



Evaluation of Training in Creative Relaxation in Primary Schools



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The Evaluation of Creative Relaxation training with Primary Age Children (age 8-11)

Background

Creative Relaxation, developed by the Psychiatrist Dr Eugenio Herrero, has been widely used in Spain with both adults and children to treat a number of conditions, with considerable acclaim over the last 30 years. It has been promoted in the UK since 2006 by The Girasol Foundation, a UK registered charity. The technique is aimed at developing and integrating relaxation into daily life as a way of promoting well-being. It is taught to teachers, who then teach it to the children. It takes 2 hours a week for five weeks to learn and, once learnt, becomes a tool for life. Prior to this research there were three successful pilots using Creative Relaxation with 49 staff from 22 schools and over 300 children in a Local Authority. Results were evaluated by the local Psychological Service. Levels of depression amongst the teachers nearly halved and there were reductions in levels of anxiety. Ninety-two percent of the teachers said they would recommend the technique to other teachers.

The aim of this current pilot project was to take the programme into a primary school where some of the teachers had already received the training, and, by using the trained teachers to train the children in the techniques, to assess whether this produced any measureable benefit for the children.

This pilot project takes place against concern about the well-being in UK children. The UNICEF study¹ placed the United Kingdom bottom of 21 industrialised with regards to child well-being. Apart from the humanitarian considerations other studies have shown that children with anti-social behavioural problems are, over their life course, very expensive to society². The current Government is as committed as the previous government to improve the well-being of children, but given the financial situation, there is unlikely to be any cash associated with this.

The project is of particular interest because, if effective, it could be an extremely cost-effective method of improving child well-being (see appendix for details). Once the class teachers are trained, they can cascade the training through their classes. Although there are a number of well-being programmes now operating in schools, Creative Relaxation is potentially more effective because the instruction is manualised, is taught by the teachers and the children are given practical workable techniques to manage future stresses/challenges in their lives.

The Centre for Research into Parenting was used to assess the potential benefits of the training for the children.

The school

The school chosen for the trial was a primary school in North London. This is a Community School for boys and girls from the age of three to eleven. There are 2 classes per year group with up to thirty pupils per class.

¹ UNICEF (2007) Child well-being in rich countries, *Innocenti Report Card 7*, Florence.

² Scott, S., Knapp, M., Henderson and Maughan, B. (2001) Financial cost of social exclusion: follow up study of antisocial children into adulthood *BMJ* 2001;323

Ofsted (2007) notes: 'This large school serves a mixed residential area. The roll has been rising rapidly over recent years. Over two thirds of pupils come from a variety of minority ethnic backgrounds, the largest group being Pakistani. More than four out of ten pupils speak English as an additional language. The number eligible for free school meals is about average. Almost a fifth of pupils have learning difficulties or disabilities, an average proportion. The school has awards for developing its staff, teaching basic skills and promoting healthy lifestyles....' The Ofsted report gives the school a '2' (Good) rating for overall effectiveness but a '1' (outstanding) for personal development and well-being.

When AB met with the teachers for feedback on the training and research, they talked of their pride in the school. They felt it was a welcoming place and the atmosphere in the school was particularly supportive for children, parents and teachers. In the last 5-6 years the population of the school has changed from a majority of white suburban children to a much more diverse population with many nationalities, more children who do not have English as their first language, and more disadvantaged children. Some children are dropped off by car at school while others have to travel across town by bus from where they had been re-housed. The teachers were particularly proud of how well they had integrated into the school not only the children, but also the mothers. Some particularly shy ethnic minority mothers now took part in school meetings.

The evaluation

The overall aim of the evaluation was to assess the outcomes (emotional/behavioural and cognitive) of children undertaking Creative Relaxation training. The two-class format of the school enabled one class to act as an Experimental group who would receive the training from the teachers and the other class to act as a Control group. The Control group teachers had not received training in Creative Relaxation.

The emotional and behavioural adjustment scores of 161 children age 8-11 before and 148 after the training were accessed using the child-report Strengths and Difficulties Questionnaire (Goodman). This is a widely used and much respected measure which gives an overall adjustment score and sub scores for a range of conditions (see appendix). Unfortunately some children were not available on the day or had dropped out by the second wave. Potential increases in perception/concentration were evaluated using the FACES measure. Special permission to use this tool was given by the suppliers in Spain (see appendix). Children under extra stress were identified by a modified version of the Family Adversity Scale (Tiet et al). Questionnaires from children with special needs and those on Free School Meals were noted from school records.

An agreed questionnaire was given to all children in both the Experimental and the Control groups, before and after the training. The administration of the questionnaire was professionally supervised, together with help from the class teachers. AB undertook two feedback sessions in the school. First, she met three class teachers from the Control classes and then, teachers who had been involved in the Experimental group training. Completed questionnaires were processed by a survey agency into SPSS. No names were on the questionnaires. The data file of both sweeps was then sent to Paulo Fuller who was responsible for the analysis of the survey data.

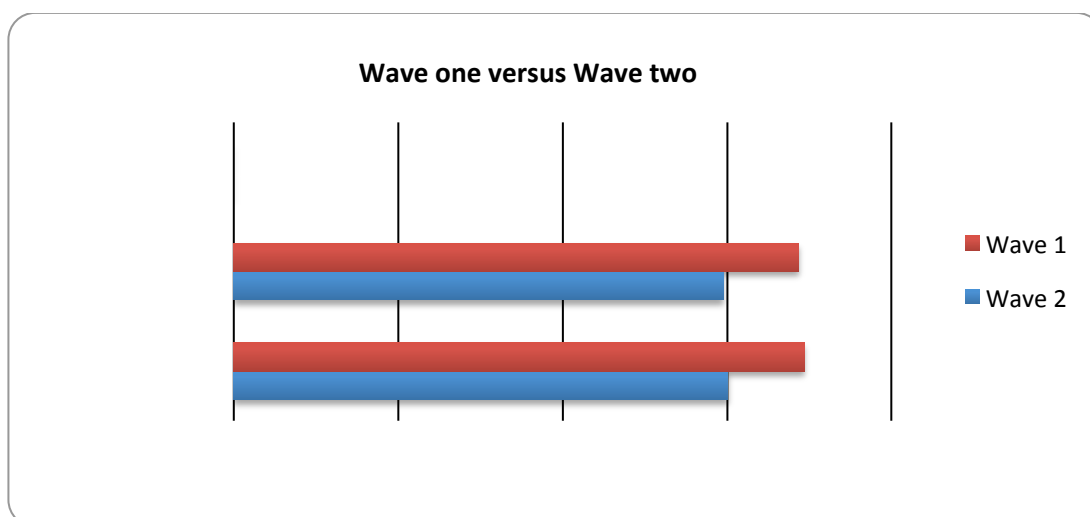
Ethical permission to undertake the study was given by University of Oxford Research Ethics Department. All parents were informed of the proposed training. Although Creative Relaxation is completely non-religious, 3 parents withdrew their children because of possible religious concerns.

After the study there were no reported concerns from parents. This was considered a positive sign. One parent came into the school to say that her child had found the training especially useful.

Findings

Survey data

Overall it was disappointing that there were no statistically significant differences between the Experimental and the Control group as measured by the Strengths and Difficulties Questionnaire.



As measured on the Strengths and Difficulties Questionnaire, the adjustment levels of both those who took part in Creative Relaxation Training (Experimental group) and those who did not (Control group) improved over the term. At the start of the period both groups were averaging scores that suggested 'borderline' emotional and behavioural problems. By the end of the period, the average emotional and behavioural scores for both groups were within the 'normal' range. In both groups, there was also a reduction in scores in the subscales within the Strengths and Difficulties Questionnaire. These subscores highlight particular types of behaviour. Emotional symptoms were reduced in both groups; as were conduct problems scores and hyperactivity. Surprisingly, there was no drop in the peer problem score in the Experimental group between wave 1 and 2.

The data was further explored to see how specific groups of children with shared characteristics responded to Creative Relaxation training. There was no difference between the mean Strengths and Difficulties scores amongst those who received *free school meals* and those who did not.

Both *boys and girls* in the Control group, that is those who did not receive the training, had high scores at the start of the project. By wave 2, the mean scores had reduced to 'normal' levels. Both the boys and girls in the Experimental group were nearer the 'normal range' at the start and although there was some downward movement (i.e. improvement) for the boys, this was not significant.

When it came *to ethnicity*, the Control group who had had more difficulties to begin with, achieved more marked improvements between the two waves. Overall, however, there were no significant differences between the different ethnic groups on the SDQ scores between those who received the training and those who did not.

There were high levels of *family adversity* as measured by the Tiet et al Family Adversity Index. In the first wave there were 61 out of 81 children in the Control group and a similar number in the Experimental group with three or more family adversities: such as death in family; serious illness; divorce; parent has lost job etc. At wave 1 the average SDQ total score of those with 3+ family adversities in the Control group was 20. This is in the ‘abnormal’ range. Surprisingly the average total SDQ score of those with 3+ family adversities in the Experimental group was only 15 which is just within the ‘normal’ range. By wave 2, the total SDQ score for the Control group had dropped to 15, while the Experimental group remained just below 15.

Looking at the total SDQ scores *by age* told an important story. The Experimental group appeared more successful in reducing the emotional and behavioural scores of the 8 and 9 year olds than the children of 10 and 11. As can be seen in the following table, the main improvement was amongst the 8 and 9 year olds.

Differences: Control (Mean SDQ Score) - Experimental (Mean SDQ Score) by Age

	Difference in SDQ total score
8	0.48*
9	0.85*
10	-0.38*
11	-0.72*

*Positive scores indicate that those who did the training were better adjusted overall after the training than those who did not have the training. Negative scores indicate those who did the training actually had a worse score than those who did not.

Children’s views on their training

The responses to the open questions in the questionnaire vividly illustrated how young people of different ages responded to the training.

Age 8: Overwhelmingly the responses were positive:

‘It makes me calm when I have a lot of things on my mind’
‘It keeps me relaxed’.

Only 2 children remarked that it was a bit long and got a bit boring at times.

All the children said they practiced CR every day and the vast majority also used it once or twice a week or more at home.

Age 9: Here too the responses were largely positive

‘It was calming’; ‘it’s cool’; ‘it was fun’;
‘It’s relaxing and all my worries went’; ‘It calms’ me down. I can handle myself and not get into trouble’; ‘Sometimes I get a bit stressed and it helped me.’

Only one child said that it did not work for him. It was boring. Two children complained that the way they were encouraged to sit in their chairs was uncomfortable.

Almost all the children practiced CR every day and most used it at home 1 or 2 times a week.

Age 10: Most responses were positive but there were more critical comments

'Calmed me down. I get to relax more'; 'I was able to let out my feelings'; 'I felt better'

Here more children complained about the training being too long; 'it's a bit boring doing things again and again'; 'Some people make noises and this disturbed me.'

But most children practiced CR every day and many found it useful at home.

Age 11: At this age, there were few positive responses, the majority were negative.

Two children talked about it calming them down but most complained that it was 'boring'; 'went on too long'; one child felt it was a 'waste of time'.

Another child said that 'it's a bit weird; it hurts your head'

Surprisingly most children claimed to practice CR every day but few used it at home.

The FACES test

This test was included in the questionnaire for all children at both stages. The hypothesis for using this test was that improvements in stress levels might show up in improved perceptual ability. Although the children appeared to enjoy doing the test, there was no difference between those who did the Creative Relaxation Training (E) and those who did not (C). The Control group had many fewer correct scores at wave 1 than the Experimental group. Whereas both groups improved their scores, the improvement was more marked in the Control group who did not receive the training.

Teacher feedback

- Generally teachers who had knowledge of Creative Relaxation and those who had been involved in the training recognised the potential. 'You are teaching children an important life skill; something that they can draw on all their life.' One teacher remarked that a child had used the technique to stay calm on a school outing. Another teacher remarked that the training seemed to have helped develop the children's imaginations and creativity. This was certainly seen in the feedback slips collected by the Class Five teacher.
- The teachers reported that there were different levels of enthusiasm from the children for the training across the age groups. The older children were more sensitive to peer influences and had been harder to engage than the younger children. It was also unfortunate that the teacher delivering the training to older children was not their regular teacher, and there may have been insufficient relationship of trust established to encourage the older children to engage properly. The questionnaire responses also suggested that quite a few of these older children 'found it boring'. With children on the edge of puberty, this may be more a reflection of lack of trust and embarrassment than the actual content of the training.
- Although all the teachers felt that teaching Creative Relaxation was useful, there were different levels of enthusiasm amongst the teachers. The most enthusiastic appeared to have been better able to inspire their class. Some teachers had been quite creative in developing the ideas. Two teachers mentioned that getting children to lie on the class floor (perhaps 4 at a time) and shutting their eyes seemed to engage the children better. Another teacher had asked children to bring in a photo of them looking happy. This had worked well although it was sad that some children did not have a photograph of themselves. Some teachers felt that the early sessions before half term seemed repetitive. There may be room for more creative approaches here. One teacher mentioned that children seemed more motivated after half term in sessions 5 and 6.

- Another teacher commented that teaching the same thing over and over again was not good teaching practice. Girasol believes that this was a misunderstanding which should be addressed with teachers as part of their training.
- None of the teachers involved in the Experimental group had noticed any behaviour change in their class. In fact the survey findings demonstrate that all children (both Control and Experimental groups) had lower SDQ scores at the end of the term. That is, there were fewer children exhibiting emotional and behavioural problems. The Deputy Head felt that the reasons no change had been seen was because the levels of behaviour overall were good.
- There was some concern that the training may have been corrupted by another programme that was going on at the same time. Although there had been another after-school relaxation programme running at the same time this only involved some 6 children.
- Overall the school seemed committed to continue with the training. The Deputy Head was positive about the value of Creative Relaxation. It was anticipated that if the training was repeated year on year as children went up through the school, the real benefits would be seen. Overall I got the impression that the school wanted to develop the training for the 'whole school'.

Class Five feedback

The strongest evidence of the efficacy of Creative Relaxation comes from comments of pupils in Class Five. The class teacher of this group teacher was particularly enthused by the training, and collected comments from the children after each session. It was apparent that her enthusiasm and creativity in using the training inspired her class. It was also interesting how the children's skills in relaxation developed over the training. For some children the techniques seemed to work straightaway. For others, it took a while to learn. As the training developed, some children started to use it in other settings, particularly in the home.

First session

'I was on a really soft cloud and then I saw a ladder. I climbed down. I also felt a lot calmer and relaxed...'

'Today I felt really different to the usual days... I felt so calm. It was like my own world. Everything is the way it was. I wish it was like that forever...'

Second Session

'I feel different to before.... I feel like I'm in a different world of mine'

'I felt like I was in the warm and with the breeze feeling relaxed and calm. It was the best experience ever in my whole life! I was in a wonderland of peace'.

Third session

'I was on the floor and I liked it. More than sitting down. I felt tingly and I started to float. I was calm and really relaxed'.

'I love today. There were bells on my finger tips'.

Fourth session

'I felt scared about the Gala today but when I did the Relaxation I felt calm and I wasn't worried about the Gala. It left me feeling happy.'

'I feel relaxed after the new bit (what we did today). For the first few times I did it, the relaxation didn't work for me. After a while I started to get used to it. I want this relaxation (training) to go on a bit longer.'

Fifth Session

'In the mirror I saw a bad side and a good side. At first I was in the bad side and then I became better and better and I went into the good side'

'When I was looking in the mirror, I saw me smiling on Britain's Got Talent. I kept getting older, then I won the money and had a massive big smile on my face'.

Sixth session

'I love my special space...I like Creative Relaxation so so much! I wish it never ends'.

'I felt much better after the relaxation. In the relaxation there are many exercises. My favourite part is the fruit part where you can taste it.'

Seventh session

'I feel safe. I feel relaxed and calm. It's going to end soon. No!'

'I really like it. It makes me tidy'.

'I had a terrible day and these (exercises) brightened it up. I love my special place'.

'I feel more happy after I have done the relaxation. Mrs Ward helps us to do it better every day. This is really calming as well.'

'Last night I couldn't sleep at all and today when I have done it (Creative Relaxation), I felt sleepy and relaxed.'

'Today my sister threw a big tantrum and it was really annoying. When I did my relaxation, I felt better and I saw myself as really happy.'

'I had a nightmare last night and now I am happy and joyful'.

'When I had trouble sleeping at home I used this sensational technique. I was so relaxed instantly.'

'I did it at night and I had a great dream.... I'm getting happier and happier'.

'I have done it at home and I showed my sister and Mum'.

Conclusions

- It was disappointing that no statistically significant differences as shown by the Strengths and Difficulties Questionnaire were seen between those children who received the Creative Relaxation Training and those who did not. Reaching levels of significance in a small sample is always hard. We were aware that numbers were tight but sadly some children were not present for both waves, which reduced the number that could be assessed. Outcomes for the Experimental group as measured by the Strengths and Difficulties Questionnaire were, however, generally in the right direction.
- The fact that we were not able to demonstrate significant findings appears to relate to 1: The success in the school in improving emotional and behavioural adjustment of all children during the normal course of the school term. The average SDQ scores of *all* the children in both the Control and the Experimental group moved from 'borderline' to 'normal' between the two waves of the study, regardless of whether they took part in the training. 2: Problems, as mentioned above, in the sample size; 3: Different levels of enthusiasm and skills in teaching the training. 4: The fact that some children were not taught by their regular class teacher. Results appeared to be better when the children were taught by their class teachers who already had the necessary levels of trust with their pupils. The form with the oldest children had extra difficulties in that they were not taught by their regular class teacher, and in addition the teacher that was leading the training was not there for two sessions.
- To increase the benefits of Creative Relaxation, further thought may need to be given to: improving the training, and possibly the content of the training; focusing the training on children before they reach the peer-sensitive final years in their primary school; and, perhaps, setting up clearer expectations with the schools that the training is best when undertaken by a regular class teacher.

What can be said about Creative Relaxation with some confidence is that:

Although no statistically significant findings were shown in this study, the feedback from pupils and teachers, as well as findings from the previous pilot studies, suggests that Creative Relaxation training may offer real benefits for children that could give them life-long stress-management strategies. There was evidence that the children were starting to use the skills they had learnt for coping with problems in their lives and at home. The earlier studies suggested that there may be additional benefits for teachers themselves in undertaking this training but this was not the focus of this study.

The economics of providing primary school children with this training are particularly cost-effective. The fact that the training is manualised ensures some standardisation in training. The wider benefits of improving the emotional and behavioural well-being of children are well researched showing that there can be long term benefits in better attainment, better relationships with family and partners, better employment prospects and less likelihood of later mental health problems.

In technical terms, using evidence-based criteria, Creative Relaxation reaches the thresholds to suggest that it is a '*promising*' intervention but which needs further development to maximize its potential.

After further refining teacher training methods and resolution of some of the issues raised in this report, it is recommended that a further Controlled trial is undertaken in four primary schools with some 600 of children aged 8, 9, 10.

Appendix: THE TESTS USED

What is the SDQ? (See SDQinfo.com)

The Strengths and Difficulties Questionnaire (SDQ) is a brief behavioural screening questionnaire about 3-16 year olds. It exists in several versions to meet the needs of researchers, clinicians and educationalists. The SDQ has been very widely used in the UK and around the world. It was the basis for assessing the mental health of children and adolescents in Great Britain (Meltzer, Gatward, Goodman, Ford) 2000. National Statistics Office). As such it is a very well respected instrument.

All versions of the SDQ ask about 25 attributes, some positive and others negative. These 25 items are divided between 5 scales:

- 1) emotional symptoms (5 items)
- 2) conduct problems (5 items)
- 3) hyperactivity/inattention (5 items)
- 4) peer relationship problems (5 items)

The total scores comes from adding the scores on the first four scales together (20 items)

- 5) Prosocial behaviour (5 items)

Self Completed

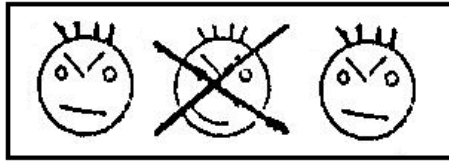
	Normal	Borderline	Abnormal
Total Difficulties Score	0 - 15	16 - 19	20 - 40
Emotional Symptoms Score	0 - 5	6	7 - 10
Conduct Problems Score	0 - 3	4	5 - 10
Hyperactivity Score	0 - 5	6	7 - 10
Peer Problems Score	0 - 3	4 - 5	6 - 10
Prosocial Behaviour Score	6 - 10	5	0 - 4

In this study the self-report measure was used. This is usually recommended for children age 11+, but various researchers have now used it successfully with children age 8+. In this study the whole questionnaire, question by question, was read aloud to the children to overcome any reading difficulties.

The FACES TEST

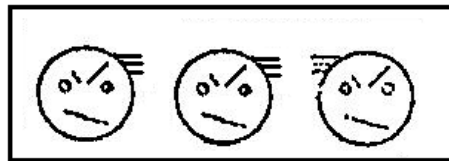
Can you spot the difference?³

Here is a row of faces. One face is different from the others. The face that is different is marked.



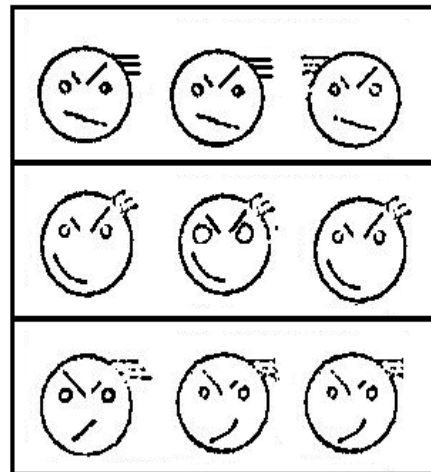
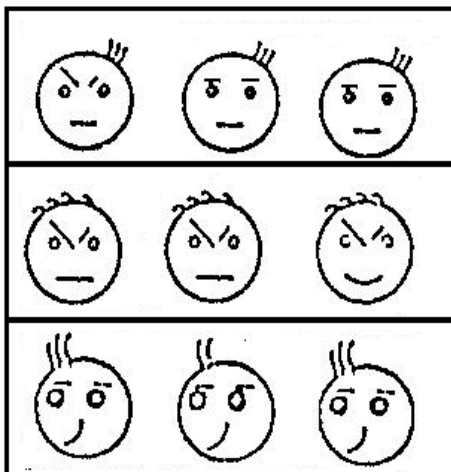
Look closely to be sure that you see why the middle face is marked. The mouth is the part that is different.

Here is another row of faces. Look at them and mark the one that is different.



You should have marked the last face

Here are more pictures for you to practice on. In each row mark the face which is different from the others.



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