

Appendix A

New Glarus Study

Methods

Participants

One hundred and one children attending kindergarten and first grade at New Glarus Elementary School in New Glarus, Wisconsin, comprised the initial subject population for this study. New Glarus is a small, rural town (population approx. 2,000) located 35 miles south of Madison. The elementary school serves approx. 350 students in grades K-1, including three sections each of kindergarten and first grade. Class size averages 18 pupils per section.

Measures

The *Preschool and Kindergarten Behavior Scales* (PKBS)⁴ and the *Social Skills Rating System* (SSRS)⁵ were the instruments chosen for the pre- and post-assessment measures for this study. Each of these instruments is designed to document the frequency of a variety of social skills and problem behaviors, and each may be completed by teachers and parents. Pro-social behaviors were operationally defined as the social skills composite scores on the PKBS and the SSRS. Examples of these positive behaviors include cooperation and sharing, helpfulness, responsibility, kindness, social comfort, empathy, independence and assertion. Behavioral problems were operationally defined as the problem behavior composite scores on the aforementioned two instruments. Examples of these problem behaviors include self-centeredness, verbal or physical aggression, poor control of temper, attention problems and hyperactivity. Parents and teacher completed the two behavior rating instruments at the onset and conclusion of the four-month study, thus providing four pre- and post- data sets for each child.

Procedures

The principal investigators for this study were a licensed massage therapist and a clinical psychologist. The investigators conducted a one-day in-service program on the theory and utilization of Compassionate Touch, which is based on the Direction of Energy technique outlined in the text *CranioSacral Therapy*⁶. Attendees at the in-service included the six classroom teachers whose students would be involved in the study, several school administrators (guidance, special services, physical therapy), and other interested teachers from different grade levels.

The Direction of Energy technique is based on the premise that humans generate, store and transmit energies within their bodies. Indeed, electrical activity is necessary for all life, and within the physical body there are two generally recognized electrical systems. First is the electrical current responsible for muscle contraction, nerve transmission, glandular secretion and sensation. Second is the more recently identified electromagnetic system that emanates from atoms and cells and is potentially responsible for our overall health; this system is most immediately associated with human consciousness. Each of these systems may be detected and measured (e.g., electrocardiogram, electroencephalogram, energy field spectrogram)⁷, and each is influenced by the presence of other electrical

fields⁸. Compassionate Touch may be thought of as a positive and benevolent utilization of the Direction of Energy technique⁹.

The utilization of Compassionate Touch is remarkably simple. The person using the technique places one hand on either side of the physical area through which he/she wishes to direct, pass or organize a positive energy. Each hand assumes the role of an electrode, and energy is directed from the hand on one side of the physical area to the hand resting on the other side.

This technique is particularly helpful in cases of physical injury or pain. For example, if a child falls and bumps his leg, another child can position one hand over the painful area and the other hand on the opposite side of the leg, then simply imagine a line connecting the two hands. This intentional Compassionate Touch continues until a palpable softening is felt in the tissue at the site of the injury. This is often accompanied by a pulsation and a localized rise in body temperature. As the process comes to completion, the therapeutic pulse diminishes and the skin temperature returns to normal.

Since the population of this study was young school children, the term *helping hands* was used to help them conceptualize the touch as light, positive, caring contact between children. The children used both their hands on either side of the "owie" and then directed "happy thoughts" about the person that they were helping. When asked for examples of appropriate happy thoughts, the children were quite creative and suggested thoughts ranging from birthday presents, rainbows, dolphin kisses, chocolate cake and ice cream, to smiles, kisses, or "just anything that would make you happy so you could feel better."

Helping hands were used not only to assist someone with physical pain, but also to help those who were emotionally distressed or unhappy. For example, if one of the children felt sad or disappointed, another child could use his or her *helping hands* by placing them on either side of the child's heart or chest and then sending happy thoughts.

Following the in-service program, the investigators spent two days on site at New Glarus Elementary School discussing and demonstrating Compassionate Touch Helping Hands techniques with kindergarten and first grade classes, and encouraging teachers to identify appropriate instances in which children could be encouraged to help one another. As an additional teaching aid, a short song was created that children could sing each morning. This served as a reminder of the following four steps required in using *helping hands*:

1. A child in need of assistance is identified.
2. The child wishing to use his or her *helping hands* asks permission to do so.
3. If permission is granted, *helping hands* are placed on either side of the area in which assistance is wanted.
4. Happy thoughts are sent through the hurt from one *helping hand* to the other.

Finally, to encourage the children to help others and to feel good about themselves as compassionate individuals, the teaching staff put together a bulletin board of *helping hands*. Each time a child used *helping hands* to assist another child, the helper was invited to take a paper cutout of a hand and write his or her name on it, along with the name of the person who was helped. The paper hand was then attached to the bulletin board in the hallway for others to see and appreciate.

Separate pre- and post-means were computed for teacher and parent assessments using the PKPS and SSRS instruments. These scores were further subjected to a one-tail t test of statistical significance, $p > .01$. Raw scores were converted to percentile rankings, and graphs A-F depict the pre- and post-score comparisons by respondent (teacher or parent), gender and total group. From an initial sample population of 101 subjects, at the conclusion of the study we had complete data sets for 79 school children upon which to base our results.

Results

The data analysis showed a very clear and statistically significant ($p > .01$) increase in the demonstration of pro-social behaviors and a similarly significant ($p > .01$) reduction in behavior problems reported by the classroom teachers. Statistical significance exceeded .01 for boys and girls independently, as well as for the total group. Indeed, the data demonstrated an average increase of 148% in positive and caring behaviors, and an average decrease of 45% in aggressive or problem behaviors. Put another way, at the conclusion of the study these teachers observed more than twice as many acts of compassion and empathy, and only half the acts of aggression or behavioral problems as they reported at the study's onset.

In addition to teacher ratings on the PKBS and SSRS, parents also completed these instruments at the beginning and conclusion of our study. When regarded initially, it seemed surprising that parental pre- and post-test scores showed very little change. In fact, three of the eight pre- and post-measures were identical, and no sets of scores were separated by more than eight points. All these differences were statistically insignificant although, of the five measures reflecting a change, four were in the desired direction of increased pro-social and decreased aggressive behaviors.

Discussion

We began this research with the belief that human touch holds tremendous potential as a healing and empowering mechanism. While we are painfully aware of physical and psychological damage that can be perpetuated through abusive and wrongful touch, it seems to us that touch has been over-sexualized in our culture. Recent sexual harassment charges against the first grade boy who kissed a female classmate on the cheek, as well as the prohibition against touch that most elementary school teachers must live with, are exemplary of our culture's exaggerated avoidance of touch¹⁰.

Compassionate Touch, as defined by this study and utilized as described above, was shown to be highly effective in promoting an increase in positive and caring behaviors

while concurrently promoting a decrease in aggressive and problem behaviors in children. The fact that all measures completed by the classroom teachers were beyond the .01 level of statistical significance demonstrates at least a 99% probability that these desired changes in behavior were attributable to the Compassionate Touch Program.

The difference in perspective between parents and teachers may be understood by contrasting household and school environments. The parents' post-program evaluation of their children indicated essentially no change in either pro-social or problem behaviors. Yet the school environment typically offers many more opportunities to engage in peer interaction (both positive and negative), self-initiative and leadership activities.

That said, there were individual reports from parents who were highly impressed with changes demonstrated by their children. One such report deserves mention. On the second day of the program, one of the kindergarten teachers received the following note from the mother of one of her students: "I came home with an awful headache last night. Sara jumped up and said, 'I can help!' She placed her hands proudly on the front and back of my head and held it. It worked!"

In post-program interviews, the six classroom teachers were unanimous in their support of the program. Two unsolicited letters were received from teachers involved in the program.

Clearly, our world is in need of more compassion. The costs and risks associated with implementation of the Compassionate Touch Program with young children are extraordinarily minimal. Yet the potential benefits to the children involved and our communities at large are perhaps beyond measure.

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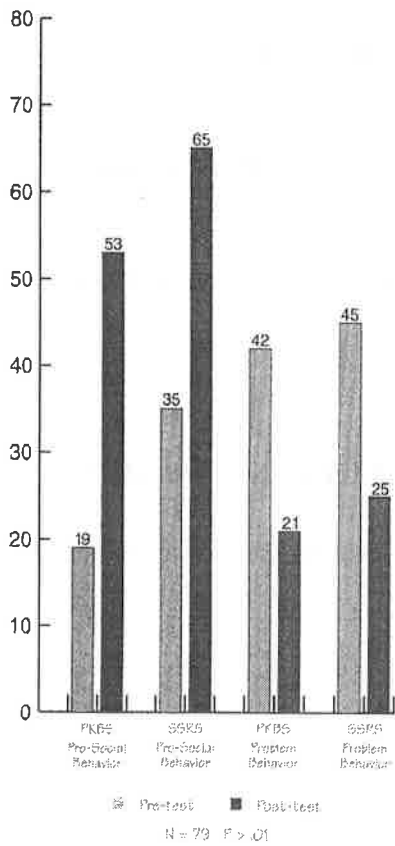
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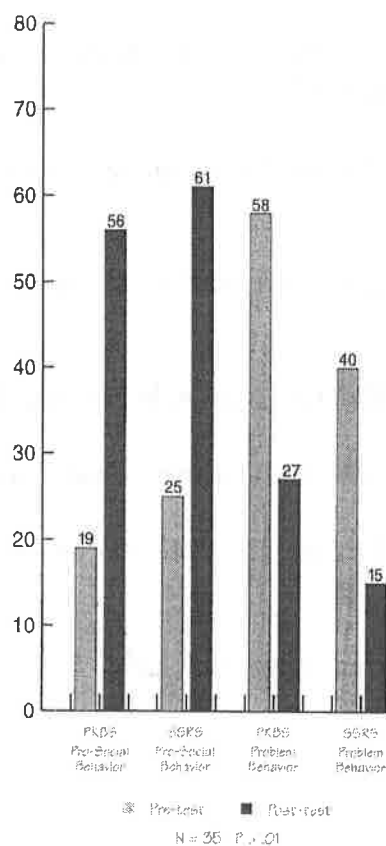
Chart of Study Results

Compassionate Touch — A Program with Lifelong Benefits

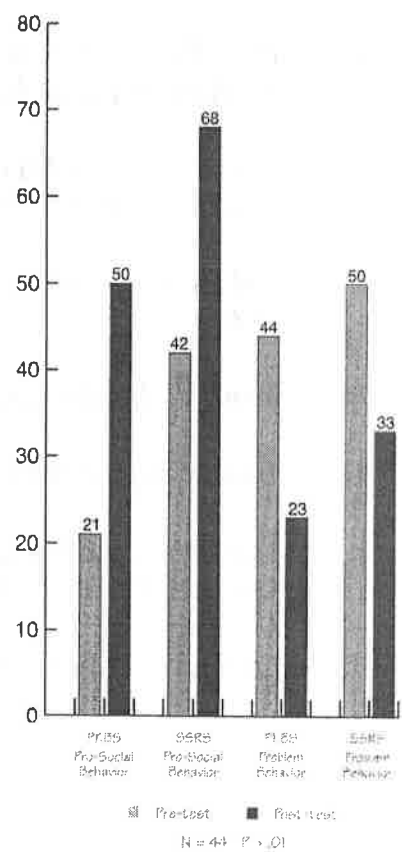
Teacher Pre- & Post-Test Scores for Total Group



Teacher Pre- & Post-Test Scores for Girls



Teacher Pre- & Post-Test Scores for Boys



Appendix B

Update on New Glarus Study

Students Participating in Year 1

In October 1999, the Compassionate Touch Program was introduced to kindergarten and first grade students at a single elementary school in Wisconsin. There were a total of 101 students in the first year of the study. An analysis of the evaluations showed a very clear and statistically significant increase in positive social behaviors ($p < .01$) and a statistically significant decrease in negative behaviors ($p < .01$). These differences were consistent with boys and girls.

Students Participating in Year 2

In October 2000, the Compassionate Touch Program was reintroduced to first and second grade students and introduced to kindergarten students. Children exposed to the program showed significant increases in self-esteem and positive social behaviors based on individual assessments by their teachers.

There were 173 students who participated in the program this year. Of these, 85 were girls and 88 were boys. There were no significant differences by gender or grade level. There were not sufficient numbers to analyze by race/ethnicity or by disability.

Students were evaluated by their teachers before the introduction of the Compassionate Touch Program and again at the end of the school year. This was done to determine if there were differences in their social skills including cooperation, assertion and self-control, and in problem behaviors including externalizing (such as aggressive behavior and poor temper control), internalizing (such as sadness and anxiety) and hyperactivity (such as fidgeting and impulsive acts). The following tables show the average values for these different measures for the pre-test and the post-test evaluations and whether the change was statistically significant.

| | Pre-test Mean | Post-test Mean | t-test Value | Significance |
|-------------------|---------------|----------------|--------------|--------------|
| Social Skills | | | | |
| Cooperation | 13.8988 | 15.4107 | 5.792 | <0.001* |
| Assertion | 11.1657 | 13.6568 | 9.960 | <0.001* |
| Self-Control | 13.5858 | 15.2840 | 6.675 | <0.001* |
| Problem Behaviors | | | | |
| Externalizing | 1.7427 | 1.3333 | 3.353 | <0.001* |
| Internalizing | 2.7861 | 2.7861 | - | - |
| Hyperactivity | 4.4503 | 3.6491 | 4.287 | <0.001* |

*Statistically significant

There were statistically significant changes in specific social skills. The strongest positive changes were in the areas of assertion and self-control. The mean increases in the assessments of the students' skills in the following clusters were all statistically significant.

Cooperation:

- Finishes class assignments within time limits
- Uses time appropriately while waiting for help
- Produces correct schoolwork
- Follows directions
- Puts work materials or school property away
- Ignores peer distractions when doing class work
- Keeps desk clean and neat without being reminded
- Attends to your instructions
- Easily makes transition from one classroom activity to another

Assertion:

- Introduces self to new people without being told
- Appropriately questions rules that may be unfair
- Says nice things about self when appropriate
- Invites other s to join in activities
- Makes friends easily
- Initiates conversations with peers
- Appropriately tells you when he or she thinks you have treated him or her unfairly
- Gives compliments to peers
- Volunteers to help peers with classroom tasks
- Joins ongoing activity or group without being told to do so

Self Control:

- Controls temper in conflict situations with peers
- Compromises in conflict situations by changing own ideas to reach agreement
- Responds appropriately to peer pressure
- Responds appropriately to teasing by peers
- Receives criticism well
- Accepts peers ideas for group activities
- Cooperates with peers without prompting
- Responds appropriately when pushed or hit by other children
- Gets along with people who are different

The only social skills that did not show a significant positive changer were acceptable use of free time and controls temper in conflict situations with adults.

There were statistically significant reductions in problem behaviors as well. While as a group the internalizing behaviors showed no difference, the externalizing and hyperactivity behaviors were significantly reduced after the program.

Externalizing:

- Fights with others
- Gets angry easily

Hyperactivity

- Is easily distracted
- Interrupts conversations of others
- Disturbs ongoing activities
- Doesn't listen to what others say
- Fidgets or moves excessively

Students Participating for Two Years

There were 84 students who participated in the program for both years. They were reintroduced to the program in the Fall of 2000. The following table shows that while improved social skills continued to be highly statistically significant, there were slight but not statistically significant decreased in two of the three problem behavior clusters over the two-year period.

These students received additional evaluations in the Spring and Fall of 2000, as well as a reintroduction to the program in the Fall of 2000. These midcourse evaluations showed slight increases in the externalizing and internalizing clusters. However, these were not statistically significant and the overall comparison shows a net decrease in these behavior clusters. This "summer slump" could point to the need for reinforcement of the program with parents and caregivers during school vacations.

| | Pre-test Mean | Post-test Mean | t-test Value | Significance |
|-------------------|---------------|----------------|--------------|--------------|
| Social Skills | | | | |
| Cooperation | 13.3214 | 15.6905 | 4.903 | <0.001* |
| Assertion | 11.0361 | 14.3855 | 7.367 | <0.001* |
| Self-Control | 13.2500 | 16.0357 | 7.104 | <0.001* |
| Problem Behaviors | | | | |
| Externalizing | 1.6429 | 1.2857 | -1.439 | <0.001* |
| Internalizing | 2.7500 | 2.1667 | -1.532 | <0.001* |
| Hyperactivity | 4.4167 | 3.1786 | -3.506 | <0.001* |

*Statistically significant

Conclusions

The significant increases in the social skills assessments of the students demonstrates the positive effect of the Compassionate Touch Program on the students' abilities to cooperate, assert themselves appropriately and control their behavior. It also shows specific improvement in factors that contribute to increased tolerance and acceptance of others.

There was significant decrease in problem behaviors, specifically those related to anger management, disruptive and distracted behaviors. The notable decreases in fighting and anger demonstrate positive social learning and the development of self-control and compassion for their peers.

The learning of these skills at an early age will benefit these children as they grow up and move into more social interaction as adolescents and young adults.

Appendix C

Comments From Teachers

“During the course of the four-month study of the Compassionate Touch Program, I have noticed that many of the children are more aware of those around them. Some children have become very caring to those that are hurt.

“I have also noticed that this technique of helping others has increased the self-esteem of some children. This is a simple technique that young children are able to do regardless of their academic abilities.

“I am very pleased with this simple concept and technique as a way of helping children become more compassionate and caring for others, as well as building good feelings about themselves.”

Janet Austin
First Grade Teacher
New Glarus Elementary School

“I feel the involvement with the Compassionate Touch study has been beneficial for both my students and myself. The ‘helping hands’ have allowed my students to feel a strong sense of belonging to a group and the willingness and eagerness to care for and help members of that group. Also, the students felt empowered when their ‘helping hands’ were needed by other students.

“Through this study, I have been able to observe the growth of my students’ abilities to help others in need. The Compassionate Touch study has not only helped to foster good feelings in my classroom, but also acted as a strong community builder for our room.”

Jamie Brecklin
Kindergarten Teacher
New Glarus Elementary School

Appendix D

Step-by-Step Teacher Guide

Each Morning (in no particular order):

- Ask the children if anyone has used their *helping hands*. Encourage them to share their stories with the other children.
- Play the CD or cassette tape and sing the *helping hands* songs. Indicate song words on the poster (Appendix E).
- Pointing to the procedure poster, ask the children to repeat the steps for using their *helping hands* (Appendix F).
- Generously give out the *helping hands* stickers to the children.

If principals, teachers or parents ask for more information about The Upledger Institute, The Upledger Foundation or CranioSacral Therapy, it is readily available by calling 1-800-233-5880. Please ask for the Community Relations Department.