

Evaluative Study on the social validity of the developmental disability parent training program Stepping Stones Triple P

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Abstract

There is a worldwide lack of scientifically proven and commonly accessible preventative intervention programs for families with disabled children. The aim of the present study is to evaluate ethical and practicability aspects of the social validity of the Australian developmental disability parent training program Stepping Stones Triple P (SSTP), which has not been previously tested in Europe. The SSTP parent video was rated by a sample of 33 German master-level students of psychology, using quantitative and qualitative questionnaires. Overall, the ethical acceptability of the program was evaluated as moderately positive and the practical applicability as neutral, that is neither positive nor negative. Ethical acceptability was rated as positive for all the parental strategies demonstrated in SSTP except for Planned Ignoring, which was rated as neutral, and Quiet Time and Time Out, both of which were rated as moderately negative. Overall program flexibility for parents and children was rated as moderately negative. Critical comments focused on the overuse of traditional operant conditioning techniques and the lack of contemporary more developmentally orientated behaviour methods. Though findings support the assumption of a moderately positive social validity overall, the analysis revealed clear limitations. Thus, some revision of the program is suggested. Further research should expand to various groups having everyday experience with children with disabilities as well as to various diagnostic categories.

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

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1. Introduction

Epidemiological studies have shown that the prevalence of challenging behavioural symptoms, such as self-injury, aggression, noncompliance, overactivity, and ritualistic behaviours in children with severe intellectual disabilities and related developmental disabilities (Batshaw, 1994) ranges between 40% and 65% (Roberts, Mazzucchelli, Studman, & Sanders, 2006). As a result, the parents of developmentally disabled children are faced with high care-giving demands in their everyday life, which frequently result in heightened stress and lead to impairment in their individual as well as family adjustment (Plant & Sanders, 2007a). Family-orientated preventative and rehabilitative approaches have been increasingly developed in recent years in order to provide professional support for parents in these high-risk situations (cf. Tonge, Brereton, Kiomall, Mackinnon, King, & Rinehart, 2006). A central type of preventive family intervention is the cognitive-behavioural parent training, which is carried out either with single parents, in parent groups or with a combination of both. Key goals of this approach are (1) the facilitation of adequate parental health cognitions, such as the acquisition of strong self-efficacy beliefs and the provision of a scientifically based disability concept comprising appropriate social cognitions on the causes, nature, and consequences of the disability and its associated behavioural symptoms; (2) the enhancement of parenting strategies and skills in order to promote the child's cognitive and emotional development and manage behaviour problems (Mah & Johnston, 2008).

1.1 Structure and goals of the SSTP program

The parent training program Stepping Stones Triple P (SSTP; Triple P: "Positive Parenting Program") is targeted towards the broad diagnostic group of children with developmental disabilities (Batshaw, 1994), who are at particular risk of developing behavioural or emotional problems (Sanders, Mazzucchelli, & Studman, 2004a; Sanders, Turner & Markie-Dadds, 2004b). The SSTP program (Sanders, Mazzucchelli, & Studman, 2003b) is a modification of the general parenting program Standard Triple P (Wiese, Stancliffe, & Hemsley, 2005; Heinrichs, Hahlweg, & Doepfner, 2006; Thomas & Zimmer-Gembeck, 2007; Nowak & Heinrichs, 2008; Sanders, 2008; Sanders, Ralph, Sofronoff, Gardiner, Thompson, & Dwyer, 2008;). While the SSTP program has already been tested in Australia (Queensland), (Roberts *et al.*, 2006; Plant & Sanders, 2007b; Whittingham, Sofronoff, & Sheffield, 2006; Whittingham, Sofronoff, Sheffield, & Sanders, 2009a, b, c) it is only beginning to be tested in North-America and Europe (Probst, 2009).

The program material includes (a) "Stepping stones: A survival guide for families with a child who has a disability" DVD and booklet (Sanders, Mazzucchelli, & Studman, 2003a, b); (b) "SSTP family workbook" (Sanders,

Mazzucchelli, & Studman, 2003c) (adapted for German-speaking people: Sanders *et al.*, 2004b; Sanders, Mazzucchelli, & Studman, 2005). The SSTP program is targeted at parents of children with disabilities aged between 2 and 12 years and has five levels of intervention strength to meet the individual family's support needs (Sanders *et al.*, 2004a). Level 1 consists of basic information about SSTP available on the Internet and through other mass media. Level 2 involves the provision of information and advice for a specific parenting concern and level 3 includes active skills training. Level 4 involves broad focus parenting skills training with a combination of group and individual sessions, while level 5 is an enhanced behavioural family intervention program for families where parenting difficulties are complicated by additional family distress. Levels 4 and 5 have already been evaluated in Australia (Roberts *et al.*, 2006; Plant & Sanders, 2007b; Whittingham, Sofronoff, Sheffield, & Sanders, 2009a, b, c).

Preliminary evidence, based on three controlled studies from Australia with 177 families with a developmentally disabled child (in total 103 intervention group families, 74 control group families) supports the assumption that SSTP is effective with regard to child problem and parent behaviour (Probst, 2009; Whittingham *et al.*, 2009a).

According to the program authors (Sanders *et al.*, 2004a), the SSTP program aims to promote positive caring relationships between parents and their children and to help parents develop effective management strategies. Specific aims are to (1) increase parents' competence in managing common behaviour problems and developmental issues found among children with disabilities; (2) reduce parents' use of coercive and punitive methods of disciplining children; (3) improve parents' personal coping skills and reduce parenting stress; (4) improve parents' communication about parenting issues and help parents support one another in their parenting roles; and (5) develop parents' independent problem-solving skills (Sanders *et al.*, 2004a). Key aspects of positive parenting comprise "ensuring a safe and interesting environment", "creating a positive learning environment", "using assertive discipline", "adapting to having a child with a disability", "having realistic expectations", "being part of the community", and "taking care of yourself as a parent" (Sanders *et al.*, 2003b).

1.2 Aims of the present study

As there is a lack of preventative, evidence-based (Chambless & Hollon, 1998) and easily (commonly) accessible family intervention programs for developmental disabilities worldwide (Reichow, Volkmar, & Cicchetti, 2008) (cf. Loesel, 2006) testing the Stepping Stones Triple P Program is a matter of some scientific and social urgency also in German-speaking and other European countries. Until now studies on its effectiveness and social validity have been carried out exclusively by the Sanders research group in Australia (Probst, 2009). Studies on social validity are urgently required for

ensuring program quality (Rossi, Lipsey, & Freeman, 2004) because cross-cultural and cross-countries transferability of parent training programs cannot be presupposed. The social validity of an intervention method is assessed to the extent its goals, treatment methods and treatment effects are accepted by relevant social groups currently involved in the interventions or in the future (see Callahan, Henson, & Cowan, 2008). These groups are defined as (1) professionals, such as therapists or special education teachers, (2) paraprofessionals, such as non-licensed educational aides, higher-level students of psychology, medicine, and education, parents trained as co-therapist; (4) nonprofessionals, such as lay parents and other significant lay persons in the community.

The aim of the present study is to evaluate key aspects of the social validity of the SSTP program. Guided by the work of Whittingham, Sofronoff and Sheffield (2006) the following two dimensions of the social validity of the SSTP parent training program will be investigated in the target group: (1) “ethical acceptability” and (2) “practical applicability”.

The ethical acceptability of an intervention method can be regarded as a key criterion of social validity because it only makes sense to evaluate a method’s applicability if the method is ethically acceptable with regard to common as well as professional ethical norms, such as the United Nations Convention on the Rights of the Child (Office of the United Nations High Commissioner for Human Rights, 2002) and the APA Ethical Principles of Psychologists and Code of Conduct (American Psychological Association, 2002). In addition to ethical acceptability, an intervention can only be considered as socially valid if it is perceived to be practically applicable for the target group, in this case the belief that goals and methods can be implemented by the parents of children with developmental disabilities.

The evaluation of the social validity of the program is based on the evaluation of the SSTP program described and demonstrated in the video “Stepping Stones: A Survival Guide for Families with a Child Who Has a Disability” (Sanders *et al.*, 2003a). The social validity of (a) global characteristics of the program, and (b) the specific parenting strategies contained in the program are investigated. The study is carried out in a group of master-level psychologists who are classified as paraprofessionals. Paraprofessionals often play key roles in the implementation and monitoring of preventive and rehabilitative family interventions (Oneal, Reeb, Korte, & Butter, 2006).

2. Method

2.1 Participants

A total of 45 master-level students of psychology took part voluntarily and anonymously in the study (85% female, mean age = 31.06 years, SD = 7.69). Based on the master studies curriculum, all students had attained the

bachelor level of psychology qualification as well as sound knowledge in clinical and educational psychology, intervention methods and professional ethics. The study was carried out in two sessions, which lasted 90 minutes each, with an interval of one week within a regular curriculum-based lecture given by the first author at the University of Hamburg, Germany. 33 participants took part in both sessions and filled out both parts of the quantitative questionnaire on the social validity of the SSTP (see section 2.2.2). This constituted the *core sample* on which the quantitative results of the study are based (Table 1 and 2). 79% were female and the mean age was 31.3 years ($SD = 8.4$). The mean total number of semesters studied in psychology was 6.2 ($SD = 2.1$). There was thus a drop out rate of 27%. There were no significant differences between the final sample and the dropouts with regard to demographic as well as evaluative variables.

The students filled out both parts of the qualitative questionnaire at home (see Table 3, items 1-6 belong to part 1, items 7-15 to part 2). The return rate was 73 percent, that is 24 of the core sample of 33 students completed both parts. Thus, there was a drop out rate of 27%. Again, there were no significant differences between the final sample of 24 students on which the results of the qualitative questionnaire are based (Table 3) and the dropouts with regard to demographic and evaluative variables.

2.2 Materials

2.2.1 Stepping Stones Video

The video shown is entitled “Stepping Stones Triple P: A survival guide for families with a child who has a disability” (total length: 80 min., Sanders *et al.*, 2005). It contains five parts with explanations of parenting situations. The headings of the five parts are as follows: Part One: “What is Positive Parenting? Seven key aspects of positive parenting”; Part Two: “Causes of behaviour problems”; Part Three: “Promoting children’s development: fourteen parenting strategies for developing a positive parent-child relationship, encouraging desirable behaviour and teaching new skills and behaviours”; Part Four: “Managing misbehaviour: eleven strategies”; Part Five: “Family survival tips: 5 recommendations for coping with everyday life”.

In each of the five parts the content is first introduced, followed by demonstrations of the relevant parenting situation. These took place at home between parents and their disabled child and are explained by Matthew Sanders in the form of an interview. Finally, the content is summarized. The video was dubbed into German in the version used in this study.

2.2.2 Quantitative questionnaire on the social validity of the SSTP

The quantitative questionnaire on the social validity of the SSTP contains a total of 43 items: (a) 38 items relate to different parts of the Stepping Stones program shown in the video and evaluate key aspects, strategies and

tips for positive parenting (items 1-37) as well as a program overall (item 38). They include 7 items on Key Aspects of Positive Parenting (part 1), 14 items on Strategies for Promoting Children's Development (part 3), 11 items on Strategies for Managing Misbehaviour (part 4), 5 items on Family Survival Tips (part 5), as well as one global evaluation item (see Table 1). The conception of the items was based on the study of Whittingham *et al.* (2006). The specific aspects of the strategies presented in the video were evaluated with regard to "ethical acceptability" and "perceived practical applicability" on a 5-point Likert scales (1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree). Example items: (1) Establishing ground rules: "I consider the presented strategy to be ethically acceptable" (1 = "strongly disagree" to 5 = "strongly agree"); "I consider the strategy to be usable" (1 = "strongly disagree" to 5 = "strongly agree"); (2) Overall Evaluation: "I consider the parent training program SSTP to be ethically acceptable" (1 = "strongly disagree" to 5 = "strongly agree"); "I consider the parent training program SSTP to be usable" (1 = "strongly disagree" to 5 = "strongly agree").

(b) The questionnaire contained 5 additional items on global characteristics of the SSTP program. These were evaluated on a single dimension on the same 5-point scale. All five items are shown in Table 2. Example item: "The presented parenting behaviour leaves parents and children enough room for flexibility" (1 = "strongly disagree" to 5 = "strongly agree").

2.2.3 Qualitative questionnaire on the social validity of the SSTP

The qualitative questionnaire on the social validity of the SSTP contained 15 items with an open answer format (see Table 3). Items 1, 3, 4, 7, 8 and 12 related to parts 1 to 5 of the Stepping Stones video. Example item: "Please evaluate the presented key aspects of positive parenting demonstrated in part 1 and give reasons for your answer". Items 2, 5, 6, 8-11 included student statements from a previous pilot questionnaire pre-study on the SSTP with another sample of master-level psychology students from the University of Hamburg. Example item: "Please comment on the following statement on the video from a former student who evaluated this video: 'Quiet Time and Time Out are good for bringing peace to both parents and children'". Items 13-15 related to global characteristics of the program quality. Example item: "How would you characterize the recommended parenting behaviours". The answers to these items were categorised using a 5 point rating scale (1 = very negative, 2 = negative, 3 = neutral, 4 = positive, 5 = very positive) by two raters independently. The concordance between the raters was satisfactory ($\kappa = 0.85$).

2.3 Procedure

The study was carried out in two sessions, each about 90 min long. In the first session, following an approximately 10 min introduction to the study and

the Stepping Stones Triple P parenting program (origin, target group, basic principles and structure), the students were shown the first three parts of the Stepping Stones Video using a video projector presentation. At the second session a week later the last two parts of the video were presented. The students were also briefly informed about the family workbook (Sanders *et al.*, 2003b, 2004b). The workbook focuses on the strategies presented in the video, the transfer of the strategies to everyday life and planning for high-risk situations (“planned activity training”, Sanders *et al.*, 2003c, pp. 125-149).

2.4 Data Analysis

The statistical analysis of the data from the quantitative questionnaire was carried out using SPSS, Version 15. Where the distribution of the evaluations is reported the 5-point Likert scales are reclassified as follows: 1 = very negative, 2 = negative, 3 = neutral, 4 = positive, 5 = very positive.

3. Results

The results of the present study are based on the analysis of the quantitative questionnaire, the qualitative questionnaire, and the correlations between both instruments.

3.1 Results from the quantitative questionnaire on the social validity of the SSTP

The results for the individual key aspects, parenting strategies and family survival tips presented in the Stepping Stones Video (Items 1-37) as well as the overall program evaluation (Item 38) are shown in Table 1 (pages 50-51).

The following results for the individual key aspects, parenting strategies and family survival tips presented in the Stepping Stones Video (Items 1-37) can be shown.

Aspects of Positive Parenting. The ethical acceptability of the principles presented in Part 1 of the video was rated by the participants on average as positive for all items. The means for the 7 individual aspects ranged between 4.06 and 4.75. The least positively evaluated aspect was “Using assertive disciplines” with $M = 4.06$. Similarly, practical applicability was predominantly rated positively, but to a lesser extent (means ranged between 2.97 and 3.55).

Strategies for Promoting Children’s Development. The ethical acceptability of the 14 Strategies for Promoting Children’s Development presented in Part 3 of the video was rated on average as positive for all items (means ranged between 3.33 and 4.85). Practical applicability was also evaluated predominately positively, though to a lesser extent (means ranged between 3.22 and 4.48).

Table 1 - *Results of the evaluation of key aspects and strategies in the SSTP and the overall program evaluation*

Item No.	Key aspects, Strategies and Tips for Positive Parenting	Ethical acceptability	Practical applicability
		M (SD)	M (SD)
7 Key Aspects of Positive Parenting			
1	(1) Ensuring a safe and interesting environment	4.42 (0.81)	3.55 (0.99)
2	(2) Creating a positive learning environment	4.65 (0.61)	3.35 (0.88)
3	(3) Using assertive discipline	4.06 (1.01)	3.09 (0.82)
4	(4) Adapting to having a child with a disability	4.60 (0.67)	3.50 (0.98)
5	(5) Having realistic expectations	4.63 (0.66)	3.44 (1.11)
6	(6) Being part of the community	4.72 (0.58)	3.47 (0.95)
7	(7) Taking care of yourself as a parent	4.75 (0.57)	2.97 (0.90)
14 Strategies for Promoting Children's Development			
8	(1) Spend quality time with your child	4.66 (0.70)	3.72 (0.89)
9	(2) Communicate with your child	4.73 (0.67)	3.97 (0.95)
10	(3) Show affection	4.85 (0.36)	4.48 (0.71)
11	(4) Praise your child	4.44 (0.88)	4.00 (1.05)
12	(5) Give your child attention	4.61 (0.70)	3.82 (0.73)
13	(6) Provide other rewards	3.91 (1.10)	3.79 (0.99)
14	(7) Provide engaging activities	4.65 (0.55)	3.56 (0.84)
15	(8) Set up activity schedules	4.24 (0.97)	3.56 (0.91)
16	(9) Set a good example	4.72 (0.52)	4.03 (0.86)
17	(10) Use physical guidance	4.12 (0.86)	3.52 (0.83)
18	(11) Use incidental teaching	4.55 (0.67)	3.97 (0.88)
19	(12) Use ask, say, do	4.27 (0.91)	3.67 (0.99)
20	(13) Teach backwards	4.09 (0.89)	3.22 (1.10)
21	(14) Use behaviour charts	3.33 (1.14)	3.39 (1.14)
11 Strategies for Managing Misbehaviour			
22	(1) Use diversion to another activity	3.70 (1.19)	2.94 (0.93)
23	(2) Establish clear ground rules	3.94 (1.00)	3.52 (1.00)
24	(3) Use directed discussion for rule breaking	3.97 (1.03)	3.72 (0.92)
25	(4) Use planned ignoring for minor problem behaviour	3.00 (1.16)	3.24 (1.00)
26	(5) Give clear, calm instructions	4.39 (0.79)	3.50 (0.76)
27	(6) Teach your child to communicate what he/she wants	4.18 (0.95)	2.88 (0.99)

Item No.	Key aspects, Strategies and Tips for Positive Parenting	Ethical acceptability	Practical applicability
		M (SD)	M (SD)
28	(7) Back up your instructions with logical consequences	4.00 (1.00)	3.48 (0.94)
29	(8) Use blocking for dangerous behaviour	4.12 (0.89)	3.94 (0.75)
30	(9) Use brief interruption for disruptive behaviour	3.27 (1.07)	3.15 (0.87)
31	(10) Use quiet time to deal with misbehaviour;	2.64 (1.22)	2.97 (1.07)
32	(11) Use time-out to deal with serious misbehaviour	2.24 (1.20)	2.79 (1.19)
5 Family Survival Tips			²
33	(1) Work as a team	¹	3.61 (0.97)
34	(2) Avoid arguments in front of your child	¹	3.30 (0.98)
35	(3) Get support	¹	3.85 (0.94)
36	(4) Have a break	¹	3.24 (0.94)
37	(5) Think positive	¹	3.00 (0.83)
38	Overall evaluation of the training program (1 item)	3.48 (1.09)	3.00 (0.75)

Note: M = mean, SD = standard deviation

¹ Ethical acceptability was not evaluated for this dimension due to expected highly positive convergence

² "I consider the recommendation to be practically applicable for families with disabled children"

Strategies for Managing Misbehaviour. The ethical acceptability of the 11 strategies from Part 4 of the video was predominantly rated positively with three exceptions: "Use planned ignoring" (M = 3.00), which was evaluated neither positively nor negatively "Use quiet time to deal with serious misbehaviour" (M = 2.64) and "Use time-out to deal with serious misbehaviour" (M = 2.24), which were evaluated negatively (the means ranged between 2.24 and 4.39). As "quiet time" and "time-out" were the only strategies to be evaluated negatively the percentage distributions of the evaluations are reported. The ethical acceptance of "quiet time" was rated as very negative by 21.2% of the sample, by 27.3% as negative, by 24.2% as neither positive nor negative, by 21.2% as positive and by 6.1% as very positive. The ethical acceptance of "time-out" was rated as very negative by 33% of the sample, by 30% as negative, by 21% as neither positive nor negative, by 9% as positive and by 6% as very positive. The practical applicability of all but 4 strategies was predominantly evaluated positively (means of the eleven strategies ranged between 2.79 and 3.94): of these four ("Use diversion to another activity", "Teach your child to communicate what they want", "Use quiet time" and "Use time-out"), "Use time-out" was the most negatively evaluated.

Family Survival Tips. The five tips presented in Part 5 of the video, which were not rated for ethical acceptability, were predominantly rated positively for their practical applicability except “Think positive” ($M = 3.00$), which was rated neither positively nor negatively (the five means ranged between 3.00 and 3.85).

The following results for the overall evaluation of the SSTP program items in terms of ethical acceptance (Item 38) can be shown (see Table 1): the acceptance of the program was rated on average as positive ($M = 3.48$). Specifically, it was rated as very negative by 6% of the participants, by 9% as negative, by 33% as neither positive nor negative, by 33% as positive and by 18% as very positive; the practical applicability of the program was rated on average as neither positive nor negative ($M = 3.0$) and as very negative by 3% of the participants, by 18% as negative, by 55% as neither positive nor negative, by 24% as positive and by 0% as very positive. The overall evaluation of the program in terms of ethical acceptability was on average clearly less positive ($M = 3.48$) than the evaluation of the individual aspects and strategies averaged over all 32 items ($M = 4.13$) as was the overall evaluation in terms of practical applicability of the program on average clearly less positive ($M = 3.00$) than the evaluation of the individual aspects and strategies averaged over all 37 items ($M = 3.50$).

The results from Items 39-43 of the questionnaire on the social validity of the SSTP relating to the evaluation of global aspects of the SSTP program are summarized in Table 2. The flexibility of the program (Item 41) was rated on average as negative ($M = 2.55$) and the promotion of the development of the child’s independence (Item 40) on average as slightly positive ($M = 3.06$). The practical applicability of the presented strategies for both working parents (Item 41, $M = 2.42$) and single parents (Item 42, $M = 2.55$) was rated on average as negative. Finally, the appropriateness of the presented examples of problem behaviour (Item 43) on average as slightly negative ($M = 2.93$). In summary, the items 39-43 on *global* aspects of the program (see Table 2) were evaluated less positively than the items 1-38 on *individual* aspects and strategies of the program on average (summarized over all 38 items). The students from the sample judged missing flexibility and restricted applicability for working and single parents to be the most critical global aspects of the program.

Table 2 - Results of the quantitative questionnaire on the social validity of the SSTP: General characteristics of the SSTP program

Item No.	Items: Global aspects SSTP	M (SD)
39	The presented parenting strategies leave parents and children enough room for flexibility	2.55 (1.03)
40	The presented parenting strategies promote the development of the child's independence	3.06 (1.12)
41	The presented parenting strategies can also be used by working parents	2.42 (1.09)
42	The presented parenting strategies can also be used by single parents	2.55 (1.15)
43	The examples of problem behaviour are appropriate	2.93 (1.12)

Note: M = mean, SD = standard deviation

3.2 Results from the qualitative questionnaire on the social validity of the SSTP

The results of the 15 items are summarized in Table 3 and show attitudes and evaluations towards the program.

(a) The individual key aspects of Positive Parenting presented in the parent video (Item 1) were approved to be appropriate goals by the large majority (81%). However, this evaluation was qualified by criticisms (see Item 2) expressed by a large number of students (64%), stressing that terms like "realistic expectations" or "appropriate (child) behaviour" were not defined exactly enough in the video with the consequence that child's needs could be neglected in favour of parents' egocentric interests.

(b) "Causes of behaviour problems" (Item 3) was evaluated positively as an important topic for parents by a clear majority of 71%. It was criticised by a minority deeming that family's influence on the child was not emphasized enough.

(c) Promoting children's development in terms of individual strategies (Item 4) was appraised as relevant and meaningful for enhancing child's abilities and skills and as usable by the clear majority of 76% of the respondents. However, this affirmative position was qualified (see Items 5 and 6) by about the half of the students (55%), criticizing parenting examples as being too mechanical, indicating a tendency to continuously categorize

child's behaviour as right or wrong, rewarding or punishing, and increasing the risk of neglecting the child's individuality and creativity.

(d) "The strategies of managing misbehaviour (excluding quiet time and time-out)" (Item 7) were evaluated positively only by a minority of 35% as effective and practicable in making daily life more comfortable and easy for all family members. The majority (60%) evaluated these strategies negatively seeing a lack of parental empathy and consideration of the child's individual needs (Item 7). Likewise, the strategies of "Quiet Time" and "Time-Out" (item 8) were evaluated by the great majority (79%) as negative, focusing on repressive and ethically dubious features of time-out procedures. Only 17% of the responders judged these methods to be acceptable. Items 9-11 also relate to "Strategies of managing misbehaviour". The answers to these revealed further critical attitudes towards this part of the video. Almost all respondents (92%) thought that neither the causes of the behaviour problems (Item 9), nor the discussion with the child about reasons for his/her behaviour and alternative behaviours were not presented adequately. Whereas 46% of the respondents criticised that the parenting strategies failed to teach autonomy and independence, focusing too much on conditioning, 50% of students were convinced that children are supported in acquiring self-dependence (item 10). However, 74% saw a risk in the inflexible and dogmatic use of strategies from "managing misbehaviour" (Item 11).

(e) The recommendations presented in Part 5 were evaluated positively by the large majority (85%) as meaningful, effective and practical.

(f) The items 13-15 related to global evaluative aspects of the program. 62% of the students characterized the recommended parenting behaviours (Item 13) as lacking empathy and promoting dependency, whereas 25% of the sample evaluated the parenting behaviour as supporting, loving, and effective. The perceived goals of the Stepping Stones parent training (Item 14) were positively evaluated by 50% of the sample as enhancing self-efficacy and focusing on child acceptance, whereas 46% believed that the goals emphasized too much obedience and thus neglected autonomy. Responding to the question of chances and risks of the program (Item 15), 58% focused on risks, stressing rigid patterns, whereas 25% of the sample focused on chances, stressing empowering children with more autonomy. Overall, the results from the qualitative questionnaire indicate that (1) individual elements of the programs, such as "key aspects", "strategies for promoting development", and "recommendations for family life" were appreciated by the large majority of the students (70 to 85%). However, (2) a significant percentage (50 to 65%) qualified their positive evaluations of individual aspects of the program by criticizing overall features of the program, stressing neglecting child's needs for autonomy, individuality and loving care. Furthermore, (3) the demonstrated use of "managing misbehaviour", specifically of time-out strategies, was criticized by a large majority of about 80%.

Table 3 - Results from the 15 item Qualitative Questionnaire

15-items SSTP Qualitative Questionnaire	%-pos ¹ %-neu ² %-neg ³	Examples for positive and negative statements
(1) "Part 1: What is Positive Parenting? In Part 1 seven principles (aspects) of Positive Parenting have been described ("ensuring safe, interesting environment" etc., all 7 aspects were presented). Please evaluate the presented principles and give reasons for your judgement"	pos=80.9% neu=0.0% neg=19.1%	<u>pos</u> : "I appreciate the principles as guidelines never to be neglected"; <u>neg</u> : "...very unspecific, the rules in each case are not addressed clearly";
(2) "Please comment on the following statement on the video (Part 1) from a student (from a preliminary study): I think there is too much emphasis on the "correct" behaviour. What is "correct behaviour and how can parents know that the behaviour they deem as correct is really the best for the child?"	pos=22.7% neu=13.6% neg=63.7%	<u>pos</u> : "I don't agree. I understood that the strategies have to be fitted to the specific situation. They are a framework for very insecure or inexperienced parents and will not harm the child in any way"; <u>neg</u> : "Exactly, that's the point that annoys me most What is the definition of "correct", "realistic expectation", "consequence"? You want a functioning child? It's not about the child - it's about the parents' peace of mind";
(3) "Part 2: Causes of behaviour problems ("genetic and biological make-up", "family environment", "influences from peers, school, and media"). Please evaluate the presented contents and give reasons for your judgement"	pos=71.4% neu=4.8% neg=23.8%	<u>pos</u> : "interesting and useful; non-professionals often don't know these things"; <u>neg</u> : "This part is too short, especially about influences that come from outside the family. The immense impact of parents decreases over time...";
(4) "Part 3: Promoting children's development ("spend quality time with your child" etc., all 14 strategies were presented). Please evaluate the presented strategies and give reasons for your judgement"	pos=76.2% neu=4.8% neg=19.0%	<u>pos</u> : "I think the strategies shown are very good for promoting development; they are reasonable and simply to use"; <u>neg</u> : "The strategies are based on learning theories. However, the question of the right attitude toward the child is not discussed. I think the approach is too mechanical";
(5) "Please comment on the following statement (...): The parenting behaviours demonstrated in Part 3 fail to adequately take into account the children's and parents' individuality and intuition"	pos=36.4% neu=9.1% neg=54.5%	<u>pos</u> : "I disagree; I think the strategies shown are a framework that will be reduced step-by-step (gradually) so that individuality and intuition are promoted"; <u>neg</u> : "I agree – everything seems like a manual for a mechanical toy";

15-items SSTP Qualitative Questionnaire	% -pos ¹ % -neu ² % -neg ³	Examples for positive and negative statements
(06) "Please comment on the following statement (...): I think the permanent assessment of the child's behaviour in Part 3 is highly problematic: Whatever the child is doing, it has always either to be rewarded or punished for it."	pos=41.0% neu=4.5% neg=54.5%	<u>pos</u> : "I think the program reinforces constructive behaviour that is necessary for the child's development and reduces destructive behaviour by ignoring it ..."; <u>neg</u> : "I agree. With this program children are trained only to function";
(07) "Part 4: Managing misbehaviour ["use diversion to another activity" etc.; 9 of the 11 strategies are included here; "quiet time" and "time out is analyzed separately, see item 08]. Please evaluate the presented strategies and give reasons for your judgement".	pos=60.0% neu=5.0% neg=35.0%	<u>pos</u> : "Overall I think the strategies are very good, because their goal is to ease the live)s of everyone involved"; <u>neg</u> : "These strategies as they are shown are all unacceptable. They do attain the goal in some cases. The needs of the child are not further considered. Threats and punishments come first.";
(08) "Please evaluate the presented strategies Quiet Time and Time-out and give reasons for your judgement"; "Please comment on the following statement (...) on the video, Part 4: Quiet Time and Time Out are good for bringing peace to both parents and children".	pos=16.7% neu=4.2% neg=79.1%	<u>pos</u> : "I think its good because it's practical" (...) I agree because both parties get time to to think"; <u>neg</u> : "... reminds me a lot of locking up children and of parental arbitrariness";
(09) "Please comment on the following statement (...) on the video, Part 4: The possible causes of the child's behaviour are not discussed adequately".	pos=8.3% neu=0.0% neg=91.7%	<u>pos</u> : "This statement only partly true, for it is said "teach your child to communicate what it wants and feels [thus, the child learns to communicate its needs and the reasons for its misbehaviour]"; <u>neg</u> : "Not much is spoken to the child about reasons and possible alternatives – a specific behaviour is set and demanded That's a major flaw of the program".
(10) "Please comment on the following statement (...) on the video, Part 4: The child is disciplined rather than brought up to be more independent and self-responsible."	pos=50.0% neu=4.2% neg=45.8%	<u>pos</u> : "I don't agree because the program helps the child to become independent, e.g. by the strategy "Teach your child to communicate what it wants"; <u>neg</u> : "That's right, the child is simply conditioned "
(11) "Please comment on the following statement (...) on the video, Part 4: The recommended strategies are presented in a dogmatic way. As a consequence, there is a risk of implementing parental strategies uncritically and inflexibly."	pos=21.7% neu=4.4% neg=73.9%	<u>pos</u> : "I don't agree because parents are offered a lot of for implementing strategies"; <u>neg</u> : "That's right! It looks like there are no alternatives";

15-items SSTP Qualitative Questionnaire	%-pos ¹ %-neu ² %-neg ³	Examples for positive and negative statements
(12) "Part 5: Family survival Tips ("work as a team" etc, the five tips were listed). Please evaluate the recommendations and give reasons for your judgement."	pos=85.0% neu=5.0% neg=10.0%	<u>pos</u> : "They are meaningful and effective because they can be put into practise"; <u>neg</u> : "Sounds pretty good, but most of them can't be realised";
(13) How would you characterise the recommended parenting behaviours?	pos=25.0% neu=12.5% neg=62.5%	<u>pos</u> : "Promoting, positive, clear, understandable for the child; supporting and caring"; <u>neg</u> : "It looks a bit unsympathetic, similar to an operation instruction";
(14) Please describe in your own words the goals of the Stepping Stones parent training	pos=50.0% neu=4.2% neg=45.8%	<u>pos</u> : "To raise awareness for systematic effects in education (e. g. consequent behaviour) – to raise awareness for self-efficacy; - to accept the child as he/she is"; <u>neg</u> : "Well functioning disabled children, who reduce parents' stress level. Increased autonomy, greater independence of both parties, and appropriate child behaviour fade into the background";
(15) What chances and risks do you see in this parent training?	pos=25.0% neu=16.7% neg=58.3%	<u>pos</u> : "children are enabled to live an independent life" <u>neg</u> : "the child with his/her unique behaviour is pressed into a rigid pattern";

Notes

¹ Categories of "positive" and "very positive" have been summarized.

² Neutral (neither positive nor negative, partly-partly).

³ Categories of "negative" and "very negative" have been summarized; "positive" means: "an evaluation in favour of the program"; due to some missing/not analyzable data the number of respondents varies between 22 and 24.

3.3 Correspondence between the Quantitative (QN) and Qualitative (QL) Questionnaires

Pearson correlations between the variables in the two questionnaires were carried out in order to analyse the correspondence between the quantitative and qualitative questionnaires. The selected variables from the quantitative questionnaire include the scales (a) "ethical acceptability of key aspects-QN" (computed by summarizing across all 7 items, see Table 1, Mean (M) = 4.54, SD = 0.45), (b) "ethical acceptability of promoting development-QN" (summarized across all 14 items, Table 1, M = 4.37, SD = 0.44), (c) "ethical acceptability of managing misbehaviour-QN" (summarized across all 11 items, Table 1, M = 3.59, SD = 0.71), and (d) "global evaluative aspects of

SSTP-QN” (summarized across items 1, 2 and 5 in Table 2 and item “overall evaluation of the training program in terms of ethical acceptability”, Table 1, $M = 3.01$, $SD = 0.85$). The selected variables from the qualitative questionnaire included the scales (a) “evaluation of key aspects-QL” (summarized across item 1 and 2, Table 3, $M = 2.98$, $SD = 1.12$), (b) “evaluation of promoting development-QL” (summarized across items 4 to 6, Table 3, $M = 3.03$, $SD = 1.26$), (c) “evaluation of managing misbehaviour-QL” (summarized across items 7-11, Table 3, $M = 2.72$, $SD = 0.67$), and (d) “global evaluative aspects of SSTP-QL” (summarized across items 13-15, Table 3, $M = 2.63$, $SD = 1.35$).

The results of the correlation analyses revealed positive, for the most part significant, correlations between the variables of the quantitative (QN) and qualitative (QL) questionnaires. Specifically: (a) the scale “ethical acceptability of key aspects-QN” correlated nonsignificantly ($r = 0.28$, ns) with “ethical acceptability of key aspects-QL” and significantly ($r = 0.54$, $p < .01$) with “global evaluative aspects of SSTP-QN”; (b) the scale “ethical acceptability of promoting development-QN” correlated significantly with “evaluation of promoting development-QL” ($r = 0.58$, $p < .01$) and “global evaluative aspects of SSTP-QN” ($r = .71$, $p < .01$); (c) the scale “ethical acceptability of managing misbehaviour-QN” correlated significantly with “evaluation of managing misbehaviour-QL” ($r = .49$, $p < .05$) and with “global evaluative aspects of SSTP-QN” ($r = .63$, $p < .01$); (d) the scale “global evaluative aspects of SSTP-QN” correlated significantly with the corresponding scale “global evaluative aspects of SSTP-QL” ($r = .73$, $p < .01$). In sum, all correlations were significant at least at the 5-percent level, except the correlation between the two “acceptability of key aspects” variables, possibly due to ceiling effects. Thus, in general the results indicate sufficient concordance between the two measurement instruments.

4. Discussion

The aim of the present study was to assess central aspects of the social validity of the parent training program Stepping Stones Triple P.

4.1 Sample of master level students

The study was carried out with a sample of paraprofessionals consisting of master level students of psychology. These can be considered to be a relevant group for a first-step social validation in a new sociocultural environment because it can be assumed that the great majority of the participants will be working as professionals in the health sector and be involved in preventative and rehabilitative programs in the near future. Further, as the members of this group are as yet not bound and obliged to therapy schools - such as behavioural, psychodynamic or systemic-family orientated approaches - they may be less biased and more open-minded towards evalua-

tion studies like the present one. Nevertheless, the inclusion of experts having clinical expertise with children with disabilities is absolutely essential for a second-step social validation, in order to ensure comprehensive judgments based on real-life experiences with clients and their families, and with various diagnostic subgroups. Overall, the analysis reveals that seemingly there was no general anti-behaviouristic bias, as has been reported to be characteristic for some part of students and professionals of Psychology in Germany (Lueck, 1991), shown by this sample of students. For, typical behaviouristic strategies of behaviour shaping, such as “Use ask, say, do” or “Teach backwards”, of contingency management, such as “Use Behaviour Charts” or of “antecedent interventions”, such as “Set up activity schedules” were evaluated as moderately to highly positive in terms of ethical acceptability. Negative evaluations focused clearly on the two timeout procedures.

4.2 Overall evaluation of the program

Overall, the central criterion of social validity, ethical acceptability, was evaluated positively. This result is in line with results of the studies from Whittingham *et al.* (2006), Roberts *et al.* (2006) and Plant and Sanders (2007b), which were carried out on parents of children with developmental disabilities. However, the practical applicability of the program was evaluated overall only neutrally in this study. It is possible that the practical applicability of the program was not evaluated positively because the participants saw a lack of consideration of single and working parents and did not judge the Australian family model with the mother apparently being a housewife and solely responsible for the parenting to be generally valid in the German context. This point could be relevant in other European countries. In contrast, the practical applicability of the SSTP program was evaluated more positively in the Whittingham *et al.* (2006) study from Australia.

The overall evaluation of the ethical acceptance was not as positive as the mean acceptance of the *individual* strategies. A similar result can be seen to a lesser degree for practical applicability. That the overall evaluation of the program was less positive than the average evaluation of the individual strategies on both dimensions could be due to the following factors: a) the overall evaluation was made at the end of the video presentation and was thus biased by salient negatively perceived individual strategies, such as the time-out strategies (see below); (b) doubt about the implementation of the program in German family life; (c) the critical evaluation of the flexibility of the program for both parents and children; (d) critical evaluation of the program quality with too little emphasis on empathy, enjoyment, self-determination, independence, and consideration of the child’s individual needs and with too much emphasis on control, obedience and dependency.

4.3 Evaluation of individual parenting aspects and strategies

The results revealed the key social validity criterion of ethical accept-

ability was evaluated positively for a total of 29 of the 32 individual parenting aspects and strategies. This overall positive result is in line with the results of the Whittingham *et al.* (2006) and Roberts *et al.* (2006) studies. The only strategy to be evaluated neither positively nor negatively was “using planned ignoring for minor problem behaviour”. This result is also consistent with the results of the Whittingham *et al.* (2006) study. “Planned ignoring” was viewed critically by the parents in this study because it did not take into consideration the causes of children’s behavioural problems. The strategies of “quiet time” and “time-out”, which were evaluated negatively, will be discussed in the next section.

4.4 Evaluation of time-out strategies

The strategies “quiet time to deal with misbehaviour” and “time-out to deal with serious misbehaviour” are both “time-out from positive reinforcement” strategies and are classified in the literature as “exclusionary time-out” (Parrish, 1994) or simply as time-out strategies. They were the only strategies in the SSTP program to be evaluated negatively with regard to their acceptance. “Time-out” was evaluated as negative by two thirds of the participants and “quiet time” by approximately half. There were also many critical negative comments in the qualitative questionnaire relating to these strategies. These could be classified as (a) general ethical arguments, for example, “restricting the development of the child’s personality”, (b) children’s rights topics, for example, “limiting freedom through restrictive punishments that limit the child’s movement”, and (c) professional-ethical arguments, for example, “endangering the child’s health by accepting the risk of negative consequences for the child’s development” and “restricting the right for the best possible treatment”.

According to the authors (Sanders *et al.*, 2003a, pp. 29-30), quiet time involves removing the child from the activity in which the problem behaviour occurred and having him/her sit quietly on the edge of the activity for a short time (e.g., in the corner of the room). The criterion for using time-out is when the child does not stay in quiet time or as a consequence for temper outbursts or serious misbehaviour such as hurting others. In time-out the child is put in another room away from everyone else and kept there for a short time. The room should be uninteresting yet safe, with good lighting and ventilation. The door is only closed if the child does not stay in the room. Time-out and quiet time is ended when then the child has remained quiet for the agreed time (e.g., one minute).

The overall negative evaluation of the time-out strategies in the qualitative questionnaire is consistent with the results of the Whittingham *et al.* (2006) study, where a portion of the parents with children with autism evaluated these strategies critically because they ignore the activating events and stabilizing factors of the problem behaviour and make the implementation of alternative (non-aversive) developmentally adequate methods (e.g.,

“social story” approaches) more difficult. In addition, caution with regard to the use of the time-out strategies for the problem behaviour of individuals with disabilities was reported in an Australian review of the SSTP method (Wiese *et al.*, 2005): “Again, identical to Triple P (standard program), the use of time-out may be of concern to DADHC [Department of Ageing, Disability & Home Care, Australia] given its policy on Restricted Practices (Behaviour Intervention and Support Policy, 2003, p. 49). In contrast to these results, in two clinical studies from Roberts *et al.* (2006) and Whittingham *et al.* (2009b), time-out strategies were evaluated predominantly as positive (“helpful”) by parents of children with mental retardation and autism.

The low social acceptance of the time-out methods in the current study may be due to the fact that there was a lack of a convincing context for using these strategies as they were not presented as being part of a global educational-therapeutic concept. There is general agreement on this concept in the literature (Bregman, Zager, & Gerdtz, 2005) and it has four main features:

(1) *Seriousness of the problem behaviour as a criterion for indication:* There is general agreement that aversive methods such as time-out should only be used when the problem behaviour is serious and destructive, and endangers the health of the client/ patient or family member, such as physical aggression, intentional damage to property, tantrums, and specific types of self-destructive behaviour (Parrish, 1994; Carr, 1998; Scott, 1998). However, the video booklet and workbook state that the time-out strategies are recommended not only for serious misbehaviour, but also for everyday problems of obedience (Sanders *et al.*, 2003a, p. 29-30). Furthermore, the exit conditions are formulated conditionally (peaceful behaviour for a set period of time) so that the time-out periods can be of a considerable duration.

The time-out strategies in the video were applied in four examples (see Table 4). In two of them, the misbehaviours consisted in not following the mother’s instruction (Example 1), such as to stop throwing toys on the floor or to put on one’s shoes (Example 3), which are comparatively minor problem behaviour. In the other two, the reasons for punishment were not clear (Example 2) or not reported (Example 4), respectively.

(2) *Urgency of the intervention:* It is not clear in the video and workbook that the restrictive interventions are to be used when they are urgently needed, unavoidable (Bregman *et al.*, 2005; Harris, 1998) and according to the principle of the “least restrictive alternative” (Rojahn & Weber, 1996; Bernard-Opitz, 2007), where all other available alternatives with less restrictiveness have been exhausted (Parrish, 1994). Furthermore, it is not adequately clear whether a “functional behavioural analysis” was previously carried out or whether the time-out strategy was carried out within a comprehensive treatment approach for this problem behaviour (Bregman *et al.*, 2005).

In all four examples (see Table 4), video and workbook failed to indicate the urgency of the situations and to document results from functional behavioural analysis. For example in the case of Michaela (Table 4, No. 1),

what are possible causes and functions of “throwing toys on the floor”? Is the child bored with the game? Or enjoying the body movement? Or fascinated by the noises? Or wanting to annoy her mother?

(3) *Analysis of possible detrimental effects*: Possible detrimental effects are not sufficiently described, as they are by Parrish (1994), Harris (1998) and Howlin (1998a, b). These include taking offence, loneliness and feeling excluded. Further unwanted consequences could be “modelling inappropriate behaviour” and “suppressing non-targeted behaviour” (Parrish, 1994). The parents need to be informed of such detrimental consequences (“informed consent”, Parrish, 1994).

(4) *Ethical considerations and monitoring*: The video and workbook failed to mention that time-out strategies are highly controversial methods that are only to be used in families and institutions in the short-term, when they are strongly indicated, and when they are continually monitored and are carried out under professional supervision (Parrish, 1994; Howlin, 1998a; Bregman *et al.* 2005).

Table 4 - *Exemplary scenes from the SSTP-parent video showing use of time out strategies*

Description of the scenes (Source: Parent Video, Part 4, Managing Misbehaviour)
(1) Michaela, a girl in preschool age with Down Syndrome is playing with a large pile of play dough. She is trying to punch out some play dough figures with a form. However, the form seems more interesting to her than using it with the clay. She explores it and then throws it off the table. Obviously she is not doing this to annoy anyone or to misbehave but to try something out. Her mother (women next to her) urges her to keep the form on the table. Michaela does not react to this, it seems like she is too absorbed into her exploration. So she throws another figure off the table. Now her mother punishes her by putting her into quiet time. After time is up and Michaela is allowed to return to the table, her mother praises her as she is bumping the form repeatedly into a massive pile of clay. All her curiosity and interest seems to be gone. The scene looks like there 'is only one right way to play with this form and Michaela is forced to do it.
(2) A toddler on his mothers arm, seemingly with an intellectual disability, is carried around while his mother is taking to his room. The speaker in the video tells us "a toddler's playpen can be used as the quiet place for the age of about 18 months and onwards". However, it remains totally unclear what the toddler really did and why. It' is almost obvious that he doesn't even understand why he is brought to his playpen.
(3) Justin, a boy in preschool age, refuses to obey his mother's request: "Justin, it's time for pre-school. Put your shoes on, please". He refuses with "No!" and throws away the shoes his mother has handed to him. His mother brings his shoes back and repeats her request: "It's time for pre-school, you have to put your shoes on", handing the shoes to him again. Again, Justin throws the shoes away. Mother: "Okay, it's time for quiet time. Come on!" She takes his hands pulling him away from his rocking vehicle (commentary: "In this example quiet time is used at first.") Mother: "You need to sit here quietly for one minute" (commentary: "And when the child doesn't stay in quiet time the parent uses time-out as a backup"). Justin does not stay quiet and as a result he has to go to time out. Mother: "Justin, you haven't stayed in quiet time, it's time for time out. Come on". In this example, it is not reported whether alternative, less restrictive strategies such as "response cost" in the context of behaviour charts had been administered before, and what the possible reasons for complying with mother's requests might be. Overall, the scene looks staged.
(4) Jay, a boy in preschool age, is sent to by his mother downstairs to sit in time-out on a stool next to the washing machine. Mother: "Jay when you've been quiet for one minute you may come out of time out." After a while, mother takes him back, saying: "Jay you have been in time out for one minute you may come out of time out now." In this scene, the cause for sending the boy to time-out is not reported nor is said what other and less restrictive treatments had been used before.

4.5 Inflexible and over-directive use of parenting methods

A further factor that may have lead to the critical and partly negative evaluation of the program is the preponderance and inappropriate use of “traditional behavioural methods”, drawing primarily from operant learning theories, stressing permanent external consequences and tending to an over-directive interaction style in some places in SSTP compared with “contemporary behavioural methods” (see Prizant, Wetherby, Rubin, Laurent, & Rydell, 2006, pp. 118-119), in which more weight is placed on developmental aspects, intrinsic motivation, self-initiative and facilitative interaction style. These approaches are considered very important for secondary and tertiary prevention of developmental disabilities (National Professional Resources & Paul H. Brookes, 2004; Prizant & Wetherby, 2005).

An exemplary scene from the parent video, which was critically commented upon by some students, can illustrate this point (see Part 1 of the video, Aspects of Positive Parenting, Sanders *et al.*, 2003a). The scene is designed to demonstrate the third key aspect of positive parenting, “using assertive discipline”, defined as “being decisive and responding quickly when your youngster is misbehaving and teaching him/ her to behave in an acceptable way”:

Table 5 - Results from the 15 item Qualitative Questionnaire

<p>Description of the scene (Source: SSTP parent video, Part 1)</p> <p>A boy of preschool age, supposedly with intellectual disability, is playing alone on the floor with some toys, hammering a robust-looking toy boat with a snail figure on top. He looks concentrated and fascinated in his activity, showing no signs of aggressive or destructive intention. However his play is interrupted immediately by his mother and he is scolded as follows: "We don't hit the boat with the hammer, do we? What do we hit with the hammer? What do we use the hammer for?" After the boy answered "For the bridge" (a wooden toy work bench next to him), his mother praised him, "Good boy, - you hit the bridge with the hammer". Afterwards the boy shows full compliance by hammering the wooden pegs into the work bench.</p>

Figure 1 - Illustration of the scene from Part 1 of SSTP video, described in Table 5



The boy's activity could however be seen as being developmentally appropriate functional play activity rather than as misbehaviour. In this case the mother could have responded in a more facilitative and participating interaction style as a play partner.

4.6 Appropriateness of the research instruments

The combination of quantitative and qualitative methods applied in this study is known as the "middle ground" approach (Prizant & Wetherby, 2005), which is a proven approach in the interdisciplinary field of developmental disabilities. The analysis of the results shows that the two methods are complimentary. The ratings from the quantitative instrument can be better understood when viewed in the context of the answers in the qualitative questionnaire and vice versa.

4.7 Limitations of the study

The following factors need to be considered when interpreting the results of this study: (1) *Sample size*: The sample in this study was relatively small with 33 participants. (2) *Subjects*: the sample consisted of master level students of psychology. The participants were asked to take part in the context of an obligatory lecture and thus the sample is an availability sample. For this reason, the representativeness of our sample for the whole population of paraprofessionals of the same discipline or indeed other similar disciplines (education, medicine, social work.) cannot be assumed. (3) *Clinical expertise*: Furthermore, the master level students had limited clinical experience required to accurately evaluate the practical applicability of developmental disability intervention methods in families.

5. Conclusion

Under consideration of the methodological limitations discussed above, the results of this first empirical investigation of the social validity of the Stepping Stone parenting program in German speaking countries are two-fold:

(1) Overall, the results support the assumption of a positive social validity. On the key dimension of ethical acceptability, the global evaluation was on average positive, with 52% of the participants evaluating it positively and only 19% negatively. This result is consistent with results from some studies in the English-speaking world. (2) However, there were restrictions to the social validity of some specific aspects of the program. These primarily concerned the time-out strategies. The ethical acceptability of the time-out strategy was evaluated negatively by 64% of participants and arguments relating to professional ethics, children's rights and educational principles were given. This result is also consistent with some studies from the English-speaking literature. Furthermore, there was a possible halo effect in the evaluations, whereby the negative evaluation of the time-out strategies lead to a less positive global evaluation of the program. Contemporary behavioural concepts of the child as an active, intrinsically motivated being who experiences enjoyment have been given less weight in the SSTP program in several cases compared to traditional behavioural concepts of the child as a passive, mainly externally controlled being whose behaviour has always to be reinforced, extinguished or punished.

As a consequence, it is recommended that the SSTP program be partially revised. The following modifications are suggested: (1) The sections relating to exclusionary time-out methods in the parent video and family workbook ought to be overworked thoroughly. Time-out should be marked more clearly as a unique and last-resort intervention, to be used only if all less restrictive methods have failed, and, in addition, all three criteria for indication "seriousness of behavior", "urgency for intervention", and "analysis of possible harmful consequences for child and caretakers" have been met. Thus, both time-out strategies should be unequivocally presented as educational procedures standing *not* on the same level as the other nine methods presented in "Strategies for Managing Misbehaviour" (see table 1). (2) All four examples of implementing time-out methods in the parent video, Part 4 (described in table 4), should be removed and replaced by more appropriate instances reflecting criteria for indication. (3) In Part 1 of the parent video, the scene with the child playing with the boat (described in table 5) should be eliminated and replaced by an example taking in account developmental functioning and needs of a child with intellectual disability more thoroughly. (4) In Part 1 and Part 3 of the parent video and in Chapters 3 and 4 of the family workbook, stronger emphasis should be put on "positive antecedent components" (Roberts, Tingstrom, Olmi, & Bellipani, 2008), such as "effective instruction delivery" including visual support methods and related "structured teaching"

strategies (Mesibov & Shea, 2010) addressing in particular the specific needs of children with intellectual, autism spectrum, and related developmental disabilities. These positive antecedents may obviate the need for highly restrictive methods in some cases (Roberts *et al.*, 2008). Further, critical incidents resulting from incorrect use of time out may be prevented.

In this way, the interdisciplinary professional and common acceptance of the program can be further improved.

The implementation of the preventative SSTP parenting program in German-speaking and other countries reflects the urgent need in society for such a program. The particular advantages of the SSTP program are that it has the status of preliminary evidence, and is international, interdisciplinary, easily accessible due to Triple P's trans-regional structure, suitable for children with different developmental disabilities and its use has been controlled by a licensing system.

Further steps of research should expand to various groups of clinical professionals, paraprofessionals, and nonprofessionals, e. g. parents, who have everyday experience with children with disabilities and to investigate the program's specific efficacy for various diagnostic categories.

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