CRITICALLY APPRAISED PAPER (CAP)

FOCUSED QUESTION
What is the evidence to support the effectiveness of parent training programs for children with behavioral difficulties on the quality of life of the child and family?


CLINICAL BOTTOM LINE:

It is important to determine the effectiveness of parenting programs, so therapists can provide evidence based intervention to the parents and family members. If parents have evidence of the effectiveness of the programs, they may be more apt to complete and follow through with the program. As occupational therapists, it is our role to both treat the child and educate the families to help enhance the child and family’s quality of life.

“Programs such as the Incredible Years program (Webster-Stratton, 1993) and the Triple P Positive Parenting Program (Markie-Dadds & Sanders, 2006; Sanders, Markie-Dadds, Tully & Bor, 2000), have shown to be effective on positive outcomes such as improving parent–child interaction, strengthening effective emotional communication skills, and emphasizing parenting consistency (Kaminski, Valle, Filene & Boyle, 2008)” (p. 44). As seen in this quote, parent training programs have been researched and found to have positive effects on parents and families who have children with conduct problems. Data collected from this study demonstrate effective outcomes within the parent, child, and parent–child relationships. For parents, this study found the interventions decreased inconsistent and negative parenting practices, stress, anxiety, and depression. The interventions supported an increase the parent’s coping skills, social supports, self-efficacy, competence, and confidence in parenting skills. Through use of the intervention, the children demonstrated a decrease in problem behaviors, violence, and aggression, and an increase in mental health. The authors of this study agree with the significant role of this parent training program within family units and the need to educate parents on the positive parenting strategies to help manage and cope with their child’s behavior difficulties. This article provides evidence to support the use of parent training. Through the comparison of parent-orientated programs and school-based interventions, a better understanding of parent training can be achieved.
Through this randomized controlled trail (RCT), which involved 3 intervention groups and 1 control group, the effects of Triple P Positive Parenting Program are examined. Furthermore, this study allows for comparing the home-based intervention (Triple P) to a school-based intervention (Fit and Strong for Life). The parents within the parent-orientated (Triple P) program reported the intervention was effective within both the child’s behaviors and parenting styles. As seen in the study’s results, Triple P is an effective parenting program and should be carried out even within families whose children are receiving additional services within the school environment. It is the role of the occupational therapist to educate the parents on the effective treatments and interventions available to their child. According to Occupational Therapy Practice Framework: Domain and Process, “occupational therapy practitioners advocate for the well-being of all persons, groups, and populations” (American Occupational Therapy Association, 2008, p. 630). Although occupational therapists are not currently implementing parent training interventions, training programs fall within the profession’s scope of practice by allowing therapists to improve the well-being and quality of both the child and family.

RESEARCH OBJECTIVE(S)
List study objectives.

- To examine the effectiveness of the self-directed Triple P compared to a school-based intervention, Fit and Strong for Life.
- To determine the effectiveness of the 2 separate intervention groups compared to a combination group of both self-directed Triple P and Fit and Strong for Life interventions.
- To examine the changes in the child’s behavior in 4 different conditions.
- To investigate the effectiveness of the combined intervention group to determine if a combination of a school-based intervention and self-directed home-based intervention would be superior to the individual interventions.

DESIGN TYPE AND LEVEL OF EVIDENCE:

RCT: Level I

Limitations (appropriateness of study design):
Was the study design type appropriate for the knowledge level about this topic? Circle yes or no, and if no, explain.

YES/NO

SAMPLE SELECTION
How were subjects selected to participate? Please describe.

Participants were recruited to participate in this study from elementary schools within 6 regions of German-speaking areas in Switzerland. The study was advertised through school newspapers.
that provided parents with further information of the study and programs, and details on the
inclusive and exclusive criteria of the study. Parents and teachers who were interested in
participating in the study were invited to an informational meeting. The parents were divided
into 4 separate conditions through a computer-generated randomization.

### Inclusion Criteria

NR

### Exclusion Criteria

NR

### SAMPLE CHARACTERISTICS

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>N = 528 parents</td>
<td>N = 73 teachers</td>
</tr>
<tr>
<td>% Dropouts</td>
<td>N = 948 parents consented, N = 528 participated</td>
</tr>
<tr>
<td></td>
<td>N = 95 teachers consented, N = 73 participated</td>
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<tr>
<td>% Male</td>
<td>11.3 parents</td>
</tr>
<tr>
<td></td>
<td>23 teachers</td>
</tr>
<tr>
<td>% Female</td>
<td>88.7 parents</td>
</tr>
<tr>
<td></td>
<td>77 teachers</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>79% of parents were of Swiss nationality</td>
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<tr>
<td>Disease/disability diagnosis</td>
<td>NR</td>
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</table>

Check appropriate group:

<table>
<thead>
<tr>
<th></th>
<th>20–50/study group</th>
<th>51–100/study group</th>
<th>101–149/study group</th>
<th>150–200/study group</th>
</tr>
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<tbody>
<tr>
<td>150–200/study group</td>
<td>✓</td>
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### INTERVENTION(S) AND CONTROL GROUPS

**Group 1. Parent-oriented intervention (Triple P)**

<table>
<thead>
<tr>
<th>Brief Description</th>
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</thead>
<tbody>
<tr>
<td>Teachers and parents were randomly assigned into the Triple P group. The group consisted of 20 classes, 20 teachers and 115 parents. The self-directed Triple P was chosen for the parent-oriented intervention group. This intervention was designed to allow parents to complete the program from within their own homes. The parents received a Triple P self-help workbook and DVD, as well as 10 weekly telephone calls completed by the parent with a trained Triple P provider. The program guided parents through a 10-week series of reading and practicing their skills. The program was developed to help parents with the demands of caring for, supervising, and managing their children.</td>
</tr>
</tbody>
</table>
Setting | The self-directed Triple P parenting program was carried out within the participants’ own home environments.

Who Delivered? | The parents completed this program through self-directed workbooks and DVDs in addition to weekly telephone calls supervised by a trained Triple P provider.

Frequency? | NR

Duration? | This program lasted for 10 weeks. Each telephone call made to the parents during the weeks of this program lasted 20–30 minutes.

Group 2: School-based intervention (Fit and Strong for Life)

Brief Description | Teachers and parents were randomly assigned to the Fit and Strong for Life intervention group. The group consisted of 24 classes, 18 teachers, and 122 parents. The sessions were based on the manual in life competencies, including exercises on improving behaviors, attitudes and emotion regulation elements. Teachers carried out this school-based intervention through a standardized format following a protocol during school hours.

Setting | The Fit and Strong for Life intervention took place within the school setting during school hours.

Who Delivered? | Teachers implemented this intervention to the students within the 24 classes of this group. The teachers were trained prior to implementation of the program.

Frequency? | The intervention sessions were carried out weekly to the students.

Duration? | This intervention was completed over a 12–14 week span, during weekly 60–90 minute sessions.

Group 3: Combination intervention

Brief Description | Teachers and parents were randomly assigned to the combined intervention group. This intervention group consisted of 20 classes, 17 teachers, and 171 parents. The families received both the school-based intervention (Fit and Strong) and parent-orientated intervention (Triple P).

Setting | The school-based intervention (Fit and Strong) took place within the school setting, while the parent-oriented intervention took place within the family’s home setting.

Who Delivered? | Teachers implemented the Fit and Strong intervention to the students. The teachers were trained prior to implementation of the program. The parents completed the parent-oriented program through self-directed workbooks and DVDs and participated in weekly telephone calls supervised by a trained Triple P provider.

Frequency? | Both interventions were carried out weekly with this group.

Duration? | The school-based intervention was completed over 12–14 weeks, with weekly 60–90 minute sessions. The parent-oriented program was completed
over the duration of 10 weeks. Each weekly telephone call made to the parents lasted 20–30 minutes.

Group 4: Waitlist group

<table>
<thead>
<tr>
<th>Brief Description</th>
<th>Teachers and parents were randomly assigned to the waitlist control group. This control group consisted of 18 teachers and 156 parents. No interventions or programs were carried out with this group.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting</td>
<td>NA</td>
</tr>
<tr>
<td>Who Delivered?</td>
<td>NA</td>
</tr>
<tr>
<td>Frequency?</td>
<td>NA</td>
</tr>
<tr>
<td>Duration?</td>
<td>NA</td>
</tr>
</tbody>
</table>

Intervention Biases: Circle yes or no and explain, if needed.

Contamination

YES/NO

Co-intervention

YES/NO

Timing

YES/NO

Site

YES/NO

Use of different therapists to provide intervention

YES/NO

Multiple teachers implemented the school-based interventions. Teachers were recruited from 6 different regions within the German-speaking area of Switzerland. Due to the total of 35 teachers who carried out the Fit and Strong interventions within a total 44 classrooms, this may have influenced or skewed the results of the study.

MEASURES AND OUTCOMES

Complete for each relevant measure when answering the evidence-based question:

Name of measure, what outcome was measured, whether the measure is reliable and valid (as reported in article–yes/no/NR [not reported]), and how frequently the measure was used.

Positive Parenting Questionnaire, which measures the parents’ parenting behaviors in addition to positive support and reinforcement they provide their child. The parents’ parenting styles are measures with a 13-item Parenting Practice Scale.

- Reliability: Yes, α coefficients of the test are good (α = .81)
Name of measure, what outcome was measured, whether the measure is reliable and valid (as reported in article–yes/no/NR [not reported]), and how frequently the measure was used.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Outcome</th>
<th>Reliability</th>
<th>Validity</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parenting Scale</td>
<td>dysfunctional parenting styles</td>
<td>Yes, high internal consistency (α = .95) NR</td>
<td>Each of the 3 assessment periods: (1) pre-intervention, (2) post-intervention, and (3) follow-up.</td>
<td></td>
</tr>
<tr>
<td>Problem Setting and Behavior Checklist (PSBC)</td>
<td>confidence</td>
<td>Yes, high internal consistency (α = .95) NR</td>
<td>Each of the 3 assessment periods: (1) pre-intervention, (2) post-intervention, and (3) follow-up.</td>
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</tr>
<tr>
<td>Depression Anxiety Stress Scale</td>
<td>level of depression, anxiety, and stress</td>
<td>Yes, high internal consistency (α = .90) NR</td>
<td>Each of the 3 assessment periods: (1) pre-intervention, (2) post-intervention, and (3) follow-up.</td>
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<tr>
<td>Resilience Scale</td>
<td>on a 7-point scale from agree to disagree</td>
<td>Yes, high internal consistency (α = .95) NR</td>
<td>Each of the 3 assessment periods: (1) pre-intervention, (2) post-intervention, and (3) follow-up.</td>
<td></td>
</tr>
</tbody>
</table>
Name of measure, what outcome was measured, whether the measure is reliable and valid (as reported in article—yes/no/NR [not reported]), and how frequently the measure was used.

<table>
<thead>
<tr>
<th>Measure</th>
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<th>Validity</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Satisfaction</td>
<td>Yes, high internal consistency ($\alpha = .95$)</td>
<td>NR</td>
<td>Each of the 3 assessment periods: (1) pre-intervention, (2) post-intervention, and (3) follow-up.</td>
</tr>
</tbody>
</table>

Name of measure, what outcome was measured, whether the measure is reliable and valid (as reported in article—yes/no/NR [not reported]), and how frequently the measure was used.

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<th>Validity</th>
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</tr>
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<tbody>
<tr>
<td>Strengths and Difficulties Questionnaire (SDQ)</td>
<td>Yes, high internal consistency ($\alpha = .91$)</td>
<td>NR</td>
<td>Each of the 3 assessment periods: (1) pre-intervention, (2) post-intervention, and (3) follow-up.</td>
</tr>
</tbody>
</table>

Measurement Biases

Were the evaluators blind to treatment status? Circle yes or no, and if no, explain.

YES/NO

Recall or memory bias. Circle yes or no, and if yes, explain.

YES/NO The outcomes of the above measures were completed with the use of self-reported assessments that required the parents to recall past experiences. Individuals often are able to recall positive memories and experiences better than a negative event they may have experienced. Due to the above reasons the results of this study maybe skewed on the basis of the recall of the participants.

Others (list and explain):

- This study was based on parent-rated scales. The parents within the study reported on their child’s behaviors, which may create bias resulting in skewed results.
- Short time frame of 4 months does not effectively examine long-term effects of the program.
- Only parents and teachers of the children were included; no additional observations were made by clinicians.

RESULTS
List results of outcomes relevant to answering the focused question
Include statistical significance where appropriate \((p < 0.05)\)
Include effect size if reported

- Compared to the control group, the Triple P and combined group resulted in a significant increase in positive parenting and parent confidence \((p < .001)\). Dysfunctional parenting improved significantly at the time of the post intervention measures.
- No significant effects were found in the Fit and Strong for Life group.
- The parents who participated in the Triple P training, reported experiencing “a significant improvement in confidence of dealing with problem child behaviors and report smaller depression levels and stress” \((p. 50)\) \((p < .001)\).
- The combined intervention did not show a greater effect on the child’s behavior compared to the Triple P program alone.
- “The Triple P has an effect in the family and not in other contexts such as school” \((p. 50)\).

Was this study adequately powered (large enough to show a difference)? *Circle yes or no, and if no, explain.*

**YES**

Were appropriate analytic methods used? *Circle yes or no, and if no, explain.*

**YES**

Were statistics appropriately reported (in written or table format)? *Circle yes or no, and if no, explain.*

**YES**

**CONCLUSIONS**
State the authors’ conclusions that are applicable to answering the evidence-based question.

This study allows parents to recognize the effects and significance parent training programs can have on children with behavioral problems and a family’s quality of life. Cina et al. (2011) demonstrate the how parenting training affects a family individually and additionally with the presence of a school-based intervention. This article provides evidence on the effectiveness and convenience that the Self-directed Triple P Program provides families. The parents, who participated in the Triple P training, reported “positive parenting, dysfunctional parenting and parenting confidence improved significantly” \((p. 50)\). Furthermore, the study did not support the “extra benefit of the additional school-oriented program” \((p. 50)\). In this study, children in the school-based intervention did not demonstrate the same benefits seen among the children and families of the parent-orientated and combined groups.

It is the role of the therapist to educate the parents on effective treatments for their child. As seen through the above results, Self-directed Triple P is an evidence-based practice that might
be considered for families who have children with behavioral difficulties to promote enhanced quality of life.

References


This work is based on the evidence-based literature review completed by Alecia Steeves, OTS, and Carmela Battaglia, PhD, OTR/L, Faculty Advisor, Keuka College.


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