

An innovative approach to evaluation: Theory-informed, 'expected versus actual', evaluation of educational practice used in a public health parenting programme

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Abstract

Background: Evaluations of public health and education are interventions aimed at improving wellbeing needed to ensure investment in projects with the highest likelihood of patient or public benefit. Evaluations normally focus on interventions as they are delivered, with recommendations arising from participants' feedback, outcomes and comparison with other programmes. Nevertheless, some public health tools, such as needs assessments and audits, do use 'expected versus actual' (EVA) comparisons.

Methodology: This research sought to evaluate the teaching methods used in a parenting programme. To do this, the teaching activities associated with different educational theories were collated into a checklist and the parenting training was analysed using this list, to identify gaps in practice. Thus, what might be expected to be seen in education delivery was compared with actual delivery.

Result: This is an innovative approach to evaluation that can be tested in other settings. Here the evaluation showed only minor gaps in the pedagogical methods used, due to the programme having run for over a decade. Nevertheless, the providers planned to make changes as a result of the exercise.

Conclusion: The EVA evaluation is a beneficial adjunct to evaluation of wellbeing-related interventions using the 'theory of change' approach.

Keywords: Public health, Parenting, Evaluation, Training, Pedagogy, Theory of change

Introduction

Parents' approaches to communicating with their children influences both child and adult wellbeing (Dubroja et al., 2016). Parenting training programmes are known to be effective in supporting parents to adjust their interactions with children, thus promoting child and adult wellbeing and reducing referrals to children's psychological services (NICE, 2017). The parenting training analysed here was run at eight

school sites in London, in 2018. The full evaluation of the programme is described elsewhere (Shah et al., 2018).

Staff and community training programmes are important tools for primary and secondary health promotion across a wide range of health improvement areas (Donaldson and Donaldson, 2003: 117). The methods described in this article are applicable to other training programmes aiming to promote wellbeing. Here we focus on evaluating the teaching methods used in a parenting programme. There are distinct areas of pedagogy within parenting training. These are: training of staff and parent-champions to train parents; the training of parents to alter parenting styles; and, lastly, the education of children, through changes in interactions with parents, to improve behaviour. The first two elements are considered in this paper.

‘Evaluation’ is a broad term and may address a variety of questions (WHO, 2013). Most evaluations are aimed at determining the effectiveness of interventions, where “effectiveness refers to the ability of the intervention to produce the desired outcome under large-scale, relatively uncontrolled settings” (Spiegelman, 2016). Interventions are projects, programmes or initiatives. The evaluation discussed in this paper is unusual in that it is asking this type of question: “could more results be obtained by using different [training] instruments?” [training added] (WHO, 2013). It is not determining the effectiveness of the parenting training as it was delivered because it is considering different, alternative, delivery instruments. Additionally, ‘theory’ in process evaluation typically focuses on the ‘theory of change’, that is, explanations of the drivers of change (MacKenzie & Blamey, 2005; Government of Canada, 2012). Whereas, here, multiple theories are used to explore alternative delivery. The method is designed to help those involved in promoting wellbeing undertake assessment of gaps in “delivery instruments”. Therefore, due to these distinctions, it has been called a theory-informed, expected versus actual (EVA), evaluation.

Philosophically, there are important distinctions to be made between an evaluation of a programme as delivered and evaluation of what a programme might be missing or might do differently. The former can be more

practical and may be linked to the maxim, associated in the UK with New Labour policy-making: ‘what counts is what works’ (Wells, 2007). However, it is apparent that if policy and methods are not tried it is difficult to evaluate, or test, them. The method discussed here is designed to encourage a conscious assessment of alternatives where further approaches to investigation, such as randomised controlled trial, is impractical (Donaldson and Donaldson, 2003).

‘Theory’ is a set of features describing how a process operates, which can be tested, or have been tested, or measured. Thus, a theory should be applicable to different settings and lead to similar results (Halperin & Heath, 2012). The value of theory in pedagogy is debated. Garry Thomas (2007), for instance, is sceptical of theory improving teaching. Bob Bates (2016), on the other hand, uses theory to suggest educational activities. In general, educational theory is expected to influence the style and delivery of teaching.

There are numerous educational theories. Schunk (2014), for instance, includes over twenty in his glossary alone and Bates (2016) discusses many more. In reviewing these theories, four aspects are striking. Firstly, theories may be described, but it is often not clear how much they have been tested and, even then, tested in replicable ways. Having said this, pedagogy is often seen as an art, as well as a science, and so allows ‘artistic licence’ and mixed methods approaches (Gibbs, 2015). Secondly, it is notable that many of the theories described are at least several decades old, while the implications of this are not necessarily the same for each theory. Thirdly, educational theory tends to be applied across wide ranging circumstances. In textbooks for schoolteachers, the lifelong learning sector, health promotion and wellbeing trainers and higher education the same theories are found, notwithstanding some theories focused on young children and adults (Merriam & Bierema, 2014). Yet experimental research, while showing positive results in some areas, is not necessarily applicable to others. Thus, misapplication of theory and conflict between theories may arise over, for example, the benefits of repetition and preventing errors, or over progression in learning from factual to conceptual issues (Clarke, 2008; Adey & Shayer, 1994; Reece & Walker, 2003; Gravells,

2012; Anderson & Bloom, 2001). Fourthly, many activities are effective in improving learning. However, the issue is that some approaches work better than others (Hattie, 2012).

Notwithstanding these caveats, educational theory is developed to influence teaching. The aim of this study was to evaluate the teaching methods used in a parenting programme that took place over ten weeks at eight school sites in XXX London. The objectives in doing this were to collate activities associated with educational theories into a checklist, assess delivery against this checklist – thereby identifying gaps in educational activities, and, finally, to discuss any gaps identified with the training provider. We therefore formulated this research question: Does a prior consideration of educational theory and models help to suggest training refinements and self-reflection by deliverers?

Data and Methods

The data available for our evaluation consisted of training manuals and observed teaching sessions. We interrogated these using checklists, which are explained here.

Education theories were reviewed and turned into checklists of observable attributes

The process for devising the checklists went as follows. Firstly, to identify educational theories, we used databases including Academic Search Elite and Education Abstracts. We began searching with the terms ‘education’ and ‘theory’, as well as ‘adult learning’ and ‘theory’. A search of the British Library and university library catalogues for books was conducted. Bates (2016) was the key book that led to ‘snowballing’, that is, following up of references, and then further references arising from them. Due to the very large number of theories covered, referencing using Bates as a key source, has been used here. We proceeded until we were observing repetition of theories from different sources and we were not identifying new ones, that is, there was saturation.

Once we had identified the theories, we reformulated them as activities we would expect to observe if the theory was being applied, this process was derived from Bates (2016). We placed the activity associated with theory in the checklist, in the form of a question. For example, taking Knowles’s (1988)

theory of adult learning, if this operationalised, we would expect to see evidence of facilitators finding out about parents’ interests. Thus, the checklist question was: ‘Did facilitators find out parents’ interests?’ (Knowles, 1988).

In total, 78 theories were translated into checklist questions on ‘activities that might be expected to be observed within a training environment’ if the theory was followed (the list is available from the first author). This is not to imply the trainers should necessarily use the methods listed but is testing if they did.

To aid the assessment process, the questions were also categorised as to where, timewise, they would be likely to be seen in the training. Further examples of questions, and associated theorists, that were placed into the checklist are as follows:

‘Are parents told at the start of the session what to expect?’ (Gagne, 1985).

‘Do learners reflect on their beliefs?’ (Festinger, 1962).

‘Do parents assess their learning styles?’ (Sternberg & Grigorenko, 2004).

‘At the end of each session, is a summary provided of where learners are at?’ (Clarke, 2008; Hattie, 2012).

The list of 78 activities derived from named theorists was also distilled into a 20 area, second, smaller checklist. This was completed by the first author to provide an additional framework by which to interrogate delivery and generate material for the trainers’ reflection (Table 1).

Assessment of the written materials

We assessed the written trainers’ manuals by going through them with the 78-point checklist and identifying where in the manuals the issue was referred to. The shorter 20-area checklist was also used. The main manual is a detailed 89-page document setting out the content of a ten-session parenting training. A smaller 5-day facilitator training manual was also analysed. The aim was to show possible gaps. To increase rigour, the three authors undertook the manual checking exercise independently. Any discrepancies in the findings (no.= 6/78) were resolved by taking the majority view. Those features that could not be found in the training manuals were looked for by one researcher in 2018 observing four

training sessions of up to 20 participants, using a short checklist of questions on issues not observable in the manual (Table 2). This data was collated to identify any remaining gaps.

The findings were discussed with the training provider. Following observation of the training sessions, a discussion with the provider staff took place. The purpose of this dialogue was to establish the views of staff within the training organisation on the gaps identified. The two training provider leads participated, having

been invited by the authors. We wanted to know if the providers would concur with our findings and what they would do with the information we gave them. The conversation was recorded in writing, and this was checked as the session progressed. We then shared the typed script of the proceedings with the participants to check. The discussion was designed to follow the style of a focus group in that the participants' discussed the gaps and also discussed each other's ideas about them (Barbour, 2007).

Table 1. Shortened checklist on training provision, based on theory

Area	Comments
1 Anecdote	Providing anecdotes is part of Gagne's (1985) schema and other theorists. Links to adult learning and the extent to which trainers talk about their experiences.
2 Assessment/recapping	Parenting training will not have assessments – but some form of recapping by with or participants might increase engagement.
3 Challenge	A balance of training that includes sufficient challenge may sustain engagement for some participants.
4 Context/school	Issues to do with the school and wider context (eg whether participants have previous experience of parenting support, etc) may be discussed.
5 Copying	Trainers may wish to consider if opportunities to copy others are included.
6 Discovery	Are there opportunities to weave this into training. Perhaps by participants watching their actions on video etc.
7 Feedback	Are there more and different opportunities to provide positive feedback, especially in follow-up sessions?
8 Feelings	How are these discussed?
9 Friendly	Are there any actions that can increase opportunities to be friendly and welcoming?
10 Explanation of sessions	Is this provided in different formats?
11 Explaining how parents will learn	Where does this come in?
12 Individuals – how different people like to learn	Is there any opportunity to check what parents like?
13 Individuals – beliefs	Are beliefs discussed?
14 Peers	Have parents been asked if they want to support each other in any way?
15 Prior knowledge	Is the prior knowledge and experience of parents discussed?
16 Problems	Are trainers supported to deal with problems in the group?
17 Role play	How many different role plays are used?
18 Sections	How long are sections?
19 Tools and 'language' (eg music etc) – varied approaches – (including IT/social media)	Are there any further opportunities to use different medias? From diagrams to games.
20 Trainers' openness	Have trainers discussed this aspect themselves?

The method of assessing the training, by using checklists, meant that elements that were missing were clearly identifiable. However, given the cautiousness with which we would approach educational theory, as highlighted in the introductory section of this article, it was considered appropriate to ascertain the provider's view. The findings are set out in the form of – gaps identified. The provider's interpretation of the appropriate response to these findings is also set out.

Ethical approval for the project was obtained by Dr Thomas and Dr Shah from the University of West London in 2018.

Results

The aim of this study was to evaluate the teaching methods used in a parenting programme. The objectives in doing this were to collate activities associated with training theories into a checklist, assess delivery against the checklist, and to discuss any gaps identified with the training provider.

The training studied here had been well evaluated previously and had been developed over ten years by experienced trainers (Day et al., 2012). Therefore, we found that many aspects of training theory, as set out in our checklists, were evident in analysis of the manuals and in observation of the training sessions.

Yet, from our evaluation of the manuals certain areas could not be observed, as referred to in Table 2: pace (including areas such as, does the session go off expected content, how much support is given during exercises?); feedback and wrapping up (including, how much recapping is there?); style and group issues (such as, are opportunities to copy others included?). Nevertheless, some areas that could not be found from an analysis of the manuals were observed in the training itself.

The findings from the training sessions did, however, reveal certain gaps. From the observations it was apparent that there was some scope for development; 'recapping', 'feedback' and 'wrapping-up' were least applied. Here, more of a summary could have been given at the end of sessions.

In addition, under 'style and group issues', some further use of metaphors and stories might have been considered. Other areas were observed to be effective, such as, appropriate challenge of participants. The pace of the sessions was found to work well, with some small and appropriate diversions from the set programme.

The findings were collated and shared with the training provider. The key points made by the training provider staff were as follows:

The value of the EVA exercise was in its stimulation to reflection on the overall training

Table 2. Shortlist of areas observed on teaching theory

1.Pace
Does the session go off from the expected content?
How much support is given to participants during exercises?
2.Feedback and wrapping up
How does feedback work when participants are working in pairs?
How much recapping is there?
How much of a summary is given at the end of the session?
3.Style and group issues
Are opportunities to copy others are included?
Are there any chances to be more friendly and welcoming?
Are metaphors, stories, analogies used?
Does everyone have a say?
Are 'overbearing learners' challenged?

delivery and as a confirmation, in this case, of the provision.

The checklists support redrafting the training manuals. Thus, we'll "use this as a checklist when we review the manual [referring to Table 1]. We would expect to be adapting and incorporating".

Importantly, "the work brings to consciousness what we have done. The value is in making things explicit".

"Anecdotes work when facilitators have thought through real-life experience that has emotional salience. The power of the anecdotes is that parents may think – if you are like me and you did that, maybe I'll have a go too".

Support for trainers in summing-up was discussed. It was agreed that this is a demanding aspect of training and a focus on practicing can help. "Feedback is an issue. In revising the manual, we will take on these issues. Getting other people to deliver means we need to be clear in the manual", was a comment.

Overall the view from the providers can be summed up as follows: "Data shows that parents love the course. However, you are giving us valuable leads to help guide our reflections". Thus, the evaluation supported training provider reflection on less used training activities and gaps in the training manuals.

Discussion and Conclusion

Our research question was: Does a prior consideration of educational theory and models help to suggest training refinements and self-reflection by deliverers? This appears to be the case as, firstly, ideas for small changes to future delivery, which went beyond only responding to conventional evaluation feedback, were presented to the training provider. This was as a result of the theory-informed, expected versus actual (EVA), evaluation. Secondly, the provider valued the exercise because it helped their self-reflection.

In our study the training providers had worked on the course for several years (Day et al., 2012). They knew of many of the "instruments that might obtain more

results" (WHO, 2013; Hattie, 2012). Nevertheless, they found it useful to be told about the theory-based pedagogical techniques that were not observed in their training. They could then plan how to address gaps in the training manuals and delivery. Less experienced providers may have gained more. Those undertaking evaluation of training interventions aiming to promoting wellbeing should be aware that evaluation that is only focused on outcomes may overlook opportunities to further improve delivery.

Returning to the literature discussed in the article's introduction, evaluations normally attempt to assess the effectiveness of interventions, as they are delivered. However, this does not clarify what could be done differently that may be more effective (WHO, 2013). The paper has analysed expected activity, based on theory, as opposed to the quantitative and policy data (Wright & Cave, 2013). We have sought to evaluate, in a systematic way, gaps in 'delivery instruments', or, in this case, pedagogical actions. The process relied on translation of educational theory into observable attributes. The need for caution in adherence to these theories is emphasised (Thomas, 2007). Therefore, discussion with the providers, and their reflection, was an integral part of the evaluation.

This method can suggest training refinements and encourages self-reflection by deliverers and thus meaningfully informs delivery of interventions aimed at promoting wellbeing. EVA evaluation based on educational theory may be of particular use at point of scale-up of parenting and related interventions into wider programmes where maintaining fidelity to original protocols can be a challenge. Also, it would be particularly helpful when training is being delivered by those with less formal teaching, or training, backgrounds.

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