Abstract of thesis entitled

“An Evidence-Based Guideline for Providing Online Parenting Programme for Parents of Children with Behavioural Problems”

Submitted by Chung Yuk Shan for the degree of Master of Nursing at The University of Hong Kong in July 2015

In Hong Kong, the prevalence of children with behavioural problems is found comparable with international figures. It is estimated that 10% parents were experiencing difficulties with their children’s behaviours. An effective parenting programme should aim to increase parents’ self-efficacy and improve their children’s behavioural problems. The Department of Health of Hong Kong has implemented a group version of the Positive Parenting Programme (Triple P) for parents of children since 2001. However, due to its delivery format, there is increasing demand for a wider dissemination of the Triple P in a more engaging, convenient, and accessible format.

Compared to the traditional group-based practice, an online-based approach would be a more cost-effective method on providing easily accessible
and widely available parenting support for the parents. Online parenting training programmes are seen in other clinical settings overseas. Nevertheless, there is currently no evidenced-based online positive parenting programme available in the Department of Health in Hong Kong. Therefore, this dissertation is a translational nursing research that aims to (i) identify and evaluate the current evidence of the effectiveness of online-based parenting programmes for addressing child behaviour problems, (ii) assess the feasibility and transferability of the online parenting programme, and (iii) develop an evidence-based guideline for providing the online parenting programme to parents of children with behavioural problems.

Three electronic databases including PubMed, CINAHL Plus, and PsycINFO were used. A systematic literature search was conducted to assemble relevant and empirical evidence on the effectiveness of online parenting programmes or interventions on child behaviour problems for parents. Six studies met the selection criteria and were evaluated. Five selected studies showed statistically significant in improving child behaviour problem while four selected studies showed statistically significant in improving parenting style after intervention. Each selected study was critiqued using the appraisal instrument of the Scottish Intercollegiate Guideline Network. The implementation potential was
then assessed. An evidence-based guideline for providing an online parenting programme was developed based on the best evidence derived from the six selected studies. The three main parts of the guideline were: recruitment, implementation and evaluation of the programme.

An implementation plan was established which include a communication plan and a pilot test. In the communication plan, various internal and external stakeholders were identified to ensure smooth communication process and supports. The pilot test, with a sample size of 10, would then be carried out to examine the feasibility of the programme in the targeted setting before the full-scale implementation. An evaluation plan of the actual implementation of the programme was hence developed, with a sample size of at least 166, to evaluate the identified patients outcomes (child behaviour, parenting style and parents’ knowledge) and health provider outcomes (staff satisfaction). With the implementation of the evidenced-based online parenting programme, an improvement in child behaviour would be expected.
An Evidence-Based Guideline for Providing Online Parenting Programme for Parents of Children with Behavioural Problems

by

Chung Yuk Shan

R.N., BNurs

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Nursing at the University of Hong Kong.

July 2015
Declaration

I declare that this thesis represents my own work, except where due acknowledgement is made, and that it has not been previously included in a thesis, dissertation or report submitted to this University or to any other institution for a degree, diploma or other qualifications.

Signed…………………………………………………

Chung Yuk Shan
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1.1. Background

Child behaviour problems, characterized by oppositional, aggressive or disruptive behaviours of children, may cause negative impact on their ongoing development (Loeber & Farrington, 2001). Typically, parenting is an essential factor in affecting child behaviour (Taylor & Biglan, 1998). According to C. Leung, Leung, Chan, Tso, and Ip (2005), parents of children with perceived behavioural problems, particularly those with low social support and household income, are the riskiest of maltreating their children. Inadequate parenting knowledge and tough parenting behaviours also have a large impact on child abuse (Berger & BrooksGunn, 2005). More numbers of these children would have adolescent psychopathology, substance abuse, dependence (Oshri, Rogosch, Burnette, & Cicchetti, 2011) as well as serious adult problems of depressive (Loth, Drabick, Leibenluft, & Hulvershorn, 2014) or antisocial disorder (Byrd, Loeber, & Pardini, 2014).

Parenting programmes are behavioural family interventions that aim to improve child-rearing in families particularly those with children exhibiting behavioural problems by enhancing positive parenting skills and competence based on social learning and cognitive-behavioural principles (Taylor & Biglan,
It is a comprehensive strategy of selective, targeted prevention and early intervention for child maltreatment and behaviour problems (Sanders & Turner, 2005).

According to the international studies of Mullick and Goodman (2001) and Khan et al. (2009), there were approximately 10% to 15% preschool children having behavioural problems. In the local, similar proportions of about 10% children also have potentially significant problems of behaviour in Hong Kong (C. Leung et al., 2005). Therefore, interventions that encourage positive parenting practices are crucial to reduce the incidence of child behaviour problems and child maltreatment (Sanders & Cann, 2002).

1.2. **Affirming the Need**

1.2.1. **Local Setting**

In Hong Kong, the Family Health Service (FHS) of the Department of Health (DH) provides community-based public health promotion for children and women. Core programmes in parenting aim to empower parents with the essential awareness and skills to nurture their children. Preventive parenting guidance is provided to parents in the form of information leaflets, workshop and individual counselling by FHS nurses. For parents who encounter difficulties in parenting or those children with early signs of behavioural problems, group-based parenting
training programme which focuses on positive parenting skills would be provided by accredited positive parenting programme nurses.

1.2.2. Current Practice

Positive Parenting Programme (Triple P) is the current parenting programme for the preschool children’s parents offered by nurses in the FHS. According to Sanders (2008), Triple P is a multilevel parenting intervention developed by the University of Queensland in Australia for enhancing the knowledge, skills, and confidence of parents. Its positive parenting principles include ensuring a safe and engaging environment, creating positive learning environment, using assertive discipline, having realistic expectations, and taking parental self-care (Sanders, 2008; Sanders, Cann, & Markie-Dadds, 2003). It integrates five levels of rising intensity from primary strategies (Level 1) to intensive behavioural family intervention (Level 5). Currently in the FHS, group-based level 4 programme (Group Triple P) is the highest level of parenting intervention available to targeted parents. The 8 weeks group programme is implemented in group-based setting, which involves 4 times of weekly group sessions (2.5 hours each) and 4 times of weekly telephone counselling sessions (30 minutes each).

The Triple P International (TPI) is granted by the University of
Queensland for the worldwide dissemination of Triple P. Accredited staff refers to staff who has been trained in Triple P Provider Training Courses by the TPI. In the current practice of the FHS, accredited nurses play the most important role in the parenting programme as the key qualified programme providers. They act as the facilitators who guide the group to understand and self-manage child misbehaviour, and to apply positive parenting skills for different situations.

Although enrolment of the current group-based programme is opened up to all concerned parents, service centres only regularly offer the group programme once a month or longer with restricted quota at about 10 parents each due to limited manpower and resources. Many parents are not aware of the intervention because of poor publication. Intervention would also be delayed as a result of limited availability.

1.2.3. Clinical Issue

There are strong evidences showing the beneficial effects of Triple P. It is an effective behaviour family intervention for child behaviour problems (Janine Dretzke et al., 2009), and parenting problems in skills and well-being (Lindsay, Strand, & Davis, 2011; Nowak & Heinrichs, 2008), styles and competency (de Graaf, Speetjens, Smit, de Wolff, & Tavecchio, 2008). In Hong Kong, its efficacy is also proved in Chinese population (C. Leung, Fan, & Sanders, 2013; C. Leung,
Sanders, Leung, Mak, & Lau, 2003; Li, Chan, Mak, & Lam, 2013). In addition to limited availability and accessibility, poor acceptance, unsatisfactory attendance rates, and high drop-out rates were noted (Sanders, Markie-Dadds, Rinaldis, Firman, & Baig, 2007). Common barriers include work-schedule conflicts (Sanders & Wilkinson, 2012), and unfavourable multi-week groups delivery format (Metzler, Sanders, Rusby, & Crowley, 2012).

In Hong Kong, 963 cases of child abuse were reported in 2013 while more than half abusers were their own parents (Child Protection Registry, 2013). The reported number may only reflect a small portion of the actual incidence of either dysfunctional parenting practices or maltreatment (Shapiro, Prinz, & Sanders, 2008). According to the Census and Statistics Department (2011), there were nearly 50,000 preschool children per year of age in Hong Kong. While each grouping of the Group Triple P could only engage about 10 parent participants, limited amount of parents could be benefited by the current programme. Perhaps most significantly, a larger population-level and more widely accessible and engaging parenting programme is indicated.

1.2.4. Potential Innovation

According to Mazzucchelli and Sanders (2010), content of parenting intervention can be delivered in a flexible way according to the framework and
principles. Other than group-based approach, self-directed approach with minimal therapist supports provided similar child and parent outcomes to those achieved with more intensive facilitator inputs (O'Brien & Daley, 2011). Nowadays, there are several evidence-based parenting training programmes such as Adventures in Parenting (National Institute of Child Health Human Development, 2001), Incredible Years (Webster-Stratton, 1998), Triple P (Sanders, Turner, & Markie-Dadds, 2002), and New Forest Parent Training Programme (Thompson et al., 2009). The online format of these parenting interventions had shown significant positive outcomes in parenting (Nieuwboer, Fukkink, & Hermanns, 2013) and client satisfaction (Taylor et al., 2008). A cost-effective online-based approach may enhance the accessibility, attendance and engagement of the parenting programme (Calam, Sanders, Miller, Sadhnani, & Carmont, 2008; Love, Sanders, Metzler, Prinz, & Kast, 2013). Therefore, with high degree of popularity and usage of internet in Hong Kong, and the significance of the identified clinical issue on child development and child maltreatment, the proposed research question is:

In parents of preschool children, would an online parenting programme for parents of children with behavioural problems be effective?

1.3. Objectives and Significance
1.3.1. Objectives of the Dissertation

- To identify and evaluate the existing evidence of the effectiveness of online-based parenting programme on child behaviour problems.

- To assess the feasibility and transferability of the implementation of an online parenting programme guideline.

- To develop a plan to implement and evaluate the proposed programme.

1.3.2. Significance

Metzler et al. (2012) reported that parents preferred self-directed delivery designs for instance online programme the most and preferred home visits, therapists, or multi-week parenting groups designs the least. Therefore, online-based approach may encourage more recognition than the current concrete and unfavourable group-based practice. Overcoming the common barriers of face-to-face intervention and elevating the attendance and engagement of parents, the new approach may be significant in increasing the reach of the evidenced-based parenting programme to more and broader range of clients. Higher participation of parents with adequate population reach would achieve a stronger effect of the intervention at a population level (Sanders et al., 2007). As a result, the proposed feasible delivery approach of the parenting programme would further reduce behavioural problems in children, decrease insufficient and
potentially violent parenting practices or maltreatment and provide extra parenting support to more needed parents in a wider range of population (Shapiro et al., 2008). Such accessible and responsive innovation would greatly impact on the prevalence rates of childhood behaviour problems.

Although parenting interventions have been demonstrated to be cost-effective (J. Dretzke et al., 2005), the potential huge cost of implementing the new online programme should be considered. However, the investment would be still worthy as criminality and child development prospect may acquire the greatest cost. Besides, the practical and logistic use of the convenient approach allows better distribution of human and organizational resources for further training of new parenting programme facilitators and other clinical use. More importantly, better nursing practice may be implicated as nursing time for running the group intervention would be saved, which increases the possibility of serving more clients or the capacity of having more clinical time for listening and giving tailor-made feedback on parents’ individuals needs and interests. In addition, the new online-based approach would also provide inspiration for an increase of using this channel in other public health programme in the future.
Chapter 2: Critical Appraisal

2.1. Search and Appraisal Strategies

2.1.1. Identification of Studies

Three electronic databases including PubMed, CINAHL Plus (EBSCOhost), PsycINFO via ProQuest were used to identify potential studies for review. Reference lists of searched potential articles were also considered for additional studies. Keywords used include: ‘Triple P’, ‘positive parenting’, ‘parenting program’, ‘parenting intervention’, ‘parent training program’, ‘internet’, ‘podcasts’, ‘web’, and ‘online’.

2.1.2. Inclusion Criteria

Both English and Chinese written articles of Randomized Controlled Trials (RCTs) and Quasi-Experimental Trials which targeted at parents of children aged \( \leq 12 \) on parenting intervention with online-based or web-based component were included.

2.1.3. Exclusion Criteria

Studies were excluded for those which targeted at non-parents group or parents of children aged >12. Feasibility study, pilot study, qualitative study, and incomplete articles were also excluded.

2.1.4. Data Extraction
The guideline of the Scottish Intercollegiate Guidelines Network (SIGN) was adopted to be the reliable assessment tools to assess the quality of the selected studies as it was well-tested to develop evidence-based clinical guidelines (SIGN, 2011). Relevant data of identified articles was extracted to individual table of evidence in a standard format to facilitate summarization and cross-study comparison.

2.1.5. Appraisal Strategies

The quality assessments of all selected studies were then carried out using the methodology checklist - Methodology Checklist 2: Randomized Controlled Trials (Appendix A) designed by SIGN to guide the assessment of each study’s methodological quality (SIGN, 2012). The level of evidence of each study was then rated according to its type and quality (Appendix B).

2.2. Results

2.2.1. Search History

Initial search was carried out on the period from 1 March, 2014 to 15 May, 2014. Total of 722 studies were searched by keywords in all three databases. Three duplicated articles within the three databases were eliminated. Based on the inclusion and exclusion criteria, 11 potentially relevant studies were retrieved after title and abstract review. Articles were mainly excluded by (1) not having an
online component in the intervention, (2) study types, (3) non-parents subjects, and (4) children age > 12. Furthermore, two studies were excluded after full text review of articles as they were either feasibility study (Clarke, Calam, Morawska, & Sanders, 2013) or incomplete article (Taylor et al., 2008). Reference lists of the 6 studies left were reviewed, but no new articles that met the selection criteria were found. Total of 6 studies were selected by search process presented in Appendix C with a PRISMA Flow Diagram in Appendix D.

2.2.2. Tables of Evidence

The 6 identified articles were studies of Bert, Farris, and Borkowski (2008), Enebrink, Hogstrom, Forster, and Ghaderi (2012), Morawska, Tometzki, and Sanders (2014), Sanders, Baker, and Turner (2012), Sanders, Calam, Durand, Liversidge, and Carmont (2008), and Sanders, Dittman, Farruggia, and Keown (2014). Data of these 6 studies were extracted to separate table of evidence (Appendix E) with the guidance of the SIGN (SIGN, 2011). Headings of the tables include the types of study with the levels of evidence, population characteristics, intervention, comparison, length of follow-up, outcome measures, and effects size. All extracted data were important for data summary and synthesis for recommendations.

2.2.3. Study Characteristics
All 6 studies found were RCTs. The articles were written in English and published from 2008 to 2014. They were all done in developed countries - two studies were conducted in Australia (Morawska et al., 2014; Sanders et al., 2012), one in New Zealand (Sanders et al., 2014), one in Sweden (Enebrink et al., 2012), one in the UK (Sanders et al., 2008), and one in the USA (Bert et al., 2008). No interventional control group was used to evaluate the effectiveness of their web-based parenting interventions by 3 studies (Enebrink et al., 2012; Morawska et al., 2014; Sanders et al., 2012). Non-inferiority and similar design was used to compare two intervention approaches by study of Sanders et al. (2014). On the other hand, control group with standard intervention was compared to intervention group with web-based intervention in 2 studies (Bert et al., 2008; Sanders et al., 2008). Only one study included a three-group comparison to evaluate the effectiveness of the face-to-face, web-based, and standard self-help interventions (Bert et al., 2008). Pre-post intervention measurements were evaluated by all 6 studies, while further follow up evaluation at 3 months after intervention completion were reported by 2 studies (Sanders et al., 2012; Sanders et al., 2008).

2.2.4. Methodological Issues

Qualities of articles were appraised by the guidance of the SIGN’s methodology checklist (Appendix A). According to SIGN (2012), the checklist
addressed 10 key questions in section one to review the internal validity and addressed 4 questions in section two to review the overall appraisal. Checklists of each 6 selected studies were presented in Appendix F.

2.2.4.1. Research Questions

According to the checklists in Appendix F, research questions were obviously stated in only one study (Bert et al., 2008). However, objectives and hypothesis of studies were addressed clearly and appropriately in other 5 studies in the part of background (Sanders et al., 2008), abstract and aims (Enebrink et al., 2012), or abstract and introduction (Morawska et al., 2014; Sanders et al., 2012; Sanders et al., 2014).

2.2.4.2. Randomization

For randomization, both Sanders et al. (2012) and Morawska et al. (2014) used computer-generated number; Enebrink et al. (2012) used online-programme randomizer; Sanders et al. (2014) used stratified randomization. However, two studies only briefly mentioned about randomization with no details of the method used (Bert et al., 2008; Sanders et al., 2008).

2.2.4.3. Concealment

Concealment was addressed by four studies (Enebrink et al., 2012; Morawska et al., 2014; Sanders et al., 2012; Sanders et al., 2008). Adequate
concealment was ensured as Sanders et al. (2008), Sanders et al. (2012), and Morawska et al. (2014) reported of using automatic online allocation while Enebrink et al. (2012) reported of using ceiled envelop. Nevertheless, both Bert et al. (2008) and Sanders et al. (2014) failed to provide their methods of concealment.

2.2.4.4. Blinding

Both Enebrink et al. (2012) and Sanders et al. (2012) covered on blinding of their assessors. Even so, all six studies were limited by the lack of mentioning the blinding procedure for their subjects.

2.2.4.5. Comparison between intervention and control groups

Subjects were selected by inclusion and exclusion criteria. In all 6 studies, after randomization, no significant group differences in the composition of treatment and control group were reported.

2.2.4.6. Outcomes Measurement

Questionnaires were used as the measurement tools of intervention outcomes in all 6 studies. Bert et al. (2008) reported the use of inter-coding with two research assistants to ensure reliability of subjective outcome measures. Validated and internationally used measurement scales, Eyberg Child Behaviour Inventory (ECBI) and Parenting Scale (PS), were adopted by 5 studies (Enebrink
et al., 2012; Morawska et al., 2014; Sanders et al., 2012; Sanders et al., 2008; Sanders et al., 2014) and 4 studies (Morawska et al., 2014; Sanders et al., 2012; Sanders et al., 2008; Sanders et al., 2014) respectively.

2.2.4.7. Attrition Rate

Both Sanders et al. (2012) and Bert et al. (2008) took incentive to attract its participants to complete the study. With sample sizes ranged from 104 (Enebrink et al., 2012) to 453 (Sanders et al., 2008), dropout rates for the 6 studies were 8.2% (Sanders et al., 2014), 14% (Sanders et al., 2012), 17.3% (Enebrink et al., 2012), 20.8% (Bert et al., 2008), 27.9% (Morawska et al., 2014), and 64.9% (Sanders et al., 2008). Only one study of Bert et al. (2008) described about its power analysis with a power of 0.81 from its reduced sample.

2.2.4.8. Intention To Treat Analysis

Intention To Treat (ITT) principle was well applied by 4 studies (Enebrink et al., 2012; Sanders et al., 2012; Sanders et al., 2008). However, Bert et al. (2008) did not mention about using ITT, while Sanders et al. (2014) excluded its lost subjects from analysis.

2.2.5. Quality of Studies

Each of the 6 RCTs was reviewed for an overall appraisal. Levels of evidence of the 6 studies were rated from 1+ to 1- as presented in Appendix F.
2.2.5.1. Medium Quality Studies

Among the 6 studies, two studies were rated as 1+ level of evidence (Enebrink et al., 2012; Sanders et al., 2012). They fulfilled majority of criteria required in the section one of the checklists as presented in the appraisal tables (Appendix F). They were only limited by no blinding procedures for their subjects, which may be impractical for most behavioural trials.

2.2.5.2. Low Quality Studies

Four studies were rated down to 1- level of evidence (Bert et al., 2008; Morawska et al., 2014; Sanders et al., 2008; Sanders et al., 2014). Firstly, Morawska et al. (2014) failed to consider blinding and was limited by a relatively high attrition rate (27.9%). Secondly, with a very high dropout rate (64.9%) even with a well-addressed ITT analysis, evidence of Sanders et al. (2008) was restricted without any details of its randomization or blinding. Meanwhile, Sanders et al. (2014) did not appropriately address the ITT principle, or to mention its concealment method and blinding, therefore, quality of evidence was affected. Lastly, risk of bias was found in the study of Bert et al. (2008) as randomization methods, concealment, blinding and ITT were not well addressed.

2.3. Summary and Synthesis

2.3.1. Summary of Data
Participants’ characteristics, interventions used, outcomes and conclusion of studies were summarized based on the data extracted in the tables of evidence (Appendix E) and appraisal tables (Appendix F).

2.3.1.1. Participants’ Characteristics

All participants were parents with children aged from 2 to 12. Despite mean age of children was not reported in the study of Bert et al. (2008), mean age of children varied from 4.7 (Sanders et al., 2012) to 6.83 (Enebrink et al., 2012) among the other 5 studies. Only 4 studies had reported about parents participants’ mean age (Bert et al., 2008; Morawska et al., 2014; Sanders et al., 2012; Sanders et al., 2014). However, all reported mean age of parents were similar, at 30.74 (Bert et al., 2008), 36.99 (Morawska et al., 2014), 37.37 (Sanders et al., 2012), and 37.19 (Mother) / 39.63 (Father) (Sanders et al., 2014). Both mothers and fathers were recruited in 5 trials (Enebrink et al., 2012; Morawska et al., 2014; Sanders et al., 2012; Sanders et al., 2008; Sanders et al., 2014). Meanwhile, only mother participants were reported in one trial (Bert et al., 2008).

2.3.1.2. Interventions Used

Parenting training modules on well-designed website were used as the intervention by 4 trials (Bert et al., 2008; Enebrink et al., 2012; Sanders et al., 2012; Sanders et al., 2014), while one trial used web-based podcasting
information as a brief parenting intervention (Morawska et al., 2014) and one trial used extra web support as a combined intervention with media (Sanders et al., 2008). Adopted parenting programme included Triple P (Morawska et al., 2014; Sanders et al., 2012; Sanders et al., 2008; Sanders et al., 2014), Adventures in Parenting (Bert et al., 2008) and Comet (Enebrink et al., 2012). Duration of completing the interventions varies from 2 weeks (Morawska et al., 2014), to 3 months (Bert et al., 2008; Sanders et al., 2012).

2.3.1.3. Outcomes

According to Cohen (1988), an effect size in the range of $d=0.2$ to $0.49$ represents a small effect, $d=0.5$ to $0.79$ represents a moderate effect, and $d=0.8$ to infinity represents a large effect. Small to large effects of child behaviour, parenting style and parenting knowledge outcomes were found from the online parenting interventions among the identified studies.

2.3.1.3.1. Child Behaviour

Child behaviour outcomes were measured by 5 studies (Enebrink et al., 2012; Morawska et al., 2014; Sanders et al., 2012; Sanders et al., 2008; Sanders et al., 2014). Among them, Sanders et al. (2012) reported the largest effect size in child behaviour changes. Sanders et al. (2012) stated that the online interactive positive parenting programme had large effect ($d=0.89$) in reducing the frequency
(p=.00) and moderate effect (d=.71) in reducing the rate (p=.00) of child behaviour problems. Both effects were maintained significantly (p=.00). Sanders et al. (2012) also reported significant adjustments in children’s conduct (p=.002) and emotion (p=.003) with moderate effect size of .58 and .44 respectively. In addition, the 10 weeks parenting programme of Enebrink et al. (2012) showed moderate effect (d=.72) in reducing the rate (p<.01), small effect (d=.42) in reducing the frequency (p<.01), and moderate effect (d=.62) in reducing adjustment difficulty (p<.001) of child behaviour problems.

Less short-term effect was shown by the combined intervention of Sanders et al. (2008) as the extra web support and email helpline for parenting education had improved child behaviour problems (p<.05). Although no significant condition differences were shown at follow up, effect size of its intervention group increased from moderate (d=.60) to large (d=.80). Besides, Morawska et al. (2014) reported the parenting podcasts had provided moderate effects (d=.56) in reducing the frequency (p<.001), and small effects (d=.39) in reducing the rate (p=.024) of child behaviour problems. However, its results of child emotional and behaviour adjustment were not significant. Meanwhile, Sanders et al. (2014) suggested both versions of online-based and workbook intervention were effective in child behaviour outcomes changed by non-significant differences of effects size.
in the frequency (Mother $d = -0.13$, Father $d = -0.14$) and rate (Mother $d = -0.09$, Father $d = -0.16$) of child behaviour problems.

### 2.3.1.3.2. Parenting Style

Parenting style outcomes were measured by 4 studies (Morawska et al., 2014; Sanders et al., 2012; Sanders et al., 2008; Sanders et al., 2014). According to Sanders et al. (2012), the online parenting programme had significant moderate short-term effect ($d = .53$ to $.61$) in each of the Laxness ($p = .015$), Over-reactivity ($p = .00$) and Verbosity ($p = .004$) domains of Parenting Scale. Effects were maintained ($p = .00$) with further increased effect size to moderate to large long-term effect ($d = .69$ to $.84$). Additionally, small to large significant effect sizes ($d = .39$ to $.88$) in reducing the use of parenting style in the domain of Laxness ($p = .001$), Over-reactivity ($p = .001$) and Verbosity ($p < .001$) were also found by Morawska et al. (2014). Meanwhile, Sanders et al. (2014) suggested both online-based and workbook interventions were effective in parenting style outcomes by non-significant effects size differences (Mother $d = -.03$ Father $d = .05$). Moreover, Sanders et al. (2008) reported a significant reduction of dysfunctional discipline parenting style ($p < .05$) which was maintained at follow up ($p < .05$).

### 2.3.1.3.3. Parenting Knowledge

On the other hand, only one study (Bert et al., 2008) focused in measuring...
the outcome of parenting knowledge. Bert et al. (2008) showed that its web-based intensive parenting programme provided knowledge gain of parenting \((p < .05)\) along with no statistically differences with the face-to-face programme of same content.

### 2.3.1.4 Conclusion of Studies

The 6 identified studies concluded that online-based parenting programmes can be effective especially with significant outcomes in child behaviour, parenting style and parenting knowledge (Bert et al., 2008; Enebrink et al., 2012; Morawska et al., 2014; Sanders et al., 2012; Sanders et al., 2008; Sanders et al., 2014). Online parenting interventions were more accessible (Enebrink et al., 2012; Morawska et al., 2014) and cost-efficient (Bert et al., 2008; Enebrink et al., 2012), and comparable to self-help (Sanders et al., 2014), group-based (Enebrink et al., 2012), and face-to-face dissemination (Bert et al., 2008). Reviewed studies suggested that online parenting programmes had greater values in the comprehensive public health by providing parenting support for child behaviour problems as they have the potential to attain a large population of parents (Morawska et al., 2014; Sanders et al., 2008).

### 2.3.2 Synthesis and Recommendations

Data and evidence of the 6 studies were further synthesized to propose
recommendations on participants, intervention, assessment and outcomes evaluation, and facilitators for the proposed guideline for providing the online parenting programme.

2.3.2.1. Participants

Among all 6 studies, participants who were parents with child behaviour concerns were self-referred to trials had shown significant results. Therefore, professional referral might not be necessary for the proposed programme. Results were found very effective for slightly elevated but not severe child behaviour condition, thus indications of early child behaviour problems by an elevated ECBI score without actual professional diagnosis of behavioural or emotional problems might be addressed in the proposed guideline for selecting appropriate targets (Enebrink et al., 2012; Sanders et al., 2012). Despite parents with children aged 2 to 3 were recruited in the study of Bert et al. (2008), all other 5 studies targeted on parents with children of mean age at about 4 to 6. As children at 4 to 6 were more cognitively competent, thus the proposed evidence-based programme might target children aged from 4 to 6 as to apply evidence from the included studies. Management of ineligible parents should be considered. We might provide information about other parenting references or other health professionals to them as suggested by the study of Enebrink et al. (2012).
Even though superior significant effects had been showed in studies with more proportions of highly educated parents’ participants (Enebrink et al., 2012; Sanders et al., 2012), we could adopt the suggested inclusion criteria of a minimum reading ability at primary school level as it might be more suitable for our proposed programme (Sanders et al., 2012). Besides, limited amount of fathers were recruited in the 5 studies which targeted at both mothers and fathers participants (Morawska et al., 2014; Sanders et al., 2012; Sanders et al., 2008; Sanders et al., 2014). To enlarge the programme usage for both parent groups, fathers’ participations were suggested to be promoted (Bert et al., 2008). In the studies of Sanders et al. (2012) and Enebrink et al. (2012), more proportions of fathers than other studies was attracted and recruited by mass media, internet or online parenting forums and childcare settings, which might be the better mean to arouse both parents groups’ interest into a parenting programme.

2.3.2.2. Intervention

Regarding to the intervention features, focused contents of all selected studies were similar which include parenting principles and positive parenting skills (Bert et al., 2008; Enebrink et al., 2012; Morawska et al., 2014; Sanders et al., 2012; Sanders et al., 2008; Sanders et al., 2014). All online parenting programmes were effective, however, Triple P which emphasized on core
parenting principles and positive parenting skills were encouraged for standardizing the framework of the proposed online programme as it was adopted by 4 out of 6 studies (Morawska et al., 2014; Sanders et al., 2012; Sanders et al., 2008; Sanders et al., 2014). The use of online training modules on well-designed websites was suggested by 4 studies (Bert et al., 2008; Enebrink et al., 2012; Sanders et al., 2012; Sanders et al., 2014) while video component was recommended to be one of the features of the online modules by 3 studies (Enebrink et al., 2012; Sanders et al., 2008; Sanders et al., 2014). Number of the online modules varied from 7 (Enebrink et al., 2012) to 12 (Bert et al., 2008). As too many or too long training modules would not be preferred and the greatest effects of child and parenting outcomes were shown by having less online modules in an interactive approach, 8 interactive Triple P online modules (Sanders et al., 2012; Sanders et al., 2014) which lasted for approximately 1.5 hours each (Enebrink et al., 2012) were recommended.

All online parenting interventions in the 6 studies initiated immediately after first assessment and last for a period of time. Even though fewer accesses to online parenting intervention were noted after weeks, Sanders et al. (2008) suggested that more times of using an online parenting programme may have a stronger intervention effect. Besides, results were still encouraging for those who
had not completed all online modules (Sanders et al., 2012). Therefore, the proposed guideline may suggest allowing access to the intervention website as early as possible for an appropriate duration, for instance immediately from one week of time after initial screening (Bert et al., 2008) for 6 months (Sanders et al., 2012).

Furthermore, the proposed programme should be delivered in an online-based approach, thus internet access is important. As we could not exclude clients without internet like the study of Sanders et al. (2012), information on free internet and computer access should be provided to clients in the proposed programme to minimize access problems for the programme as suggested by the study of Bert et al. (2008). Satisfactory rate of ever-logging into the online modules (96.7%) and completion rate of all online modules (43%) were achieved by Sanders et al. (2012). Therefore, making reminder calls and emails to subjects without logging, and follow up calls would be an effective method to encourage programme adherence and to avoid problems of programme features (Sanders et al., 2012). Several combined or enhancement strategies were also suggested by studies, such as providing workbook (Bert et al., 2008; Sanders et al., 2012; Sanders et al., 2008), offering short downloadable parenting information (Morawska et al., 2014) or having extra web supports and e-mail consultations.
Strategies to promote engagement and programme completion were also recommended such as making agreements with significant others (Sanders et al., 2008), providing contact detail of a support person (Morawska et al., 2014) and provision of professional contact by telephone, email, text messaging, video conference or in person (Sanders et al., 2014). All these effective strategies should be considered in the new guideline.

2.3.2.3. Assessment and Outcome Evaluation

In addition, methods of screening or tools of structured assessment and evaluation should also be included in the proposed guideline. Eligibility screenings by eligibility questionnaires were found to be effective in the way of telephone (Sanders et al., 2012), online (Sanders et al., 2008), or face-to-face interview (Enebrink et al., 2012). Eyberg Child Behaviour Inventory (Eyberg & Pincus, 1999) and Parenting Scale (Arnold, O’leary, Wolff, & Acker, 1993) were the two recommended structured measurement tools for assessing and evaluating child behaviour and parenting style (Enebrink et al., 2012; Morawska et al., 2014; Sanders et al., 2012; Sanders et al., 2008; Sanders et al., 2014). For outcomes evaluation, follow up were suggested to take place right after intervention (Bert et al., 2008; Enebrink et al., 2012) and at 3 months after intervention completion (Sanders et al., 2012; Sanders et al., 2008). They are vital to be included in the
initial assessment and follow up in the proposed guideline. Besides, parenting knowledge could be a potential secondary outcome measure (Bert et al., 2008).

2.3.2.4. Facilitators

Expert inputs of an evidence-based parenting programme were necessary for the content and materials of the online parenting programme (Enebrink et al., 2012; Morawska et al., 2014; Sanders et al., 2012; Sanders et al., 2014). Additionally, the programme should also be facilitated by experienced and accredited therapists such as clinical psychologists or trained cognitive behaviour programme providers (Enebrink et al., 2012; Sanders et al., 2008).

All these recommendations might be easily transferred to our clinical setting as our department has been collaborated with the TPI, one of the evidenced-based parenting programme training providers. FHS nurses are well-trained as the providers of Triple P with accreditation from the TPI. Nurses who are good collaborators with good rapports with clients may also have the advantages to be the contacting and supporting person for reminder calls, programme enquiry or consultations (Sanders et al., 2012). However, an extra training in how to handle technical problems, and how to clarify and respond to parents’ questions and provide supports to follow the online programme might be included in the proposed guideline (Enebrink et al., 2012). In short, the proposed
online parenting programme should be standardized and available on a secured web site for parent targets, and accredited nursing staff should be the facilitator. To further enhance the whole programme, supervision by an experienced clinical psychologist should also be incorporated into the proposed guideline as suggested by the study of Enebrink et al. (2012).

2.4. Conclusion

After reviewing the 6 selected studies done in recent years, online parenting programmes were found to be effective in improving child behaviour problems. No single study provided the most effective guideline. However, the review had identified some crucial components that should be integrated into the guideline for providing the proposed online parenting programme.
Chapter 3: Translation and Application

3.1. Implementation Potential

To evaluate the implementation potential of the proposed parenting programme, the transferability of the selected studies to our targeted unit and populations, the feasibility of implementing the programme, and the cost-benefit ratio of the innovation should be carefully considered.

3.1.1. Transferability of Findings

3.1.1.1. Target Audience and Setting

The targeted units of the proposed programme are the Maternal and Child Health Centres (MCHCs) under the FHS of the DH which offer child health services at primary care level to promote holistic health for children up to 6 years old. As the government-run centres, 90% parents of local children would have received services from MCHCs (J. Leung, 2009). Thus, our targeted audiences are the representatives of general local parents and children in Hong Kong. According to CIA (2008), mothers’ mean age at child birth is 29.8 in Hong Kong. Their estimated average age would cross the 30 year threshold when their children reach preschool age at about 4. Parenting and child behaviour problems of preschool students are one of the main concerns. Therefore, targeted audiences of the proposed parenting programme are those local parents with children aged from 4
to 6 years old who indicate concerns about the behavioural problems in their
children.

Selected studies shared similar public health settings with our proposed
setting as most of their populations were recruited from similar community
outreaches such as childcare setting (Sanders et al., 2012), family practice centre
and day-care centre (Bert et al., 2008). Other came from online recruitment
(Enebrink et al., 2012; Sanders et al., 2012; Sanders et al., 2008) or school setting
(Enebrink et al., 2012; Morawska et al., 2014; Sanders et al., 2012), but all
children population from the selected studies were those displaying or being
concerned with behavioural problems, and their age ranged from 2 to 12 (mean
age at about 4 to 6).

For parents, according to the Child Survey of Centre for Health Protection
(2009), more than 80% of parents in Hong Kong were adequately educated with
secondary or above. Similar literacy levels in 78% to 83% were reported in two
studies (Sanders et al., 2012; Sanders et al., 2008) despite 74% were reported to
have higher school education in one study (Enebrink et al., 2012). With reported
parents’ mean age of 30 to 39 from studies (Bert et al., 2008; Morawska et al.,
2014; Sanders et al., 2012; Sanders et al., 2014), evidence would be transferable
as both populations shared similar age and educational characteristics.
Undoubtedly, all selected studies were done in western developed countries such as Australia (Morawska et al., 2014; Sanders et al., 2012), New Zealand (Sanders et al., 2014), Sweden (Enebrink et al., 2012), the UK (Sanders et al., 2008), and the USA (Bert et al., 2008). Nevertheless, Hong Kong is also a developed city and the effectiveness of Triple P had been validated in Chinese population (C. Leung et al., 2013; C. Leung et al., 2003; Li et al., 2013).

In terms of the setting as well as the children and parents audiences of the selected studies, it was found that they may fit the target of the proposed guideline.

3.1.1.2. Philosophy of Care

The FHS under the DH aims at leading the community in promoting the health and well-being of children and families in Hong Kong by developing evidence-based programmes to meet the changing needs of the communities, as well as providing user-friendly, cost-effective, and quality-assured service (FHS, 2009). Indeed, all reviewed studies emphasised in developing a cost-effective and convenient evidenced-based parenting programme for parents of children to improve child behaviour problems in a public health approach. Therefore, the mission and philosophy of care of the reviewed studies were consistent with the targeted.
3.1.1.3. Number of Clients

Large amount of clients is expected as MCHCs are the public child health service provider in Hong Kong. In 2013, Group Triple P had an attendance number of 88 in a selected MCHC. Based on this information, it is possibly estimated that more than 2700 parents per year would be expected among the 31 centres.

Indeed, the number of potential clients might be more than expected as those who had previously declined the traditional group programme would favour the new online-based approach. There were nearly 50,000 newborn babies per year in Hong Kong (Census and Statistics Department, 2011). With 90% coverage ratio (J. Leung, 2009), it is estimated that near 45,000 children at each age year per year were under the services by MCHCs while about 10% children of them (i.e. 4500) were parent-perceived to have problems of child behaviour (C. Leung et al., 2005). According to Equal Opportunities Commission (2013), approximately 14.5% of general population were suffering from mental illness. As parents with mental illness would be excluded from the programme, conservatively, a significant number of parents of 3847 children per year possibly would be benefited from the innovation.

3.1.1.4. Duration of Programme
The proposed programme can be implemented and evaluated within 25 months as presented in Appendix G. One month would be required for getting approval from the administrators of the department. After that, 3 months would be expected to negotiate with the TPI for an approval for an innovative Chinese version of the online positive parenting programme, Triple P Online. A total of 6 months would be required to communicate with Information Technology Management Unit (ITMU) for getting support and setting up the website for the programme. Meanwhile, 6 months would be needed to attain the licences and culture adaptation for the Triple P Online in Chinese Language with the supports from the TPI. When the innovative website is almost available, 2 months would be used to communicate the proposed programme with corresponding nursing officers and front-line nursing staff. Before the pilot, a one-day orientation training to train the nurse trainers in how to deliver the intervention through the website is needed (Enebrink et al., 2012). Time for promotion and recruitment of sufficient number of interested and concerned parents for the pilot study would take 2 months. After initial screening and pre-intervention assessment, intervention would be carried out for 3 months until parents complete their post-intervention assessment (Bert et al., 2008; Sanders et al., 2012; Sanders et al., 2008). Finally, data analysis of pilot study would take one more months for
further evaluation and considerations of modification or repeating the pilot. Therefore, the proposed programme would need 17 months for its preparation, implementation and evaluation prior to actual full-scale implementation. After further staff training, the actual programme would then need 2 months to recruit sufficient subjects. Length of implementation and evaluation is about 6 months which is consistent with the reviewed studies mentioned as follow up evaluation would take place 3 months after the intervention completion (Sanders et al., 2012; Sanders et al., 2008). Lastly, the whole programme would be evaluated for its effectiveness after 25 months.

3.1.2. **Feasibility**

Apart from transferability, feasibility of the proposed programme should also be evaluated.

### 3.1.2.1. Nursing Autonomy

The DH, as one of the government organization, is expected to have a certain level of resistance to change. In current practice, decisions to implement new innovation are made by senior administrative staff due to its organisational structures. However, the Public Health Nursing Division (PHND) has the autonomy on whether an innovation is adopted and maintained. With its support, it would be feasible for nurses to carry out the innovation in the FHS. Besides,
problems of the new programme could be discussed in the parental support group 
meetings for any changes or even termination if it is undesirable.

3.1.2.2. Administration and Organization Supports

There are increasing trends of adopting innovations in the DH. Although 
getting departmental support for the innovation would be difficult due to its huge 
investment cost, it is not impossible as costly but valuable innovation such as 
prescribing dietary supplements to all antenatal clients was carried out 
successfully based on strong evidence in studies. Additionally, the innovation may 
actually save cost in a long run. Besides, online parenting platform is feasible in 
the FHS. Parenting Made Easy is one of its online platforms which helps to trend 
down the old practice of group-based child care workshop, Happy Parenting 
Workshop in MCHCs. As the overall climate of the FHS is conductive and 
open-minded to electronic platform and research utilization, the department would 
be feasible to implement the programme as it is convenient, cost-effective and can 
save more manpower with evidence provided.

3.1.2.3. Risk of Friction

Like any other new programme, fair degree of consensus among staff 
would be a potential barrier. Nursing staff would be stressed with extra workloads 
from the new programme. In fact, it might not much interfere with current staff
function as the orientation training only needs one working day and not more than 60 minutes operation time would be needed for each client for the whole programme. Moreover, their workload would be even less because of decreasing demand in Group Triple P and extra nursing counselling in parenting. Resistances within organization would be diminished through proper planning, communication, staff orientation and implementation of pilot study. Supports from other health professionals such as CPs are needed. However, it would be feasible by inviting their consensus similar to the traditional group programme.

Friction from the outside should also be considered. As Group Triple P was adopted by the DH and similar innovation had been used in Australia by Sanders et al. (2012), getting approval for a Chinese language version from the TPI would only involve some times and efforts. However, if the programme is successful, mild and early child behaviour problems would be resolved. The overall severity of child behaviour problems of children to be referred to Child Assessment Clinic (CAC) or Paediatric Department of Hospital Authority (HA) would increase. Although the two departments would have less number of cases in general, more strength of medical efforts than usual for each referred case would be required.

3.1.2.4. Equipment
In addition, extra equipments such as network server are required. However, they could be obtained by having the support from the ITMU. With the extra training, nurses would be possible to have the computer techniques to lead the programme.

3.1.2.5. Tools for Evaluation

Tools are needed to evaluate the effectiveness of the proposed programme. ECBI had been used for Group Triple P for a long time in the FHS, and was the suggested structured measurement tool for assessing and evaluating child behaviour outcomes in 5 selected studies (Enebrink et al., 2012; Morawska et al., 2014; Sanders et al., 2012; Sanders et al., 2008; Sanders et al., 2014). PS was the structured measurement tool for assessing parenting style employed by 4 selected studies (Morawska et al., 2014; Sanders et al., 2012; Sanders et al., 2008; Sanders et al., 2014). It would be feasible to evaluate the proposed programme as the two appropriate validated measuring tools in Chinese version are already available.

To conclude, in terms of nursing autonomy, administrative and organization supports, risk of friction, equipment and tools for evaluation, our proposed programme is similar to those highlighted, thus it should be feasible in the targeted service setting.

3.1.3. Cost-benefit ratio of the innovation
3.1.3.1. Potential Risks and Benefits

According to the selected studies (Bert et al., 2008; Enebrink et al., 2012; Morawska et al., 2014; Sanders et al., 2012; Sanders et al., 2008; Sanders et al., 2014), online parenting programmes are effective in improving child behaviour, parenting style or parenting knowledge without any report of harmful risk to parents or children. As presented in Appendix H, there are more benefits than risks to the clients, the staff and organization. Conversely, if the programme is not implemented, benefits from the evidence would lose. Minimal parents can access to an evidenced-based parenting programme which may result in an increasing rate or intensity of child behaviour problems and parental stress. More risks of child would be resulted while prevalence of child maltreatment or child abuse may continue to increase.

3.1.3.2. Estimated Cost and Savings

Apart from the above, benefit of huge cost savings is expected from the innovation. With the set-up cost, the estimated total cost of the proposed programme is $10921 per 10 clients in a short run (Appendix J). However, if the programme would have been carried out in a long-term with completion of staff training, the cost would be diminished to $6620 per 10 clients without the set-up expenditure. If the online parenting programme is implemented, the cost of
implementing Group Triple P to this group of parents would be saved, which is $12648 per 10 clients (Appendix K). As presented in Appendix L, large amount of cost saving would be expected in the short run and after the full-scale implementation of the proposed programme, which is $1727 per 10 clients and $6028 per 10 clients respectively. The yearly cost saving would be $2,318,971 for 3847 potential clients per year in the long run.

3.2. Evidenced-Based Practice (EBP) Guideline

With the implementation potential identified above, an EBP guideline is developed for providing Triple P in an online-based approach for parents of children with behavioural problems.

3.2.1. Title

An evidenced-based guideline for providing online positive parenting programme for parents of children with behavioural problems.

3.2.2. Target Group

3.2.2.1. Intended User of the Guideline

The guideline is to support Triple P accredited nurses for the operation of the online parenting programme in MCHCs.

3.2.2.2. Target Population

Parents who have a child with mild to moderate behavioural problems or
those having problems in handling behaviours of their children.

3.2.3. Objectives

The objectives of the guideline are to:

- Summarize available evidences for online parenting programme for child behaviour problems.
- Formulate an online parenting programme for parents to improve child behaviour problems.
- Standardized clinical practice instructions for nurses on the recruitment, implementation and evaluation of the programme in MCHCs.

3.2.4. Recommendations

A total of 6 studies were selected and reviewed in Chapter 2. According to the checklist of SIGN (2012), levels of evidence of the 6 studies were ranged from 1+ (Enebrink et al., 2012; Sanders et al., 2012) to 1- (Bert et al., 2008; Morawska et al., 2014; Sanders et al., 2008; Sanders et al., 2014). Ten recommendations for the recruitment, implementation and evaluation of the programme were made from the 6 studies as listed below. Details of their supporting evidences were provided in Appendix M. Grading of each recommendation were based on the grading system of the SIGN (SIGN, 2011) as presented in Appendix B.

3.2.4.1. Recruitment
3.2.4.1.1. Recommendation 1

Online parenting programme is an effective parenting programme for those parents with child behaviour problems, especially who are barely available for the traditional group parenting programme. (Grade A)

3.2.4.1.2. Recommendation 2

Targeted children should be aged at 4 to 6, with mild to moderate range of severity of child behaviour problems, not warrant referral to have assessment or follow up in specialties such as child assessment service or psychiatric service. Ineligible children should be referred for further medical assessment or provided with other parenting information for references. (Grade A)

3.2.4.1.3. Recommendation 3

Parents should be without mental illness, literate and have completed at least primary education level. (Grade A)

3.2.4.1.4. Recommendation 4

Both parents, especially for father, should be encouraged to participate. Parents who do not have internet access or computer should be assisted if necessary. (Grade B)

3.2.4.2. Implementation

3.2.4.2.1. Recommendation 5
Triple P accredited nurses with additional training should be the programme facilitators. (Grade A)

3.2.4.2.2. Recommendation 6

The online parenting programme should consist of 8 interactive online modules which last for about 1.5 hours each. The content of the online modules should focus on the 17 core positive parenting skills of Triple P presented and accessed in sequential order of: (1) Positive parenting (2) Preferable behaviour (3) New skills (4) Behaviour problems (5) Disobedience (6) Avoiding problems by planning (7) Making fun (8) Raising kids. (Grade A)

3.2.4.2.3. Recommendation 7

The programme should include a workbook and an email helpline which is responded by Triple P accredited nurses. (Grade B)

3.2.4.2.4. Recommendation 8

Eligible parents should be allowed to access the programme website within one week after screening. They should be encouraged to complete the intervention within 3 months, but access can be allowed for 6 months. (Grade A)

3.2.4.2.5. Recommendation 9

Trained nurses should contact parents by phone at 2 weeks and again 5 weeks after intervention has started for any problems, and by email and phone if
parents have not logged on to the programme for 3 weeks. (Grade A)

3.2.4.3. Evaluation

3.2.4.3.1. Recommendation 10

Online questionnaires should be completed by parents at pre-intervention, post-intervention (at completion of the 3-month intervention) and follow-up (3 months after intervention completion) for intervention effect evaluations. For outcome measurements, the online questionnaires should include Eyberg Child Behaviour Inventory, Parenting Scale and a knowledge test for positive parenting principle. (Grade A)
Chapter 4: Implementation Plan

4.1. Communication Plan

A communication plan is needed before the actual implementation of the proposed online parenting programme in which potential stakeholders would be identified, and the process of communicating with them would be considered.

4.1.1. Identification of Stakeholders

Stakeholders are those who would be affected by the implementation of the proposed innovation. Regarding the proposed online parenting programme which would take place in the MCHCs under the FHS, internal stakeholders include the administrators, service providers, supporters and clients. They consist of frontline Medical Officers (MOs), Nursing Officers (NOs), Triple P accredited nurses, as well as parents of the child with behavioural problems attending any of the 31 MCHCs. Besides, Clinical Psychologists and Senior Nursing Officers (SNOs) in different district clusters under the FHS, administrators of the PHND, and technicians of ITMU are also part of the internal stakeholders as the programme could not be implemented without their approval and support.

In addition, external stakeholders should also be considered to avoid frictions. For example, the TPI, which is responsible for worldwide distribution of the Triple P resources and training, must be contacted in order to seek for their
endorsement. CAC and Paediatric Department of the HA would also be contacted in preparation for the potential need for additional referrals arising from the proposed programme.

4.1.2. Communication Process

Good communication processes with these identified stakeholders are necessary to ensure the success of the proposed programme. Administrators of the PHND Head Office must be convinced as they played a key role in making the final decision about the approval of an innovation. However, a bottom-up communication flow would be more appropriate at the very beginning.

To start with, front-line MOs and NOs should be communicated during parental support group meetings for a discussion on the clinical issue of child behaviour and parenting problems, the difficulties of current practice in tradition Group Triple P programme, the affirming needs of an accessible parenting programme as well as the evidence from the literature for the proposed programme. Furthermore, CPs under the FHS should also be approached for their support in relation to the proposed programme as they are the specialists and consultants of all Triple P programmes in the FHS.

With their support, a communication team would then be formed as the
programme proposer to persuade those at the managerial level to initiate the necessary changes. The team would consist of two Triple P accredited registered nurses, one NO, one MO and one CP. A written proposal with presentation PowerPoint would be prepared by the team with highlights of the clinical issue in question, evidence, manpower and resource needs, cost-benefits, and feasibility of the proposed online programme. A formal meeting would be arranged for a presentation to the SNOs of all clusters under the FHS. For those at the managerial level, they also include the nursing administration section of the PHND Head Office who would be presented with the best evidence available especially the benefits of the proposed programme for both the parents and the department. The entire process of team building, preparation for presentation and meetings with the decision makers may take about 3 months.

If the PHND supports the programme, negotiation with the TPI would take place in terms of mutual beneficial collaboration. By convincing the latter about the contribution of the proposed programme to improve public health and the scientific value of the Triple P Online, the likelihood of obtaining permission from the TPI is enhanced. Also, the materials of the proposed programme would be translated from English into Chinese using a stringent translation and back-translation process by experts approved by the TPI and the FHS.
If the TPI approves the proposal, negotiation for extra training and other training materials for Triple P trained professionals for the online-based approach would commence. Then, the professional development section of the PHND would initiate a one-day training for the 2 registered nurses involved in the communication team who in turn would provide training for frontline Triple P nurses, with additional supports from the TPI as appropriate. Besides, technicians of ITMU would also be invited to maintain the online platform for the proposed programme. Meanwhile, the PHND Head Office would provide opportunities for the communication team to circulate information about the proposed programme by internal emails and circulars to SNOs and NOs who would coordinate briefing to frontline staff involved in the proposed programme. Patient outcomes and staff satisfaction would be reviewed in a pilot test. After that, the team would make revisions of the proposed programme based on the results of the pilot test. To further optimize the full-scale implementation, support from frontline Triple P nurses is essential and this can be done through explaining the effectiveness, benefits, and workload decline from the proposed online programme by the communication team during their training. Continuous promotion with further information of the programme would also be provided by the communication team to facilitate nurses’ compliance to sustain the change process.
4.2. Pilot Study Plan

As mentioned, in order to determine the feasibility of having an online-based approach of Triple P as the parenting programme in MCHCs, a pilot study would be carried out by the communication team made up of the 2 trained nursing coordinators and the frontline nursing staff in the pilot centre. To identify unexpected difficulties and determine whether revisions are needed before implementing the change in all MCHCs, online log analysis, client telephone surveys conduct by trained nursing staff as well as staff surveys and post-intervention staff evaluations would be used to inform what refinements are needed.

4.2.1. Location and Duration of the Pilot Study

The pilot study would be conducted in a selected MCHC as a pilot centre with a targeted sample size of 10 parents. The expected recruitment time is estimated to be around 2 months. Together with the 3-month online programme and the time required for data analysis, the pilot study would take about 6 months.

4.2.2. Recruitment of Subjects in the Pilot Study

The participants in the pilot who are parents of children would be recruited by convenience sampling based on the same inclusion and exclusion criteria as in the proposed programme. Inclusion criteria include (1) parents with primary
education or more, (2) with a child aged at 4 to 6, (3) for whom have been
diagnosed mild to moderate severity of child behaviour problems. Exclusion
criteria include (1) parents with mental illness, and (2) the child concerned
warrants referral to specialties such as child assessment service or psychiatric
service.

4.2.3. Things to be Tested

The pilot study should attempt to try out the process of the innovation in
the setting of MCHC. The testing should include the process of staff training and
subject recruitment, the acceptability and satisfaction of the proposed programme
by parents and staff, and the practicability of the programme platform, resources
and outcomes measurements.

4.2.3.1. Training

Training for frontline nurses to facilitate the proposed online parenting
programme is essential. The nursing coordinators in the communication team
would be responsible to train nurses in the pilot centre. A one-day training would
be provided. Whether the process, content and the duration of training are suitable
or sufficient would be reviewed by surveys and in staff meetings after the pilot.

4.2.3.2. Programme Materials and Online Platform

The feasibility of the programme materials and online resources should
also be tested. Before the implementation, all materials including parent’s workbook, education materials on the online platform and online questionnaires for outcome measurements as well as clients’ surveys are prepared. Any technical problems of the online platform would be identified by systematic data validations and comments from both staff and parents users. Besides, the parents recruited would be invited to access and provide comments about the proposed online programme during their telephone interviews. Comments on the understanding of materials, and log statistics for their actual usage, intervention uptake, and adherence would be collected from the parents. Furthermore, unexpected difficulties and misinterpretations of the guideline would also be noted for remedial actions.

4.2.3.3. Promotion, Recruitment and Acceptability

The Recruitment process should also be tested. Appropriate training for nurses would be undertaken and the programme promotion materials would be prepared to enrol eligible parents. Parents’ and nursing staff’s satisfaction and their opinions about the proposed programme would be collected using surveys. Parents who refuse to participate would also be interviewed for their reasons in order to effect further improvement. Logistical and recruitment difficulties would be noted. The staff sharing meetings would also allow nurses to express their
perception, satisfaction, perceived workloads, difficulties, and attitude towards the proposed programme.

4.2.3.4. The Study Measures and Outcomes

Study measures would be tested in the pilot study to determine if they can measure the outcomes accurately. The online questionnaire will consist of the Eyberg Child Behaviour Inventory, Parenting Scale, and True-false questions on Knowledge of Triple P (KTP). Although ECBI (Eyberg & Pincus, 1999) and PS (Arnold et al., 1993) are validated measurement tools for child behaviour and parenting style, all parents would have telephone interviews to ensure their understanding on the questions in their assessment tools. Their experiences in filling the questionnaires and any problems encountered would also be addressed during the telephone interviews to see whether their answers in the questionnaires are consistent with what they have entered. All the comments would be considered and addressed before the full-scale implementation to improve the user-friendliness and feasibility of the study measures.

4.2.4. After the Pilot Study

All the tests as mentioned above would be analyzed and discussed by the communication team within one month of completing the pilot study. After that, the evidenced-based online parenting programme would be finalized for full-scale
4.3. Evaluation Plan

In order to evaluate whether the innovation is effective after full-scale implementation in the local setting, strategies to evaluate the proposed programme are planned as below.

4.3.1. Identification of Outcomes

Two types of outcomes, patient outcome and health provider outcome, would be evaluated. An elaboration of the outcomes is as follows.

4.3.1.1. Patient Outcomes

The main objective of the proposed programme is to improve child behaviour problems, thus child behaviour will be our primary outcome. Based on the five reviewed studies (Enebrink et al., 2012; Morawska et al., 2014; Sanders et al., 2012; Sanders et al., 2008; Sanders et al., 2014), clinical benefits of child behaviour will be measured by the Eyberg Child Behaviour Inventory. For the secondary outcome, parenting style would be evaluated by Parenting Scale to determine the effectiveness of parenting styles in accordance with four of the selected studies (Morawska et al., 2014; Sanders et al., 2012; Sanders et al., 2008; Sanders et al., 2014). Knowledge of positive parenting, another secondary outcome, would be evaluated to determine parents’ knowledge gain from the
programme (Bert et al., 2008).

4.3.1.2. Health Provider Outcome

To determine the success of the proposed programme, health provider outcome would also be considered. As frontline Triple P nurses are the main health providers of the online programme, their satisfaction rate would be measured to determine their support and acceptance of the programme.

4.3.2. Nature and Number of Clients to be Involved

Convenience sampling will be used to recruit the clients for evaluation. Similar to the pilot study, the characteristics of the clients will follow the recommendations in the proposed guideline in Chapter 3 based on evidence derived from the six identified studies (Bert et al., 2008; Enebrink et al., 2012; Morawska et al., 2014; Sanders et al., 2012; Sanders et al., 2008; Sanders et al., 2014). Parents, literate with at least primary education, without mental illness, have a child aged at 4 to 6 with mild to moderate behavioural problems and not for referral to specialties (such as child assessment or psychiatric service) will be involved.

Online computer program, named Pifac version 1.76 (Lenth, 2011), is used for the calculation of the sample size required for evaluation of the proposed programme. As mentioned, ECBI scores will be our evaluation tools for the
primary outcome. Largest Standard Deviation (SD) and smallest effect size were adopted to get a more conservative estimate of the sample size. According to Sanders et al. (2012), the effect size is 3 in ECBI Problem and 14 in ECBI Intensity; the largest SD is 8 in ECBI Problem, and 29 in ECBI Intensity. Sample size is calculated based on each subscale and the larger value among the two calculated value is adopted. Using a one-sample \( t \) test with a power of 0.8 and a significance level of 0.05, the sample size is 58 calculated from ECBI Problem score with a SD of 8 and an effect size of 3. The lesser size estimated from ECBI Intensity score, which is only 36, is not adopted as calculated by SD of 29 and effect size of 14. Despite 5 selected studies (Bert et al., 2008; Enebrink et al., 2012; Morawska et al., 2014; Sanders et al., 2012; Sanders et al., 2014) reported dropout rates of less than 30%, one reviewed study, however, had a dropout rate of 64.9% (Sanders et al., 2008). Therefore, a conservative estimation by a 65% dropout rate is adopted, and the targeted sample size is 166.

4.3.3. When and How Often to Take Measurements

The time allowed for recruiting sufficient participants for evaluation is about two months. After that, it would take about 6 months for both implementation and evaluation of the proposed programme. Online questionnaire in Chinese version, including the two validated measurement scales, ECBI
(Appendix N) and PS (Appendix O), and one knowledge test, KTP (Appendix P), will be used for measuring the three patient outcomes. Measurements will be collected just before intervention, at completion of the 3-month intervention, and 3 months after intervention completion as a follow-up.

Concerning the health care provider outcome, staff satisfaction scores (0-5, with score 0=unsatisfactory, score 5=strong satisfactory) will be collected using the staff survey just before staff training as a baseline and at completion of intervention.

4.3.4. Data Analysis

Several data analysis will be performed to evaluate the outcomes. The two-tailed paired $t$-tests will be used to compare the baseline scores of ECBI, PS, and KTP collected just before intervention, with the scores collected immediately after completion of the 3-month intervention as well as 3 months after intervention completion at follow-up.

To determine the healthcare provider outcome, measurements of staff satisfaction will be collected just before staff training and on completion of intervention. The two-tailed paired $t$-tests will be applied to examine the difference of satisfaction score between baseline and post intervention scores to evaluate the changes of staff satisfaction.
4.3.5. Basis for Determining the Proposed Programme as Effective

The effectiveness of the proposed programme should be based upon the defined outcomes. As mentioned, the primary objective of the proposed programme is to improve child behaviour, while parenting style and parents’ knowledge on parenting would also be enhanced. In order to determine whether the proposed programme is effective in having substantial clinical benefits in patient outcomes, ECBI, PS, and KTP scores will be compared. However, the proposed innovation can be regarded as effective if there is significant improvement (p < 0.05) in the primary patient outcome, i.e. child behaviour, measured by ECBI with or without significant effects in the other two patient secondary outcomes.

In addition, for the health care provider outcome, the proposed programme will be regarded as successful in having staff supports if there is significant increase (p < 0.05) of satisfaction scores on completion from the baseline.

4.4. Conclusion

This implementation plan is essential as a comprehensive plan for communication, pilot study and evaluation is important to gain supports, indicate improvements and provide evidence for the proposed programme to make an effective change of Triple P practice in MCHC setting.
Appendix A  
SIGN Methodology Checklist 2: Controlled Trials  
(SIGN, 2012)

Methodology Checklist 2: Controlled Trials

<table>
<thead>
<tr>
<th>Study identification</th>
<th>Key Question No:</th>
<th>Reviewer:</th>
</tr>
</thead>
</table>

Before completing this checklist, consider:

1. Is the paper a **randomised controlled trial** or a **controlled clinical trial**? If in doubt, check the study design algorithm available from SIGN and make sure you have the correct checklist. If it is a **controlled clinical trial** questions 1.2, 1.3, and 1.4 are not relevant, and the study cannot be rated higher than 1+

2. Is the paper relevant to key question? Analyse using PICO (Patient or Population Intervention Comparison Outcome). IF NO REJECT (give reason below). IF YES complete the checklist.

Reason for rejection: 1. Paper not relevant to key question □ 2. Other reason □ (please specify):

### SECTION 1: INTERNAL VALIDITY

**In a well conducted RCT study…**

<table>
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<tr>
<th>Question</th>
<th>Does this study do it?</th>
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<tr>
<td>1.10</td>
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</tbody>
</table>

**Does this study do it?**

Yes □ No □ Can’t say □

Does not apply □

---

57
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<tr>
<th></th>
<th>SECTION 2: OVERALL ASSESSMENT OF THE STUDY</th>
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</table>
| 2.1 | How well was the study done to minimise bias?  
*Code as follows: (Appendix B)* | High quality (++) □  
Acceptable (+) □  
Unacceptable – reject 0 □ |
| 2.2 | Taking into account clinical considerations, your evaluation of the methodology used, and the statistical power of the study, are you certain that the overall effect is due to the study intervention? |   |
| 2.3 | Are the results of this study directly applicable to the patient group targeted by this guideline? |   |
| 2.4 | **Notes.** Summarise the authors’ conclusions. Add any comments on your own assessment of the study, and the extent to which it answers your question and mention any areas of uncertainty raised above. |   |
Appendix B
SIGN Grading System
(SIGN, 2011)

Levels of evidence

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<td>High quality meta-analyses, systematic reviews of RCTs, or RCTs with a very low risk of bias</td>
</tr>
<tr>
<td>1+</td>
<td>Well-conducted meta-analyses, systematic reviews, or RCTs with a low risk of bias</td>
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<tr>
<td>1-</td>
<td>Meta-analyses, systematic reviews, or RCTs with a high risk of bias</td>
</tr>
<tr>
<td>2++</td>
<td>High quality systematic reviews of case control or cohort or studies with a very low risk of confounding or bias and a high probability that the relationship is causal</td>
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<tr>
<td>2+</td>
<td>Well-conducted case control or cohort studies with a low risk of confounding or bias and a moderate probability that the relationship is causal</td>
</tr>
<tr>
<td>2-</td>
<td>Case control or cohort studies with a high risk of confounding or bias and a significant risk that the relationship is not causal</td>
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<td>3</td>
<td>Non-analytic studies, e.g. case reports, case series</td>
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<td>4</td>
<td>Expert opinion</td>
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Grades of recommendations

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<td>At least one meta-analysis, systematic review, or RCT rated as 1++, and directly applicable to the target population; or</td>
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<td>A body of evidence consisting principally of studies rated as 1+, directly applicable to the target population, and demonstrating overall consistency of results</td>
</tr>
<tr>
<td>B</td>
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<td>Extrapolated evidence from studies rated as 1++ or 1+</td>
</tr>
<tr>
<td>C</td>
<td>A body of evidence including studies rated as 2+, directly applicable to the target population and demonstrating overall consistency of results; or</td>
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<td>Extrapolated evidence from studies rated as 2++</td>
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<tr>
<td>D</td>
<td>Evidence level 3 or 4; or</td>
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<tr>
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<td>Extrapolated evidence from studies rated as 2+</td>
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# Appendix C

## Search Strategies and Search History

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<td>Keywords search for “Triple P” or “Positive parenting” or “Parenting program” or “Parenting intervention” or “Parent training program”</td>
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Appendix D
PRISMA Flowchart
(Moher, Liberati, Tetzlaff, & Altman, 2009)

Records identified through database searching in Pubmed database (n=229)

Additional records identified through CINAHL Plus database (n=11)

Additional records identified through PsycINFO database (n=482)

Records after duplicates removed (n=671)

Records screened (n=671)

Records excluded (n = 663)

Full Text articles assessed for eligibility (n=8)

Full Text articles excluded (n=2)
Reason:
Feasibility study (1), Incomplete article (1)

Studies included in synthesis (n=6)
## Appendix E
### Table of Evidence

<table>
<thead>
<tr>
<th>Citation</th>
<th>Study Type</th>
<th>Population Characteristics</th>
<th>Intervention (IG)</th>
<th>Comparison (CG)</th>
<th>Length of Follow-up</th>
<th>Outcome Measures</th>
<th>Effects Size (Intervention – Control)</th>
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<tr>
<td>Bert et al. (2008)</td>
<td>RCT (1-)</td>
<td>Mothers with a concerned child, recruited through the use of paediatricians, family practice centres, and day-care centres. Parents Mothers (100%) Mean Age = 30.74 (SD = 5.87) Education: not reported Children (Age 2-3) Mean Age = not reported Gender: M (47%), F (53%) Country of recruitment USA</td>
<td>IG1 12-week consecutive web-based training sessions of “Adventures in Parenting” (n=40) IG2 12-week face-to-face group training session (1 hr) with approximately 10 mothers each groups in addition to “Adventures in Parenting” with booklet (n=45)</td>
<td>Booklet as sole intervention (n=49)</td>
<td>3 months</td>
<td>Knowledge gain of parenting RPM3 Total scores</td>
<td>$F(2,96) = 4.50, p&lt;.05$ (No statistically difference for IG1 and IG2)</td>
</tr>
<tr>
<td>Sanders et al. (2008)</td>
<td>RCT (1-)</td>
<td>Parents with a behaviour concerned child, who were recruited by website featured in newspapers, posters and emails. Parents Mothers (95.1%) Father (3.3%) Mean Age = not provided Education: None (5.3%), GCSEs (36.3%), A levels (18.1%), Trade (3.3%), University Degree (20.3%) Children (Age 2-9) IG: Mean Age = 5 yr 5 m CG: Mean Age = 5.5 Gender: M (64.9%), F (35.1%) Country of recruitment UK</td>
<td>Triple P self-help workbook with extra web support and also an email helpline run by accredited Triple P service provider, in addition to the television series viewing throughout 10 weeks (n=231)</td>
<td>Standard six-episode weekly television series (n=222)</td>
<td>12 weeks (post-assessment) and 6 months (follow-up)</td>
<td>1) Child behaviour ECBI Problem 2) Parenting style PS</td>
<td>Short term (pre-post) 1) $F(1,163)=4.261, p&lt;.05$ IG d=.60 CG d=.38 2) $F(1,168)=4.280, p&lt;.05$ IG d=.53 CG d=.46 Long-term effect (pre-6 month) 1) $F(1,108)=.925, (ns)$ IG d=.80 CG d=.60 2) $F(1,114)=3.749, p&lt;.05$ IG d=.98 CG d=.53</td>
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## Appendix E

### Table of Evidence

<table>
<thead>
<tr>
<th>Citation</th>
<th>Study (Levels of Evidence)</th>
<th>Population Characteristics</th>
<th>Intervention (IG)</th>
<th>Comparison (CG)</th>
<th>Length of Follow-up</th>
<th>Outcome Measures</th>
<th>Effects Size (Intervention – Control)</th>
</tr>
</thead>
</table>
| Enebrink et al. (2012) | RCT (1+) | Parents with children displaying behaviour problems (scoring ECBI one SD above the mean) who were recruited via advertisement in newspapers, information on the internet, at campus, psychiatry, and at school. **Parents**<br>Participants: Only mothers (27.9%)<br>Only fathers (2.9%)<br>Both parents (69.2%)<br>Mean Age = not provided<br>Education: High school education (74%)<br>Country of recruitment: Sweden | 7 online sessions (1.5 h each) of a Swedish parenting programme, Comet, on a secure website, composed of written text, interactive videos and illustrations. Downloadable materials, diary, homework, multiple choice questions were provided. Assistants receive one-day training in how to monitor parents’ work, respond to enquiries or computer problem, feedback on diary.  
(n=58) | Waitlist control group  
(n=46) | 10 weeks | Child behaviour<br>(i) ECBI Problem<br>(ii) ECBI Intensity<br>(iii)SDQ Total | (i) $F(1,85)=23.83$, p<.01 $d=+.72$
(ii) $F(1,85)=8.95$, p<.01 $d=+.42$
(iii) $F(1,85)=17.01$, p<.001 $d=+.62$

Sanders et al. (2012) | RCT (1+) | Parents with a child with elevated levels of disruptive behaviour (on the ECBI) who were recruited through community outreach (mass media, online forums, schools and childcare settings) followed by telephone screening. **Parents**<br>Mother (91%) Father (9%)<br>Mean Age = 37.37 (23-50)<br>Education (Ability to read at Year 5 level or more): High school or less (17%), Technical college (25%), University degree (58%).<br>Country of recruitment: Australia | Triple P Online 8 interactive self-directed positive parenting programme modules delivered via the internet. Contacted by research assistant 2 weeks and again 5 weeks. Reminder calls and email if not logged on for 3 weeks. Prone to complete within 3 months.  
(n=60) | Internet-as-usual control group  
(n=56) | 3 months (post-assessment) and 6-month (follow-up assessment) | 1) Child behaviour and adjustment<br>(i) ECBI Problem<br>(ii) ECBI Intensity<br>(iii)SDQ Conduct<br>(iv)SDQ Emotion<br>2) Parenting style<br>(i) PS Laxness<br>(ii) PS Over-reactivity<br>(iii)PS Verbosity | 1) (i) $F(1,112)=18.84$, p=.000, $d=.71$
(ii) $F(1,112)=30.69$, p=.000, $d=.89$
(iii) $F(1,110)=9.72$, p=.002, $d=.58$
(iv) $F(1,110)=9.56$, p=.003, $d=.44$
2) (i) $F(1,111)=6.14$, p=.015, $d=.53$
(ii) $F(1,111)=16.07$, p=.000, $d=.61$
(iii) $F(1,111)=8.57$, p=.004, $d=.57$

| Short term effect (pre-post) | (i) $F(1,112)=14.00$, p=.000, $d=.60$
(ii) $F(1,112)=20.53$, p=.000, $d=.74$
(iii)& (iv) $F(1,112)=1.415$, p=.225 (ns)

| Maintenance effect (pre-6m) | (i) $F(1,111)=19.24$, p=.000, $d=.80$
(ii) $F(1,111)=28.69$, p=.000, $d=.84$
(iii)$F(1,111)=13.43$, p=.000, $d=.69$ |
## Appendix E
### Table of Evidence

<table>
<thead>
<tr>
<th>Citation</th>
<th>Study (Level of Evidence)</th>
<th>Population Characteristics</th>
<th>Intervention (IG)</th>
<th>Comparison (CG)</th>
<th>Length of Follow-up</th>
<th>Outcome Measures</th>
<th>Effects Size (Intervention – Control)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morawska et al. (2014)</td>
<td>RCT (1-)</td>
<td>Parents with children who were recruited via school newsletter for those had concerns about their child’s behavioural and/or emotional adjustment</td>
<td>Assess to 7 online and downloadable podcasts (9-14 mins) about positive parenting skills (Triple P) in 3 phrases over 2 weeks (n=73)</td>
<td>No intervention control group</td>
<td>4 weeks</td>
<td>1) Child behaviour (i) ECBI Intensity (ii) ECBI Problem (iii) CAPE Emotional (iv) CAPE Behavioural 2) Parenting style (i) PS Laxness (ii) PS Over-reactivity (iii) PS Verbosity</td>
<td>1) (i) F(1,99)=24.04, p&lt;.001, d=.56  (ii) F(1,99)=5.24, p=.024, d=.39  (iii) F(1,99)=.34, p=.653 (ns), d=.10  (iv) F(1,99)=1.13, p=.291 (ns), d=.15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parents</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2) (i) F(1,99)=10.97, p=.001, d=.49  (ii) F(1,99)=11.55, p=.001, d=.39  (iii) F(1,99)=19.47, p&lt;.001, d=.88</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean Age = 36.99 (SD =5.7)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Children</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Mean Age = 6.06 (2-10)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Gender: M (92.8%), F (6.5%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Country of recruitment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Australia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sanders et al. (2014)</td>
<td>RCT (1-)</td>
<td>Parents displaying early onset disruptive behaviour difficulties</td>
<td>Triple P Online 8 interactive self-directed positive parenting programme modules delivered via the internet The program addresses the same content areas and parenting strategies as the workbook with additional features (Video, parent-driven information, probes and exercises, worksheets, podcasts and tip sheet reviews). (n = 97)</td>
<td>Standard Self-Help Triple P group as a non-inferior treatment group which received the Every Parent’s Self-Help workbook by mail. (n = 96)</td>
<td>10 weeks</td>
<td>1) Child behaviour (i) ECBI Intensity (ii) ECBI Problem 2) Parenting style (i) PS Over-reactivity</td>
<td>Non-inferior intervention effect size (pre-post) 1) (i) (Mother) d= -0.13  (Father) d= -0.14  (ii) (Mother) d= -0.09  (Father) d= -0.16 2) Parenting style PS (i) (Mother) d= -0.03 (Father) d= 0.05</td>
</tr>
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<tr>
<td></td>
<td></td>
<td>Mean Age = 37.19</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Father = 39.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>% of University Education: Mothers (47%) Father (48 %)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Children</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean Age = 5.63 (3-8)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gender: M (67%), F (33%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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<td>Country of recruitment</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>New Zealand</td>
<td></td>
<td></td>
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</tr>
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</table>
## Appendix F
### Appraisal Table

<table>
<thead>
<tr>
<th>Remarks</th>
<th>Article 1</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIGN methodology Checklist for Controlled Trials (SIGN, 2012)</td>
<td>Remarks</td>
<td></td>
</tr>
<tr>
<td>Research questions were addressed clearly in Introduction. “Do face-to-face groups and/or web-based sessions substantially improve participant’s recall of RPM3 principles as compared to the booklet condition?” was focused.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The assignment of subjects to treatment groups is randomised.</td>
<td>Can’t say</td>
<td>Random assignment was stated. However, no details of method on randomization were mentioned.</td>
</tr>
<tr>
<td>An adequate concealment method is used.</td>
<td>No</td>
<td>Not mentioned.</td>
</tr>
<tr>
<td>Subjects and investigators are kept ‘blind’ about treatment allocation.</td>
<td>No</td>
<td>Not mentioned.</td>
</tr>
<tr>
<td>The treatment and control groups are similar at the start of the trial.</td>
<td>Yes</td>
<td>ANOVA and chi-square analyses revealed no significant differences between intervention conditions.</td>
</tr>
<tr>
<td>The only difference between groups is the treatment under investigation.</td>
<td>Yes</td>
<td>No extra intervention was noted.</td>
</tr>
<tr>
<td>All relevant outcomes are measured in a standard, valid and reliable way.</td>
<td>Yes</td>
<td>To insure intercoder reliability, the two research assistants coded each questionnaire and their degree of agreement was assessed in accordance with procedures by expert.</td>
</tr>
<tr>
<td>What percentage of the individuals or clusters recruited into each treatment arm of the study dropped out before the study was completed?</td>
<td>20.8%</td>
<td>Gift cards were given to completers. From the original sample of 134, only 106 participants completed the post-intervention assessment. Relatively acceptable dropout rate.</td>
</tr>
<tr>
<td>All the subjects are analysed in the groups to which they were randomly allocated (often referred to as intention to treat analysis).</td>
<td>No</td>
<td>ITT not mentioned.</td>
</tr>
<tr>
<td>Where the study is carried out at more than one site, results are comparable for all sites.</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>SECTION 2: Overall assessment of the study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How well was the study done to minimise bias? Code ++, +, or –</td>
<td>-</td>
<td>High risks of bias as there are uncertainty of randomization, concealment, blinding and consideration of ITT.</td>
</tr>
<tr>
<td>Taking into account clinical considerations, your evaluation of the methodology used, and the statistical power of the study, are you certain that the overall effect is due to the study intervention?</td>
<td>Yes</td>
<td>A power of .81 was considered.</td>
</tr>
<tr>
<td>Are the results of this study directly applicable to the patient group targeted by this guideline?</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Notes. Summarise the authors’ conclusions. Add any comments on your own assessment of the study, and the extent to which it answers your question and mention any areas of uncertainty raised above.</td>
<td></td>
<td>The study demonstrated online parenting programme is more cost-efficient than and nearly as effective as face-to face dissemination.</td>
</tr>
</tbody>
</table>
## Appendix F
### Appraisal Table

<table>
<thead>
<tr>
<th>Section 1: Internal validity</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 The study addresses an appropriate and clearly focused question.</td>
<td>Yes</td>
</tr>
<tr>
<td>1.2 The assignment of subjects to treatment groups is randomised.</td>
<td>Can’t say</td>
</tr>
<tr>
<td>1.3 An adequate concealment method is used.</td>
<td>Yes</td>
</tr>
<tr>
<td>1.4 Subjects and investigators are kept ‘blind’ about treatment allocation.</td>
<td>No</td>
</tr>
<tr>
<td>1.5 The treatment and control groups are similar at the start of the trial.</td>
<td>Yes</td>
</tr>
<tr>
<td>1.6 The only difference between groups is the treatment under investigation.</td>
<td>Yes</td>
</tr>
<tr>
<td>1.7 All relevant outcomes are measured in a standard, valid and reliable way.</td>
<td>Yes</td>
</tr>
<tr>
<td>1.8 What percentage of the individuals or clusters recruited into each treatment arm of the study dropped out before the study was completed?</td>
<td>64.9%</td>
</tr>
<tr>
<td>1.9 All the subjects are analysed in the groups to which they were randomly allocated (often referred to as intention to treat analysis).</td>
<td>Yes</td>
</tr>
<tr>
<td>1.10 Where the study is carried out at more than one site, results are comparable for all sites.</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

## SECTION 2: Overall assessment of the study

| 2.1 How well was the study done to minimise bias? Code ++, +, or – | - | Lack of details of randomization. No blinding were mentioned. Very high dropout with consideration of ITT. |
| 2.2 Taking into account clinical considerations, your evaluation of the methodology used, and the statistical power of the study, are you certain that the overall effect is due to the study intervention? | Yes | Attrition rate was very high, however, ITT was well analyzed. |
| 2.3 Are the results of this study directly applicable to the patient group targeted by this guideline? | Yes |
| 2.4 Notes. Summarise the authors’ conclusions. Add any comments on your own assessment of the study, and the extent to which it answers your question and mention any areas of uncertainty raised above. | The study demonstrated the value of combining self-help approaches, technology and media as part of a comprehensive public health approach to providing parenting support. However, high attrition rate limited its certainty. |
## Appendix F

### Appraisal Table

<table>
<thead>
<tr>
<th>Section 1: Internal validity</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.1</strong> The study addresses an appropriate and clearly focused question.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>1.2</strong> The assignment of subjects to treatment groups is randomised.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>1.3</strong> An adequate concealment method is used.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>1.4</strong> Subjects and investigators are kept ‘blind’ about treatment allocation.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>1.5</strong> The treatment and control groups are similar at the start of the trial.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>1.6</strong> The only difference between groups is the treatment under investigation.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>1.7</strong> All relevant outcomes are measured in a standard, valid and reliable way.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>1.8</strong> What percentage of the individuals or clusters recruited into each treatment arm of the study dropped out before the study was completed?</td>
<td>17.3%</td>
</tr>
<tr>
<td><strong>1.9</strong> All the subjects are analysed in the groups to which they were randomly allocated (often referred to as intention to treat analysis).</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>1.10</strong> Where the study is carried out at more than one site, results are comparable for all sites.</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

**SECTION 2: Overall assessment of the study**

<table>
<thead>
<tr>
<th></th>
<th>Code</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2.1</strong> How well was the study done to minimise bias? <strong>Code</strong>: ++, +, or –</td>
<td>++</td>
<td>All criteria met.</td>
</tr>
<tr>
<td><strong>2.2</strong> Taking into account clinical considerations, your evaluation of the methodology used, and the statistical power of the study, are you certain that the overall effect is due to the study intervention?</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td><strong>2.3</strong> Are the results of this study directly applicable to the patient group targeted by this guideline?</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td><strong>2.4</strong> Notes. Summarise the authors’ conclusions. Add any comments on your own assessment of the study, and the extent to which it answers your question and mention any areas of uncertainty raised above.</td>
<td>The study demonstrated the efficacy of online parenting programme, with outcomes comparable to group-based parent training programme with lower cost and higher accessibility.</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix F

**Appraisal Table**

<table>
<thead>
<tr>
<th>Section 1: Internal validity</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.1</strong> The study addresses an appropriate and clearly focused question.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>1.2</strong> The assignment of subjects to treatment groups is randomised.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>1.3</strong> An adequate concealment method is used.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>1.4</strong> Subjects and investigators are kept ‘blind’ about treatment allocation.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>1.5</strong> The treatment and control groups are similar at the start of the trial.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>1.6</strong> The only difference between groups is the treatment under investigation.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>1.7</strong> All relevant outcomes are measured in a standard, valid and reliable way.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>1.8</strong> What percentage of the individuals or clusters recruited into each treatment arm of the study dropped out before the study was completed?</td>
<td>14%</td>
</tr>
<tr>
<td><strong>1.9</strong> All the subjects are analysed in the groups to which they were randomly allocated (often referred to as intention to treat analysis).</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>1.10</strong> Where the study is carried out at more than one site, results are comparable for all sites.</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### SECTION 2: Overall assessment of the study

<table>
<thead>
<tr>
<th>Code</th>
<th>+</th>
<th>All criteria met.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2.1</strong> How well was the study done to minimise bias? Code ++, +, or –</td>
<td>+</td>
<td>All criteria met.</td>
</tr>
<tr>
<td><strong>2.2</strong> Taking into account clinical considerations, your evaluation of the methodology used, and the statistical power of the study, are you certain that the overall effect is due to the study intervention?</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td><strong>2.3</strong> Are the results of this study directly applicable to the patient group targeted by this guideline?</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td><strong>2.4</strong> Notes. Summarise the authors’ conclusions. Add any comments on your own assessment of the study, and the extent to which it answers your question and mention any areas of uncertainty raised above.</td>
<td>The study demonstrated that it is possible to bring about significant change in child behaviour and parenting problems using the non-traditional, technology-based online parenting interventions.</td>
<td></td>
</tr>
</tbody>
</table>

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68
# Appendix F
## Appraisal Table

|   | Article 5: Morawska et al. (2014) |
|---|---------------------------------
| SIGN methodology Checklist for Controlled Trials (SIGN, 2012) | Remarks |
| **SECTION 1: Internal validity** | |
| 1.1 The study addresses an appropriate and clearly focused question. | Yes | Question was not stated but objectives were addressed clearly in Abstract and Introduction. |
| 1.2 The assignment of subjects to treatment groups is randomised. | Yes | Groups were randomly assigned using computer-generated randomization. |
| 1.3 An adequate concealment method is used. | Yes | Allocation to group was automatically assigned online. |
| 1.4 Subjects and investigators are kept ‘blind’ about treatment allocation. | No | Not mentioned. |
| 1.5 The treatment and control groups are similar at the start of the trial. | Yes | There were no differences between groups on demographic variables or pre-intervention-dependent variables. However, significantly more parents in the control group had previously sought help for child behavioural and/or emotional problems. |
| 1.6 The only difference between groups is the treatment under investigation. | Yes |  |
| 1.7 All relevant outcomes are measured in a standard, valid and reliable way. | Yes | Validated outcomes measurement tools are presented clearly. |
| 1.8 What percentage of the individuals or clusters recruited into each treatment arm of the study dropped out before the study was completed? | 27.9% | Relatively high rate. |
| 1.9 All the subjects are analysed in the groups to which they were randomly allocated (often referred to as intention to treat analysis). | Yes | ITT analysis was performed. |
| 1.10 Where the study is carried out at more than one site, results are comparable for all sites. | Not applicable |  |
| **SECTION 2: Overall assessment of the study** | |
| 2.1 How well was the study done to minimise bias? Code ++, +, or – | - | Blinding was not mentioned. High dropout rate was noted. |
| 2.2 Taking into account clinical considerations, your evaluation of the methodology used, and the statistical power of the study, are you certain that the overall effect is due to the study intervention? | Yes |  |
| 2.3 Are the results of this study directly applicable to the patient group targeted by this guideline? | Yes |  |
| 2.4 Notes. Summarise the authors’ conclusions. Add any comments on your own assessment of the study, and the extent to which it answers your question and mention any areas of uncertainty raised above. | The study demonstrated that brief online parenting programme can be effective and have the potential to reach a large proportion of parents experiencing child behaviour problem. |  |
### Appendix F

#### Appraisal Table

<table>
<thead>
<tr>
<th>Article 6 Sanders et al. (2014)</th>
<th>Remarks</th>
</tr>
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<tbody>
<tr>
<td><strong>SIGN methodology Checklist for Controlled Trials (SIGN, 2012)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Section 1: Internal validity</strong></td>
<td></td>
</tr>
<tr>
<td>1.1 The study addresses an appropriate and clearly focused question.</td>
<td>Yes</td>
</tr>
<tr>
<td>1.2 The assignment of subjects to treatment groups is randomised.</td>
<td>Yes</td>
</tr>
<tr>
<td>1.3 An adequate concealment method is used.</td>
<td>No</td>
</tr>
<tr>
<td>1.4 Subjects and investigators are kept ‘blind’ about treatment allocation.</td>
<td>No</td>
</tr>
<tr>
<td>1.5 The treatment and control groups are similar at the start of the trial.</td>
<td>Yes</td>
</tr>
<tr>
<td>1.6 The only difference between groups is the treatment under investigation.</td>
<td>Yes</td>
</tr>
<tr>
<td>1.7 All relevant outcomes are measured in a standard, valid and reliable way.</td>
<td>Yes</td>
</tr>
<tr>
<td>1.8 What percentage of the individuals or clusters recruited into each treatment arm of the study dropped out before the study was completed?</td>
<td>8.2%</td>
</tr>
<tr>
<td>1.9 All the subjects are analysed in the groups to which they were randomly allocated (often referred to as intention to treat analysis).</td>
<td>No</td>
</tr>
<tr>
<td>1.10 Where the study is carried out at more than one site, results are comparable for all sites.</td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>SECTION 2: Overall assessment of the study</strong></td>
<td></td>
</tr>
<tr>
<td>2.1 How well was the study done to minimise bias? <em>Code ++, +, or –</em></td>
<td>-</td>
</tr>
<tr>
<td>2.2 Taking into account clinical considerations, your evaluation of the methodology used, and the statistical power of the study, are you certain that the overall effect is due to the study intervention?</td>
<td>Yes</td>
</tr>
<tr>
<td>2.3 Are the results of this study directly applicable to the patient group targeted by this guideline?</td>
<td>Yes</td>
</tr>
<tr>
<td>2.4 Notes. Summarise the authors’ conclusions. Add any comments on your own assessment of the study, and the extent to which it answers your question and mention any areas of uncertainty raised above.</td>
<td>The study demonstrated that online parenting intervention were not significantly different from the existing self-help programme. Both interventions were associated with improvements in child disruptive behaviour and positive parenting.</td>
</tr>
</tbody>
</table>
## Appendix G

### Timeline for Implementation of the Proposed Parenting Programme

<table>
<thead>
<tr>
<th>Event</th>
<th>Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting approval from administrators</td>
<td>04-05</td>
</tr>
<tr>
<td>Getting approval from the TPI</td>
<td>05-06</td>
</tr>
<tr>
<td>Communicating and seeking for supports from ITMU and</td>
<td>07-12</td>
</tr>
<tr>
<td>Setting up the parenting website by ITMU</td>
<td></td>
</tr>
<tr>
<td>Attaining cultural adaptation &amp; license of Chinese version of Online</td>
<td>08-11</td>
</tr>
<tr>
<td>Triple P from TPI</td>
<td></td>
</tr>
<tr>
<td>Communication to nursing officers and front-line staff</td>
<td>09-12</td>
</tr>
<tr>
<td>One-day orientation training for nursing coordinators in pilot centre</td>
<td>13</td>
</tr>
<tr>
<td>Promotion and Recruitment of Pilot Study</td>
<td>13</td>
</tr>
<tr>
<td>Screening for eligible parents</td>
<td>14</td>
</tr>
<tr>
<td>Pre-intervention assessment (pilot)</td>
<td>15</td>
</tr>
<tr>
<td>Implementation of pilot programme</td>
<td>16</td>
</tr>
<tr>
<td>Post-intervention assessment (pilot)</td>
<td>17</td>
</tr>
<tr>
<td>Data analysis of pilot for amendment of guideline</td>
<td>18</td>
</tr>
<tr>
<td>One-day orientation training for all Triple P nurses</td>
<td>19</td>
</tr>
<tr>
<td>Recruitment for actual programme</td>
<td>20</td>
</tr>
<tr>
<td>Pre-intervention assessment</td>
<td>21</td>
</tr>
<tr>
<td>Implementation of actual programme</td>
<td>22</td>
</tr>
<tr>
<td>Post-intervention assessment</td>
<td>23</td>
</tr>
<tr>
<td>Follow-up assessment</td>
<td>24</td>
</tr>
<tr>
<td>Data analysis of whole programme</td>
<td>25</td>
</tr>
</tbody>
</table>
# Appendix H

## Benefits and Risks of the Proposed Parenting Programme

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clients</strong></td>
<td></td>
</tr>
<tr>
<td>✤ Improve child behaviour and parenting problems</td>
<td>✤ No risks reported in studies</td>
</tr>
<tr>
<td>✤ Free of charge</td>
<td>✤ Time cost for the online programme</td>
</tr>
<tr>
<td>✤ Accessible and convenience, which is available in 24 hours, at their most convenient time and place</td>
<td></td>
</tr>
<tr>
<td><strong>Staff and Organization</strong></td>
<td></td>
</tr>
<tr>
<td>✤ Reorganize the role and work nature of nurses</td>
<td>✤ Investment lost may be resulted if the programme fails</td>
</tr>
<tr>
<td>✤ Less nursing time cost and effort than the current group programme</td>
<td></td>
</tr>
<tr>
<td>✤ Increase staff morale</td>
<td></td>
</tr>
<tr>
<td>✤ Less burdens of organization to promote a parenting programme</td>
<td></td>
</tr>
<tr>
<td>✤ Less demand of nursing and medical consultation for child behaviour counselling</td>
<td></td>
</tr>
<tr>
<td>✤ Provide evidences for scaling up to other area of Chinese in the world</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix I
#### Master Pay Scale (MPS)

<table>
<thead>
<tr>
<th>MPS Point (Civil Service Bureau, 2013)</th>
<th>w.e.f. 1.4.2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 (33C)</td>
<td>61,500</td>
</tr>
<tr>
<td>35 (33B)</td>
<td>58,775</td>
</tr>
<tr>
<td>34 (33A)</td>
<td>57,275</td>
</tr>
<tr>
<td>33</td>
<td>56,810</td>
</tr>
<tr>
<td>32</td>
<td>54,265</td>
</tr>
<tr>
<td>31</td>
<td>51,825</td>
</tr>
<tr>
<td>30</td>
<td>49,495</td>
</tr>
<tr>
<td>29</td>
<td>47,290</td>
</tr>
<tr>
<td>28</td>
<td>45,155</td>
</tr>
<tr>
<td>27</td>
<td>43,120</td>
</tr>
<tr>
<td>26</td>
<td>41,195</td>
</tr>
<tr>
<td>25</td>
<td>39,345</td>
</tr>
<tr>
<td>24</td>
<td>37,625</td>
</tr>
<tr>
<td>23</td>
<td>35,930</td>
</tr>
<tr>
<td>22</td>
<td>34,315</td>
</tr>
<tr>
<td>21</td>
<td>32,760</td>
</tr>
<tr>
<td>20</td>
<td>31,200</td>
</tr>
</tbody>
</table>
## Appendix J

### Estimated Cost for the Proposed Parenting Programme for 10 Parents

<table>
<thead>
<tr>
<th>Set-up Cost</th>
<th>Description</th>
<th>Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-material Cost : Preparation and Training</strong></td>
<td></td>
<td>4301</td>
</tr>
<tr>
<td>Orientation training for 2 nurses as coordinators</td>
<td>8.5 hour x 2 ($253/hour)</td>
<td></td>
</tr>
<tr>
<td><strong>Materials Cost</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Venue for training</td>
<td>ITMU Computer Lab</td>
<td>-</td>
</tr>
<tr>
<td>Network server for the programme</td>
<td>Already available</td>
<td></td>
</tr>
<tr>
<td>Telephone, computer and networking for the</td>
<td>Telephone and computers in MCHCs</td>
<td>-</td>
</tr>
<tr>
<td>programme</td>
<td>Already available</td>
<td></td>
</tr>
<tr>
<td>Setting up the parenting website</td>
<td>Server and technical supported by ITMU</td>
<td>-</td>
</tr>
<tr>
<td>Adaptation for Chinese Version of Online Triple P</td>
<td>Support by TPI</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>4301</td>
</tr>
</tbody>
</table>

Set-up materials cost is limited for the proposed programme as venue and facilities, such as computers, telephone and networking, are available. Group Triple P has been carried out in FHS since 2002, training and evaluation materials of Triple P in Chinese version were principally available. TPI would uptake for cultural adaptation from English to Chinese version of Online Triple P. For the website, ITMU would support the hardware facilities and programming techniques for setting up and maintaining the website for the proposed programme after communication and getting approval. Therefore, during the set-up period, all of the consultation, arrangement and setting would be provided and supported by different parties after thorough planning and communication. The only non-material set-up cost is for the orientation training of nominated nurses. According to Civil Service Bureau (2013), Triple P accredited nurses, who are the most experienced nurse in FHS, are paid at Point 25 to Point 33A (HKD$ 39,345 to 57275) in the Master Pay Scale (Appendix I). Their corresponding average monthly salaries are $48310 per month and their hourly salary is $253. Therefore, the one-day orientation training for 2 nurses would cost for $4301.

<table>
<thead>
<tr>
<th>Operation Cost for 10 parents</th>
<th>Description</th>
<th>Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-material Cost : Nursing staff ($253/hour)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Screening time (10 minutes per client)</td>
<td>10 minutes x 10</td>
<td>421.67</td>
</tr>
<tr>
<td>Registration to the programme website (5 minutes per client)</td>
<td>5 minutes x 10</td>
<td>210.83</td>
</tr>
<tr>
<td>Trace clients at 2 week and 5 week after start (15 minutes per client)</td>
<td>15 minutes x 10</td>
<td>632.50</td>
</tr>
<tr>
<td>Answering email helpline on clients’ requests (Assume 30 minutes per client)</td>
<td>30 minutes x 10</td>
<td>1265.00</td>
</tr>
<tr>
<td><strong>Materials Cost</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Venue for screening and intake</td>
<td>Interview room in MCHCs</td>
<td>-</td>
</tr>
<tr>
<td>Computer and networking for email helpline</td>
<td>Already available</td>
<td></td>
</tr>
<tr>
<td>License of Online Triple P including the workbook (USD 52.75 per client)</td>
<td>~$ 409 x 10</td>
<td>4090</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>6620</td>
</tr>
</tbody>
</table>

For operation, nurses would need 10 minutes to screen each parent after initial contact (Sanders et al., 2012). Besides, they would need some times (for examples 5 minutes) to register new clients to the programme website. According to Sanders et al. (2008), less than 13% of participants would email for extra support from accredited health care professional. Even if we assume all parents would request nurses’ support from the email helpline once and each email management would spend for 30 minutes, each client would only cost for 1 hour of nursing time for screening, registration, tracing and answering email. The license cost for Online Triple P would be about $409 per set. It is expected that the total estimated operation cost for 10 clients would be $6620.

### Total estimated cost for the Online Triple P (for 10 clients)

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set-up &amp; Operation Cost</td>
<td>$10921</td>
</tr>
</tbody>
</table>

With initial set-up cost, for the first 10 clients, a total of $10921 is estimated for the first time utilization of the programme in short-term. However, if the programme would be carried out in a long-term with completion of staff training, the cost would be diminished to $6620 per 10 clients without set-up expenditure.
Appendix K
Estimated Cost for Group Triple P for 10 Parents

<table>
<thead>
<tr>
<th>Set-up Cost</th>
<th>Description</th>
<th>Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-material Cost : Training</td>
<td>Training had been provided for nurses</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Already available</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Materials Cost</th>
<th>Description</th>
<th>Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Venue for group sessions</td>
<td>Conference rooms in MCHCs</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Already available</td>
<td></td>
</tr>
<tr>
<td>Telephone and computer</td>
<td>Telephone and computers in MCHCs</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Already available</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There is no set-up cost for training or facilities as Group Triple P had been implemented since 2002 in FHS.

<table>
<thead>
<tr>
<th>Operation Cost</th>
<th>Description</th>
<th>Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-material Cost : Nursing staff ($253/hour)</td>
<td>15 minutes x 10</td>
<td>632.50</td>
</tr>
<tr>
<td>Screening and telephone intake (15 minutes per client)</td>
<td>2 hours x 4</td>
<td>2024</td>
</tr>
<tr>
<td>Preparation for group assignment &amp; Posting and tracing pre-intervention questionnaire to clients (15 minutes per client)</td>
<td>Postage cost: $1.7 x 2 Questionnaire: $ 16.5 (per client)</td>
<td>199</td>
</tr>
<tr>
<td>Preparation and after work for group sessions (2 hours x 4 times)</td>
<td>0.5 hours x 4 x 10</td>
<td>5060</td>
</tr>
<tr>
<td>Group session for 10 clients (2.5 hours x 4 times)</td>
<td>~$ 157 x 10</td>
<td>1570</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Materials Cost</th>
<th>Description</th>
<th>Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Venue for screening, intake and telephone counselling</td>
<td>Interview room in MCHCs</td>
<td>-</td>
</tr>
<tr>
<td>Postage and cost of paper pre and post intervention questionnaire ($3.4 + $16.5 per client)</td>
<td></td>
<td>199</td>
</tr>
<tr>
<td>License of Group Triple P including the workbooks (USD 20.25 per client)</td>
<td></td>
<td>1570</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>12648</td>
</tr>
</tbody>
</table>

For 10 parents, the total nursing time cost for screening, assigning and tracing questionnaires, preparing and after working, implementing the 4 times of group sessions, telephone counselling sessions are $10879. With the cost of postage and questionnaires and license of Group Triple P, the total estimated cost for the Group Triple P is $12648 per 10 clients.

<table>
<thead>
<tr>
<th>Estimated cost for the Group Triple P (for 10 clients)</th>
<th>Description</th>
<th>Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set-up cost &amp; Operation Cost</td>
<td></td>
<td>12648</td>
</tr>
</tbody>
</table>

All these costs did not include those costs that would be resulted by extra nursing effort for those absented parents in group sessions.
<table>
<thead>
<tr>
<th></th>
<th>Proposed Online Parenting Programme</th>
<th>Group Triple P For 10 clients (Appendix K)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>For 10 clients (Appendix J)</td>
<td></td>
</tr>
<tr>
<td><strong>Set-up Cost</strong></td>
<td>$4301</td>
<td>-</td>
</tr>
<tr>
<td><strong>Operation Cost</strong></td>
<td>$6620</td>
<td>$12648</td>
</tr>
<tr>
<td><strong>Total Cost</strong></td>
<td>$10921 (in short run)</td>
<td>$12648</td>
</tr>
<tr>
<td></td>
<td>$6620 (in long run)</td>
<td></td>
</tr>
<tr>
<td><strong>Cost Saving</strong></td>
<td>$1727 (in short run)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$6028 (in long run)</td>
<td></td>
</tr>
</tbody>
</table>
Appendix M

Recommendations of the Evidenced-Based Practice (EBP) Guideline

Under the EBP guideline, 10 recommendations were made from evidences of the 6 reviewed studies. Each of them was graded based on the grading system of SIGN (Appendix B). Supporting evidences with their levels of evidence were provided and discussed as below.

1 Recruitment

Recommendation 1

Online parenting programme is an effective parenting programme for those parents with child behaviour problems, especially who are barely available for the traditional group parenting programme. (Grade A)

Supporting evidences:

Studies of Enebrink et al. (2012)(1+), Morawska et al. (2014)(1-), Sanders et al. (2008)(1-), Sanders et al. (2012)(1+), and Sanders et al. (2014)(1-) provided evidences to support the recommendations by showing that online parenting programmes are effective in improving child behaviour and parenting competence. Study of Bert et al. (2008)(1-) also provided evidence of improving parenting knowledge for children behaviour problems by online parenting programme. The online approach was found comparable to self-help (Sanders et al., 2014)(1-),
group-based (Enebrink et al., 2012)(1+), and face-to-face approach (Bert et al., 2008)(1-). Besides, it was beneficial to clients and organization as an effective alternative of the traditional face-to-face programme which is less demanding (Bert et al., 2008)(1-), (Morawska et al., 2014)(1-), (Sanders et al., 2012)(1+), more accessible (Enebrink et al., 2012)(1+), (Morawska et al., 2014)(1-), cost-efficient (Bert et al., 2008)(1-), (Enebrink et al., 2012)(1+), and allow greater exposure and repetition (Morawska et al., 2014)(1-).

**Recommendation 2**

Targeted children should be aged at 4 to 6, with mild to moderate range of severity of child behaviour problems, not warrant referral to have assessment or follow up in specialties such as child assessment service or psychiatric service. Ineligible children should be referred for further medical assessment or provided with other parenting information for references. (Grade A)

**Supporting evidences:**

Although one study has proved potential of early parenting intervention at early preschool children aged at 2 to 3 (Bert et al., 2008)(1-), other 5 studies (Enebrink et al., 2012)(1+), (Morawska et al., 2014)(1-), (Sanders et al., 2008)(1-), (Sanders et al., 2012)(1+), (Sanders et al., 2014)(1-) provided evidences to support the recommendation of targeting children at about age of 4 to 6. Children should
be cognitively competent for the parenting strategies of the online parenting programme, thus targeting parents with child at age of 4 to 6 in the proposed programme were supported.

Evidences in the 6 reviewed studies of Bert et al. (2008)(1-), Enebrink et al. (2012)(1+), Morawska et al. (2014)(1-), Sanders et al. (2008)(1-), Sanders et al. (2012)(1+), and Sanders et al. (2014)(1-) showed that parents who were self-referred to the intervention without professional referral were significant. Particularly, study of Enebrink et al. (2012)(1+) recommended that intervention should be carried out for children with slightly elevated child behaviour condition measured by one SD above the mean of Eyberg Child Behavior Inventory. Children with severe child behaviour or emotional problem who have needs for other professional assessment or with professional follow up should be excluded as suggested by Sanders et al. (2012)(1+). Therefore, children with referral or follow up in specialties such as child assessment service or psychiatric service should be excluded.

Management of ineligible children was considered in the study of Enebrink et al. (2012)(1+). Providing information of other parenting references or other health professional to parents was supported in the reviewed study (Enebrink et al., 2012)(1+).
Recommendation 3

Parents should be without mental illness, literate and have completed at least primary education level. (Grade A)

Supporting evidences:

Evidences of criteria of education level of parents and excluding mental illness were provided by Sanders et al. (2012)(1+). Even though evidence showed that high risk parents were less likely to comply with the programme, results were still positive for high risk population of teenager mother and parents with more abuse potential (Bert et al., 2008)(1-), (Sanders et al., 2008)(1-), (Sanders et al., 2014)(1-). However, high risk parents with mental illness were recommended to be excluded specifically by Sanders et al. (2012)(1+). Although the proposed programme would be multimedia-based, literacy is important for reading and understanding the parenting principles as well as completing programme exercises. Even though more proportions of high educated parents had shown more significant effects as evidenced by Enebrink et al. (2012)(1+) and Sanders et al. (2012)(1+), a minimum level at primary school was recommended as it was found appropriate enough to achieve significant results from the study of Sanders et al. (2012)(1+).

Recommendation 4
Both parents, especially for father, should be encouraged to participate. Parents who do not have internet access or computer should be assisted if necessary. (Grade B)

**Supporting evidences:**

The study of Bert et al. (2008)(1-) supported the recommendation of father participation by reporting evidences of more completion of online modules in families with more father contributions. Therefore, it was evidenced that father involvement would have an important influence on participation rates and intervention effects.

Besides, internet and computer are important for the online programme. Although it is unlikely to happen in Hong Kong with high popularity of internet, Bert et al. (2008)(1-) provided evidences for the recommendation in avoiding programme barriers by offering information of location of free internet and computers for limited clients.

2 **Implementation**

**Recommendation 5**

Triple P accredited nurses with additional training should be the programme facilitators. (Grade A)

**Supporting evidences:**
Both studies of Enebrink et al. (2012)(1+) and Sanders et al. (2008)(1-)
provided evidences that the online intervention should be facilitated by accredited
and experienced health professionals. As the programme of Triple P would take
place in MCHCs and accredited nurses are the major health professionals who are
experienced in Triple P, they would be the facilitators of the programme. They
should have the extra training in how to handle technological problems, and how
to clarify and respond to parents’ questions and provide supports to follow the
programme as supported by the evidence of Enebrink et al. (2012)(1+).

Recommendation 6

The online parenting programme should consist of 8 interactive online
modules which last for about 1.5 hours each. The content of the online modules
should focus on the 17 core positive parenting skills of Triple P presented and
accessed in sequential order of: (1) Positive parenting (2) Preferable behaviour (3)
New skills (4) Behaviour problems (5) Disobedience (6) Avoiding problems by
planning (7) Making fun (8) Raising kids. (Grade A).

Supporting evidences:

Enebrink et al. (2012)(1+), Sanders et al. (2012)(1+), Sanders et al.
(2014)(1-) provided evidences for the recommendation of the number of online
modules. Studies showed that 7 (Enebrink et al., 2012)(1+), 8 (Sanders et al.,
2012)(1+), (Sanders et al., 2014)(1-), or 12 (Bert et al., 2008)(1-) sessions of online modules were effective. Nevertheless, the greatest intervention effects for child and parenting outcomes and the highest level of evidence were found in the studies with 8 modules (Sanders et al., 2012)(1+), (Sanders et al., 2014)(1-) in an interactive approach (Sanders et al., 2012)(1+), (Sanders et al., 2014)(1-). Duration of each interactive module may not be restricted, yet, Enebrink et al. (2012)(1+) was the only reviewed study that provided information on the duration of online modules at about 1.5 hours each and supported the recommendation.

Triple P should be adopted as the parenting principles as evidenced by 4 out of 6 reviewed studies (Morawska et al., 2014)(1-), (Sanders et al., 2008)(1-), (Sanders et al., 2012)(1+), (Sanders et al., 2014)(1-). Online modules should be presented in a linear format and accessed consecutively for ongoing understanding as evidenced by Bert et al. (2008)(1-), Sanders et al. (2012)(1+). For this reason, modules should not be available in advance (Sanders et al., 2012)(1+), while completed modules could be allowed to refer back for revision (Morawska et al., 2014)(1-), (Sanders et al., 2012)(1+).

However, only one reviewed study (Sanders et al., 2012)(1+) provided evidence for the sequence of the online modules to instruct application of the 17 core positive parenting skills. Therefore, modules titled as: “(1) What is positive
parenting? (2) Encouraging behavior you like (3) Teaching new skills (4) Managing misbehavior (5) Dealing with disobedience (6) Preventing problems by planning ahead (7) Making shopping fun (8) Raising confident, capable kids” were supported by Sanders et al. (2012)(1+).

**Recommendation 7**

The programme should include a workbook and an email helpline which is responded by Triple P accredited nurses. (Grade B)

**Supporting evidences:**

Providing a workbook to parents for the online programme were supported by evidences of 4 reviewed studies (Bert et al., 2008)(1-), (Sanders et al., 2008)(1-), (Sanders et al., 2012)(1+), (Sanders et al., 2014)(1-). To have greater effect than having the online programme alone, it can be a workbook that can be printed out which include content of program, parent’s goals and reaction to assignments for reviewing and practicing (Sanders et al., 2012)(1+), (Sanders et al., 2014)(1-).

Sanders et al. (2008)(1-) provided evidences of offering an email helpline to parents by trained health professional had greater effects than having the online programme alone. Such provision of extra self-directed and web support may enhance intervention effects (Sanders, Markie-Dadds, Tully, & Bor, 2000). For
sufficient effect with minimal efforts, the email helpline should be initiated by parents without regular schedule as recommended by Sanders et al. (2008)(1-). Therefore, the proposed programme should have an email helpline and Triple P accredited nurses should response to emails infrequently as the programme facilitators.

Recommendation 8

Eligible parents should be allowed to access the programme website within one week after screening. They should be encouraged to complete the intervention within 3 months, but access can be allowed for 6 months. (Grade A)

Supporting evidences:

Evidences of the starting time and duration of the programme were provided by Bert et al. (2008)(1-), Morawska et al. (2014)(1-), Sanders et al. (2012)(1+), and Bert et al. (2008)(1-), Sanders et al. (2008)(1-), Sanders et al. (2012)(1+) respectively.

Ethicality, we should offer the intervention to parents as soon as possible. After eligibility screening, parents were suggested to be allowed to access to the pre-intervention assessment followed by the intervention from a personal link immediately (Morawska et al., 2014)(1-), (Sanders et al., 2012)(1+) or not later than one week (Bert et al., 2008)(1-).
Online programmes that last for 10 weeks (Enebrink et al., 2012)(1+) to 3 months (Bert et al., 2008)(1-), (Sanders et al., 2008)(1-), (Sanders et al., 2012)(1+)
had shown significant intervention effect. To have a stronger effect, more exposure or repetition (Sanders et al., 2008)(1-) and allowing to access after completion until the 6 month follow up (Sanders et al., 2012)(1+) were supported.

**Recommendation 9**

Trained nurses should contact parents by phone at 2 weeks and again 5 weeks after intervention has started for any problems, and by email and phone if parents have not logged on to the programme for 3 weeks. (Grade A)

**Supporting evidences:**

A contact person was proved to be effective to reduce programme barrier of technical problems (Morawska et al., 2014)(1-). Apart from it, Sanders et al. (2012)(1+) had provided evidence to support the recommendation of scheduled contacts. Scheduled phone contacts by trained staff are recommended to avoid any difficulties in programme features or technical issues at 2 weeks and 5 weeks (Sanders et al., 2012)(1+). Continued use of the programme should also be encouraged by giving short reminder call and email to parents who have not logged on regardless of programme content as supported by evidences of Sanders et al. (2012)(1+).
3 Evaluation

Recommendation 10

Online questionnaires should be completed by parents at pre-intervention, post-intervention (at completion of the 3-month intervention) and follow-up (3 months after intervention completion) for intervention effect evaluations. For outcome measurements, the online questionnaires should include Eyberg Child Behaviour Inventory, Parenting Scale and a knowledge test for positive parenting principle. (Grade A)

Supporting evidences:

Online questionnaires were supported by evidences of 4 reviewed studies (Enebrink et al., 2012)(1+), (Morawska et al., 2014)(1-), (Sanders et al., 2008)(1-), (Sanders et al., 2012)(1+). Data should be collected, and post-intervention assessment is suggested to take place at three months after intervention started regardless of the number of modules completed for evaluation (Bert et al., 2008)(1-), (Sanders et al., 2008)(1-), (Sanders et al., 2012)(1+). Besides, to evaluate the maintenance effect of the intervention, two reviewed studies (Sanders et al., 2008)(1-), (Sanders et al., 2012)(1+) suggested to have a 6 month follow-up assessment.

Eyberg Child Behaviour Inventory and Parenting Scale were considered to
be the two reliable and well tested measurement tools for measuring child
behaviour and parenting style in most reviewed studies (Enebrink et al., 2012)(1+),
(Morawska et al., 2014)(1-), (Sanders et al., 2008)(1-), (Sanders et al., 2012)(1+),
(Sanders et al., 2014)(1-). Although no obvious connection is reported between
knowledge gains and changes in child behaviour and parenting, testing knowledge
of programme principles in the questionnaires to examine the impact of the
parenting programme in changing parenting knowledge was supported by
evidence of Bert et al. (2008)(1-).
艾伯克兒童行為量表

- 以下是一些形容兒童行為的句子。
- 句子會逐一顯示，當句子出現時，請先按出適當的按鈕以描述你孩子近來做出該行為的頻密程度；
- 然後再按出“是” 或 “否”來表示該行為目前是否對你構成困擾。

01. 穿衣慢吞吞
02. 吃飯慢吞吞
03. 餐桌禮節不好，吃飯常常搞得亂七八糟、髒兮兮的
04. 拒絕吃為他(她)準備好的食物
05. 不肯幫忙做一些小家事
06. 睡覺時間慢吞吞
07. 不肯按時睡覺
08. 不能守規
09. 除非處罰，否則總是無法使他(她)服從

頻密程度
- 從來沒有
- 極罕有
- 少
- 有時候
- 經常
- 很經常
- 總是

是否對你構成困擾？
- 是
- 否
Appendix N
Eyberg Child Behaviour Inventory
(Eyberg & Pincus, 1999)

艾伯克兒童行為量表

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- 句子會逐一顯示，當句子出現時，請先按出適當的按鈕以描述你孩子近來做出該行為的頻密程度；
- 然後再按出“是”或“否”來表示該行為目前是否對你構成困擾。

10. 抗拒做被吩咐的事情
11. 與父母爭辯規則、規定
12. 當不能隨心所欲時會發怒、發脾氣
13. 脾氣暴躁
14. 與大人頂嘴
15. 哭聲啼哭、說話哭哭啼啼
16. 易哭
17. 大聲叫、尖叫
18. 打父母
Appendix N
Eyberg Child Behaviour Inventory
(Eyberg & Pincus, 1999)

艾伯克兒童行為量表

- 以下是一些形容兒童行為的句子。
- 句子會逐一顯示，當句子出現時，請先按出適當的按鈕以描述你孩子近來做出該行為的頻密程度；
- 然後再按出“是”或“否”來表示該行為目前是否對你構成困擾。

19. 破壞玩具或其他物品
20. 玩玩具或使用東西時很粗魯
21. 偷東西
22. 說謊
23. 嘲弄或激怒其他小孩
24. 與同齡玩伴吵架
25. 與兄弟姐妹吵架
26. 與同齡玩伴打架
27. 與兄弟姐妹打架

頻密程度
- 從來沒有
- 極罕有
- 很少
- 有時候
- 經常
- 很經常
- 總是

是否對你構成困擾？
- 是
- 否
艾伯克兒童行為量表

• 以下是一些形容兒童行為的句子。
• 句子會逐一顯示，當句子出現時，請先按出適當的按鈕以描述你孩子近來做出該行為的頻密程度；
• 然後再按出“是”或“否”來表示該行為目前是否對你構成困擾。

28. 總是要求大人的注意
29. 打斷大人說話、工作
30. 很容易分心
31. 注意力很短暫
32. 無法完成應該做的專案或工作(如畫圖、折紙)
33. 無法自己玩
34. 不能專心做一件事
35. 過動、好動、無法安靜下來
36. 尿床

頻密程度
從來沒有
極罕有
很少
有時候
經常
很經常
總是

是否對你構成困擾？
是
否
管教手法量表
（Arnold et al., 1993）

父母有很多不同的方式和手法去處理這些問題，下列是一些形容管教手法的題目。請在每條題目按下1至7，最能形容你最近對孩子的處理手法的程度按鈕。

1. 當我的孩子做錯事時
   ...  我會立刻處理

2. 在我處罰孩子之前
   ...  我只會給予一個提示或警告

3. 當我心情不佳或壓力大時
   ...  我不會比平時更挑剔

4. 當我的孩子做錯事時
   ...  我很少說話

5. 當我的孩子來煩我時
   ...  我會不理他

每一個小朋友，總有做錯事、「壞」事、有危險的事，或做一些父母不喜歡的事的時候，例如：打人、冤住扭計、不收拾玩具、忘記做功課、拋弄食物、不肯上床睡覺、發脾氣、說謊、食飯前要求吃零食、衝出馬路、辯駁。
Appendix O
Parenting Scale
(Arnold et al., 1993)

管教手法量表

每一個小朋友，總有做錯事、「壞」事、有危險的事，或做一些父母不喜歡的事的時候，
例如：打人、冤住扭計、不收拾玩具、忘記做功課、拋弄食物、不懶上床睡覺、發脾氣、
說謊、食飯前要求吃零食、衝出馬路、辯駁。

父母有很多不同的方式和手法去處理這些問題，下列是一些形容管教手法的題目，請在每
條題目按下1至7，最能形容你最近對孩子的處理手法的程度按鈕。

6. 當我的孩子做錯事時……

7. 我恐嚇孩子，我會做某些事時……

8. 我是那種……

9. 當我的孩子做錯事時……

10. 當我的孩子做錯事時……

我通常會跟孩子爭辯很久
我肯定我會做
我會跟孩子長篇大論地講道理
我會提高聲線或大喊大叫
我不會跟他爭辯
我知道我不會真的去做
會限制孩子做什麼的家長
我會簡單扼要地教訓他
會讓孩子喜歡做什麼就做什麼的家長
我會平靜地跟他說話

(135x519)
管教手法量表

父母有很多不同的方式和手法去處理這些問題，下列是一些形容管教手法的題目。請在每條題目按下1至7，最能形容你最近對孩子的處理手法的程度按鈕。

11. 如果說「不」不能立刻收效的話……
12. 當我要孩子停止做某件事時……
13. 當我的孩子不在我視線範圍內時……
14. 我的孩子犯錯後……
15. 我們出外時……

每一個小朋友，總有做錯事、「壞」事、有危險的事，或做一些父母不喜歡的事的時候，例如：打人、冤枉扭計、不收拾玩具、忘記做功課、拋弄食物、不肯上床睡覺、發脾氣、說謊、食飯前要求吃零食、衝出馬路、辯駁。
Appendix O
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管教手法量表

每一個小朋友，總有做錯事、「壞」事、有危險的事，或做一些父母不喜歡的事的時候，例如：打人、冤枉扭計、不收拾玩具、忘記做功課、拋弄食物、不肯上床睡覺、發脾氣、說謊、食飯前要求吃零食、衝出馬路、辯駁。

父母有很多不同的方式和手法去處理這些問題，下列是一些形容管教手法的題目。請在每條題目按下1至7，最能形容你最近對孩子的處理手法的程度按鈕。

16. 當我的孩子做一些我不喜歡的事情時……

17. 當我的孩子犯錯時……

18. 當我的孩子做錯事時，我會打他、摑他，拍他或捉住他……

19. 當我的孩子不依我的要求去做事時……
每一個小朋友，總有做錯事、「壞」事、有危險的事，或做一些父母不喜歡的事的時候，例如：打人、冤住扭計、不收拾玩具、忘記做功課、拋弄食物、不肯上床睡覺、發脾氣、說謊、食飯前要求吃零食、衝出馬路、辯駁。父母有很多不同的方式和手法去處理這些問題，下列是一些形容管教手法的題目。請在每條題目按下1至7，最能形容你最近對孩子的處理手法的程度按鈕。

20. 當我給他一個適當的威嚇或警告時……

21. 如果說「不」沒有效的話……

22. 當我的孩子做錯事時……

23. 當我的孩子做錯事時……
管教手法量表

父母有很多不同的方式和手法去處理這些問題，下列是一些形容管教手法的題目。請在每條題目按下1至7，最能形容你最近對孩子的處理手法的程度按鈕。

1. 我會像平常般處理他
2. 24. 如果我的孩子做錯事，然後感到難過的話
3. 我會饒恕他一次
4. 我很少用粗俗的說話或咒罵他
5. 25. 當我的孩子做錯事時
6. 我差不多次次都用粗俗的說話罵他
7. 26. 當我告訴孩子不准做某件事情
8. 我反正都會讓孩子去做
9. 27. 當我要處罰孩子時
10. 我會告訴孩子我會覺得難過
11. 我不會說我覺得難過

Appendix O
Parenting Scale
(Arnold et al., 1993)
Appendix O
Parenting Scale
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管教手法量表

每一個小朋友，總有做錯事、「壞」事、有危險的事，或做一些父母不喜歡的事的時候，例如：打人、冤枉扭計、不收拾玩具、忘記做功課、拋弄食物、不肯上床睡覺、發脾氣、說謊、食飯前要求吃零食、衝出馬路、辯駁。

父母有很多不同的方式和手法去處理這些問題，下列是一些形容管教手法的題目。請在每條題目按下1至7，最能形容你最近對孩子的處理手法的程度按鈕。

很少或從不會做

28. 當我的孩子做一些我不喜歡的事情，我會羞辱他，罵他，和說些尖酸刻薄的話

大多數都會做

29. 如果我處理孩子的問題時他辯駁或埋怨

我會不理他的埋怨，繼續執行訂下來的懲罰

我會訓導孩子不应埋怨

30. 如果當我說「不准」時，孩子發脾氣

我會放棄，對孩子讓步

我會堅持自己的立場
親子正面教育的五個關鍵要素是：
安全有趣的環境、擁有正面的學習環境、運用嚴明紀律、現實的期望值、作為父母應照顧好自己。

稱讚孩子能增加良好行為再次出現的機率。

孩子不遵守規則，應立即行動，將孩子安置在隔離區。

定規則給孩子時，清晰告訴他不應該做什麼效果最好。

針對嚴重的不當行為，父母應威脅處罰孩子。


