

Massage in Schools Programme (MISP) – Evaluation in Northamptonshire TaMHS Project

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Description of MISP

The Massage in Schools Programme (MISP) is a Wave 1/universal clothed, child-to-child massage programme aimed at school children aged 4-12. The programme was created in the early 1990s by Mia Elmsäter from Sweden and Canadian, Sylvie Hetu, as a result of their Infant Massage training and practice and motivation for all children to experience frequent positive, nurturing touch. Through the programme a back, neck, head and arm massage is given by the children, to each other, with their permission in a 10-15 minutes daily routine. The MISP website provides further details about the intervention:

<http://www.messageinschools.com>



Rationale for Including MISP in TaMHS

MISP was included in the project as a result of consultation with one of the project schools, Ruskin Infant School, which had been involved in a process to achieve Anti-bullying Accreditation. Through this accreditation process, consultation with all the school's stakeholders had identified MISP as helpful for the school to include in their provision, which would be likely to improve social relationships and therefore also provide a preventative approach to bullying at the school.

As described in the MISP Manual for Instructors (2007) the theory behind the usefulness of Massage is that it stimulates the activity of the vagus nerve [one of the 12 cranial nerves], which slows down and relaxes the central nervous system, which in turn slows the heart rate and blood pressure and the release of stress hormones, such as cortisol. It is suggested that changes in EEG patterns also indicate increased relaxation and attentiveness, and so that classroom performance should improve. Also, it is suggested that the increase in serotonin and dopamine levels due to massage improves mood state. The Touch Research Institute's database reportedly lists dozens of clinical trials demonstrating that a wide range of conditions can be improved by touch therapy, including childhood behaviour problems, mental health, anxiety and sleeplessness. Research also reports that massage increases levels of the hormone oxytocin, which reduces stress and can encourage social bonding. Rats deprived of oxytocin make poor parents and their offspring fail to thrive. Observers report increased social cohesion among classes that participate in the Massage in Schools Programme. The current research in MISP is summarised on the MISP website E.g. Trower (2004) controlled study in primary school demonstrated improved concentration and social functioning according to teacher perceptions; and children taught routines to families.

Motivation for MISIP by the Headteacher and a range of stakeholders, including parents at the school combined with anecdotal evidence of the effectiveness of MISIP from several schools both nationally and in Northamptonshire (e.g. Studfall Junior School, Corby), combined with MISIP being judged to fit well with other key aspect of evidence based or evidence informed provision including the Solihull Approach, Solution Focused Approach and Relaxation (all described elsewhere in this report) led to agreement that the approach was worth trialling as part of a set of interventions that could be evaluated in terms of outcomes. The TaMHS project presented a useful opportunity to evaluate the usefulness of the approach in terms of providing staffing and resources to enable effective evaluation of the approach and hence, help identify whether MISIP is worthy of further investment in Northamptonshire.

Provision of Training and Implementation in MISIP

In order for the school to be able to implement MISIP, the services of Joy Allibone, a local external accredited provider of massage instruction was employed and funded by TaMHS. A combination of the Massage Instructor, Headteacher and TaMHS lead Educational Psychologist/ Project Manager planned a gradual introduction of MISIP into the school via the training of staff, modelling approach with children and then coaching and observing staff using the approach all within a framework of evaluation that included intervention and control classes and evaluative feedback from staff, pupils and parents. Following this main evaluative phase, it was planned that within 12 months, all appropriate teachers and teaching assistants in the school would be trained by the MISIP instructor to the extent that they were independent in day-to-day MISIP implementation and all children in all 6 classes in the two-form entry school would be benefiting from this approach. This plan was put into action in January 2010 and reviewed at approximately 3-monthly intervals. By January 2011, all (approx 180) children at Ruskin Infant School were engaged in MISIP led by their school staff independently of external providers.

Evaluation of MISIP in TaMHS Project

Evaluations were conducted at a number of levels. Teachers completed baseline Insight Primary Self-esteem questionnaires for all pupils in YR and Y1 involved in intervention and same-age control classes before and 6 weeks after the intervention started. Parents were also asked to complete before and after intervention questionnaires using the Strengths and Difficulties Questionnaire (SDQ) for both Y1 and YR classes.

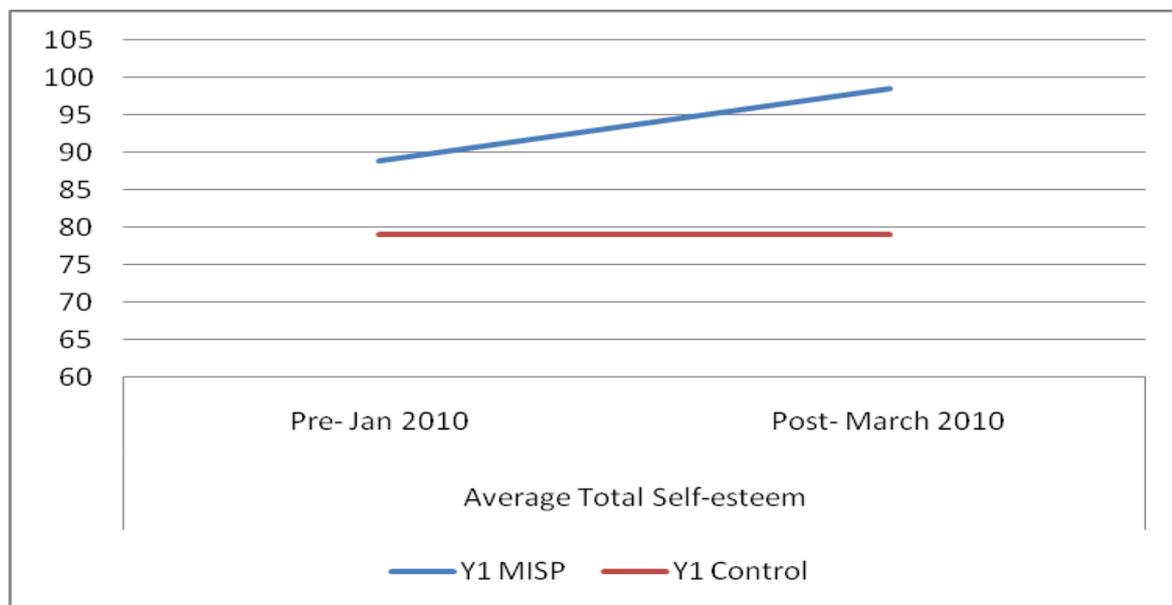
In order to measure lasting effect, it was agreed that to avoid over-burdening staff, questionnaires would be completed again 6 months later only for the 6-8 children who were regarded as most vulnerable – i.e. those eligible for free school-meals. Data was also collected from children directly about their friendships and their experience about massage. Information from parents was also sought in conjunction with their questionnaire completion. Finally, staff were interviewed about their perception of the MISIP experience.

Evaluation Results

Teacher Perceptions of Pupils Self-esteem

While the YR teachers identified no change in self-esteem for their children in both control and intervention groups, a one tailed T-Test comparison of the differences between pre and post results of Y1 teacher reported self-esteem, according to their completion of the Insight Primary Self-esteem Indicator, indicates a significant difference ($p < 0.001$) between the changes in self-esteem of the Y1 class of pupils experiencing MISP compared with those not receiving MISP in the control class. The total average self-esteem for MISP and control class over time is shown in the graph below.

Comparing MISP Intervention Y1 Class and Y1 Control Class – Insight Primary: Self-esteem Indicator



Six months later, comparisons of self-esteem both between MISP and control classes and between MISP class current and previous scores was problematic for three main reasons: 6-month data was available only for children identified as vulnerable, and some had not accessed the intervention due to being on part-time time-tables; due to the passage of time, children had a different teacher making comparisons with previous data less reliable; and the children in the Y1 control classes had experienced Zippy's Friends intervention from March to July, which may confound the results. However, bearing in mind these limitations, the results for the vulnerable pupils are as follows: -

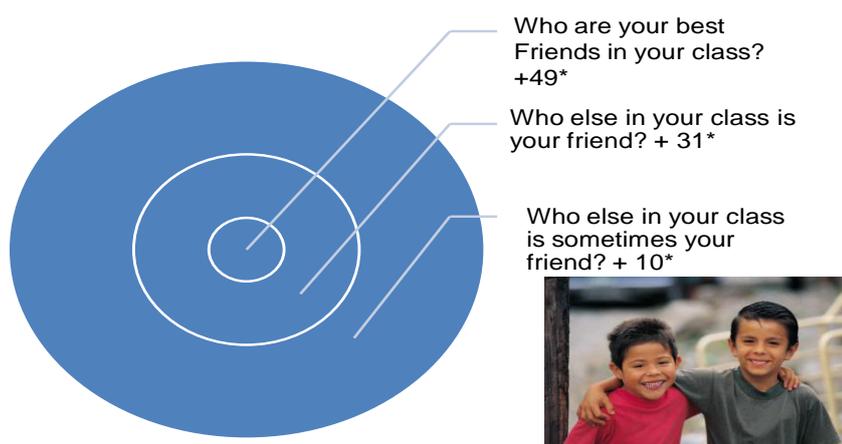
For Y1, pupils deemed vulnerable by teaching staff, a Mann-Whitney test comparison of pre-MISP vs. 6 months later identified no significant difference between MISP and control group. The vulnerable group of 4 pupils within the Y1 MISP class gained an average of 0.8 self-esteem points per pupil compared with 7 points per pupil for the group of 7 vulnerable pupils in the Y1 control class. It was suggested that the control class may well have improved due to the Zippy's Friends intervention (see relevant chapter elsewhere in this report).

For 14 YR pupils deemed vulnerable by teaching staff, a Mann-Whitney test comparison of pre-MISP vs. 6 months later identified a positive significant difference ($p < 0.01$) between MISP and control group. The vulnerable group of 7 pupils within the YR MISP class gained an average of over 33 self-esteem points per pupil compared with only 8 points per pupil for the group of 7 vulnerable pupils in the YR control class.

Pupil Perceptions

The MISP Instructor introduced the Friendship Circles evaluation tool that gauges children's perception of their relationship with others by engaging children in identifying which children in their class are their 'best friends', 'friends', or 'sometimes your friend'. Compared with baseline taken in Jan 2010 prior to MISP being introduced, after 5 weeks of engaging in MISP, the Y1 children identified a higher number of named children in each of the friendship categories: increasing respectively by an average of 1.75, 1.1 and 0.4 friends. This indicates that children who have experienced MISP perceive that they have a greater number of friendships than previously – suggesting improved social relationships in the class. It would have been further informative to use the Friendship Circles for the control class and also over an extended time period.

Friendship Circles for a Y1 Class



* Change in number of self-reported friends for 28 children in Y1 class between: before MISP and 5 weeks later: Jan – March 2010

When asked, children made many positive comments about their experience of MISP, such as liking “all of them [the strokes]” and reporting that “massage is very good, all the rain, sun, clouds... are all good”, referring to specific strokes designed to mimic the weather. Some children indicated particular sensitivity to touch such as “I don’t like it when it is hard” or not liking “the tickly feeling” associated with particular strokes.

Not all children reported enjoying massage. One boy commented: ““I don’t like it, it makes me sleepy”. For children who were not keen, they were encouraged to try-out massage: but in keeping with the ethos and the core purpose of MISP being to aid relaxation, there was no requirement of any child to engage in MISP at any time.

School Staff General Perceptions

After 3 months of MISP, teachers and teaching assistants involved in delivering MISP were asked in a focus group for their perceptions of changes. A main change identified was that the children presented as calmer and more relaxed both during and after massage and that this was especially noticeable and useful when a massage session was run just after lunch i.e. following a time that was far less structured and that promoted higher levels of activity. Staff also identified that children had improved friendships and that there was a greater sense of the class being a team. Staff also identified that generally boys seemed to apply the massage strokes more skilfully than the girls. A sense of the value placed on MISP was provided by a comment agreed by a focus group of staff, that “it would have been better if the control class had been involved in massage and got the same benefits”.

In Autumn 2010, as new staff and children were introduced to MISP, two children in 2 different classes who are regarded as vulnerable to mental health difficulties were selected for observation and comment by their classteachers in. While one child quickly took part and took an active role in the massage, the other was described as ‘a little nervous and worried’ at the beginning. After 6 weeks, both children had begun to interact with other children more and the one who had been reticent was described as ‘loving massage now’. Commenting on the whole class, one classteacher observer identified that after 6 weeks, the “whole class are receptive to the massage and are beginning to show signs of improvement with their attitude to each other”. Another pupil who was regarded as vulnerable and tended to be inappropriately over-affectionate with other children, prior to the introduction of MISP, seemed to improve his sense of personal space after experiencing massage. Concerns were expressed by two teachers that during the learning phase of MISP, 30 minutes of each school day was taken out of the curriculum for massage i.e. 2.5 hours per week. This reflects the pressure felt by teachers to progress through the academic aspects of the KS1 curriculum. It is interesting to note that despite this time used for massage over several weeks before being reduced to 10-15 mins, the following year, these pupils who had been in Y1 are predicted to achieve the best end of KS1 results the school has had during the Headteacher’s 9 year tenure.

Parent Involvement and Perceptions

Due to the need within MISP for children to actively touch other children, parent permission is required for children to engage in MISP. This proved problematic as a minority of parents were apprehensive about MISP, due principally to close association being made between nurturing touch and sexual touch. Showing parents children actually engaged in MISP in an assembly later on was helpful rather than just relying on an oral description, which increased the number of children for whom permission was given. Children, who did not have permission, were encouraged to join-in as much as they could by staying with their class and learning and practising the strokes just in the air. According to hormonal theory, such practice should benefit these children through them being present during the release through massage of the hormone oxytocin, which is thought to promote social bonding. Some parents reported that the children practised some of the strokes on other family members – which was regarded positively by these parents.

Although parents were asked and encouraged to complete the parent version of the Strengths and Difficulties Questionnaires (SDQ), before and after MISP had been introduced, there were insufficient responses to compare intervention and control classes for either YR or Y1. However, there were sufficient respondents from the YR MISP class pre and 6 weeks following the intervention to make a comparison of parent perceptions for 17 pupils. A paired-samples t-test showed no significant difference between pre and post SDQ Total-Difficulties scores (although the difference was almost significant: $p=0.055$). However, a comparison of the pre and post 'conduct problems' perception by parents showed a significant positive difference ($p<0.05$). Analysis of the average shifts in scores indicated positive (though not statistically significant) shifts in each of the sub-measures of the SDQ: especially in 'conduct problems', 'peer problems' and 'pro-social' attributes.

Capacity Building for MISP

In terms of the capacity built within the TaMHS project school that introduced MISP, all teachers and assistants within Ruskin Infant School can independently provide massage to their children, provided that they regularly consult an instructor to ensure that the accuracy and hence the quality of their strokes remains. In order to overcome the issue of new staff requiring further input from an external instructor, it is planned that two staff from Ruskin Infant School will shortly take the two-day training to qualify as instructors and hence, be able to sustain MISP in their school, provided they consult a trainer annually to ensure maintenance of the quality of their strokes and other aspects of MISP.

In order to promote the mainstreaming of MISP, staff and children at Ruskin Infant School provided a workshop at the Northamptonshire TaMHS Children's Mental Health Conferences in January 2011. This led to expressions of interest in being kept informed about training by 49 participants and 16 of them identifying that if school funds are available, they would be most likely to purchase MISP training.

Due to the benefits of the Massage in Schools Programme (MISP) being run in one of the TaMHS project schools, especially in terms of improved pupil relationships and mental health, it has been agreed that staff from other schools could have funded training for 2 staff to learn the approach and techniques. TaMHS funded training was provided to 15 schools. Having completed the training, staff are able to and expected to instruct pupils and staff across their school, and hence, to enable all children in their school to experience massage instruction frequently within an evaluative framework. Staff who attend are also required to be committed to sharing their good practice with other schools in their area, for the benefit of pupils in other schools. The popularity of this training has led to the external trainer setting-up a further training session in May 2011 with places to be funded by schools.

In terms of sustainability in publicly funded agencies, the two Specialist Teachers – Mental Health who have been closely involved in the TaMHS project in Northamptonshire will (by the time of publication of this report) have become trained as MISP Instructors for supporting schools within the county who are adopting and maintaining this approach, and for encouraging other schools to build MISP into their provision.

Finally, Joy Allibone as an Independent Instructor who provided the input to school staff for achieving the above results continues to deliver MISP with schools and is available to support schools through contact details provided in the Northamptonshire Shoebox.

Overall Impact Ratings for Massage in Schools Programme

" Where 10 is very highly useful and 1 is not at all useful, on a scale of 1-10, how useful do you think the following TaMHS interventions were/are	Overall Impact Ratings of Massage in Schools Programme, according to senior staff from 1 project school			
	Average	Median	Mode	Range
a) For children who are vulnerable to experiencing difficulties with Mental Health or who are already experiencing such difficulties	10	10	n/a	n/a
b) Overall to the school	10	10	n/a	n/a

Conclusion from Results of MISP Evaluation

The combination of quantitative and qualitative results from the MISP evaluation that involved teachers, support staff, parents and pupils, suggests that MISP can have a positive impact on the mental health of pupils, especially in terms of their self-esteem, friendships, pro-social skills, conduct problems and the class becoming more of a team and being calm. There is some indication of increased impact on engagement with learning, including with children who are vulnerable to mental health difficulties.

The key lessons learned in the Northamptonshire TaMHS Project about MISP to take forward include:-

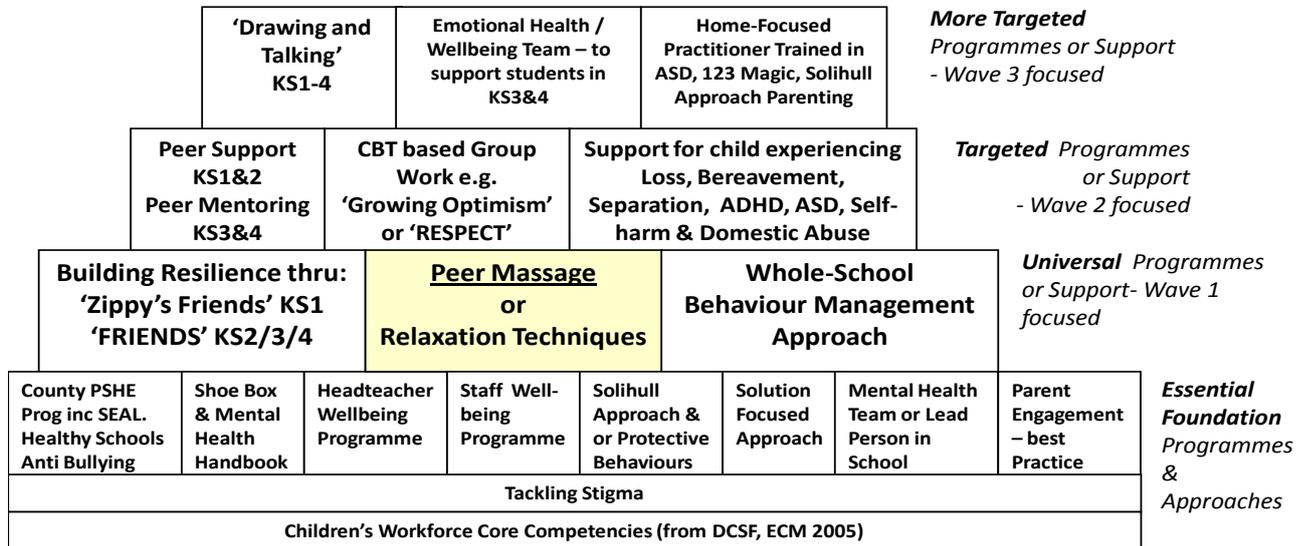
- Strong indications are that MISP can be introduced successfully into Northamptonshire schools with a positive impact on children who are vulnerable to experiencing difficulties with Mental Health or who are already experiencing such difficulties, and on the school overall.
- In particular, children benefit in terms of their relationships with others and their being calm noticeable both at school and at home.
- Key aspects for making implementation of MISP successful include enabling parents to see the intervention as a positive way of helping their child and for staff to accept that the time taken out of other curriculum aspects is worthwhile for the overall results.
- Capacity has been built for further implementation of MISP in Northamptonshire schools, and the detailed results above need to be taken into account.

Because of the indications of the importance to children's mental health of MISP, that it has been included in the Building Blocks of Provision for Building Mentally Healthy Schools in Northamptonshire at the Wave 1 / Universal focus, as a recommended provision for all schools with a KS1 &2: - as shown below: -

Building-Blocks of Provision for Building Mentally Healthy Schools in Northamptonshire



As informed by **TaMHS**
Targeted Mental Health in Schools



May 2011

Essential Underpinnings
for work with children

This 'Massage in Schools Programme' chapter was authored by, Mike Simons Specialist Senior Educational Psychologist and TaMHS Project Manager and Programme Lead.

The full document 'Northamptonshire TaMHS Project – Evaluation of Interventions April 2009 – March 2011' is available on the Northamptonshire Shoebox Website www.northamptonshire.gov.uk/shoebox

For training opportunities re 'Massage in Schools' and other interventions, please see www.northamptonshire.gov.uk/tamhs

For any further enquiries about 'Massage in Schools' or TaMHS, please contact Mike Simons – misimons@northamptonshire.gov.uk in the first instance