

Audit as evidence: The effectiveness on parenting self-efficacy of '123 Magic' programmes in one community.

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**ABSTRACT**

This paper reports an audit to determine the effectiveness of '123 Magic', a group-based parenting programme that encourages parents to explore, discuss and practice strategies to manage child behaviour. We describe how audit can be used at a local level to provide evidence of effectiveness and areas for quality improvement. Audit can also be useful to determine outcomes locally and to develop new hypotheses for testing through research. We evaluate the effectiveness of '123 Magic' by measuring whether parenting self-efficacy increases after attending a programme. 74 parents took part in the study over 16 '123 Magic' parenting programmes from October 2007 to June 2009. Parents completed the TOPSE evaluation tool as a pre- and post-course measure of parenting self-efficacy. Scores increased at the end of the parenting programmes for all scales, which suggests that '123 Magic' is effective in terms of improving parenting self-efficacy and also demonstrates the value and contribution of parenting programme facilitators to supporting parents and families in the community.

**Keywords:** '123 Magic', parenting programmes, self-efficacy, Tool to Measure Parenting Self-Efficacy (TOPSE)

## **BACKGROUND**

The current policy agenda for child health promotion (1) emphasises the importance of prevention for the future health and safeguarding of children. Parenting, and more accurately good parenting, is advocated by policy makers and practitioners alike to be a key mechanism in supporting the Every Child Matters (2) agenda and enabling children and their families to have healthier, brighter futures. Health visitors, community practitioners and more recently parenting practitioners have taken an important part in supporting parents in the community through programmes that provide various approaches to becoming more confident parents. However, until relatively recently the tools to enable practitioners to evaluate their work with parents have not been available and therefore the effectiveness for both parents and children of many of the programmes has gone unanswered.

Whilst the National Academy for Parenting Practitioners ([www.parentingacademy.org](http://www.parentingacademy.org)) has been set up to bring together practice, education and research for people involved in supporting parents, there remains a need to evaluate local innovations so that commissioners of parenting support have access to all the relevant evidence in their area.

## **AUDIT**

Audit is one way in which local parenting support practitioners can measure the effect of their own work for parents themselves and ultimately for the children concerned. Audit has been described as a process by which practitioners examine and modify their practice against agreed standards (3). Whilst the 'gold standard' for evidence is usually considered to be the randomised controlled trial, there is rarely either the funding or expertise available to conduct RCTs on local services that would be completed in a timeframe necessary for commissioners. A recent systematic review of RCTs that evaluate the effectiveness of parenting programmes on children with conduct disorder (4) (2009) has demonstrated that such programmes are effective. These programmes are specifically aimed at conduct disorder and whilst providing generalised evidence for this specific issue, may not be as informative for local commissioning as audit. However, as Kitchen points out, audit can only lead to hypotheses but cannot test hypotheses in the way that an RCT can (5). Nonetheless, Rycroft Malone et al have argued that amongst the different levels of evidence that informs health and social care, audit if systematically conducted and

appraised, is an important and relevant source of evidence for rapid appraisal of local services(6). Auplish has also commented on how audit can be used to improve care in the health system, again the importance of systematic measurement and the need to provide recommendations for improvement are an important part of the audit cycle (7).

We therefore describe in this paper a local audit of a particular community based parenting programme that provides evidence both for the provider of the service on the basis of which changes and improvements can be made, and for commissioners of this programme.

### **‘123 Magic’**

The focus of the audit was to determine the effectiveness of ‘123 Magic’ as a parenting intervention. ‘123 Magic’ was developed by Thomas Phelan, an American psychologist who specialises in working with children with clinically diagnosed behavioural issues (8). He promoted his techniques as good parenting strategies for managing behaviour of all children between the ages of 2 and 12 years. Practitioners at Families in Focus CIC in Hertfordshire, an organisation that aims to promote good parenting in the community, adapted these techniques into a group based parenting programme that encourages parents to explore, discuss and practice these parenting strategies before taking them home to their families. The company founders of Families in Focus, who have backgrounds in parenting issues, counselling, health visiting and working with marginalised family groups, bring together a wealth of knowledge, experience and insight. Each person in the team of skilled and qualified parenting programme facilitators is a parent and they come from a range of health, education and social care backgrounds. All facilitators have been trained in group facilitation skills to Open College Network (OCN) level 2.

This six session parenting programme is designed to help parents encourage positive behaviour. It explores parent- child relationships and child behaviour including sibling rivalry, conflict and tantrums and looks at how applying the rules of ‘123 Magic’ can really make a difference. The sessions also promote self preservation, reminding parents that taking care of themselves and their needs are important too. A study that randomised parents to control group or brief psychosocial intervention group using the video '1-2-3 Magic' to reduce parent-child conflict found a reduction in child problem behaviour in the intervention group (9).

The strategies are simple and the techniques familiar to many parents. The key element for parents is to stay calm and to be clear in their communication. Behaviours are divided into those the parent wants their child to stop such as whingeing, fighting and defiance and those the parent wants their child to start, such as paying attention and being polite. Stop techniques involve several stages before going into 'Time-Out' while start techniques involve all the positive reinforcements that are familiar to most parents.

The '123 Magic' approach works best with children between the ages of 5 and 9 but can be adapted for use with both younger and older children. The advantage of group work is that parents have the opportunity to listen to other parents and share their parenting experiences. Parents can tailor approaches to their own family circumstances and gain support and validation for their individual techniques.

## **TOPSE**

TOPSE is based on the self-efficacy theory developed by Albert Bandura (10-12) and has been found to be of particular relevance to practitioners who are involved in parenting support work (13, 14). A key tenet of self-efficacy theory is that a person's self-efficacy expectations in any domain of behaviour will be developed by performance mastery and vicarious experience and learning through role modelling. This process of developing self-efficacy can be achieved through group work (15) and sharing experiences with other similar individuals. Through parenting programmes such as '123 Magic', opportunities are provided for parents to raise their expectations as a result of mastering positive behaviours, experiencing other parents' success, and through encouragement from programme facilitators and other parents (14, 16).

## **THE AUDIT STUDY**

### **Aims**

The aim of this audit was to evaluate the effectiveness of '123 Magic' parenting programmes by measuring pre and post programme changes in parenting self-efficacy.

### **Design**

A pre-test/post-test design was employed using parenting self-efficacy as the outcome measure. The audit was conducted in 2009.

## **Participants**

Parents attending '123 Magic' parenting programmes across a range of venues in Hertfordshire took part. These programmes were run by trained parenting programme facilitators with a range of experience. Programmes running between October 2007 and June 2009 were included in the audit.

## **Instrument**

The parenting self-efficacy measure used was TOPSE (13, 14), which is a multi-dimensional instrument of 48 statements within 8 scales, each scale having 6 statements and representing a distinct dimension of parenting: Emotion and affection, Play and enjoyment, Empathy and understanding, Control, Discipline and boundaries, Pressures, Self-acceptance, Learning and knowledge.

The items are rated on an 11-point Likert scale where 0 represents completely disagree and 10 represents completely agree. The scale contains positive and negatively worded items and the responses are summed to create a total score; the lower the score, the lower the level of parenting self-efficacy.

## **Estimates of reliability and validity**

Previous studies have provided support for the reliability and validity of TOPSE (13, 14). Internal consistency reliability for each scale was estimated at baseline for the current sample through the use of Cronbach's alpha co-efficients (table 1).

## **Data Collection**

Data were collected over a 19 month period between 2007 and 2009. Parents complete the TOPSE booklet at the first session of a parenting programme and again at the final session. This is a routine component of the programme that parents are aware of from the start and all the data are anonymised.

## **Data Analysis**

The data were analysed using the Statistical Package for the Social Sciences (SPSS) version 14.0. Paired t-tests were conducted to determine differences in self-efficacy scores from baseline to end of course.

## **RESULTS**

Data were collected for 74 parents attending 16 '123 Magic' parenting programmes over a period of 19 months. The mean scores at baseline and end of programme are shown in table 2.

### **Difference in scores over time**

There was a mean increase from baseline to end of course scores on all scales and these increases were statistically significant (table 3). These results are consistent with those found in previous studies using TOPSE.

## **DISCUSSION**

Self-efficacy scores improved in all domains of parenting after attending the '123 Magic' parenting programme and this is consistent with previous research (14). The improvement in scores to do with emotion and affection, were significant though somewhat less than the change in scores in other domains of parenting. Focus group work during the development of TOPSE (17) found that many parents had concerns about child behaviour, boundary setting and discipline, areas that '123 Magic' clearly address. This is consistent with the principles of '123 Magic', which aim to reduce parent-child conflict and supports the findings of Bradley et al (2003).

The analysis assumed independence of all observations and it is acknowledged that the study may be limited by differences between different parenting programmes that were not analysed, for example number of parents attending each programme. The group dynamics and characteristics of the parenting programme facilitators are also factors which may have an overall impact on the effectiveness of the course. However the purpose of this audit was to evaluate '123 Magic' parenting programmes by measuring changes in parenting self-efficacy rather than to evaluate other outcome measures or individual courses.

The evidence from this audit would suggest that '123 Magic' is effective in terms of improving parenting self-efficacy and it would now be useful to evaluate other outcome measures such as the relationship between parenting self-efficacy and child outcomes. This audit has also demonstrated the value and contribution of parenting programme facilitators to supporting parents and families in the community and provides further evidence to support the reliability of TOPSE as an evaluation tool.

It is important to acknowledge that as an audit of the programmes, these data only provide evidence that can stimulate hypotheses, it is not possible from the audit alone to test the hypothesis that '123 Magic' is the causal factor that increases parenting self-efficacy, although it is highly indicative.

So what value does this audit have for local practitioners and commissioners? As well as providing evidence that parents seem to increase their parenting self-efficacy over time, it also provides potential areas for quality improvement, for example:

- Providers of '123 Magic' may want to consider adjusting the balance of input between emotional and behavioural aspects of parenting. Whilst parents have expressed a need to develop their skills and confidence in behaviour management, there was evidence of slightly less self-efficacy increase in the emotional domain that parents would also benefit from.
- Providers and commissioners of this programme should consider how parents themselves could input into the further development of the programme
- Commissioners should consider using systematic local audit to inform the commissioning cycle and to improve quality of provision and value for money.

## **CONCLUSION**

This audit has shown that '123 Magic' is an effective parenting programme to increase parenting self-efficacy over the period of the programme. This increase in self-efficacy is important in itself as studies have shown that parents who are more confident in their ability to parent are more likely to be competent to nurture and develop their children into healthy and confident young adults (18, 19). However, whilst this provides a good evidence base on which to commission a programme such as '123 Magic', it is necessary in the longer term to undertake further hypothesis-testing research and refinement of programmes and instruments to ensure that the best services are being delivered to parents and children.

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**Table 1** Cronbach's alpha reliability co-efficients

Scale	Cronbach's alpha	Cases
Emotion/affection	.80	74
Play/enjoyment	.89	74
Empathy/understanding	.87	74
Control	.84	74
Discipline/boundaries	.90	74
Pressures	.79	74
Acceptance	.81	74
Learning/knowledge	.81	74
Total Scale	.90	74

**Table 2**

Summary statistics for all participants at baseline and end of course.

SCALE	Base-line			End of course		
	n	Mean (SD)	median	n	Mean (SD)	median
Emotion/affection	74	49.8 (7.8)	51	74	52.2 (7.1)	55
Play/enjoyment	74	44.4 (10.8)	45	74	50.8. (7.2)	51
Empathy/understanding	74	42.6 (8.9)	42	74	49.6 (6.6)	50
Control	74	31.0 (11.3)	32	74	42.9 (9.6)	44
Discipline/boundaries	74	35.4 (11.6)	36	74	46.9 (7.8)	48
Pressures	74	38.0 (11.1)	39	74	43.4 (10.9)	44
Acceptance	74	43.9 (8.9)	44	74	49.7 (8.0)	51
Learning/knowledge	74	49.4 (7.8)	50	74	53.5 (5.6)	55

**Table 3**

Mean change in scores from baseline to end of programme for all scales

SCALE	Baseline to end of programme		
	n	Mean (95%CI)	<i>p</i>
Emotion/affection	74	2.4 (0.9, 3.8)	0.002
Play/enjoyment	74	5.7 (3.7, 7.8)	<0.001
Empathy/understanding	74	7.0(5.3,8.7)	<0.001
Control	74	11.8(9.2,14.5)	<0.001
Discipline/boundaries	74	11.4(9.1,13.8)	<0.001
Pressures	74	5.4(2.8,8.1)	<0.001
Acceptance	74	5.8(3.8,7.7)	<0.001
Learning/knowledge	74	4.1(2.6,5.5)	<0.001

### Summary of key points

Parenting programmes have an important role in supporting parents to become more confident in their parenting.

TOPSE is a tool to measure parenting self-efficacy and has been used to evaluate a wide range of parenting programmes in the UK and Internationally.

‘123 Magic’ parenting programme promotes good parenting strategies for managing child behaviour and provides opportunities for parents to increase their self-efficacy for parenting through mastering positive behaviours, role modelling and encouragement from facilitators and other parents.

Audit is an effective way to demonstrate the value and contribution of parenting programmes. Commissioners should consider using systematic local audit to inform the commissioning cycle and to improve quality and value of service provision.