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Article

An evaluation of the online universal programme *COPING Parent*: a feasibility study

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Significance for public health

Good quality parenting is associated with positive child outcomes, including increased social and emotional competence, pro-social behaviour and well being; therefore providing evidence-based parenting support is potentially a useful way of promoting positive child development. Whilst there are evidence-based services for parents of children with identified behavioural and other developmental problems, there is less reliable support for parents in general. Most parents do not receive evidence-based advice on dealing with common everyday parenting challenges, as there are fewer public health resources available for parents in general. The changing patterns of family life have increased the demands on all parents and many now seek advice online, therefore universal web-based provision may be a useful public health tool to equip parents with the skills to practice positive parenting, address everyday parenting challenges, encourage positive child behaviour, achieve good child outcomes and avoid problems becoming more severe.

Abstract

Background: COPING parent (Confident Parent Internet Guide) is an online universal parenting programme designed for parents of children aged 3-8 who are interested in learning positive parenting strategies to address everyday parenting challenges. Most people now have access to the internet and many parents seek online parenting advice, so it is important to ensure that advice is both evidence-based and freely available. The 10-week online COPING parent programme presents information and activities based on core social learning theory principles. The programme provides information and video examples of parenting skills, uses quizzes to test knowledge and suggests home practice activities. This study was undertaken to obtain feedback on the usefulness and acceptability of the programme to inform its further development.

Design and Methods: The programme was created using the LifeGuide software and participants (n=20) were asked to complete one chapter of the programme each week and provide feedback. This feasibility study was undertaken to highlight any technical issues and suggest modifications prior to a more rigorous evaluation.

Results: Both participant feedback and programme usage data are reported. Thirteen feedback forms were returned and programme usage data was downloaded for all participants. Feedback suggested modifications that included adaptations to enable the programme to be accessed by tablet users, an option to look back over previously completed chapters, the inclusion of more video examples of positive parenting and text message prompting to address attrition challenges.

Introduction

Societal changes have always presented new challenges for parents and impacted on parent-child relations, child behaviour and parenting style. However the pace of change has accelerated, and recent changes such as children spending increasing amounts of time watching television, surfing on the internet and/or playing video games can put children at-risk of poor outcomes.^{1,2} Apart from the direct risks associated with spending a lot of time in front of the TV, playing video games or accessing inappropriate internet content, these activities also have other effects in terms of less time spent in physical activities and,³ for busy families, increasing use of convenience food,⁴ and children spending less time in the company of adults and more in their own rooms.

Other recent changes also include increasing rates of divorce and/or single parenthood, all of which can contribute to parental challenges.⁵ Increased economic uncertainty has led to many dual-career families with children spending less time with parents and more time in child-care,⁶ which can compromise parent-child relations. Belsky concluded that more than 20 hours per week of such care posed risks for the infant-parent relationships and for psychological and behavioural adjustment during the toddler, preschool, and early primary-school years.^{6,7} The increased strain caused by work-life balance can also impact on parenting behaviour, as short-term fluctuations in levels of daily work stress appeared to contribute to day-to-day changes in parenting behaviours, primarily resulting in mothers becoming more withdrawn.⁸

Despite these lifestyle changes, good quality parenting remains key to achieving good child outcomes, 9,10 and numerous studies have demonstrated the benefits of teaching positive parenting strategies for both parent and child outcomes in both targeted and preventive trials. 10-12 Interventions based on learning theory 13,14 have demonstrated significant increases in the use of positive parenting practices and reductions in child problem behaviour in young children. 10-12 This growing evidence for the effectiveness of teaching parents positive strategies has demonstrated the potential of such programmes to improve the mental health and well being of both children and parents. 15,16 However, although effective, such programmes are generally targeted and therefore not accessible to all parents, 17,18 with many not having access to good quality advice when faced with everyday parenting challenges.

Public health is defined as an approach to prevent disease, prolong life and promote health through the organised efforts of society, and can include the provision of personal services to individuals such as vaccinations, behavioural counselling or health advice. A targeted approach to improve health and well being can target behaviours such as smoking cessation or weight loss, which together could significantly benefit society and reduce both the risks and financial burden of ill health. There is increasing evidence to suggest that public health and health promotion interventions based on social and behavioural science theory, such as





social learning theory,¹³ are effective.²¹ A systematic review of theory-based practices for improving health behaviour such as contraception use, found that of the 14 trials included, 10 showed positive results in favour of the social cognitive theory-based groups.²²

In the field of parenting an example of a theoretically underpinned public health approach to parenting is the Triple-P parenting programme,²³ which provides parents with parenting tips and strategies but also de-stigmatises parent help seeking, empowering parents to self-regulate when solving problems and validating positive parenting strategies. 18 The Triple-P programme is both universal and targeted, and incorporates five levels of intervention, ¹⁷ with all levels incorporating the same content but different intensities of skills training and practitioner support are provided. For example, level-1 is a universal population-level approach with the aim of increasing community awareness for parenting by providing access to parent information to all interested parents. In contrast, level-5 is a targeted approach, providing 11-session enhanced version of the programme to families where parenting difficulties are complicated by other sources of difficulty, i.e. parental depression.¹⁷ Numerous trials of the Triple-P parenting programme, both standard and web-based, have demonstrated positive outcomes for both parents and children.^{23,24} As a public health approach to supporting parents, the web offers a potentially efficient, accessible, convenient and affordable method to reach a large number of parents with evidence-based parenting information.²⁵

In the UK, in 2016, 89.4% of men (22.8 million) and 86.4% of women (23.1 million) accessed the internet, an increase from 87.9% of men and 84.6% of women in 2015,²⁶ suggesting the potential of the internet for disseminating evidence-based information to the population at large. The advantages of web-based programmes over more traditional approaches in targeting public health concerns include convenience, relatively low cost of dissemination, and reaching more individuals and the options to incorporate behavioural principles such as audio, video and feedback.²⁰ Although not as extensively researched there is some evidence demonstrating increased positive parenting following webbased interventions, ^{27,28} but these programmes were for parents of children with early-onset conduct problems. Although positive findings have been reported following parent engagement with web-based programmes, they are associated with high attrition with many participants starting, but not completing programmes. For example 95% of parents completed session 1 of a Triple-P online parenting programme and only 47% completed all eight sessions.²⁷ In a separate Triple-P trial, only 50.3% of parents watched all six episodes of driving mum and dad mad and as the weeks progressed fewer parents accessed the website to download resources.29

The COPING parent online universal programme is derived

from the principles of behaviour, including reinforcement and the social learning theory. ^{13,14} The basic premise of the social learning theory is that people learn by observing the actions of others, ²¹ and the consequences of those actions. ¹⁴ Key constructs include observational learning, reinforcement, self-efficacy, goal setting and self-monitoring, ²¹ and can be used in interventions to promote healthier behaviour. The COPING parent online universal programme incorporates these key constructs, by including video examples of positive parenting (observational learning), setting achievable goals (*i.e.* spend ten minutes playing with your child every-day or praise positive child behaviour), monitoring the achievement of goals (by asking parents to report the number of times spent playing with their child), reinforcement of achievement (online feedback) and multiple-choice quizzes (online feedback and correct responses).

The content of the programme is based on The Little Parent Handbook, 30 which originated as a set of help sheets for parents developed as part of trials conducted by Judy Hutchings and colleagues during the 1990s. 31,32 The initial trial recruited parents of children with significant problems who were treated by CAMHS (Child and Adolescent Mental Health Service) professionals and subsequently in home based interventions delivered by health visitors. The programme involved teaching parents behavioural management advice targeting problematic child behaviour. Advice was given on how to respond to problematic child behaviour in a clear and consistent way and to encourage positive child behaviour by providing reinforcing consequences. Strategies also included record keeping, setting achievable goals and providing parental feedback and prompting and reinforcing parents when using the strategies effectively in order to increase confidence and exposure to success. Parents were observed implementing the strategies both within a clinical setting and at home in order to encourage generalisation of skills. Significant overall improvements were found from these multicomponent trials in measures of child behaviour, parental practices and maternal mental health.³¹ The help sheets were subsequently published as The Little Parent Handbook, 30 as a tool for all parents allowing for the wider dissemination of evidence-based parenting strategies (Table 1).

The intervention is available continuously and individuals can log in at times most convenient for them. Individuals are expected to complete one chapter each week and each chapter takes approximately thirty minutes. The intervention is programmed to leave a five-days gap between the completion of one chapter and access to the next chapter in order to give individuals an opportunity to practice the skills demonstrated in the programme. It is not necessary to complete each chapter in one sitting, participants can log in and out as they wish. Suggested activities are provided at the end of each chapter, for example to provide specific labelled praise for

Table 1. The intervention consists of ten chapters, eight content and two revisions.

	Chapter title	Strategies/skills
1	Spending special time with your child through play	Building positive relationships; Spending quality time together; Descriptive commenting
2	Encouraging good behaviour through praising	Reinforcing positive behaviour; Labelled praise; Sharing positive emotions
3	Encouraging good behaviour through rewarding	Planned rewards; Unexpected rewards; Praise and reward together
4	How to get better at giving instructions [part 1]	Give one instruction at a time; Give specific instructions; Praise compliance
5	How to get better at giving instructions [part 2]	House rules; Apply rules consistently
6	Revision	Summary of chapters 1-5
7	Ignoring problem behaviour	Ignore problem behaviour; Consistency
8	Teaching your child new behaviours	Modelling; Shaping; Prompting
9	How to develop your child's language skills	Labelling feelings; Reflection and problem-solving
10	Revision	Summary of chapters 1-9



positive child behaviour *e.g.* well-done for coming to sit at the table when I asked you to. If individuals log in before five days had elapsed, a message appears telling them it is not quite time for the next session yet. If participants log out before completing the chapter, the programme takes them back to the last page they viewed, avoiding participants having to start chapters from the beginning.

Each chapter follows the same format and includes information presented in bullet point format, colourful images to complement the text, an audio button enabling individuals to listen to the information rather than reading it, video examples of positive parenting to illustrate key skills, questions based on the video examples to teach observational skills and multiple-choice questions based on content to test information retention (online feedback appears on the screen with a score and correct answers to the questions). The researchers have attempted to make the programme as easy to navigate as possible by keeping written content minimal and putting large back and next buttons at the bottom of each page. A summary of the key points in each chapter is available to download and save (or print if the participant has access to printing).

The first chapter covers the core principles of relationship building through play emphasising the importance of parents taking an interest in their children by setting them a goal to spend 10 minutes engaged in child-led play every day at home. In order to encourage self-monitoring, individuals are asked to record online how many times they had played with a child during the previous week by selecting a number from a drop down menu. Automated feedback is given (on screen) based on the responses selected. Participants who report having played with their child once every day for ten minutes (*i.e.* selected 5 or more) are congratulated for taking the first step in improving their relationship with a child by making time for play. If they fail to engage with the task and report that they have not played with their child (*i.e.* selected 4 or less), participants are reminded of the importance of play.

The online intervention was created as a universal access preventive programme using the LifeGuide software. LifeGuide can be programmed to deliver evidence-based behavioural advice¹² and to employ behavioural principles within intervention delivery³³ to make the intervention more engaging to users. The COP-ING parent programme is intended for all parents of children aged 3-8 years with the aim of encouraging positive parenting. This feasibility study was undertaken to inform a future evaluation in terms of programme delivery, usefulness and acceptability. Additionally, the study will inform researchers of the effectiveness of recruitment methods, the time frame for programme completion and programme adherence. Other important feasibility parameters such as demand, implementation, practicality and efficacy,³⁴ will be explored with the intended population (parents of children aged 3-8 years) in a future trial.

The School of Psychology Ethics Committee, Bangor University (research proposal number 2015-15506) reviewed and approved this feasibility study.

Materials and Methods

Twenty (n=20) individuals were recruited by word of mouth and/or through recruitment posters displayed in two local nurseries. A member of the research team contacted the nursery managers to explain the project. Both managers agreed to distribute recruitment posters to parents of children aged 3-8 years who attended their nurseries. One manager requested that two newly appointed nursery nurses try the programme as a training exercise; both signed up for the study. Former colleagues and people with an

interest in the work of the centre were also invited to participate. Sixteen individuals recruited were parents, eleven with children aged between 3 and 8 years, two with younger and three with older children. Four participants had no children, two were colleagues and two worked as nursery assistants in a local nursery.

Individuals who expressed an interest in participating met with a researcher, received a detailed information sheet and were given opportunity to ask questions. Individuals who agreed to participate were asked to sign a consent form. Once written consent had been obtained, participants were provided with a detailed programme information sheet that included instructions, the link to the programme, an individual username and password to log in and the researchers e-mail to use in event of experiencing problems. Participants needed an internet connection and access to a PC or laptop. The intervention can be accessed on smartphones and tablets, but some of these devices do not support flash player, and individuals accessing the programme on these devices would be unable to watch the videos or listen to the audio. To obtain participant feedback on all aspects of the intervention, including the content of the videos, participants were asked to view the programme on a PC or laptop. There were no programme access costs involved for participants as the programme was hosted on Southampton University live server therefore no downloading was required.

Participants were provided with a feedback form at the end of the study. The intervention was on-line from October 2015 until January 2016, although participants were asked to complete the programme by December 18th 2015 to give the research team time to analyse the feedback and make any modifications to the programme in preparation for the evaluation in early 2016. Participants who had not completed the programme by December 18th 2015 but wished to carry on were told that it remained accessible until the end of January 2016.

Individuals were asked to contact the research team once they had completed the programme to receive the feedback form. Individuals who had not completed the programme before the Christmas break, were sent the feedback form by e-mail and asked to share their views on the chapters they had completed. Once feedback was received, participants were given a copy of *The Little Parent Handbook* as a thank you for their time.

Results

Twenty participants consented to undertake the programme. Thirteen (65%) returned completed feedback forms by December 18th 2015, and LifeGuide usage data was collected and downloaded for all participants who had logged into the programme. One parent was recruited after seeing the recruitment flyer in a nursery, two were recruited after a nursery manager asked if they could undertake the programme for training purposes and the remaining participants were recruited by word of mouth. Ten participants were well-educated (post-16), seven (n=7) had a university degree and three (n=3) were currently completing a college course, the remaining ten (n=10) were in paid employment Nineteen (n=19) participants logged in and began chapter one, and eighteen (90%) completed it, with only three completing all ten chapters (15%). The rate of completion decreased from chapter two onward as illustrated in Figure 1. The mean number of completed chapters was four.

The ten participants (77%) who had not completed the programme were asked to give reasons for non-completion within the given timescale. Eight reported that they had forgotten, one that a family member had fallen ill and the other reported workload pres-





sures and not having access to a PC or laptop at home.

Participants were asked to rate 12 statements using a five-point likert scale ranging from strongly disagree to strongly agree. Responses from the thirteen participants are illustrated in Figure 2.

Twelve of the thirteen participants agreed or strongly agreed that the overall appearance of the programme was engaging and 11 agreed or strongly agreed that the amount of text on each page was appropriate with two participants rating this as neutral and that they felt some chapters had a lot of text. All participants either agreed or strongly agreed that dividing the programme into weekly chapters made the material more manageable, and 12 reported that the programme was easy to navigate. With regards to whether or not the programme features were working, ten agreed or strongly

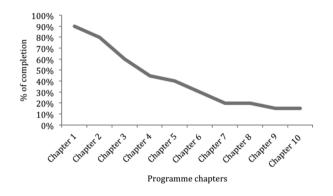


Figure 1. The percentage of programme completion for nineteen participants.

agreed with this statement, whilst three individuals reported problems, one was accessing the programme on an iPad (as access to a laptop became difficult during the study), which does not support the LifeGuide software and was therefore unable to watch the videos or listen to the audio button. Two participants reported issues with their PCs, however these were unrelated to the LifeGuide software. Eleven participants agreed or strongly agreed that the video examples of positive parenting were useful with two individuals selecting neutral. Only three participants utilised the audio button, and two strongly agreed that the audio button was useful. Eleven participants either agreed or strongly agreed that the end of chapter guizzes and online feedback were useful. Only eight participants agreed or strongly agreed with the statement that they were able to make time each week to engage with the chapters, four disagreed with this statement. Twelve participants agreed or strongly agreed that the images supplemented the text well, and 12 also either agreed or strongly agreed that the two summary chapters were useful in the reminding of key points. One individual rated neutral for this question and reported that the two summary chapters made the programme longer than necessary. Twelve participants either agreed or strongly agreed with the final statement, I would recommend this programme to parents of children aged 3-8 years. Overall, this feedback was predominantly positive despite the majority of participants not having accessed the full programme, which makes its usefulness questionable. For example, twelve participants either agreed or strongly agreed that the two summary chapters were useful in the reminding of key points despite only six participants having accessing a summary chapter and only three accessing both (Figure 2). However, of the 13 participants who returned a feedback form, eleven supplied additional comments, which proved more useful in terms of possible programme modifications. The comments were classified into four

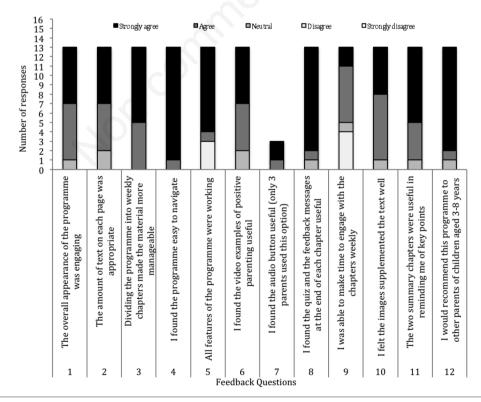


Figure 2. The number and distribution of responses to each statement from 13 participants.





main themes:

- i) Programme reminders would have been useful to avoid forgetting: Eight participants reported forgetting to log in and reported that reminders would have been useful in keeping them on track (either text or e-mail).
- ii) Log in and review of previously completed chapters. Three participants reported that an option to log in and look over previously completed chapters would have been useful. There was a five-day gap between each session to allow time to practice the skills outlined in the programme. If participants logged in before the next session became available, a message appeared telling them that the next session was not yet available. Participants would have liked the option to look back and revise previous topics during the five-day gap, and the LifeGuide usage data reported that the log in early page was viewed 22 times.
- iii) More video examples of positive parenting. Eleven participants (85%) reported that they found the video examples of positive parenting useful and would have liked more visual examples in the programme.
- iv) Instructions for how to make the videos bigger. Two participants reported that the video boxes were small and that it was difficult to see exactly what was happening in the video clip, another reported that it took a long time to realise that you could make the videos full screen, and that instructions for how to do this would be useful in future.

LifeGuide software allows researchers to view and/or download individual usage data including the number of completed chapters, number of log-ins and data on any programmed variable using the *saved value* logic command, for example questions that require the user to select a response. Participants were asked to record the number of times they played with a child each week (they were not able to proceed to the next page without selecting a response). The data for parents (*n*=11) who had a child aged between 3-8 years (target child age for the programme) are represented in Table 2.

Parents 6 and 13 both completed the programme and reported spending more time spent engaged in child-led play (61 and 68 times in total) compared to other parents. The mean time spent engaging in child-led play was 20 and the mean number of chapters completed was four. In a future study these data can be used to explore whether more self-reported instances of child-led play are

Table 2. The total number of times reportedly spent playing with a child as reported by parents (n=11) with children aged between 3-8 years.

Parent	Chapters completed	Times reportedly spent in child-led play
Parent 3	5	19
Parent 4	5	9
Parent 6	10	61
Parent 7	2	4
Parent 8	2	4
Parent 9	3	8
Parent 10	4	15
Parent 11	8	11
Parent 13	10	68
Parent 15	1	15
Parent 16	3	15

associated with better outcomes, however for the present study, the data only demonstrates the total number of times spent in child-led play. LifeGuide also provides data on the number of log-ins and the number of completed chapters for each participant indicating how many individuals completed chapters in one sitting, and how many logged-in multiple times. These data can be used to explore whether more log-ins are associated with better outcomes, however for the present study, it only demonstrates whether individuals completed chapters in one or more sitting sittings. Only five of the twenty (25%) individuals completed the chapters in one sitting, the remaining participants (75%) logged in more than once to complete them and the mean for the number of log ins for the sample (n=20) was five.

Discussion

This feasibility study examined programme delivery, usefulness and acceptability and gained user feedback to enable adaptations prior to a more rigorous evaluation. Twenty participants were recruited through word of mouth and/or recruitment posters and asked to complete the programme and fill out a feedback form.

The feedback reported on the likert scale did not prompt any significant modifications, as it was predominantly positive, despite the majority of participants not fully engaging with the programme. This could possibly be explained in terms of participant self-report bias. Participants who are required to self-report tend to under-report behaviours that are deemed inappropriate or negative by researchers and over-report on behaviours viewed as appropriate or positive.³⁵ Participants in this feasibility study may have selected positive responses in order to please researchers rather than giving objective views. For example, on the whole, feedback was promising and participants reported that they found the material engaging, thought the programme easy to navigate and would recommend it to parents of children aged 3-8 years. Despite these positive responses, the majority of participants did not complete the programme with only three completing all ten chapters. Nevertheless, the additional comments provided by thirteen participants proved useful in terms of programme modifications.

Programme engagement was poor with 90% of participants completing chapter one but only 15% completing all ten chapters. This is consistent with the literature as attrition rates with webbased interventions can be problematic, 27,29 highlighting the need for strategies to increase retention and programme completion in web-based programmes. Dittman et al.36 examined the extent to which session completion predicted post-intervention child behaviour and parenting outcomes after participation in the Triple P online parenting programme. They concluded that the number of completed modules predicted mother- and father-reported child behaviour outcomes (less disruptive child behaviour) and motherreported ineffective parenting (less ineffective discipline and increased parental confidence). Pre-intervention measures were not taken for this study; therefore it is not possible to relate the poor attrition rate with the identified variables. A future evaluation will be incorporating a demographic pre-intervention measure; therefore engagement with the programme can be explored further in relation to the identified pre-treatment variables.³⁷

Additional comments suggested the need for weekly prompts informing individuals when the next session was available. Due to eight participants reporting they had forgotten to log on, modifications to the programme include text message prompts to inform future participants when the next chapter becomes available. If parents do not log on to access the new chapter for three consecu-





tive days, a reminder text is sent. If the parent still has not logged on for a further three days, another reminder is sent. Failing this, weekly reminder texts are sent. The text message service was set up through *Janet txt* service and text messages will be automatically sent through LifeGuide; therefore no cost will be involved for the participant. Text message prompt may increase programme engagement as a systematic review of studies using text message reminders to increase medical attendance rates found that short message service reminders in health care settings substantially increase the likelihood of attending clinic appointments.³⁸

Participants reported that the option to look back over previously completed chapters would have been useful, as in this study each chapter could only be viewed once and could not be accessed again after it had been completed. As a result of this feedback, the programme has been modified to allow participants the option to look back over previously completed chapters an unlimited amount of times. This allows the option of content rehearsal which has been demonstrated to benefit learning allowing future exploration of whether more revision leads to better outcomes in terms of increased positive parenting.³⁹

One individual reported difficulty in accessing the programme on an iPad, which does not support the LifeGuide software (after access to a laptop became difficult during the study). This participant was unable to watch the videos or listen to the audio button. In anticipation that some families may only have access to the internet on these devices and not on a PC or laptop, the programme has been modified to allow individuals the option to access the programme on an iPad or tablet. This modification allows participants accessing the programme on an iPad or tablet to click on an external link through LifeGuide and watch the videos on *Vimeo* (private video uploading site) in a separate window.

Video examples of positive parenting were included in the programme to visually illustrate key principles, however some chapters did not have many videos. The researchers were at the time unclear as to the amount of videos that could be uploaded without affecting the quality of the videos, as videos were streamed from the liver server. Participants reported that more video examples of positive parenting would be useful, and based on this feedback twenty additional video clips have been added to the programme (without affecting the quality). Additionally, as a result of feedback from two participants, instructions have been added next to the videos to ensure that individuals know how to make videos appear full screen and how to exit videos and return to the programme.

Conclusions

This feasibility study was useful in gaining user feedback, which led to programme modifications in preparation for a future evaluation. Firstly, the features of the programme were working correctly, apart from for the one individual using an iPad – but this led to a modification which allows future participants to have the option of which device to use to access the programme. Secondly, the programme was well received, especially the video content of which participants wanted to see more. This led to the modification of adding more video examples of positive parenting. Thirdly, the majority of individuals would recommend the programme to other parents, and this was extremely positive in terms of progression with a larger evaluation. Nevertheless, the study did have some limitations.

Firstly, programme completion was poor with only 15% of individuals completing all ten chapters in the given time frame. This made it difficult to test the features of the entire programme

and limited the validity of some of the user feedback. Secondly, only one parent was recruited after seeing the recruitment flyer in a nursery, the remaining participants were recruited by word of mouth, suggesting that other recruitment methods must be explored. For a future trial, it is intended to recruit parents by sending recruitment posters to primary schools in addition to nurseries and also utilising health visitors and school nurses by asking them to approach parents. Thirdly, only eleven individuals had a child aged 3-8 years, therefore feedback from the target sample was limited. Finally, half of the participants (n=10) were well educated (post-16 education) and the other half (n=10) were in employment and did not report any issues with the literacy requirement of the programme; however the programme does include video-based modelling of skills and an audio option to reduce the literacy requirement.

The feasibility study gained user feedback in terms of programme delivery, usefulness and acceptability. A future trial will evaluate the programme further with parents of children aged 3-8 years in a Randomised Controlled Trial (RCT) through parent self-report measures and a behavioural observation of parent-child interaction. The aim is to recruit 50-60 parents of children aged 3-8 years who would like to learn more about positive parenting. The evaluation would establish whether this programme is useful in encouraging positive parenting practices and promote positive behaviour change more widely.

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Contributions: DAO, designing of the online programme, manuscript writing, gaining ethical approval, data collection, data analysis, critical revision and final approval of manuscript; JH, author of *The Little Parent Handbook*, critical revision and final approval of manuscript.

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