looked staged and that a less restrictive strategy could have been used (time out used after a child refuses to put on shoes and then does not remain seated in quiet time), and that the use of directed discussion was over-directive and stifled appropriate play (boy hitting a toy boat with a hammer instead of the toy hammering pegs).

In responding to these criticisms it is important to recognise that the primary purpose of the DVD is to illustrate key aspects in the implementation of SSTP strategies; that is, how strategies are implemented, but not necessarily when. Hence it is the implementation of strategies that is presented without a larger functional context that may have caused the concerns of Probst *et al.* (2010). While it is our contention that all the examples depict acceptable implementation of the strategies, this is not to say that the examples illustrate the only way a parent could have responded

in the scenarios depicted. As stated earlier in this paper, a guiding principle underpinning SSTP is that parents learn to direct their own behaviour, selecting personal goals for their own and their child's behaviour, and choosing which of the SSTP strategies presented are acceptable and appropriate in their personal circumstances. When necessary, it is the practitioner's role to help parents recognise the principles underpinning the strategies and discuss where and how they might be usefully employed; however, ultimately it is the parents who choose which strategies they wish to use and in which circumstances. To the extent that the depiction of these strategies adversely influences perceptions of their acceptability (e.g., because of the staged nature of the depiction), the authors will attempt to address these issues in future iterations of the DVD.

Conclusion and future directions

Probst *et al.*'s (2010) paper reported that a sample of 33 inexperienced German masters level students of psychology who viewed the SSTP survival guide parent video rated the strategies of quiet time and time out as lacking in both ethical acceptability and practical applicability. On the basis of this the authors recommended revisions to the content of the program.

While the research literature has informed and continues to inform the development of SSTP, Probst *et al.*'s (2010) study does not represent sufficient evidence to modify core program content; data from studies involving multiple informants and empirical evidence of efficacy would be required to do this. Nevertheless, future iterations of program materials will continue to consider issues relating to the accuracy and accessibility of content, as well as data on acceptability, efficacy, and effectiveness.

The perceived acceptability of the content of an intervention is important not only because of issues concerning social validity, but also because such perceptions can impact on the uptake, delivery and (ultimately) the effectiveness of an intervention. The findings of Probst *et al.,* (2010) highlight that there will inevitably be variations in how individuals accept program content. However, it should be noted that it is not always appropriate to alter the intervention itself, as Probst *et al.,* (2010) suggest, to increase the perceived acceptability. If an intervention has been demonstrated to be effective and there is considerable empirical evidence for the specific elements of the intervention in question, then it may be more appropriate to increase perceived acceptability through efforts to decrease professional and parental misunderstanding. To this end, future research could usefully investigate influences on perceptions of content and, in particular, practical strategies to circumvent or overcome barriers to the acceptance of socially valid and empirically supported methods.

Such strategies might impact on the rates at which empirically supported interventions are adopted and implemented with fidelity. Potential strategies could include the provision of high quality information regarding the relevance, efficacy and validity of an intervention or strategy, endorsement of an intervention or strategy by recognised experts, or consumer testimonies regarding the effectiveness and acceptability of an intervention or strategy.

References

American Academy of Pediatrics (1998). Guidance for effective discipline. *Pediatrics, 101*, 723-728.

Azrin, N. H., Besalel, V. A., Jamner, J. P., & Caputo, J. N. (1988). Comparative study of behavioral methods of treating severe self-injury. *Behavioural Residential Treatment, 3*, 119-152.

Baer, D. M., Wolf, M. M., & Risley, T. R. (1968). Some current dimensions of applied behavior analysis. *Journal of Applied Behavior Analysis, 1*, 91-97.

Bandura, A. (2000). Exercise of human agency through collective efficacy. *Current Directions in Psychological Science, 9*, 75-78.

Bodenmann, G., Cina, A., Ledermann, T., & Sanders, M. R. (2008). The efficacy of Positive Parenting Program (Triple P) in improving parenting and child behavior: A comparison with two other treatment conditions. *Behaviour Research and Therapy, 46*, 411-427.

Bregman, J. D., Zager, D., & Gerdtz, J. (2005). Behavioral Interventions. In F. R. Volkmar, R. Paul, A. Klin, & D. Cohen (Eds.), *Handbook of autism and pervasive developmental disorders, Vol. 2: Assessment, interventions, and policy* (pp. 897-924). Hoboken, NJ: John Wiley & Sons.

Cunningham, C. E., Bremner, R., & Boyle, M. (1995). Large group community-based parenting programs for families of preschoolers at risk for disruptive behaviour disorders: Utilization, cost effectiveness, and outcome. *Journal of Child Psychology and Psychiatry, 36*, 1141-1159.

Dadds, M. R., Adlington, F. M., & Christensen, A. P. (1987). Children's perceptions of time out. *Behaviour Change, 4*, 3-13.

Department of Ageing, Disability and Home Care (2003). *Behaviour intervention and support policy.* Sydney, Australia: Author.

Dekker, M. C., & Koot, H. M. (2004). Problems with emotions and behaviour in young people with intellectual disability. *Kind en Adolescent, 25*, 211-223.

Dekker, M. C., Koot, H. M., van der Ende, J., & Verhulst, F. C. (2002). Emotional and behavioral problems in children and adolescents with and without intellectual disability. *Journal of Child Psychology and Psychiatry, 43*, 1087-1098.

Emerson, E. (2003). Prevalence of psychiatric disorders in children and adolescents with and without intellectual disability. *Journal of Intellectual Disability Research, 47*, 51-58.

Eyberg, S. (1988). Parent-child interaction therapy: Integration of traditional and behavioral concerns. *Child and Family Behavior Therapy, 10*, 33-46.

Fabiano, G.. A., Pelham, W. E. Jr., Manos, M. J., Gnagy, E. M., Chronis, A. M., Onyango, A. N., & Swain, S. (2004). An evaluation of three time-out procedures for children with attention deficit/hyperactivity disorder. *Behavior Therapy, 35*, 449-469.

Ford, A. D., Olmi, D. J., Edwards, R. P., & Tingstrom, D. H. (2001). The sequential introduction of compliance training components with elementary-aged children in general education classroom settings. *School Psychology Quarterly, 16*, 142-157.

Hagopian, L. P., Farrell, D. A., & Amari, A. (1996). Treating total liquid refusal with backward chaining and fading. *Journal of Applied Behavior Analysis, 29*, 573-575.

Hampel, O. A., Hasmann, S. E., Schaadt, A. K., Holl, R., Petermann, F., & Hasmann, R. (2010). Effekte des Stepping Stones Elterngruppentrainings für Familien mit behinderten Kindern [Stepping Stones parenting training as an effective support for families with a handicapped child]. *Kindheit und Entwicklung, 19*, 36-46.

Hampel, O. A., Schaadt, A. K., Hasmann, S. E., Petermann, F., Holl, R., & Hasmann, R. (2010). Evaluation von Stepping Stones Triple P: Zwischenergebnisse der Stepping-Stones-SPZ-Multicenterstudie [Evaluation of Stepping Stones Triple P: Interims analysis of the Stepping-Stones-SPC-Multicentric Study]. *Klin Padiatr, 222*, 18-25.

Harris, J. (1998). Cerebral palsy. In P. Howlin (Ed.) *Behavioural approaches to problems in childhood* (pp. 136-151). London, England: Cambridge University Press.

Harrison, J. (2006). *Evaluation of a group behavioural family intervention for families of young children with developmental disabilities* (Unpublished honours thesis). Charles Sturt University, Wagga, Australia.

Hart, B. M., & Risley, T. R. (1974). The use of preschool materials for modifying the language of disadvantaged children. *Journal of Applied Behavior Analysis, 7*, 243-256.

Hart, B. M., & Risley, T. R. (1995). *Meaningful differences in the everyday experience of young American children*. Baltimore, MD: Brookes.

Heinrichs, N., Hahlweg, K., Bertram, H., Kuschel, A., Naumann, S., & Harstick, S. (2006). Die langfistige Wirksamkeit eines Elterntrainings zur universellen Präven-

tion kindlicher Verhaltensstörungen: Ergebnisse aus Sicht der Mütter and Väter [The long-term efficacy of a parent training for universal prevention of child behaviour problems: Results form the mother's and father's perspective]. *Zeitschrift für Klinische Psychologie und Psycholotherapie, 35*, 97-108.

Hobbs, S. A., Walle, D. L., & Caldwell, H. S. (1984). Maternal evaluation of social reinforcement and time-out: Effects of brief parent training. *Journal of Consulting and Clinical Psychology, 52*, 135-136.

Kaminski, J. W., Valle, L. A., Filene, J. H., & Boyle, C. L. (2008). A meta-analytic review of components associated with parent training program effectiveness. *Journal of Abnormal Child Psychology, 36*, 567-589.

Karoly, P. (1993). Mechanisms of self-regulation: A systems view. *Annual Review of Psychology, 44*, 23-52.

Leung, C., Sanders, M. R., Leung, S., Mak, R., & Lau, J. (2003). An outcome evaluation of the implementation of the Triple P—Positive Parenting Program in Hong Kong. *Family Process, 42*, 95-108.

Matsumoto, Y., Sofronoff, K., & Sanders, M. R. (2009). Socio-ecological predictor model of parental intention to participate in Triple P-Positive Parenting Program. *Journal of Child and Family Studies, 18,* 274-283

Mazzucchelli, T. G., & Sanders, M. R. (2010). Facilitating practitioner flexibility within evidence based practice: Lessons from a system of parenting support. *Clinical Psychology: Science and Practice, 17*, 238-252.

McGee, J. J., Krantz, P. J., & McClannahan, L. E. (1985). The facilitative effects of incidental teaching on preposition use by autistic children. *Journal of Applied Behavior Analysis, 18*, 17-32.

McWilliam, J. (2010). [Stepping Stones Triple P provider training data]. Unpublished data.

Morawska, A. (2010, February). *Triple P for culturally diverse families*. Paper presented at the 12th Helping Families Change Conference, Brisbane, Australia.

Morawska, A., & Sanders, M. (in press). Parental use of time out revisited: A useful or harmful parenting strategy? *Journal of Child and Family Studies*.

Nirje, B. (1985). The basis and logic of the normalization principle. *Australia and New Zealand Journal of Developmental Disabilities, 11*, 65-68.

Office of the Senior Practitioner, NSW Department of Ageing, Disability and Home Care *(2009). Behaviour support policy*. Retrieved from http://www.dadhc.nsw.gov.au/dadhc/Publications+and+policies/People+with+a+disability/Behaviour_Support_Manual.htm

Patterson, G. R. (1982). *Social Learning Approach Series: Vol. 3. Coercive family process: A social learning approach*. Eugene, OR: Castalia Publishing Company.

Patterson, G. R. (2005). The next generation of PMTO models. *Behavior Therapist, 28* (2), 27-33.

Plant, K. M., & Sanders, M. R. (2007). Reducing problem behavior during care-giving in families of preschool-aged children with developmental disabilities. *Research in Developmental Disabilities, 28*, 362-385.

Probst, P., Glen, I., Spreitz, J., & Jung, F. (2010). Evaluative study on the social validity of the developmental disability parent training program Stepping Stones Triple P. *Life Span and Disability, 13*, 43-70.

Roberts, M. W., Hatzenbuehler, L. C., & Bean, A. W. (1981). The effects of differential attention and time out on child noncompliance. *Behavior Therapy, 12*, 93-99.

Roberts, C., Mazzucchelli, T., Studman, L., & Sanders, M. R. (2006). Behavioral family intervention for children with developmental disabilities and behavioral problems. *Journal of Clinical and Adolescent Psychology, 35*, 180-193.

Rutter, M. (1990). Psychosocial resilience and protective mechanisms. In J. E. Rolf, A. S. Masten, D. Cicchetti, K. H. Nuechterlein, & S. Weintraub (Eds.), *Risk and protective factors in the development of psychopathology* (pp. 181-214). New York, NY: Cambridge University Press.

Sanders, M. R. (1999). Triple P-Positive Parenting Program: Towards an empirically validated multilevel parenting and family support strategy for the prevention of behavior and emotional problems in children. *Clinical Child and Family Psychology Review, 2*, 71-90.

Sanders, M. R., & Lawton, J. (1993). Discussing assessment findings with families: The guided participation model of information transfer. *Child and Family Behavior Therapy, 15*, 5-35.

Sanders, M. R., Mazzucchelli, T. G., & Ralph, A. (in press). Promoting parenting competence through a self-regulation approach to feedback. In R. M.Sutton, M. M. Hornsey, & K. M. Douglas (Eds.) *Feedback: The handbook of praise, criticism, and advice*.

Sanders, M. R., Mazzucchelli, T. G., & Studman, L. J. (2004). Stepping Stones Triple P: The theoretical basis and development of an evidence-based positive parenting program for families with a child who has a disability. *Journal of Intellectual and Developmental Disability, 29*, 265-283.

Sanders, M. R., Mazzucchelli, T. G., & Studman, L. J. (2005). *Stepping Stones Triple P: Überlebenshilfe für Eltern von Kindern mit einer Behinderung* [*Stepping Stones Triple P: A survival guide for families with a child who has a disability*] [VHS Video] (Brisbane, Australia: Families International: German translation by PAG Institut für Psychologie AG). Muenster, Germany: Verlag fuer Psychotherapie.

Sanders, M. R., Mazzucchelli, T. G., & Studman, L. J. (2010). *Stepping Stones Triple P-Positive Parenting Program as a public health approach to strengthening parenting of children who have a developmental disability*. Manuscript in preparation.

Sanders, M. R., Mazzucchelli, T. G., & Ralph, A. (in press). Promoting parenting competence through a self-regulation approach to feedback. In R. M.Sutton, M. M. Hornsey, & K. M. Douglas (Eds.) *Feedback: The handbook of praise, criticism, and advice*.

Sanders, M. R., Tully, L. A., Baade, P. D., Lynch, M. E., Heywood, A. H., Pollard, G. E., & Youlden, D. R. (1999). A survey of parenting practices in Queensland: Implications for mental health promotion. *Health Promotion Journal of Australia, 9*, 105-114.

Sanders, M. R., Tully, L. A., Turner, K. M., Maher, C., & McAuliffe, C. (2003). Training GPs in parent consultation skills. An evaluation of training for the Triple P-Positive Parenting Program. *Australian Family Physician, 32*, 763-768.

Taanila, A., Ebeling, H., Heikura, U., & Jarvelin, M.-R. (2003). Behavioural problems of 8-year-old children with and without intellectual disability. *Journal of Pediatric Neurology, 1*, 15-24.

Tait, K., Sigafoos, J., Woodyatt, G., O'Reilly, M. F., & Lancioni, G. E. (2004). Evaluating parent use of functional communication training to replace and enhance prelinguistic behaviours in six children with developmental and physical disabilities. *Disability and Rehabilitation, 26*, 1241-1254.

Tonge, B., & Einfeld, S. (2000). The trajectory of psychiatric disorders in young people with intellectual disabilities. *Australian and New Zealand Journal of Psychiatry, 34*, 80-84.

Turner, K. M. T., Richards, M., & Sanders, M. R. (2007). Randomised clinical trial of a group parent education programme for Australian indigenous families. *Journal of Paediatrics and Child Health, 43*, 429-437.

Webster-Stratton, C. (1998). Preventing conduct problems in head start children: Strengthening parenting competencies. *Journal of Consulting and Clinical Psychology, 66*, 715-730.

Whittingham, K., Sofronoff, K., & Sheffield, J. K. (2006). Behavioral family intervention for children with developmental disabilities and behavioral problems. *Research in Developmental Disabilities, 27*, 364-380.

Whittingham, K., Sofronoff, K., Sheffield, J., & Sanders, M. R. (2009a). Behavioural Family Intervention with parents of children with ASD: What do they find useful in the parenting program Stepping Stones Triple P? *Research in Autism Spectrum Disorders, 3*, 702-713.

Whittingham, K., Sofronoff, K., Sheffield, J., & Sanders, M. R. (2009b). Stepping Stones Triple P: An RCT of a parenting program with parents of a child diagnosed

with an Autism Spectrum Disorder. *Journal of Abnormal Child Psychology, 37*, 469-480.

Whittingham, K., Wee, D., & Sanders, M. R., & Boyd, R. (in press). Responding to the challenges of parenting a child with cerebral palsy: A focus group. *Disability and Rehabilitation*.

Wiese, M., Stancliffe, R., & Hemsley, B. (2005). *Review of positive behaviour support programs for families*. Sydney, Australia: Centre of Developmental Disability Studies and Department of Ageing, Disability and Home Care. Retrieved from http://www.dadhc.nsw.gov.au/NR/rdonlyres/08E45F97-0A09-4915-9FE4-AB6E1CC4243E/1390/ReviewofPositiveBehaviourSupportProgramsforFamilie.pdf

Wolfensberger, W. (1983). Social role valorization: A proposed new term for the principle of normalization. *Mental Retardation, 21*, 234-259.

Zubrick, S. R., Ward, K., Silburn, S. R., Lawrence, D., Williams, A. A., Blair, E., Sanders, M. R. (2005). Prevention of child behavior problems through universal implementation of a group behavioral family intervention. *Prevention Science, 3*, 1-18.