



Peer Massage in Nottinghamshire Schools

An evaluation of a Massage in Schools Project in five schools in Nottinghamshire



Peer Massage in Schools

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Introduction

This report outlines a project undertaken by the Holistic Health Team in five schools in Nottinghamshire. The project involved the teaching and supervising of a short massage routine to pupils in a primary school environment and evaluates the impact that the process had on the pupils involved. The project was commissioned by and carried out in partnership with Nottinghamshire Healthy Schools Programme (NHS Nottinghamshire County).

The impact is measured by analysis of self reported data from the pupils themselves using two evaluation sheets, which were specifically designed for the project. These results have been compared to results from control groups in the same schools who did not become involved in the massage process. The evaluation processes were carried out by class teachers to diminish the potential for the “Hawthorne effect” (a placebo-type effect where participants in a study appear to show improvement because they know they are being evaluated).

Class teachers also evaluated the impact they felt the process had on the pupils and commented on the relationship between massage and subsequent behaviour and performance at school.

Local Context

The five schools chosen for the project are all in the borough of Bassetlaw within the Worksop and Retford areas of Nottinghamshire.

Worksop is a market town to the north of Sherwood Forest in Nottinghamshire. It is believed to have been in existence since Anglo-Saxon times and is sometimes referred to as the “Gateway to the Dukeries” as there are many ducal estates near by. It was a thriving centre for coal mining with many mines located in the district of Bassetlaw; by 1900 the majority of the local workforce was employed in

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the mining industry. The decline of the coal industry over the last thirty years has, however, resulted in high levels of unemployment in the area. The Worksop South East area has had some of the highest levels of unemployment in the county for some years. Worksop's economy now mostly depends on food production, retail and distribution.

All of the schools chosen for the study have been determined as rating low on the Income Deprivation Affecting Children Index (IDACI), indicating a high level of deprivation within each school (Noble et al, 2007). It has been observed in studies that White British pupils living in disadvantaged circumstances are the lowest attaining ethnic group (Strand, 2008). The schools were selected in consultation with the Nottinghamshire Healthy Schools Team who are familiar with the schools involved. The schools were chosen on the basis that they would be capable of working co-operatively with the study team.

Massage Context

The use of massage with children and young people is not a new concept. Massage techniques have been used as interventions in clinical settings with children and young people and have been shown to be beneficial in the treatment of various physical and psychological conditions. In terms of both reduction of symptoms and improved quality of life, studies have shown that the process can be beneficial in working with conditions such as burns (Morien et al, 2007), HIV (Hillier et al, 2010), junior arthritis (Field, 1998), asthma (Field et al, 1997) and low birth weight (Vickers et al, 2004).

Support for the use of massage as an intervention for psychological or mental health issues with younger people also appears to be of value with improvements shown in areas such as sexual abuse (Powell and Cheshire, 2010) and Post Traumatic Stress Disorder (Field et al, 1996). Massage techniques have also been reported to be of value in some learning difficulties associated with autism (Cushway et al, 2005, Escalona et al, 2002) and cerebral palsy (Stewart, 2000).

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In a move away from massage as an intervention in response to a difficulty, some studies have begun to look at the use of massage as a health promotional tool to help develop some of the components that help build resilience in young people rather than as a response to a presenting difficulty. This has involved studying the use of massage in areas such as anger management (Von Krorring et al, 2008), bonding and attachment (Cullen-Powell, 2005) and self esteem (Osborne, 2006). Positive touch is felt to be imperative for social bonding and establishing feelings of security and emotional well-being (Bowlby, 1988). A growing body of literature on risk and resilience, school engagement, and health promotion suggests that learning strategies to prevent or cope with stress and emotional incidents is as important (if not more important) for young people than effective interventions when things go wrong (Brown, D’Incau et al, 2005). Bosworth and Earthman (2002) go so far as to say that developing skills in this area is vital if children are to develop emotional health and make the transition to what they term “successful adults”.

The Child and Adolescent Mental Health Services review (CAMHS Briefing paper, 2009) specifically mentions that recent initiatives share a common aim of developing the capacity of schools to promote well-being and to play a pivotal role in prevention of emotional problems and early intervention where such problems are evident. These initiatives include the duty on schools to promote well-being, the National Healthy Schools Programme, aspects of the Behaviour and Attendance programme, Extended Schools, the Social and Emotional Aspects of Learning (SEAL) programme and the Targeted Mental Health in Schools (TaMHS) programme.

At the same time, much can be achieved through the individual interactions between students and school staff – a theme highlighted by the children and young people in the review’s focus groups. Younger children in particular valued the opportunity to share a problem or concern with a trusted adult, for example, through school-based strategies such as circle time, which aims to help children develop self-

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esteem and confidence, nurture creativity and provide a supportive environment for all.

The use of massage techniques to help develop the skills needed for emotional health and well-being has been the cornerstone of the Massage in Schools Programme, which has reflected the growing interest in holistic health practices, including massage, in school settings. Trower (2008) describes how the Massage in Schools Programme (MISP) uses a whole school inclusive approach and is a useful tool in supporting all children to help develop a sense of belonging, equality and respect. She goes on to describe how massage is being used by multi-agency professionals looking at holistic strategies in helping to meet the objectives of Every Child Matters and that it is a recognised pro-active anti-bullying intervention.

MISP links to the four main inter-related sections of the National Curriculum for Personal, Health, Social and Citizenship Education (PHSCE); it helps develop confidence, relationships, respect for self and others and teaches experientially rights and responsibilities, looking after the emotional health and well-being of all. It has further contributed to the National Healthy Schools agenda and the Primary Strategy: Social and Emotional Aspects of Learning (SEAL).

Massage in Schools has in some areas been an important component in the drive by schools to achieve National Healthy School Status (NHSS). This long-term programme promotes the link between good health, behaviour and attainment. Whilst National Healthy School Status will cease to exist from 31 March 2011, the government continues to recognise the important role of schools in supporting the health and well-being of children and young people. To build on the good practice of NHSS (92% of schools in Nottinghamshire are Healthy Schools) the programme will change to a 'schools-led' model, where participation is locally determined according to local needs. In Nottinghamshire the Local Healthy Schools Team will continue to support schools using a health behaviour change approach to develop health and well-being

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activities/interventions which improve outcomes for children and young people. This “plan, do, review” approach will ensure that schools put in place the most appropriate services to meet the needs of their children and young people.



Massage in Schools

Although massage for young people has been examined in a range of clinical settings in health care, published research on using massage techniques in non-clinical settings with young people is relatively uncommon. The Massage in Schools Association (MISA) however has some evidence based on studies carried out throughout the UK. The Massage in Schools Programme (MISP) was introduced to the UK in December 1999 and is now being used in schools throughout the country. It originated in Sweden and was developed for use with primary aged children. Peer massage is a simple, yet effective combination of massage exercises, which are voluntarily carried out by the children on one another whilst remaining clothed. It is an integral part of the Massage in School's Programme.

Participation in peer massage is voluntary; however children appear eager to take part. Sessions begin with each child asking permission to touch his/her partner and finish with a “thank you”. The children take turns to follow the routine and are encouraged to choose different partners as they become more familiar with the process.

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According to the Massage in Schools Programme Course Manual for Instructors the benefits of a peer massage in schools programme are;

- Children become calmer
- Improved concentration
- More confidence
- It helps children recognise *good* and *bad* touch
- Better motor skills
- Teaches respect of self and others
- Reduction in bullying and aggression
- The teacher benefits from a calmer classroom and improved concentration
- Massage is fun
- Massage can form part of the Personal, Social, Health and Citizenship Education (PSHCE) at KS1 and KS2 and may contribute to the attainment of the Healthy School Status by enhancing Social and Emotional Aspects of Learning (SEAL).

A study carried out by Renfrewshire Educational Psychology Service and the University of Strathclyde (Woolfsen et al, 2005) looked specifically at concentration and self-esteem. It was found that the study group made a significant improvement in their concentration levels compared to the control group. A significant improvement in self esteem was seen in the study class, but this was also the case in the control group. Feedback from pupils, teachers and parents was predominantly positive and all involved expressed the desire to continue with the practice.

At Leicestershire Educational Psychology Service, Boyd (2008) studied two schools looking at four specific areas; concentration, calmness, emotional literacy and bullying. In both schools there was a marked increase in the children's concentration levels in the study group compared to the control. In one school there was a greater increase in calmness (but due to staffing problems, information could not be collected from the other school). Both schools showed a greater increase in emotional literacy in the study class compared to the control class, and

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there was also a greater decrease in the number of incidents of aggression/bullying. Feedback was favourable from all concerned and the most common words used to describe how the massage made the children feel were *relaxed*, *calm* and *happy*.

A published study carried out by MacIntyre et al (2010) at the Education and Research Centre at Brighton University focuses on the impact that Massage in Schools may have on children's relationships. Two classes were used in two different schools and several methods of data collection were used, including observations, interviews, questionnaires, and social network mapping. The study found that the effects of massage were positive both in the classroom and in the playground. Massage was found to increase a sense of calm, reduce aggressive behaviour and increase social networks among the children.

As a starting point to explore how Massage in Schools could be used in Nottinghamshire, a pilot project was carried out in 2008-9.



Nottinghamshire Peer Massage Pilot Project

This pilot project was carried out in fourteen schools in Nottinghamshire. The Local Healthy Schools Team selected schools that had achieved National Healthy School Status and indicated an interest in massage. Schools were offered the programme free of charge, providing they evaluated and continued to monitor practice beyond the life of the programme.

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Overall, the results of this pilot project were positive in all areas, but the most statistically significant results were seen in the areas of relaxation and improved concentration in class, results which correlated with the findings of the Renfrewshire and Leicestershire studies. Overall the results suggested that with regular practice the effects of massage were both lasting and cumulative.

The pilot project set out to collect a large amount of data using a simplified questionnaire administered twice, once after two sessions of massage and again after four weeks of practice.

The participating schools were widely geographically dispersed throughout the county, making regular contact and access problematic. This made ongoing supervision and support for teaching staff difficult and less consistent than was desirable. Lessons learnt about the supervision and implementation of the project led to a set of recommendations that helped to shape this current project.

Recommendations from the pilot project:

- That a larger scale project is carried out using lessons learned and with methods refined from this pilot project.
- The full project should be coordinated by a small core team consisting of the Holistic Health Team, Nottinghamshire Healthy Schools and SAMHS Consultancy.
- That the participating children be from a single year group, with a control group, for comparison, where numbers allow.
- That the core team shall do as much execution of the project as possible to ensure consistency.
- That further work is done with schools in the full project to link the effects of the massage on levels of achievement and improvements in behaviour in participating schools.
- The pilot project is submitted to MISA for future learning and dissemination.

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The Nottinghamshire Massage in Schools Project

Following the recommendations in the pilot project a more detailed study was commenced with the aim of following a group of pupils through a process of learning massage techniques and utilising them in a classroom setting over a period of five months. This report outlines this project, run in Nottinghamshire, in which young people in a number of schools were introduced to peer massage.

The project aimed to evaluate the impact that Massage in Schools could have on children in years 4 and 5 in mainstream education if it became incorporated into the school day on a regular basis.

The project delivered training to teach pupils the Massage In Schools Programme (MISP) routine that involves some appropriate massage techniques that children could do on each other safely and quickly in the classroom setting. Massage instruction was delivered by instructors from the Holistic Health Team who held qualifications in MISP massage, had enhanced CRB clearance and held public liability insurance. All participants had parental consent to be part of the process.

The project aimed to compare the impact that the experience had on the pupils' emotional health and well-being and behaviour in these groups when compared to a control group of similar children in a different class in the same school who did not experience massage.

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Part of the evaluation would involve teacher's views of any changes in pupils' presentation following the massage interventions and part would involve pupil self reporting their thoughts and feelings using specific evaluation tools designed for the project. These evaluations would be compared against data using the same tools for pupils in the control groups. Evaluation was taken at three points in the project; baseline before the massage intervention, after four weeks of learning the massage routine and after four months of practicing on a regular basis.

Methodology

Young people in primary school classes in five schools in Nottinghamshire were involved in the process. In each case qualified MISP instructors from the Holistic Health Team (HHT) taught the children in the class and the teacher some basic massage techniques. These involved techniques that did not require touch in any areas that could be deemed intimate and did not require the removal of any clothing. The MISP routine involves fifteen moves, which work on the back, shoulders, neck, arms and hands.

Before the sessions children completed two evaluation tools. Another set of the tools was completed at mid-point and a third set was completed at the end of the study. The two evaluation tools that the children completed had been specifically designed by the team involved to examine the impact that massage might be having on areas of well-being and social inclusion.

Firstly the "octopus" (appendix 1) examined areas related to mood and social interaction. This was a pictorial representation of an octopus, which presented the children with eight statements and asked them to rate whether the statements resembled themselves with a scale of "not like me", "a bit like me", or "just like me". The eight statements could be connected to four themes that the project team was interested in. These themes were **well-being, empathy, social skills** and **confidence**.

A sheet of A4 size paper with a cartoon style octopus was given to the children. Each tentacle of the octopus held a placard containing one of the

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statements. The children were asked to indicate whether the statements were like them or not by colouring in the placards with specific colours i.e. “not like me” was coloured in red, “a bit like me” in yellow and “just like me” in green.

Figure 1 - The Octopus

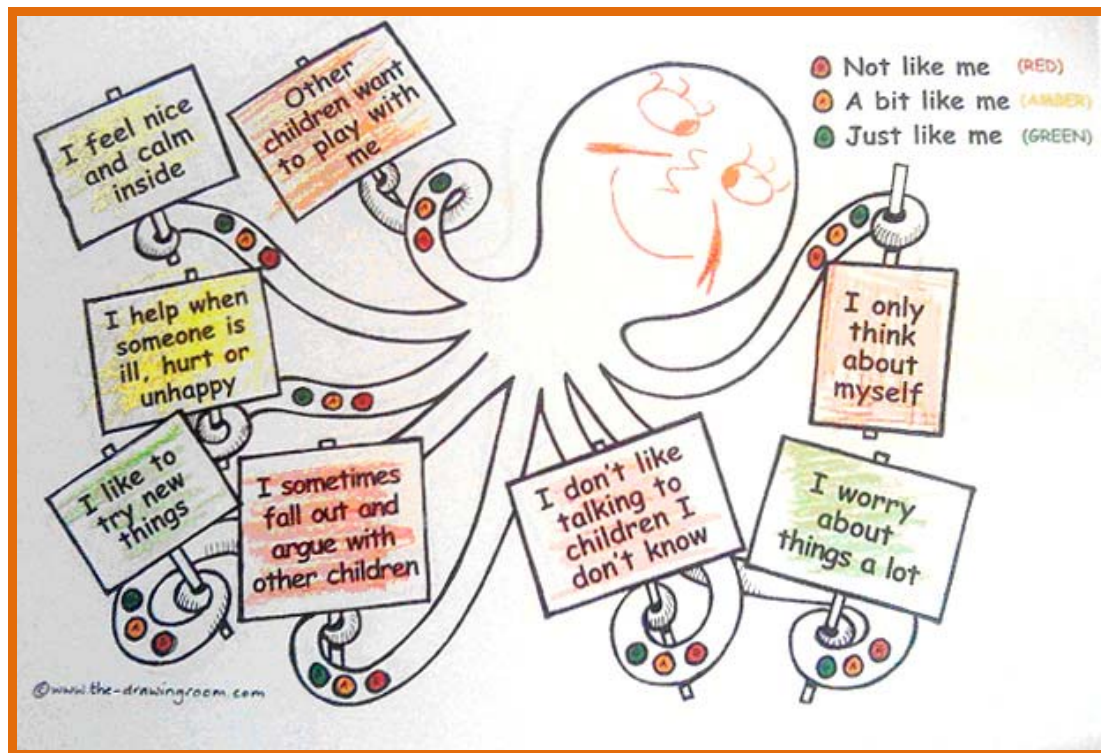


Figure 1 shows an example of an octopus that was completed during the study. The face on the octopus was deliberately left blank so that it would not influence the choices and so that children could complete the drawing with the face showing any emotion they wanted it to reflect.

Secondly a field of words was presented to the children and they were asked to select the four words that best reflected their mood and emotional state at the time of completion. Table 1 shows the words that were included. These words appeared scattered on a sheet of A4 paper (appendix 2) with each word surrounded by a box. The children were asked to indicate which four words best reflected their current state by either ticking or colouring the box.

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Table 1 – Words included in the field of words

Calm	Wound up		Included	Left out
Good	Bad		Supported	Let down
Happy	Upset		Safe	Scared
Focused	Bored		Cool	Cross
Okay	Fed up		Brilliant	Rubbish

As with the octopus these words reflected the four main themes that the team was particularly interested in:

Well-being was the first theme the team looked at. In the octopus questionnaire well-being corresponded to the statements:

- “I worry about things a lot”
- “I feel nice and calm inside”

In the field of words this was reflected in the following pairings:

Calm / Wound up, Good / Bad, Happy / Upset

Empathy was the second theme and this was reflected in the octopus statements:

- “I only think about myself”
- “I help when someone is ill, hurt or unhappy”

In the field of words this was reflected in the following pairings:

Focused / Bored, Ok/ Fed up

Social Skills was the third theme and this was reflected in the octopus statements:

- “I sometimes fall out and argue with other children”
- “Other children want to play with me”

In the field of words this was reflected in the following pairings:

Included / Left out, Supported / Let down

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Confidence was the final theme and was reflected in the octopus statements:

- “I like to try new things”
- “I don’t like talking to children I don’t know”

In the field of words this was reflected in the following pairings:

Safe / Scared, Cool / Cross, Brilliant / Rubbish

Complementing the self-reporting by the children involved, was a tool to be completed by teachers in the study classes who were using the massage techniques. This questionnaire used a sixteen question Likert scale format to examine any impact that the teachers felt was evident from the process. The methodology and process was discussed with the local ethics committee representatives and was supported.

Sample

Schools for inclusion in the study were targeted using the IDACI scores and were approached by the Healthy Schools Team. Each of the schools had worked previously with the Healthy Schools Team on other initiatives. Initially five schools in the area became involved in the process and the HHT met with the staff and explained the project and the process to staff. Throughout the process one of the schools pulled out after stage two and the other four successfully completed.

All Schools attended a workshop that introduced the strategy for project delivery and the evaluation process and discussed methods of collecting the data. The evaluation tools used for the process were presented and endorsed at this meeting.

Data Collection

Consent was sought from the parents of the children involved in the study. Children whose parents did not consent, did not take part in the massage but practiced the moves in the air or on their own bodies, so that they were still involved in the process.

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Although the children in the study class were aware that they were doing the massage, none of the children had been told that they were part of a study. Time was allocated specifically for the evaluation and each of the teachers was briefed thoroughly by the instructors immediately before the evaluation took place. They were asked to ensure that the children realised that there were no right or wrong answers, and that they were not going to be marked. Teachers explained to the children that the field of words sheet related to how they felt at the time of completing the document, whereas the octopus related to how they felt in general. Children were asked not to put their names on the sheets, in order to preserve their anonymity and so that they felt free to answer honestly with no fear of judgment or consequences. The information was delivered and the process completed as part of a normal SEAL lesson, so the children were unaware that they were being evaluated as part of a larger study. Collected data was sent to the evaluation team who had no contact with, or influence on, the data collection process.

In each case two different classes in each school were used, one as the massage group and one as the control group. These groups were made up of pupils in years 4 and 5 and where necessary, year 6 as a control group. The control group had no input from the HHT and did not use massage but completed the same evaluation sheets at the same times for comparison and evaluation purposes. This was done to diminish contamination in the process. This is however a very difficult thing to achieve outside of a laboratory setting and it must be acknowledged that it is likely there would have been some exchange of information between pupils in the playground setting.

The data sets returned for the evaluation provided the evaluation team with data from a massage group and a control group in each of the four schools with clear evidence that the makeup of the groups was similar enough in terms of educational attainment (maths levels, reading levels and writing levels were compared), attendance and behaviour to warrant credible comparison. The number of children who completed all stages of

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the process in the massage group was 75 the number in the control group was 85 giving a combined total of 160 participants for the study.

The delivery of the massage programme involved five visits of approximately one hour. The massage group had four instruction sessions delivered by a member of the HHT and one follow up session four months later. The techniques taught in these sessions were incorporated into the school day and pupils had the opportunity to practice the techniques by massaging each other in sessions during their time at school. MISP instructors advised teachers that the routines be practiced on a daily basis whenever possible.

Results

Overall the children who completed the octopus evaluations appeared to understand and engage with the process well. The colour coding system appeared to offer an easily understood system and the data collected from the exercise was complemented by embellishments, such as those in Figure 1, to depict children's feelings. Similarly the field of words was completed well with participants ticking the word, circling the word or colouring in the block in which the word was housed.

A full breakdown of the results from the octopus evaluation is available in table form in appendix 3 of this report. This shows the level of agreement (just like me) disagreement (not like me) and don't know (a bit like me) for each question for all the schools involved. Within the body of the report, in order to clarify the results only the level of agreement in percentage terms will be shown in graph form.

A full breakdown of the results from the field of words evaluation is available in table form can be found in appendix 4 of this report. For the purposes of clarity only the difference between the massage and control group at the end of the study will be shown in percentage terms.

The results are presented in four sections to reflect the themes of the evaluation process: well-being, empathy, social skills and confidence.

Well-being

The results in the section focusing on well-being produced an interesting response from the octopus statements. The first statement “I worry about things a lot” showed a marked difference between the control group and the message group.

Figure 2 - I worry about things a lot

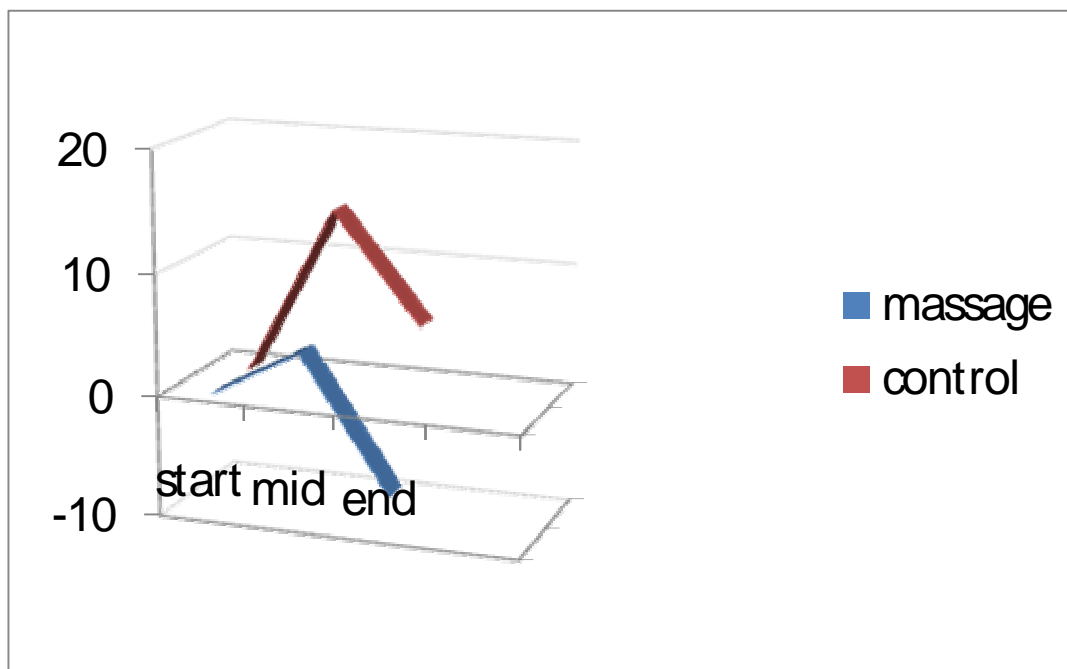


Figure 2 shows us that from the baseline start point the control group increased their agreement substantially and by midpoint had shown an increase of 14%. By the endpoint of the study this group continued with a higher level of agreement that they worried about things a lot, although this had reduced to 5% above the start point.

In contrast, although the message group also showed a rise in the level of agreement at midpoint of 4%, by the end of the process this had fallen to a level of 7% below the starting baseline. **This gives an overall difference of 12% between the message and control group at the end of the study, and shows that the message group had a clear tendency to worry less than the control group.**

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For the octopus statement "I feel nice and calm" a similar contrast was found between the control group and the message group.

Figure 3 - I feel nice and calm inside

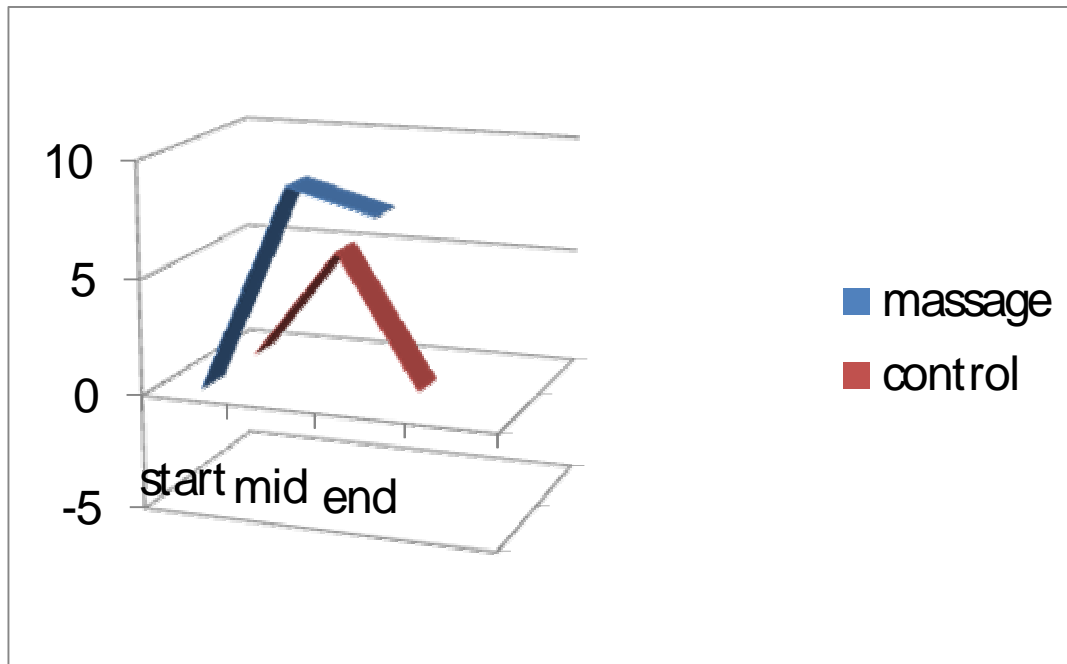


Figure 3 shows that by the midpoint the control group had a rise in agreement with the statement but, by the end of the process, were lower than the start point with an endpoint 1% lower than the baseline. The message group however showed a steep rise of 9% in agreement that they felt nice and calm by midpoint, although this diminished a little to 8% by the end of the process. **There was an overall difference of 9% between the two groups by the end of the study, which shows that the message group clearly felt calmer inside than the control group.**

This difference between the two groups was similarly reflected in the results of the field of words for this section. The percentage identified is the percentage difference at the end point of the process.

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Table 2 – Well-being field of words results

word	massage group	control group
calm	3 % higher	
wound up		2 % higher
good	1% higher	
bad		1% higher
happy	4% higher	
upset		1% higher

Table 2 shows that the number of participants in the massage group who described themselves as *calm* and *happy* was significantly higher than in the control group. Twice as many children in the control group described themselves as feeling *wound up* or *upset* as they do in the massage group.

Evidence from the teachers' evaluations at the end of the process suggests an improvement in the children's well-being and ability to concentrate:

Table 3 – Well-being teachers' results

	strongly agree	agree	neither agree or disagree	disagree	strongly disagree
The children appear calm and happy	1	2	1		
The children are wound up and difficult to engage			1	1	2
The children are settled and attend to the class	1	3			
The children appear agitated and unsettled			1	1	1

Observations and comments from teachers regarding well-being and concentration included:

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"The class is generally much calmer and more receptive to learning."

"There is a general improvement in concentration."

"I have noticed a marked improvement . . . they come in focused."

"There is an improvement in the children's ability to concentrate for longer."

"Levels of concentration are high during massage and for a short while afterwards."

Well-being Summary

The statements relating to well-being show the most significant results in the study and this is also supported by the field of words and the teachers' evaluations. It is clear that regular massage has decreased stress, worry and anxiety and increased a sense of calm and well-being.

Empathy

The first octopus statement for consideration in the section focusing on empathy was the statement "I only think about myself".

Figure 4 - I only think about myself

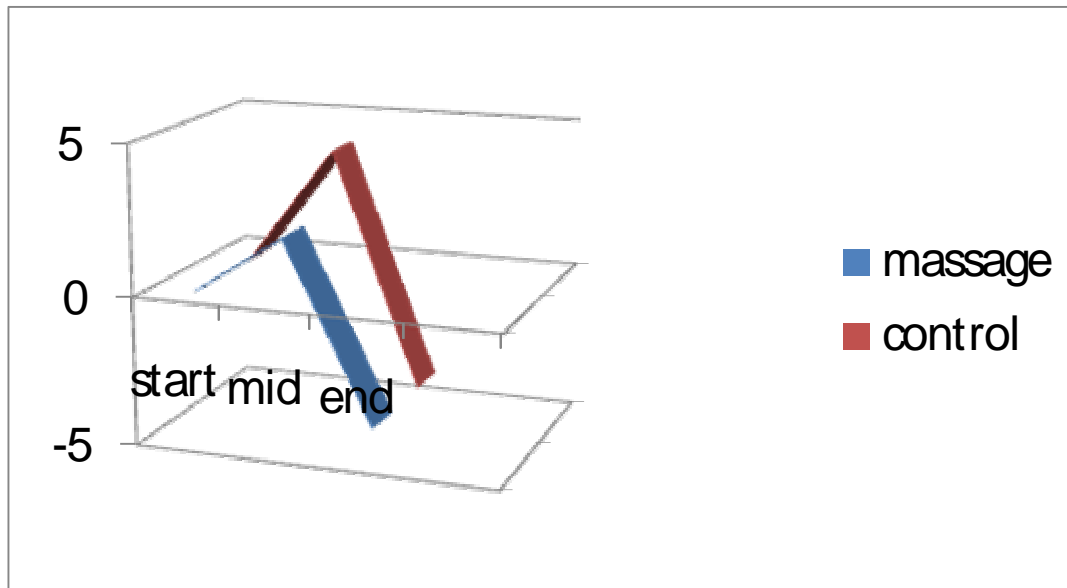
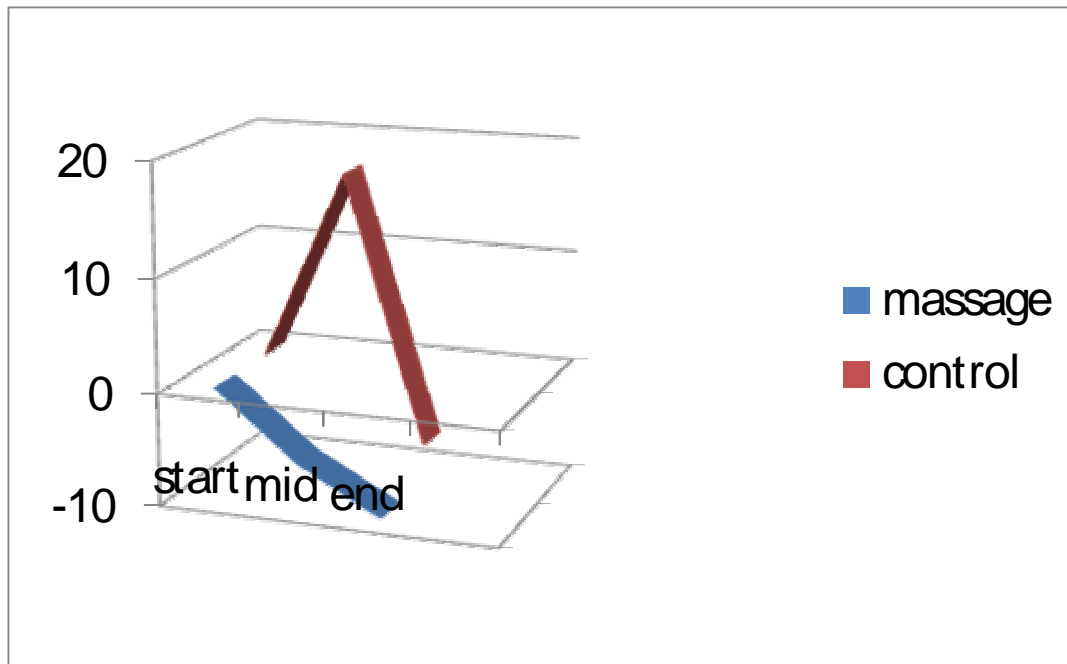


Figure 4 shows that both the control group and the message group ended the time sequence with the same scores below the baseline having both had a rise in agreement at midpoint. The control group had risen by a level of 4% at midpoint before ending 4% below the baseline. The message group rose by 2% before ending on the same score of 4% below their baseline. **These results show an increase in empathy in both the message and control groups, with both at exactly the same level by the end of the study, so we cannot necessarily attribute this change to the effects of the message.**

The other statement relating to empathy asked children whether they felt they would be likely to help someone who was ill, hurt or unhappy.

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Figure 5 - I would help someone who was ill, hurt or unhappy



In figure 5 we can see that the control group for this question showed a sharp rise at midpoint to 17% above the baseline, but fell back by the end of the process to end 7% below the baseline.

The message group ended even further below the baseline with an endpoint 10% below their baseline, having been 6% below at midpoint. **So we actually see a marked decrease in empathy in the message class and a decrease by the end of the study in the control group, with a 3% difference between the two.**

The field of words items relating to empathy show inconclusive results.

Table 4 – Empathy field of words results

word	message group	control group
focused	Even	Even
bored	2% higher	
ok		2% higher
fed up	Even	Even

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Table 4 shows that the control group scored higher than the massage group in the area of feeling **ok**, whilst the massage group reported feeling more **bored**. It is worth noting that although **focused** and **ok** are positive terms in relation to **bored** and **fed up**, it is probable that the pupils from the massage group are choosing other, more obviously positive, words to describe how they are feeling.

Despite these results there was some positive evidence from the teachers' evaluations. They reported some improvements in empathy among the children, although we do have a couple of teachers agreeing with the negative statements:

Table 5 – Empathy teachers' results

	strongly agree	agree	neither agree or disagree	disagree	strongly disagree
The children appear to be considerate and respectful of others		3	1		
The children act impulsively and without considering the needs of others		1	1	1	1
I have observed acts of spontaneous kindness	1	2	1		
The children are mean to each other		1		2	1

Observations and comments from teachers regarding empathy included:

"There has been a general improvement in respect for self and others, especially from the girls."

"Children have learned about kind touches."

"One child who is prone to outbursts has been totally absorbed during massage."

Empathy Summary

The statements relating to empathy show some improvement in one area but no improvement in the other. It is possible that any internal changes in empathy that the children have developed may take longer than the five month period of the study to manifest fully in their relationships. Although the teachers did report some improvements, there is no clear pattern from the pupils' evaluations. It may be that some of the words such as *ok* or *focused* were, in retrospect, a little vague for the age of the participants and didn't relate clearly enough to feelings or actions showing empathy. It is interesting that the *language* responses from the children do not reflect the *action and behaviour* observations from the teachers.

Social Skills

In the section on social skills, the octopus statement “I sometimes fall out and argue with other children” showed a difference between the control group and the message group at the midpoint but this had diminished somewhat by the end of the process.

Figure 6 - I sometimes fall out and argue with other children

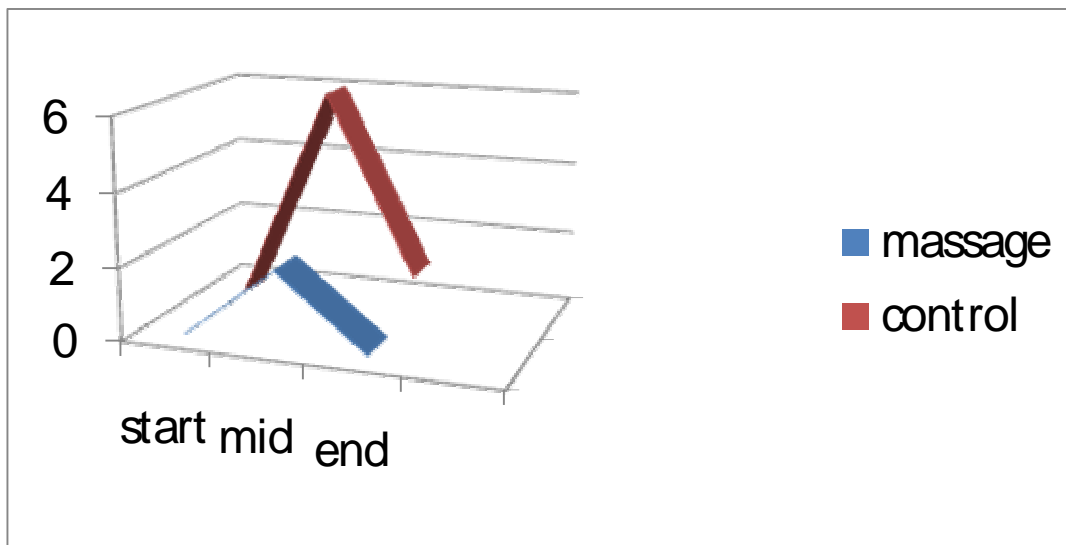


Figure 6 shows that at the midpoint the control group rose by 6% in their level of agreement with the statement, but had dropped to an increase of only 1% by the end of the process. In the message group the number of children who felt that they fell out and argue increased by 2% at midpoint but had returned to exactly the same level as the baseline by the end of the process. **This shows no change by the end of the study in the level of falling out amongst the children in the message group, compared to a 1% increase in the control group.**

The next statement relating to social skills was “other children want to play with me”. The response to this statement in the octopus exercise produced an interesting response.

Figure 7 - Other children want to play with me

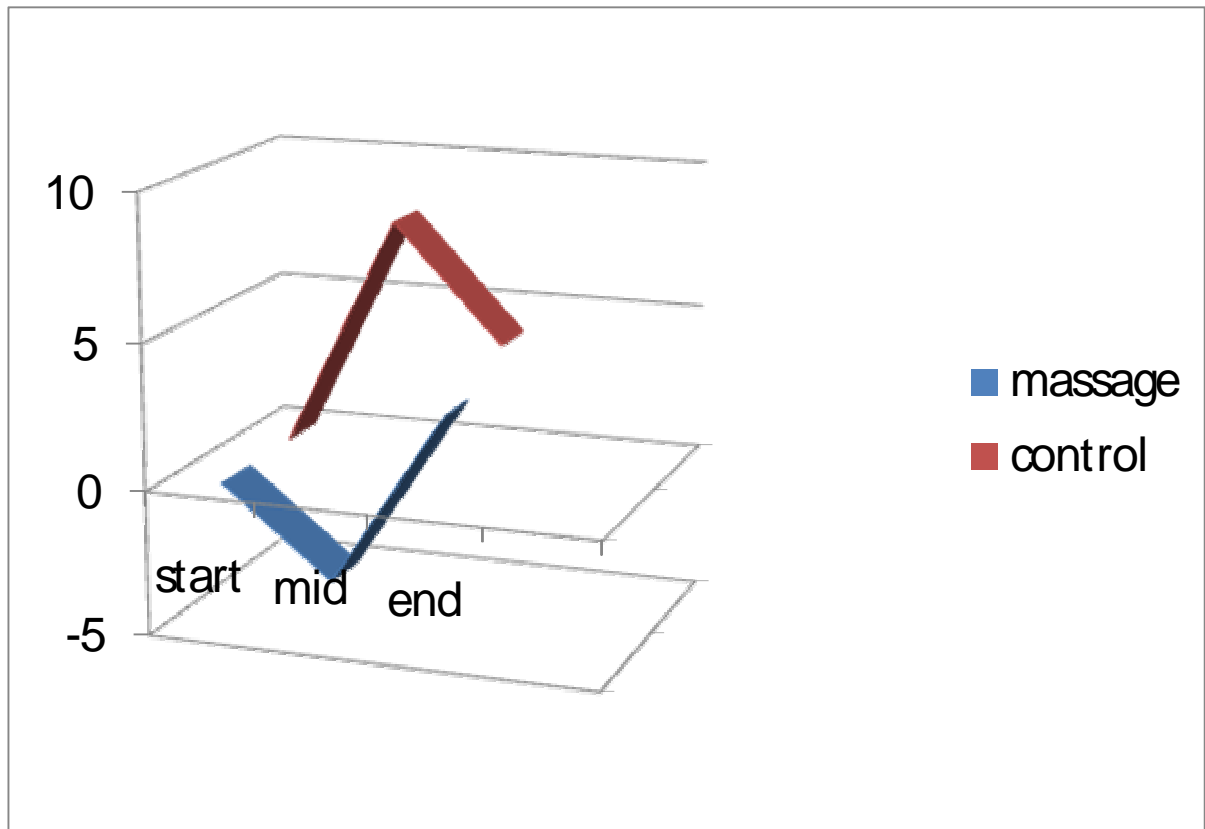


Figure 7 shows that the number of participants in the message group who felt that other children would want to play with them fell by 3% compared to the baseline at midpoint. By the end of the process this had changed and the message group ended up with a rise compared to baseline of 3% in the number of pupils who felt other children would want to play with them.

For the control group, the rise at midpoint was a marked 8% although this had fallen to 4% above baseline by the end of the process. **This shows a difference of 1% between message and control group at the end point, with the control group feeling slightly more likely that other children would want to play with them than the message group.**

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The field of words items relating to social skills showed inconclusive results.

Table 6 – Social skills field of words results

word	massage group	control group
included	Even	Even
left out	1% higher	
supported	1% higher	
let down	Even	Even

This mixed picture in table 6 suggested that the massage group felt more **left out** than the control group, but, paradoxically they also felt more **supported**. So overall both groups appear to be at roughly the same level.

There was some positive evidence from teachers' evaluations, although we can see more teachers grouped in the centre band in this section:

Table 7 – Social skills teachers' results

	strongly agree	agree	neither agree or disagree	disagree	strongly disagree
The children appear to get along well	2		2		
The children fall out and are disruptive			2	2	
At break time the children play cooperatively and constructively		2	2		
Break times are characterised by disruption and fighting			1	3	

Observations and comments from teachers regarding social skills and behaviour included:

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"There are fewer incidents of aggression."

"Incidents de-escalate far quicker thanks to massage."

"Child A, B and C have all become far less confrontational."

Social Skills Summary

The statements relating to social skills show no definite improvement in comparison to the control group. Although the teachers did indicate some improvement this was not as clear as the reported improvements in other areas. This section does not show very strong results, but this may be because all the schools are already involved in Healthy Schools and so have been working on developing social skills in other ways. Policies in place such as playground peacemakers, are likely to have evened out the results between the massage and control classes during the period of the study.

Confidence

The final theme to be explored was that of confidence. The statement “I like to try new things”, produced very different responses from the two groups.

Figure 8 - I like to try new things

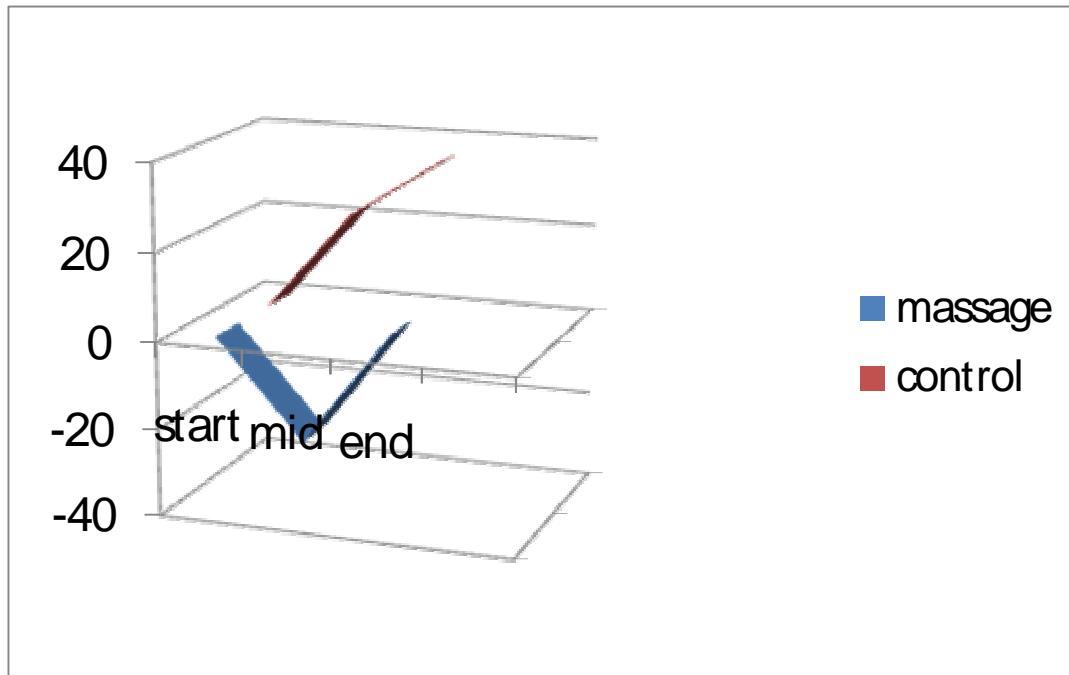


Figure 8 shows that the message group dipped by a large number (22%) at midpoint in their agreement with the statement, but by the end this had reversed and their overall result was that there was a 4% increase in the agreement with the statement.

The control group however seemed much more keen to try new things and their response showed an increase at the midpoint of 23% which increased to 36% by the end of the time frame. **Although there is a slight increase in confidence in the message group, the control group appeared to be much more confident at trying new things than the message group, by the end of the study.**

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The response to the statement “I don’t like talking to children I don’t know,” produced an interesting picture as it showed a clear point of contrast between the control group and message group.

Figure 9 - I don’t like talking to children I don’t know

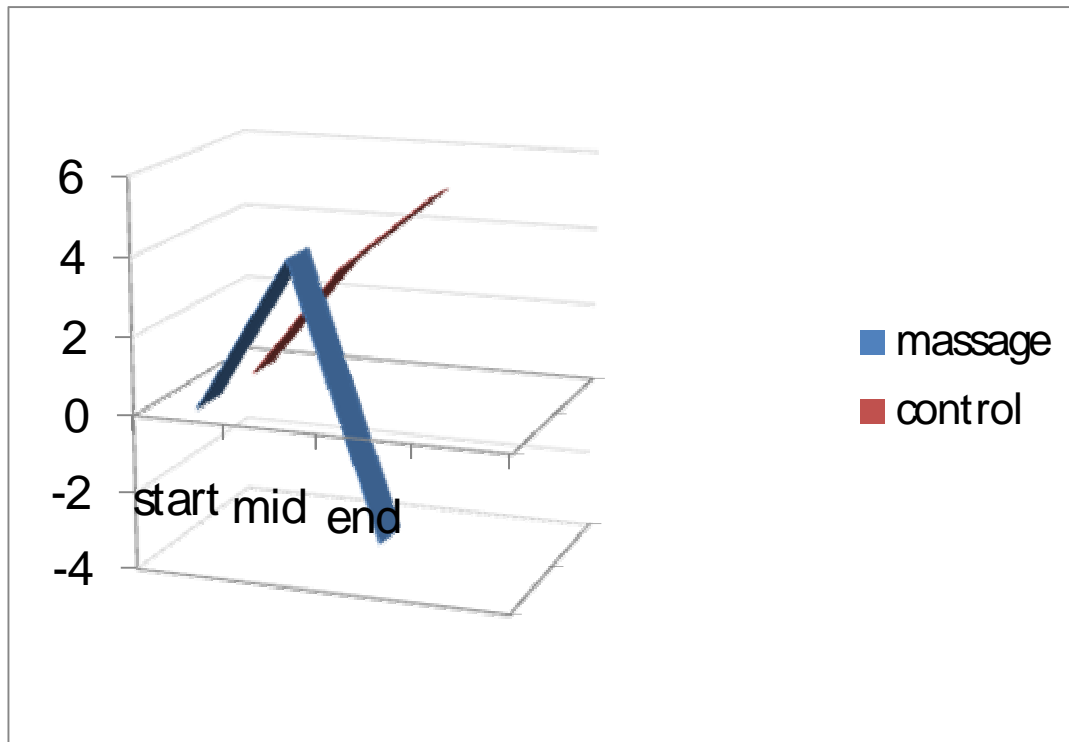


Figure 9 shows that whilst at midpoint both groups increased their agreement with the view that they did not like talking to children they did not know, by the endpoint the message group had changed and were much more comfortable talking to children they didn’t know.

The agreement with the statement from the control group was 3% higher at midpoint and rose to 5% by the endpoint. The message group was also higher at midpoint (by 4%) but dropped to a level of 3% below the baseline by the end of the message process. **We can see a clear improvement in confidence in talking to others in the message group compared to the control group, with a difference of 8% between the two at the end of the study.**

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The words relating to confidence showed a strong correlation between responses to the positive and negative words.

Table 8 – Confidence field of words results

word	massage group	control group
safe	2% higher	
scared	Even	Even
cool	2 % higher	
cross		1% higher
brilliant	Even	Even
rubbish		2% higher

Table 8 shows the massage group scoring markedly higher in the responses to the positive words **safe** and **cool**. This gap was also reflected in the fact that the control group scored higher in negative words such as **cross** and **rubbish**.

Evidence from teachers' evaluations, reflects clear improvements in confidence, particularly in children with learning difficulties:

Table 9 – Confidence teachers' results

	strongly agree	agree	neither agree or disagree	disagree	strongly disagree
The class are keen to learn and are performing well	2	1	1		
The class are reluctant to try new things and are performing badly				2	2
The children will speak up and answer questions in class	2	2			
The children lack confidence in communicating with others				2	2

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Observations and comments from teachers regarding confidence included:

"There have been two or three notable success stories."

"One girl in particular who was very disengaged has made remarkable progress."

"Academically these children have all made progress in core subjects."

"One child with Asperger's has responded well to giving and receiving massage."

"Child A (who has a diagnosis of autism) refused to let anyone touch him at the start of the programme, now he is fully engaging with a partner in giving and receiving massage."

Confidence Summary

We can see a split in this category in the questions relating to confidence, which perhaps reflects the difference in the nature of the questions themselves. Although there is only a slight improvement overall in confidence at trying new things (confidence in ability) there is a significant increase in confidence in talking to children they don't know (confidence in social situations). It is possible that, having just learnt something new, the massage group are initially busy integrating their new skills and so at that mid point stage feel less keen to try other new things. The field of words shows positive results and the teachers' evaluations show the clearest positive results of any of the four areas.

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Discussion

The project shows some interesting results in the themes explored. In two of the themes massage appeared to be having a marked impact but in the other two this was not clearly evident.

In the area of well-being the clearly higher scores for the massage group in the octopus exercise in figures 2 and 3, showed that they felt more calm and less worried than the control group. This was supported by the field of words exercise in table 2 showing that they felt much more *happy* and that the control group were more likely to feel *upset*. This change was supported by the teachers' comments and observations in table 3.

In the area of confidence, figure 9 shows it was clear that pupils in the groups receiving massage were more likely to feel confident in talking to other children they did not know, and they reported higher levels of feeling *safe* and *cool* whilst the control groups felt more *wound up* and *cross* in table 8. The teachers evaluations for this section in table 9, showed the clearest positive results in any of the four areas.

This may suggest that the biggest impact of the programme was the way in which the process, and the messages that support the process, were internalised by the children. Feeling calm, less worried and happier are essentially internal and emotive experiences and do not always relate directly to visible actions. They can have a huge impact in the ability to develop coping strategies for the stresses and difficulties that life can bring and can impact very positively in promoting good mental and physical health.

The more mixed picture in the empathy section, where the control group appeared more keen help others in figure 5, but both groups increased in feeling that they didn't only think about themselves in figure 4, also supports the idea that the main impact of massage may be in the internal experience for the children involved. The social skills section showed only 1% difference between the groups by the end of the study, in figures 6 and 7, but this has perhaps been influenced by other behavioural

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interventions such as playground peacemakers within the schools, affecting both massage and control classes.

Grouping the field of words exercise scores overall, it was interesting to see the outcomes in which the control group scored higher, the words *wound up*, *bad*, *upset*, *cross* and *rubbish*. Whilst the massage group scored higher in the words *calm*, *good*, *happy*, *supported*, *safe*, and *cool*.

Recent years have seen the development of an increasing reliance on medical interventions and chemical responses, such as Ritalin, in order to reduce worry and create a sense of calm in children. The results of this study suggest that it may well be that massage in schools can play a role in supporting children to develop strategies to help them feel safe, feel calm and increase their ability to cope with upset and the inevitable tension that every life, even that of a child, creates.

General Conclusion

This project attempted to examine the effect that giving and receiving massage could have on a group of children in school settings. The sessions for massage were taught to the pupils by qualified instructors and supervised by teachers and teaching assistants.

Evaluation of the project was carried out by self evaluation from those who participated, comparing these responses to those of a control group and from observation by teaching staff.

The group of children receiving massage, in self reporting, were found to feel more *happy*, *calm* and *safe* than those in the control group who did not receive massage. Conversely those in the control group self reported a higher frequency of feeling *wound up*, *upset* and *cross*.

The most significant gap between the massage group and the control group was in the areas where children self reported on whether they felt calm. The children who had had massage were significantly higher in the number reporting they did feel "nice and calm" in the octopus sheet

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responses, seen in figure 3, and this was further supported by the field of words section of the evaluation where those children who had received massage self reported markedly higher levels of feeling *happy* and *calm* in table 2.

The self reporting by the children was supported by the views of teachers in table 3, who felt that children who had received massage were markedly changed by the experience and were calmer, better behaved, quicker to settle and had better concentration.

The delivery of massage and teaching and supervising of techniques from qualified professionals was not felt to be disruptive to the school day and integrated well with some aspects of the curriculum around the areas of physical health and emotional health and well being.

Overall the response from teaching staff to the process was overwhelmingly positive and although the process took a short amount of time to do, didn't disrupt the curriculum and the results of integrating it into the school day appeared to be worth the effort spent.

This was a relatively small study conducted in one geographical location and, as such, there are limitations as to how much can be generalised from the results. The techniques for the process and the evaluation and data collection are however easy to reconstruct and the process could be replicated in any part of the country with groups of any size.

The Massage in Schools Association suggested that massage could help towards improving the school experience and claimed that massage in schools could help children become calmer and increase confidence and that it could offer the teacher benefits from a calmer classroom and improved concentration. In this study the combination of self reporting, control group comparison and teacher evaluation suggests that these claims were justified.

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Acknowledgement

The study team would like to thank the following schools for their participation and co-operation throughout the study:

- Kingston Park Primary School
- Langold Dyscarr Community School and Nursery
- Ordsall Primary School
- Ryton Park Primary School
- Thrumpton Primary School

The following Massage in Schools Instructors were involved in this study:

- Jane McLennan
- Charlotte Sutcliffe
- Julie Tasker
- Julie Todd
- Pip Bateman

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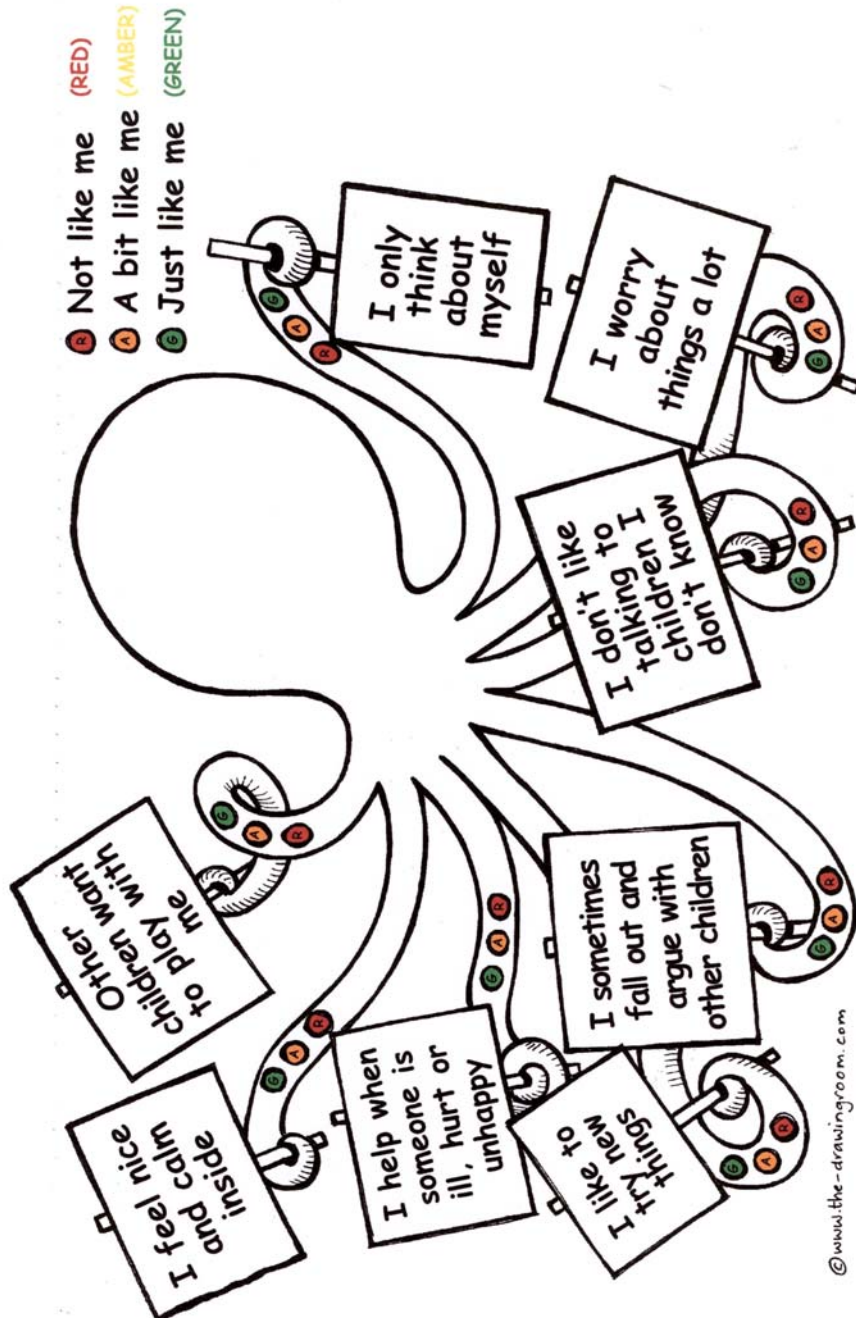
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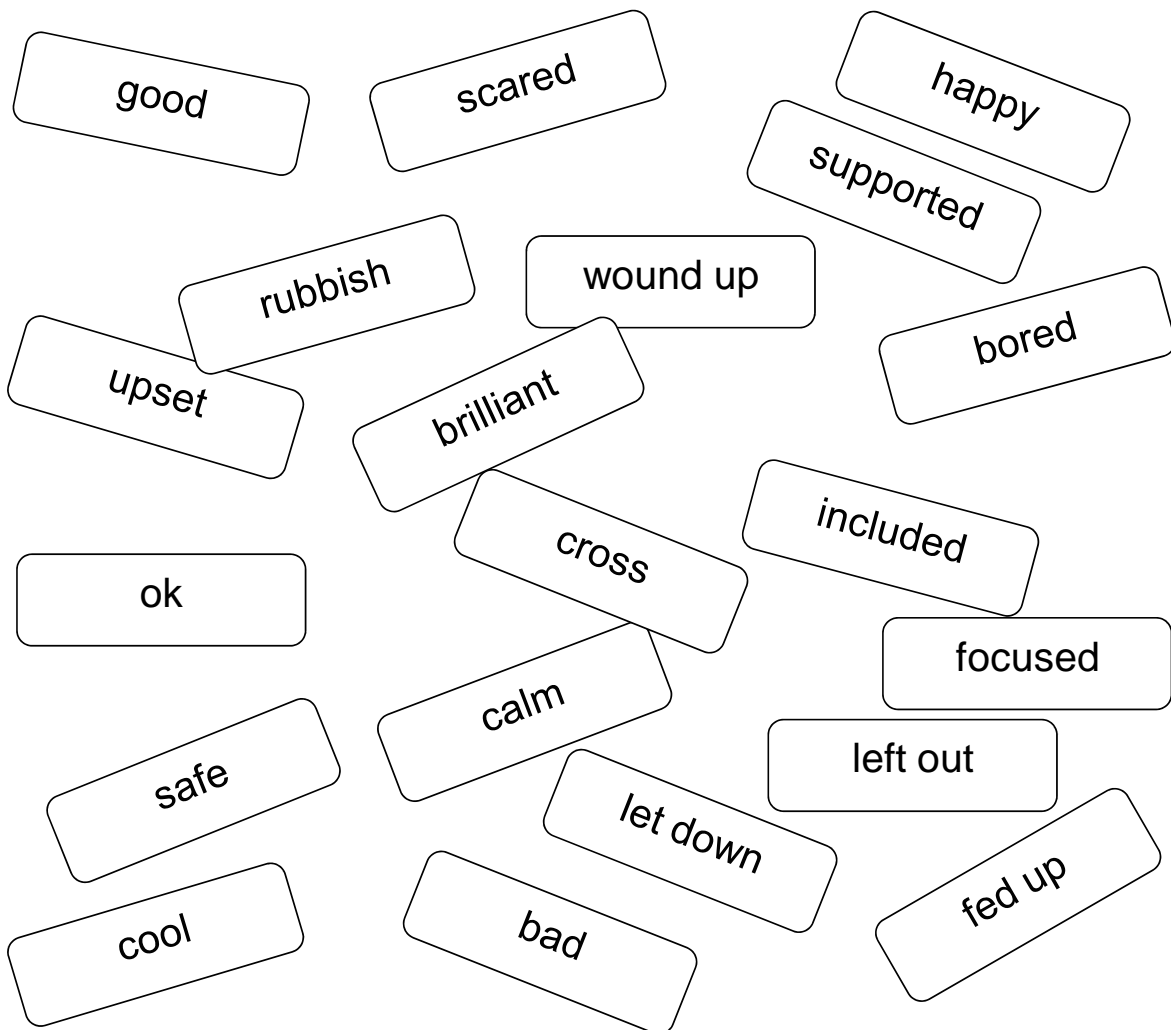
Appendix 1



Appendix 2

Today I feel . . .

Tick 4 of the words that best describe how you feel



In this space write anything else about how you feel

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Appendix 3

Octopus Results

Total control (85)

	I worry about things a lot	I feel nice and calm inside	I only think about myself	I help when someone is ill, hurt or unhappy	I sometimes fallout and argue with other children	Other children want to play with me	I like to try new things	I don't like talking to children I don't know
NOT like me	31	12	57	8	17	3	8	29
A BIT like me	47	68	40	67	65	39	22	50
JUST LIKE me	22	20	3	25	18	58	70	21

Total message (75)

	I worry about things a lot	I feel nice and calm inside	I only think about myself	I help when someone is ill, hurt or unhappy	I sometimes fallout and argue with other children	Other children want to play with me	I like to try new things	I don't like talking to children I don't know
NOT like me	22	8	66	2	18	6	10	31
A BIT like me	68	23	29	55	58	48	25	50
JUST LIKE me	10	69	5	43	24	46	65	19

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Appendix 4

Field of Words Results

Total baseline results in %

Word	C	M	Word	C	M	Word	C	M	Word	C	M
Calm	8	6	Wound-up	2	2	Included	4	3	Left out	1	1
Good	10	10	Bad	4	3	Supported	5	5	Let Down	2	1
Happy	12	12	Upset	2	2	Safe	5	7	Scared	1	1
Focused	5	4	Bored	6	9	Cool	8	7	Cross	2	2
Okay	6	11	Fed up	6	7	Brilliant	8	8	Rubbish	3	3

Total midpoint results in %

Word	C	M	Word	C	M	Word	C	M	Word	C	M
Calm	9	12	Wound-up	6	3	Included	4	3	Left out	1	2
Good	8	11	Bad	2	3	Supported	5	4	Let Down	1	2
Happy	11	11	Upset	2	1	Safe	4	8	Scared	1	1
Focused	2	3	Bored	7	8	Cool	7	6	Cross	5	2
Okay	9	11	Fed up	6	7	Brilliant	7	6	Rubbish	2	3

Total final results in %

Word	C	M	Word	C	M	Word	C	M	Word	C	M
Calm	9	12	Wound-up	4	2	Included	5	4	Left out	1	0
Good	10	10	Bad	1	1	Supported	5	3	Let Down	1	1
Happy	10	13	Upset	2	1	Safe	5	7	Scared	0	0
Focused	2	3	Bored	7	8	Cool	8	10	Cross	2	1
Okay	10	8	Fed up	4	4	Brilliant	10	10	Rubbish	3	1

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