

# **EXECUTIVE SUMMARY**

Peer massage in Primary Education: An evaluation of a Peer Massage Project in Primary Education in the South of England

## THE PEER MASSAGE PROJECT

The Peer Massage Project (PMP) is an exciting and innovative approach to introducing the demonstrated benefits of positive touch to the primary school class environment through a structured, safe and enjoyable process. This facilitates class relationships, motivation and cooperation and promotes individual children's self esteem, learning and development. This PMP is a straightforward, logical process in which children learn simple self and peer massage through their clothing. The skills are easily learned from an experienced and highly regarded practitioner and the Project is managed in the classroom by teachers to fit appropriately into their own planned teaching. There are benefits for the whole school, from Nursery to Year 6, as the Project is rolled out within the 3 stages of Orientation, Implementation and Development.

# .THE EVALUATION

A Pilot Trial of the PMP was carried out within 4 schools in the South East of England and was the subject of a rigorous, reliable and valid utilisation-focussed evaluation. A total of 11 teachers rated 49 sessions over a 5 month period in 2010 within the participating schools across classes from Reception Class to Year 6. Twenty one indicators of class behaviour, attitudes and learning were evaluated before and after Peer Massage and data were analysed using PASW Statistics Version 18.

## THE FINDINGS

The research study identified that the Peer Massage Project has a positive impact upon all specified elements of class behaviour, attitudes and learning within the participating primary schools and across all teachers, classes and times of the day.

The class behaviour theme experienced the greatest impact (23.6% improvement), class attitude an increase of 20.6% and class learning a smaller increase of 10.2%. The overall impact of the Peer Massage Project on the collective classroom experience was noted at 18.6%. Within these overall statistics, class calmness, with a 43.1% improvement, showed the greatest individual indicator impact, while the least impact, still of 7.4% improvement, was noted to be upon memory recall.

While this variation between individual indicators was demonstrated, qualitative questionnaire data illustrated that all teachers valued the contribution of the Peer Massage Project across all aspects of behaviour, attitudes and learning.

# Peer massage in Primary Education: An evaluation of a Peer Massage Project in Primary Education in the South of England

## Introduction

This report summarises a structured evaluation of the Peer Massage Project. This evaluation identifies that implementation of the Peer Massage Project in primary schools has major benefits in every aspect of class behaviour, class attitudes and class learning that formed a part of the evaluation study. The report will describe the evaluation research approach and methodology before detailing the findings, which noted the improvements in 24 indicators of behaviour, attitudes and learning. Firstly, however, it is important to summarise key factors of the Peer Massage Project process.

This Peer Massage Project is an exciting and innovative approach to introducing the demonstrated benefits of positive touch to the primary school class environment through a structured, safe and enjoyable process. This facilitates class relationships, motivation and cooperation and promotes individual children's self esteem, learning and development.

Massage has been used to promote health and relaxation for more than 5000 years and many studies have confirmed the valuable contribution to well being and life activities. More recently the potential for benefits within schools have been recognised – in Sweden, for example, massage has been integrated into the curriculum since 1999. In Kingston Upon Thames, the Peer Massage Project (PMP) began 4 years ago, working regularly with a number of primary schools with very encouraging results. The Borough have also engaged the PMP to run workshops that have introduced teachers and teaching assistants to peer massage and what it has to offer:

- The PMP is straightforward and logical
- Children learn simple self and peer massage through their clothing
- PMP is managed in the classroom by teachers to fit appropriately into their own planned teaching
- The process and skills required are easily learned

The PMP is designed to have benefits for the whole school from Nursery to Year 6 and is rolled out within 3 stages:

**Stage One** is the **Orientation Phase** which usually takes 2 weeks and involves training teachers and children in their own school site. This phase ensures that effective governance procedures are in place and that teachers and children gain the required skills and knowledge. Teachers are trained within workshops to become proficient in self and peer massage and learn practical guidelines and underpinning theory. Once the teachers are trained and confident, the children become involved. They learn simple touch games, relaxation techniques, important boundaries and basic self and peer massage sequences.

The **Implementation Phase** is **Stage Two** in which the school, teachers and children use their skills to embed the short activities of the Peer Massage Project into their daily teaching regimes. Teachers choose the time of day that suits their schedule and will lead to the most positive outcomes. In this stage, teachers and children build their confidence in using the self and peer massage sequences and appreciate the benefits that the PMP has for the class, for learning and for individual development.

**Stage Three** encompasses **Ongoing Development**. The purpose of this stage is to further expand the proficiency of teachers and children with more advanced training in new massage sequences and the use of massage stories.

## **Research Approach**

The purpose of the research was to evaluate the implementation of a pilot trial of the Peer Massage Project in 4 primary schools in the South of England in order to inform and facilitate the development of Peer Massage. A utilisation focussed (Patton 2008) approach was adopted. This approach is based on the premise that, if peer massage practice is to be successfully enhanced, stakeholder acceptance of and involvement in the generation of evaluative findings is essential. Stakeholder implementation of recommendations would thus be facilitated. This approach led to the development of a 2 phase research process; Phase 1 being exploratory while Phase 2 aimed to validate inductions derived from the previous stage.

#### Phase 1

Phase 1 involved the trial of the Peer Massage process within 8 schools. During this trial, evaluation forms were completed by participating primary school teachers and informal discussions were held with those teachers and their schoolchildren. Thematic analysis of these data highlighted the three main themes for evaluation of impact of peer massage on class behaviour, impact of peer massage on class attitudes and impact of peer massage on class learning. Ranges of issues within each of these themes were also identified.

#### Phase 2

Phase 2 involved the full pilot testing of the Peer Massage Project as described above. Findings from Phase 1 were used in the construction of the questionnaire administered during the second phase. This questionnaire, following discussions with stakeholders, was to be completed by the teachers who participated in Phase 2 of the evaluation. It was agreed that school children would not be directly involved in the evaluation process other than their participation in peer massage. Indicators were identified from the identified issues and questionnaire items were developed which adopted, as far as possible, language drawn from Phase 1 data. Each of the items relating to the themes was to be rated by respondents on a scale of 0 to 5 (see Findings for scale explanation). Due to operational constraints, it was not possible to undertake a full pilot test of the instrument so it was subjected to review by a panel of non-participating educators. This led to adjustments and the final questionnaire was constructed of 49 closed items of which 7 related to school, teacher, class year, session date and time and number of sessions and students. The remaining 42 closed items required the rating of indicators of class behaviour, attitudes and learning before and after the massage session. The alpha coefficients of the indicators relating to each of the themes were: class behaviour 0.93, class attitudes 0.89 and class learning 0.95, indicating an adequate level of internal consistency. An additional, open item sought additional thoughts and comments.

A total of 11 teachers evaluated 49 sessions over a 5 month period within the 4 participating schools. Table 1 identifies the breakdown of these teachers within the schools. The pilot scheme involved years Reception, 1, 2, 3, 5 and 6 and peer massage sessions were carried out at varying times throughout the school day. The participating schools and the participating teachers within those schools were selected on a voluntary basis and can thus be considered as a convenience sample.

Table 1: Sample Details					
	School 1	School 2	School 3	School 4	Total
No. Of Teachers	2	2	4	3	11
Years involved	2, 6	2, 5	1	Reception, 3	Reception, 1,2,3,5 & 6

Data were analysed using PASW Statistics Version 18. Descriptive statistics were generated to meet the research purpose. Inferential statistics were not used as full data were gathered from the total participating population of the Pilot Study, thus the pre-and post-massage rating differences were actual and could not have occurred by chance.

## **Ethical considerations**

The structure and process of the Peer Massage Project were developed with teacher input and in accordance with the three ethical principles of Respect for Persons, Beneficence and Justice as outlined by The Belmont Report (1979). Ethical approval for the study and access was granted by the Headmasters of all of the schools involved. All schools, teachers and parents were given full information regarding the purpose of the Peer Massage Project pilot study and the implications of participation. Confidentiality, the voluntary nature of the study and freedom to withdraw at any point without incurring sanction were emphasised during all phases of data collection. All data and data derivatives have been stored, managed and will be disposed of in compliance with good practice and the Data Protection Act (1998).

## **Findings**

As identified, the purpose of the research was to evaluate the pilot trial of the Peer Massage Project in order to inform and facilitate the development of Peer Massage. From all participants there was clear, general consensus that the Peer Massage Project contributed positively to class behaviour, attitudes and learning. Specific findings follow related to these three themes.

## Theme 1 (Table 2): Impact of Peer Massage Project upon class behaviour.

Table 2 identifies the 7 indicators of class behaviour that were evaluated. Teachers rated each of these indicators on a scale of 0 to 5 prior to the peer massage session. They then facilitated the peer massage and subsequently rated the post peer massage behaviour indicators. It can be seen that, taking into account a conversion from negative to positive behaviour for class restlessness and disruptive behaviour, there was an overall mean behaviour rating change of 0.68 (N = 46), which equates to a 23.6% positive change in class behaviour following the peer massage session. All indicators showed a positive change following massage with the greatest improvement of 31.1% being in class concentration (mean change = 0.94, N = 49), closely followed by an increase of 28.9% in class attentiveness (mean change = 0.86, N = 49). A notable 23.5% improvement in student-student (mean change = 0.73, N = 46) and 18.8% in student-teacher (mean change = 0.61, N = 46) communication was perceived along with class involvement in learning (% increase 15.2%, mean change = 0.48, N = 48). A decrease of 25% in class restlessness (mean change = -0.70, N = 49) and of 17.5% in disruptive behaviour (mean change = -0.45, N = 49) was also noted

Table 2: Comparison of class behaviour before and after peer massage:					
Mean rating of behaviour (Scale of $0-5$ , N in parenthesis)					
	massage	Actual	%		
Class concentration	3.02 (49)	3.96 (49)	0.94 (49)	+31.1%	
Class involvement in learning	3.15 (48)	3.63 (49)	0.48 (48)	+15.2%	
Class attentiveness	2.98 (49)	3.84 (49)	0.86 (49)	+28.9%	
Student-student communication	3.11 (46)	3.84 (49)	0.73 (46)	+23.5%	
Student-teacher communication	3.24 (46)	3.85 (48)	0.61 (46)	+18.8%	
Disruptive behaviour	2.57 (49)	2.12 (49)	-0.45 (49)	-17.5%	
Class restlessness	2.80 (49)	2.10 (49)	-0.70 (49)	-25.0%	
Overall class behaviour mean	2.88 (46)	3.56 (46)	0.68 (46)	+23.6%	
(including +ve -ve conversion)					

## Theme 2 (Table 3): Impact of Peer Massage Project upon class attitudes

The rating of the impact of the Peer Massage Project upon the 8 indicators of class attitudes followed the same structure as for Theme 1 and can be seen in Table 3. Accounting for a negative to positive adjustment in relation to class sadness and boredom, the overall mean attitude rating change was 0.62 (N = 43) which represents a positive percentage increase in class attitudes of 20.6%.

Table 3: Comparison of class attitudes before and after peer massage: Mean rating of attitude (Scale of $0-5$ , N in parenthesis)					
(55)	Before	After massage	Change		
	massage		Actual	%	
Class motivation	3.08 (49)	3.66 (47)	0.58 (47)	+18.3%	
Class satisfaction	3.06 (49)	3.76 (49)	0.70 (49)	+22.9%	
Class sadness	1.88 (43)	1.63 (43)	-0.25 (43)	-13.3%	
Class calmness	2.60 (48)	3.72 (47)	1.12 (47)	+43.1%	
Class happiness	3.27 (49)	3.90 (48)	0.63 (48)	+19.3%	
Class fulfilment	3.06 (48)	3.73 (48)	0.67 (48)	+21.9%	
Class boredom	2.27 (49)	1.87 (46)	-0.40 (46)	-17.6%	
Class enjoyment	3.14 (49)	3.79 (48)	0.65 (48)	+20.7%	
Overall class attitude mean	3.01 (43)	3.63 (43)	0.62 (43)	+20.6%	
(including +ve -ve conversion)					

While all of class attitudes showed a positive change, it is perhaps not surprising that class calmness showed the greatest increase of 43.1% following massage (mean change = 1.12, N = 47). Class satisfaction (% increase 22.9%, mean change = 0.70, N = 49), class fulfilment (% increase 21.9%, mean change = 0.67, N = 48), class enjoyment (% increase 20.7%, mean change = 0.65, N = 48) and class happiness (% increase 19.3%, mean change = 0.63, N = 48) also improved following massage as did class motivation (% increase 18.3%, mean change = 0.58, N = 47). There were decreases in class boredom (% decrease 17.6%, mean change = -0.40, N = 46) and sadness (% decrease 13.3%, mean change = -0.25, N = 43).

## Theme 3 (Table 4): Impact of Peer Massage Project upon class learning

There were 6 indicators associated with the theme of impact upon class learning. Table 4 describes the impact of these which were rated in the same fashion as Themes 1 and 2. It is evident that teachers made fewer ratings within this theme. This can be explained from comments within the open ended questionnaire item in which many teachers explained that they had chosen to undertake the peer massage at the commencement of a class based upon their rating of class behaviour and attitude when the class began. As teaching/learning activities had not then commenced it was not possible to rate the class learning indicators before the massage session. Most teachers who did not rate these indicators before massage did not rate after massage, explaining that comparison would not be possible. Many classes were, however, rated and all class learning indicators did show a mean increase after massage with an overall mean increase of 10.2% (mean change = 0.33, N = 34).

Table 4: Comparison of class learning before and after peer massage:					
Mean rating of learning (Scale of $0-5$ , N in parenthesis)					
	massage	Actual	%		
Class level of understanding	3.23 (35)	3.61 (36)	0.38 (35)	+11.8%	
Acquisition of knowledge	3.20 (35)	3.49 (35)	0.29 (35)	+9.1%	
Skill development	3.29 (34)	3.54 (37)	0.25 (34)	+7.6%	
Memory recall	3.38 (37)	3.63 (40)	0.25 (37)	+7.4%	
Class level of innovation	3.13 (38)	3.47 (38)	0.34 (38)	+10.9%	
Class level of logical thought	3.16 (38)	3.42 (38)	0.26 (38)	+8.2%	
Overall class learning mean	3.23 (34)	3.56 (35)	0.33 (34)	+10.2%	

Table 4. Comparison of class learning before and after near massage

Class level of understanding showed the greatest increase (% increase 11.8%, mean change = 0.38, N = 35), followed by level of innovation (% increase 10.9%, mean change = 0.34, N = 38), acquisition of knowledge (% increase 9.1%, mean change = 0.29, N = 35), level of logical thought (% increase 8.2%, mean change = 0.26, N = 38), skill development (% increase 7.6%, mean change = 0.25, N = 34) and memory recall (% increase 7.4%, mean change = 0.25, N = 37).

#### **Review**

A review of the effect of the variables of school, teacher, class year, date and time of peer massage session, numbers of sessions conducted and numbers of participating students was undertaken. While the numbers within the pilot test were limited, there appeared to be consistency between schools, teachers and class years regarding the impact of the Peer Massage Project upon class behaviour, attitudes and learning. There also did not appear to be correlation between the indicators or themes and class size, number of sessions undertaken and numbers of students in the class. However, the data suggests that there may be optimal times in the day to undertake the Peer Massage Project. Specifically, the overall impact of peer massage upon overall positive class attitudes would appear to be highest earlier in the school day. On the other hand, impact upon negative class behaviour would appear to be most optimal mid-morning and early afternoon.

## **Summary of Findings**

This utilisation focussed research study, as summarised within Table 5, has identified that the Peer Massage Project has a positive impact upon all specified elements of class behaviour, class attitudes and class learning within the participating primary schools and across all teachers, classes and times of the day.

The class behaviour theme experienced the greatest impact (23.6% improvement), class attitude an increase of 20.6% and class learning a smaller increase of 10.2%. The overall impact of the Peer Massage Project on the collective classroom experience was noted at 18.6%. Within these overall statistics, class calmness, with a 43.1% improvement, showed the greatest individual indicator impact, while the least impact of 7.4% improvement, was noted to be upon memory recall.

Table 5				
Comparison of overall theme changes before and after peer massage (No. Of indicators in parenthesis)				
Theme	% increase			
Overall class behaviour mean	+23.6%			
(including +ve -ve conversion)	(7)			
Overall class attitude mean	+20.6%			
(including +ve -ve conversion)	(8)			
Overall class learning mean	+10.2%			
	(6)			
Total theme and indicator mean	+18.6%			
	(21)			

While this variation between individual indicators was demonstrated, qualitative questionnaire data illustrated that all teachers valued the contribution of the Peer Massage Project across all aspects of behaviour, attitudes and learning.

Researcher: Dr.Gary Brown PhD MSc. RNT RGN. Head of Department, Department of Nursing and Healthcare Studies, Institute of Technology, Tralee, County Kerry, Ireland