

An Analysis of a Children's Relaxation/Stress Control Skills Program in an Alternative Elementary School

Shaunna Taylor and **Terry Orlick**, Canada

Shaunna Taylor is a graduate of the Master's Program in Sport Psychology at the University of Ottawa. She is a former athlete who has been working as a performance and life enhancement consultant in a variety of contexts. Shaunna is the mother of three young girls and continues to do consulting work with children, teachers, coaches and athletes, while living the most active and balanced life she can.

Email: shaunnataylor@sympatico.ca

Terry Orlick had the pleasure of serving as Shaunna's thesis supervisor while she was pursuing her Master's Degree at the University of Ottawa. Terry is the father of three wonderfully spirited girls, and in his spare time works as a Professor, applied researcher, writer and consultant. He has devoted much of his life to enhancing the lives of children and high level performers.

Email: excel@zoneofexcellence.com

Abstract

The findings of this study clearly showed that the elementary school children who took part in this Relaxation/Stress Control Skills program learned to relax and successfully implemented the stress control strategies taught in the program in a variety of real world situations. The classroom teachers who taught the program made adaptations along the way to meet the specific needs of their students. The children and the teachers enjoyed the program activities and felt that it affected them in positive ways. Suggestions are provided for anyone who wants to introduce a positive living skills program to elementary school aged children.

Introduction

The world seems to have become a more complex, demanding, and uncertain place for children and adults alike. Stress in children has become a major concern for teachers, parents, sport psychologists and child psychologists. The intensity and frequency of childhood stress has accompanied the increased pace of change in society. Single parent homes, bullying, violence, feelings of exclusion or uncertainty, and the trend to push children to excel at younger ages is on

the rise. In short, life seems to have become more complex and more stressful for children and adults alike, for a variety of reasons (Orlick 2001, 2002b; Elkind, 1988; Brenner, 1984).

Studies have been conducted to identify stressors in school children and to find out what coping strategies were commonly used by the children to deal with stress. These studies indicate that children felt stress from a wide variety of sources and unfortunately did not possess adequate coping skills to

deal effectively with this stress. A lack of effective coping strategies for ongoing stress can have profound negative physical, psychological, social, behavioural and learning effects on children and adults (Orlick, 2002b, 2001, 1995; Dickey & Henderson, 1989; Ryan, 1989; Blom, Cheney & Snoddy, 1986; Chandler, 1985).

Various attempts have been made to teach children to identify stress and develop effective coping strategies through relaxation, but most of these interventions were not designed in a "child-like" or "playful" manner, and were not specifically created for children (Kraft & McNeil, 1987; Marley, 1984; Martin, 1988; Smith & Womack, 1987; Stroebel, Stroebel & Holland, 1980).

In an attempt to rectify this problem, Orlick (1993, 1996, 1998, 2001, 2002a) spent many years creating a Positive Living Skills (PLS) program for children which utilized a playful, joyful or game-like approach as a key element to keep the children interested and motivated. Imagination and creativity were used in creating the activities and imagination and creativity is nurtured when children are participating in the activities. The goal of the program is to teach children valuable coping and life skills that can be used in real-world situations, both in and outside the classroom. Orlick believes that by teaching children Positive Living Skills, we provide them with the essential tools for quality living. We do this by developing their confidence, improving their focus, helping them to maintain a positive perspective within themselves and with others, teaching them how to relax and deal constructively with stress, conflicts or setbacks (Orlick, 2001, 2002a, 2002b).

In the first major study testing the effectiveness of Orlick's program for teaching relaxation and stress control skills to elementary school children (Cox & Orlick, 1996), it was found that the children who participated

in the program learned to relax and successfully implemented the relaxation/stress control strategies in a variety of real world situations. Children in control groups who were not exposed to the program made no improvements in their abilities to relax or cope effectively with stress.

Orlick's Positive Living Skills (PLS) program for elementary school children was initially delivered to the children by Orlick and his graduate students who he had trained to deliver the program. These programs achieved significant results. (Cox & Orlick, 1996; St. Denis & Orlick, 1996). In subsequent studies, the regular classroom teachers delivered the PLS program themselves, after participating in a 3 hour workshop and being provided with the program materials which included, Orlick's book, *Feeling Great : Teaching Children to Excel at Living*, a teacher's guide and audio tape or audio CD activities for the children. Teachers are the logical choice for successfully delivering a PLS program within a school context, and they have the advantage of being able to integrate the application of skills learned into the daily school schedule (Gilbert & Orlick, 1996).

Mental Skills Training for School Children

Stress Control

The philosophy underlying the PLS program for Children was the belief that if children were taught these mental skills at an early age, they would benefit from the opportunity to utilize, refine and practice these skills as they matured and grew into adults. Selye (1956) in a ground-breaking study on children and stress, expressed support for this philosophy when he wrote that it was vital that children begin to learn coping strategies for their stressors at an early age because "all codes of behavior sink in best if a tradition is established" (p. 5).

An early study conducted in the Swedish school system provided support for the notion that children and youth benefit from mental skills training (Setterlind and Patriksson, 1982). Eighty percent of the children aged 12 to 18 who took part in the six week intervention program found it easy to learn to relax, and 90% felt more confident, relaxed and happy following the intervention sessions. Other longer term effects were also recorded, such as a decrease in sleep difficulties and headaches. A more recent ten weeks intervention study testing the effectiveness of Orlick's PLS program for children indicated that younger children who took part in the intervention increased their ability to reduce their heart rates at will, increased the frequency of their highlights, and were able to employ stress control strategies in a wide variety of real world situations (Gilbert and Orlick, 1996).

Highlights

The successful use of highlights as an approach to teaching positive perspectives was discussed by Orlick (1993) and Siccone and Canfield (1993). Highlights have been defined as simple pleasures, joys, positive feelings, meaningful contact or anything that improves the quality of that day for that person (Orlick, 2001). Orlick suggested that if children are taught to search for and identify their daily highlights, they will experience them more often.

In a study focusing on highlights (St. Denis & Orlick, 1996), children participated in a number activities designed to nurture positive perspectives and were encouraged to discuss and record their highlights in a special highlight logbook. The results of this study showed that children could be taught to look for and identify their highlights, and that the frequency of their highlights increased significantly, as was illustrated by an analysis of their logbooks. A subsequent study by Gilbert and Orlick (1996) sup-

ported the positive and significant results of teaching highlights to children.

Purpose

The purpose of the present study was to assess the effectiveness of Orlick's Positive Living Skills (PLS) program with children in an alternative elementary school. More specifically, this study investigated: the extent to which children in the program increased their skills at relaxation and stress control, how classroom teachers adapted the PLS program to suit their own unique classroom environments, and whether teachers felt they were personally affected through their participation in the program.

Method

Participants

Students attending an alternative or open school were selected to participate in this study. Alternative schools are organized so that students of many different ages and backgrounds learn and play together. Alternative schools use multi-aged groupings and encourage the participation of family and friends in the classroom learning process (Crichton, 1994). The alternative or open school concept has both the teacher and child participating in a two-way flow of sharing information and ideas about how the day's curriculum will proceed.

Teachers in the alternative school environment make considerable adaptations to conventional curricula, to make it "fit" their particular student population. Children are encouraged to express what "works" for them and what does not work. It is precisely for this reason that it was expected that the alternative school teachers and students participating in this study would provide valuable feedback and recommendations for further improvements to the intervention program.

Four elementary school teachers from the same alternative elementary school served as participants for the study, along with their students, averaging 25 students per class. Each teacher participant taught a different grade level, ranging from grades 1 through six, with 3 out of 4 classes being classes of two grades combined: 1/2 split, 2/3 split, 4/5 split and 6.

The students in each class served as student participants. The main goal of this study was to learn from each of these teachers and their students.

Data Collection Procedures

Relaxation/stress control

The Heart Rate Monitor (DT 1000) was used to measure the extent to which the children learned to relax. The DT 1000 monitor gives digital heart rate readout within a few seconds. It has a reliability rate of 97%, when validated against the Vantage XL - Polar sport tester (Cox & Orlick, 1996). Prior to the intervention pre-testing, the researchers conducted a reliability check on a separate class of children. Two researchers recorded the same child's heart rate at the same time prior to the relaxation attempt. The same procedure was carried out 60 seconds after the child was instructed to relax. The inter-recorder reliability rate was 99%

To record heart rate data, the researchers found a quiet spot in the classroom, away from the rest of the class, to conduct the testing. Each child was then fitted with a heart rate monitor and a baseline heart rate was established. Twenty seconds after a heart rate appeared on the monitor, the researcher recorded the child's heart rate. This 20 second delay ensured that the digital heart rate readout had stabilized, in order to provide an accurate heart rate measure. A team of three researchers conducted the pre- and post-testing, all of whom had training in

using the heart rate monitor, thus ensuring reliable recordings.

The researcher then gave the following instructions to the children: "I'd like you to try to relax the best way that you know how for one minute". After exactly one minute, the researcher recorded the heart rate monitor's digital readout, while the children were still trying to relax.

Student logbooks

Each child participating in the intervention was given his/her own logbook. Logbooks were used to identify and record: (1) stressful experiences, (2) coping or relaxation techniques attempted, (3) how the student felt both before and after the stressful experience, and (4) heart rates before and after a number of relaxation attempts during the program.

At the conclusion of the intervention program, the logbooks were collected and analyzed. A content analysis was performed to assess the extent to which the children had applied the relaxation and stress control activities that they had learned, in their daily lives.

Teacher curriculum guides

Each teacher participating in the intervention program was given a curriculum guide which gave session by session instructions on how to conduct the intervention program. All teachers were instructed to make notes in their curriculum guides after each intervention session. Problems, adaptations, suggestions or positive feedback pertaining to each individual session could be recorded here. At the conclusion of the intervention program, the curriculum guides were collected and a content analysis of all session notes and any program changes was conducted.

Interview

Both structured and unstructured interviews were used in this study. From the onset of the program, the researcher met with the teachers on a weekly basis for casual and unstructured interview sessions. Any concerns, suggestions or insights the teachers had were discussed during these sessions and the researcher kept a logbook and recorded all key points. Structured interviews were held with each of the teachers at the end of the study. These interviews were audio-taped and later transcribed for analysis.

All student participants were interviewed at the conclusion of the intervention program. They were asked to honestly express their feelings about the program. They were asked whether or not they had learned anything from the intervention, whether or not they had used any of the strategies, whether or not they felt that they would continue to practice the program's activities on their own and whether or not they enjoyed taking part in the program.

Qualitative methods were used to explore the teacher and student feedback. The research design was constructed to suit the unique constraints and parameters of the study, using quantitative and qualitative methods. The teachers' perceptions of the program changes made were taken directly from the teachers' logbooks, notes, questionnaires and interview transcripts. The teachers were given free rein to be as flexible and creative in their delivery of the intervention program as they deemed necessary and beneficial. The first author recorded the teachers' reflections, consulted extensively with the teachers, and after many hours of "deliberate reading," wrote their stories in a manner similar to Partington's (1995) study with musicians.

An attempt was made to capture the overall meaning and values underlying the teacher's reflections, notes and conversational responses, to learn from their expertise.

Questionnaires

After the first week and mid-way point of the intervention program, a questionnaire was given to the teachers to assess their perceptions of the program. They were asked if they felt that they were affected in any way by the program, what adaptations they might have made to the program contents and how they perceived the program's effects on their students. Teachers were also asked to provide recommendations for improving the program for the future. All of the teacher interviews and questionnaires were administered by the first author.

Final feedback session

Once all the data had been collected and a preliminary analysis had been completed, the researchers presented these findings to the school. The audience consisted of a group of teachers, student-teachers, parents and the principal. A question and answer session took place at the end of the session, giving parents and teachers a chance to give feedback. The school principal concluded the session with an overview of how the program was perceived by the school administration and notes were taken by the researcher.

Intervention Procedures

Before the intervention began, the teachers participated in a 3 hour workshop which explained the rationale behind the program, how to run the activities, how to use the logbook and allowed them to listen to a sampling of the audio-taped exercises. During the course of the study, the first author met with the teachers on a weekly basis to answer any questions or concerns.

All students participated in pre- and post-testing as well as weekly intervention sessions for 10 consecutive weeks. The duration of each session varied from class to class. It was suggested that the teachers conduct the program three or four times weekly for approximately 15-20 minutes per ses-

sion, but were given license to adapt this time frame however they saw fit.

The intervention program consisted of activities from Orlick's PLS program for children (Orlick, 1996, 2001), which were taught through the use of standardized audio-tapes. The students were taught a series of relaxation and stress control activities, as well as the basic concepts about stress and relaxation. They were also introduced to what highlights are and how to recognize them. A typical intervention session would begin with an introduction by the teacher, a relaxation audio-taped activity or a highlight activity and a short discussion about the activity and/or mental skill being used or taught that session. If time allowed, a session would sometimes end with a logbook activity pertaining to the mental skill being discussed.

All of the intervention sessions were conducted by the classroom teacher, through the aid of a curriculum guide and the PLS audio-tapes (Orlick, 2001). Each teacher was encouraged to review the curriculum guide and adapt it in whatever way they felt would best serve their class. This varied from following the guide completely, to making minor or major modifications in how the program was delivered.

Results

The results from this study were encouraging and significant. The students successfully implemented the relaxation and stress control strategies in their daily lives (as indicated by student logbooks and student interviews), and an analysis of relaxation heart rate scores on pre- and post-tests showed a significant increase in their capacity to lower their heart rates by the end of the 10-week program. Teachers also made modifications to the intervention program and provided valuable suggestions for program improvement.

Relaxation Pre- and post-test heart rate scores

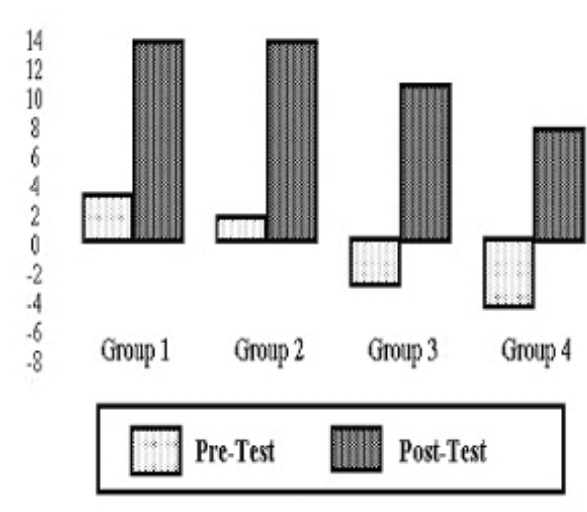
Heart rate (HR) difference scores were used to assess the extent to which children learned to relax themselves at will during the intervention program. Results demonstrated that every group was able to decrease their heart rate after participating in the intervention program. When asked to relax for a period of 60 seconds before the intervention began, on average, Grade 6 students reduced their HR by 2.6 beats, Grade 4/5 students reduced their HR by 1.7 beats, Grade 2/3 students increased their HR by 2.1 beats, and Grade 1/2 students increased their HR by 3.7 beats.

When asked to relax for a period of 60 seconds at the conclusion of the intervention program, on average, Grade 6 students reduced their HR by 12.6 beats, Grade 4/5 students reduced their HR by 13.2 beats, Grade 2/3 students reduced their HR by 9.9 beats and Grade 1/2 students reduced their HR by 7.7 beats (see Figure 1).

Figure 1 shows the extent to which children could lower their heart rates by relaxing for 60 seconds on the «pre-test before the intervention program, and on the post-test after the intervention program.

An attempt was made to assess the extent to which the children used the relaxation and stress control strategies they had been taught, in their daily lives, both inside and outside the classroom. This was done through a qualitative analysis of the children's logbooks, and was further validated through interviews with the children and their respective teachers.

Average Beats per Minute Children Lowered Their Heart Rate on Pre-test and Post-test.



Logbook Analysis of Implementation of Relaxation/Stress Control Strategies

An analysis of the children's logbooks and interviews revealed that 81 out of the 85 children (95%) who took part in the study, successfully used relaxation/stress control strategies that were taught in the intervention program in situations outside of the intervention sessions. More specifically, all of the children in Grade one/two (19 out of 19), 19 out of 21 children in Grade two/three, 28 out of 29 children in Grade four/five and , 15 out of 16 children in Grade six provided specific examples of successfully using the intervention skills outside of the intervention context.

Some commonly cited circumstances where they used using the relaxation/ stress control strategies included at home when they had difficulty falling asleep, during conflicts with siblings or friends, when playing games or sports, while doing schoolwork/ homework, and when they were scared or hurt.

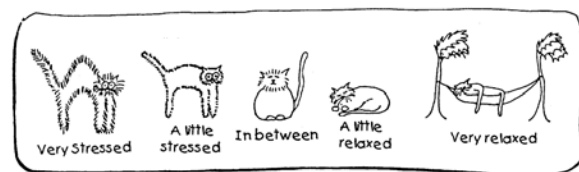
To meet the criteria for successfully implementing a relaxation/stress control strategy in their daily lives, a child had to report spe-

cific examples of successfully using the strategies in his or her logbook. To assess the extent to which children were successfully applying various relaxation/ stress control strategies, they were requested to answer the following questions in their logbooks:

1. Did anything stressful happen yesterday or today? Yes or No

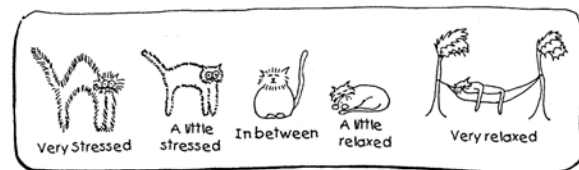
If yes, what happened?

How did you feel when this happened?



2. Did you do anything to feel less stressed? Yes or No
If yes, what did you do?

How did you feel after doing this?



The children rated their level of stress using the pictorial "cat scale", which was first developed by Orlick, for the Cox and Orlick (1996) study. The scale consisted of a five-point scale ranging from very stressed (5), to very relaxed (1). They rated how they felt initially when faced with the stressful situation or event and then how they felt after using a stress control strategy from the intervention program. The following examples of the children's responses were taken directly from their logbooks and the children's spelling was retained.

Example #1 (Girl, Grade 4/5)

Q. Did anything stressful happen?

A. Yes

Q. If yes, what happened?

A. I was mad at a player on my ringete (ringette) team.

Q. How did you feel when this happened?

A. Rating = 1, very stressed.

Q. Did you do anything to feel less stressed?

A. Yes

Q. If yes, what did you do?

A. 1 Breath Relaxation. (One Breath Relaxation)

Q. How did you feel after doing this?

A. Rating = 5, very relaxed.

Example #2 (Boy, Grade 2/3)

Q. Did anything stressful happen?

A. Yes

Q. If yes, what happened?

A. When I can't (can't) sleep, sometimes.

Q. How did you feel when this happened?

A. Rating = 2, a little stressed.

Q. Did you do anything to feel less stressed?

A. Yes

Q. If yes, what did you do?

A. Special Place Relaxation (Special Place Relaxation).

Q. How did you feel after doing this?

A. Rating = 5, very relaxed.

Example #3 (Girl, Grade 6)

Q. Did anything stressful happen?

A. Yes

Q. If yes, what happened?

A. I was tired and worried because (because) my book report was due the next day!

Q. How did you feel when this happened?

A. Rating = 1, very stressed.

Q. Did you do anything to feel less stressed?

A. Yes

Q. If yes, what did you do?

A. Tree-it, so I would get to work! (on my book report).

Q. How did you feel after doing this?

A. Rating = 5, very relaxed.

Example #4 (Boy, Grade 1/2)

Q. Did anything stressful happen?

A. Yes

Q. If yes, what happened?

A. Morgan (my brother) was teasing (teasing) me.

Q. How did you feel when this happened?

A. Rating = 1, very stressed.

Q. Did you do anything to feel less stressed?

A. Yes

Q. If yes, what did you do?

A. 1 Breath Relaxshum (One Breath Relaxation) and Change Channels (Changing Channels).

Q. How did you feel after doing this?

A. Rating = 5, very relaxed.

The four preceding responses provide typical examples of the successful implementation of the relaxation/stress control strategies

learned in the intervention program that were applied to the children's "real life" stressful situations. As in Cox and Orlick (1996) and Gilbert and Orlick's (1996) studies, a stress control strategy was deemed to have been "successful" if the student's feelings and ratings on the five-point cat scale moved from stressed to relaxed after implementing the strategy. Almost all children recorded successfully using the intervention program's strategies in their daily lives to relax and/or relieve stress.

The children's teachers also confirmed that a very large percentage of children discussed, recorded in their logbooks, and reported applying these strategies successfully outside of the intervention sessions.

Student Post-Intervention Interviews

An interview was conducted with each child participating in the study (n=85) following the intervention period. The purpose of these interviews was to assess the extent to which the children were using the relaxation/stress control program in "real life" situations, and to gain insight into their views and opinions regarding the intervention program. The interviews were conducted by a team of researchers possessing experience in interviewing and knowledge in the area of mental skills training and children.

When asked how they felt about the intervention program, 97% of the children reported that they liked it. Some representative responses were: "It was good and pretty fun", "It made me feel better", "I liked it!" When answering the question, "Did you like the program or not?", only two out of the eighty five children responded in a less than enthusiastic way with, "Not really," and "Not very much".

When asked whether or not they learned anything from the program, 97% of the children answered that they had learned the following strategies or concepts: (1) to relax

(e.g., "to calm down when I'm hyper", "I learned how to relax on my own"), (2) to feel better (e.g., "When I'm not feeling good, it helps me feel okay", "When I'm mad, I can change channels to feeling happier"), and (3) to cope with stress (e.g., "When I got the wind knocked out of me, I practiced my breathing to feel normal", "It helps me feel better when I'm nervous about things").

When asked if they had told or taught anyone about what they learned from program, 61% of the children said "yes". The people who they told or taught included family members, such as parents, siblings and cousins, or friends who had not participated in the program.

When asked whether they would continue to use the skills or concepts they had learned in the program, 89.4% said "yes" that they would use continue to use what they had learned in their daily lives. They cited a variety of specific situations where they felt they would continue to use the program strategies, such as for falling asleep at night, when they were being bothered by others, when playing sports, and when they felt "bad" (e.g., scared, sad, embarrassed or nervous). The fact that almost 90% of the students felt that the skills they had learned were valuable enough to continue to use in the future, and cited specific examples of where they could use them in their daily lives, is promising.

Teachers Modifications Intervention Program

One of the goals of this study was to examine the extent to which the teachers modified the PLS intervention program to meet their students' needs, and whether this modified program had comparable positive results on the children's ability to relax and cope positively with stress (Cox & Orlick, 1996; Gilbert & Orlick, 1996). A qualitative analysis of session notes kept by each of the four teachers, combined with weekly field notes

taken by the first author and post-intervention interviews, clearly showed that each teacher had made modifications to the intervention program.

Teacher 1 grade 6

This teacher played several taped exercises, one after the other, at least once a week, as compared to one prescribed taped exercise in the curriculum guide. She felt that this really got the children immersed in the relaxation process.

I really like to play one whole tape side for twenty minutes, let them sit at their desks or lie down and just do it and relax, get into it, so they could get to know it. This is not a written program where they have a little card and they say, "Okay I'm going to change channels now". They have to have this really internalized, and know what they're doing. Which is why I like to actually just do a couple, and review. Because sometimes I get down there with them and for 20 minutes it is total silence. The tapes are excellent.

She found that splitting up the boys and girls during relaxation sessions on the carpet eliminated fidgeting and lack of focus on the exercises.

Being down there on the carpet can get to be like one big sleepover, (in grade six) they're much more hormonal than the grade one's, two's, three's and four's...This environment is for learning and relaxation. We have girl days on the carpet and boy days, carpet days and non-carpet days in here.

In the question period, she tried to let the children lead the discussion, as she felt that they were entering a time in their development when it is very awkward to share very personal information.

Not too much probing if they seem shy or embarrassed. It's awkward in grade six. They're really trying to grow up and be individuals. I think the relaxation has really worked.

She cut down on the times she did the logbooks and put an emphasis on the taped exercises and relaxation (testing the pulse every session).

Do the exercises, and compliment with the logbooks every so often. Let the kids lead you. Then they'll enjoy it. They know what they want, what they like, what works for them. I let them do the exercises. I see them relaxing. They tell me it works.

Teacher 2 grade 4/5

This teacher added more "physical" exercises to illustrate the concrete physical differences between a relaxed versus a tense state. She added some of her own martial arts inspired exercises and stretching exercises to the intervention sessions.

I think there should be more of a physical component to it. A physically active component to it. Not necessarily all the time, but at different points ... I concentrated on incorporating something new. I also combined a physical or breathing exercise with the taped exercises.

Instead of the recommended 15-20 minute sessions, at a frequency of 3 or 4 times a week, she conducted a 45 to 55 minute session, once or twice a week.

I also think that there is room for making the sessions longer. I know some might argue that for the grade one's and two's the shorter sessions are better. Shorter sessions go with shorter attention spans, but I think that the longer sessions for the older kids at a lower frequency per week allows them to really get into it.

I understand that everything at this point is kept really short, 15 to 20 minutes, to introduce it. But I think to really be effective, each and every one of those exercises can be expanded a lot longer. I think the children should be able to go beyond a 2-5 minute taped exercise to up to 15 minutes of relaxation, and feedback, as well ... I have really lengthened my sessions to one or two per week for the better part of the afternoon each time.

I really like to stress that they should be the demonstrators, so that they are learning from each other as well. I tied in the breathing exercises and relaxation with the no smoking campaign. The kids came up with their own visualizations of breathing - a visualization story of how the lungs were working for them. There are so many things you can do with it. Next year I will continue and I hope to do even more.

Teacher 3 grade 2/3

This teacher alternated doing logbook exercises and taped exercise sessions, so that the children could spend more time with each.

To start, I took them out of the classroom for every session. Every day, that was the routine, to go out of the class into the auditorium. By the time I would get them there, do the tape or exercise, re-group, post-discussion, logbook, back to class, it was very time-consuming. I spoke to (Grade the 1/2 Teacher) and she was doing one or the other, either a tape and discussion, or logbook and discussion. That was what I started doing as well. I understand that for the first 5 lessons or so, it is important that the kids get a holistic look at the whole thing, how it all fits in, but after that, I was able to break it up a bit into more manageable sessions. I would give some examples (for application) from my own

life, and there was more of a consensus-type feedback sometimes. Over the course of time they would open up with more specifics about application. As it went along, I was getting spontaneous answers like, "I used it for this, at this time, etc." One common thing was when I would ask, "Does anyone have trouble falling asleep" Oh yes. yes. Those kinds of things the kids really opened up to. The kids would point out favourite techniques they did use that worked for them, floating on clouds, special place. They loved drawing their special place in their logbook

Teacher 4 grade 1/2

This teacher modified the suggestion for including both a audio taped activity and a logbook activity in one session because she felt it was taking too much time for the younger children to get fully engaged in both. She also initially introduced the audio taped activities by reading the scripts the children herself.

They have difficulty writing and it takes an awfully long time to get the logbook activities organized. They always want to come up to me and show me everything and they always want to finish everything. Twenty minutes turns into an hour and it's really just too much for a grade 1/2 day to get it all in...We're taking it much more slowly. I'm only doing one-half a lesson at a time (an audio tape or a logbook activity). That's really working out.

Initially, I didn't use the tapes. Instead, I read the text so that it could be paced and they would have a familiar voice on which to focus. Once they had the routine down, I introduced the tapes. I felt this was a worthwhile transition.

(For some of the logbook activities) I had them sit at their desks and open

their logbooks to the day they were supposed to do. I made a little game of it. I asked them to set their heads on the logbooks so all those good thoughts from the last day would flow back into their heads.

When they got up from imagining their special place, (I would tell them) they will pick up their heads and the special place will be right there on the page, ready for them to trace it out. It worked out really well and by doing it at their desks we saved time, so we were able to do the relaxation and the logbook that day. It was nice.

She began letting the children use a highlight jar at any time of the day. The highlight jar became a regular fixture in the class, and was used whenever the teacher or students felt someone needed it.

We also are using a highlight jar a lot. They are often asking if they can go and pull out a highlight! It will happen at any time of the day, not just relaxation time.

(We played old favourites more often or on request by the end of the intervention). We took a class vote, and spaghetti toes and jelly belly were the first two favourites. They were also the favourites from the onset of the program near the beginning. They still really like them. And Star Track, too.

For this age group it would be nice to have 10 solid ones (taped activities) that would be very different from one another and that they could really get to know. I really believe that if we had 10 very distinct relaxations to work on, rather than having more, that they will learn them and they can become part of them, rather than have 20 or more that they don't know all that well.

Each teacher used her own modified approach to deliver the PLS program to the children and each approach was successful in meeting the programs objectives. The important point here seems to be that as long as the children listen to the content on the audio taped exercises and these skills and exercises are repeated, and reinforced with respect to application in real world situations, the program has a very high probability of being successful.

Teacher's Perceptions about the Intervention Program

The teachers in this program were asked to reflect on whether the PLS program had personally affected them. All four teachers came into the program with varying levels of skepticism. They were all interested in seeing how their students would respond to the intervention program. Prior to its commencement Teacher 1 expressed a feeling of being anxious to "get the program over with", as she was feeling overwhelmed, with an already heavy workload.

All four teachers personally participated in the intervention exercises with the children in their classes, when circumstances allowed. They reported using the intervention sessions as a break for themselves, as well as their students. Teacher 3 expressed that she personally enjoyed taking part in the exercises with her students, and felt that her students as well as their families benefited from the intervention program. Many her students told her they liked to use the taped activities before they went to bed. Teacher 2 indicated that being a part of this study had rekindled her interest in relaxation techniques and had inspired her to become more involved in stress control with her class, her family and on her own.

All four teachers reported enjoying the activities and being pleased with the positive results they witnessed in their students. They all reported seeing an increase in the chil-

dren's abilities to focus on tasks, an increased awareness of what makes them happiest, a better understanding of what stresses them and what works best for them in dealing with stress.

Teacher Recommendations

The teachers in this school were accustomed to making adaptations to most conventional curricula on an ongoing basis in order to best meet the needs of their classroom populations. Our intervention program also underwent a number of adaptations. The teachers encouraged their students to express their opinions towards the intervention activities. This helped them to better understand what worked best and what did not work best for these children. Open dialogue meant the teachers and students could consult with one another in order to shape and refine the intervention program and how it was being applied in their lives.

The teachers highlighted the following recommendations for others who intend to implement the Positive Living Skills Program with elementary school children.

Focus on one element at a time. For younger children concentrate on one taped activity or one logbook activity for each session, giving adequate time to the activity and discussion about the applications for the activity. The point here is to guard against overloading the session or the students to the point where children are feeling rushed or stressed to get things completed.

Let the children lead the discussions whenever possible. Involve the children fully with respect to asking questions, sharing answers, and discussing options for applying what they are learning.

Get to know a reasonable number of relevant activities very well. For the younger children, choose a reasonable number of taped activities that are best suited to

the needs of those children. In certain instances with very young children, it might be of value for the teacher to read the audio taped scripts for the first few sessions.

Repeat sessions/lessons until they are learned. Sessions that are disrupted due to extraneous circumstances should be repeated to ensure the children have an opportunity to learn the concept presented that day. Repetition of all taped activities is important.

Seize opportunities to show applicability. Use the program concepts or exercises at any time of the day to show their applicability to real issues or "real life" situations. Children learn best by experiencing concepts and by seeing how those concepts or skills can be applied. Where possible tie in application of skills learned to ongoing school activities and campaigns, and into any situations where it would be helpful to control distractions.

Increase the frequency or duration of the intervention session whenever possible or deemed of value. More time with learning and applying relevant activities can increase the chances of children living these skills and perspectives.

Consider adding physical activities and/or other positive living skills strategies. Additional activities that serve to compliment the basic concepts taught in the relaxation/stress control program can be of value.

Maintain flexibility. Maintaining a sense of openness and flexibility within program activities is important to the overall success of the program. For example, Teacher 4 allowed her children to whisper their highlights to each other after the taped exercises were completed, because the children in her class liked sharing secrets. Teacher 3 provided the time for children to have a longer logbook session on the first day after Spring

Break, as the children had an abundance of experiences they wanted to record.

Post-Study Feedback Session

Parents of the participating children were invited to an information session offered prior to the intervention program and were also invited to the post-intervention session. At post intervention session, many parents shared positive comments regarding the impact the program had on their children. They provided concrete examples of how the program was being used by their children at home and in other contexts. It was suggested that parents be more involved in the program, and that the design of the program be modified to more actively include the parents and the home environment.

At the post intervention feedback session, the principal of the school indicated that she was very supportive of the Positive Living Skills program and expressed this to the group of parents, teachers and researchers gathered together.

“I wholeheartedly advocate the inclusion of the (PLS) program in the regular curriculum of our school. If there are all sorts of extra things like feelings like anger ... coming into the school, it will adversely affect school climate. Children who have not yet developed self-discipline will behave appropriately because their teacher is present. We want the kids to be in control not because (the teacher) is in the room, but because they want to be in control”.

One Year Follow-up

The researcher contacted the teachers and principal one year after the study took place. All four teachers were continuing to use the program, in varying capacities, and were using their own modified versions of the program. Because the alternative school system uses multi-aged groupings, some of the students remained with the same teachers in the following year. These "old tim-

ers", as Teacher 4 referred to them, were very helpful in demonstrating and teaching the activities and concepts to their new classmates:

The old timers treated (the intervention exercises) like old friends, "Oh, I remember this one. I like it!" The new timers tended to fidget but slowly got the idea from the old timers' good modeling.

Teachers 2 and 4 regularly used the program several times a week, and Teachers 1 and 3 implemented key activities once a week, and much more often in specific situations where they felt it would be particularly beneficial (like sharing highlights):

I use the tapes periodically as a cool down in the gym. For sick tummies, red measles needles etc., I give them suggestions like Jelly Belly, or a Super Breath. I also tell them when I'm using some of the techniques. We often tell highlights at the end of the day as a "ticket out the door".

Teacher 3 also planned to do a "refresher course" on the main intervention program concepts later in the year, as part of the school-wide personal safety program. The principal also expressed her continued support of the program, and felt that it was a valuable tool for her teachers and students.

Discussion

This study showed that when children were taught relaxation and stress control skills, they could successfully apply these skills, both in the classroom and in their daily lives. This finding supports the findings of previous studies by Cox and Orlick (1996), and Gilbert and Orlick (1996). Some of the most commonly cited circumstances for using the stress control strategies in this study included: dealing with various stresses in the home, when they had difficulty falling asleep, when they had conflicts with siblings

or friends, when playing games or sports, when doing schoolwork and when they were scared or hurt. The same key stressors were identified in studies by Gilbert and Orlick (1996), Cox and Orlick (1996) and Setterlind and Patriksson (1982).

The student participants in the present study were not only able to identify stressors, but were successful at implementing the new skills they had learned to combat these stresses. Logbook analysis indicated a 95% success rate in children's recorded attempts at using relaxation/stress control techniques.

By the end of the intervention almost all the children in the present study were able to identify what stressed them, and had successfully implemented stress control strategies in their daily lives. This study, along with our previous studies with children, show that definite benefits can be accrued from teaching relaxation and stress control skills to children. These are skills that every child and every teacher can gain from.

An important finding in the present study was that after a 10 week intervention, 89.4% of the student participants said they would continue to use the skills and activities that they had learned through the intervention program. Gilbert and Orlick (1996) also found that a high percentage of students said they would to continue to use elements of the program (87.5%), and an even higher percentage of children (98%) reported the intention to continue using these skills in the Cox and Orlick (1996) study.

The children really enjoyed taking part in the Positive Living Skills program. Ninety-seven per cent of the student participants talked about enjoying the program. (e.g., "I liked it because it was fun!", "It had neat things to do."). The element of enjoyment is a huge factor in sustaining children's motivation long enough to learn the various skills and perspectives being taught. When

children learn through play or a playful medium and find the learning process enjoyable, there is a much better chance that they will learn, remember and apply what they have learned.

The inclusion of parents in reinforcing program activities could provide further support for learning and applying relevant skills. Cox and Orlick (1996) used a questionnaire to elicit parental feedback, with a 72% return rate (n=107) and found that a high percentage of these parents (96%) reported that their children had told them about the program or taught them program activities. Eighty seven percent of the parents who responded to the questionnaire cited specific examples of how their children had used and benefited from program activities.

Teachers in the present study were very supportive of the idea of including the parents and the children's home environments within the parameters of the program, and stressed the importance of the role of the parent in the stress control repertoire of children: One teacher commented, "The longer I teach, the more I think that what goes on after school is extremely important. I have the children for a small percentage of their lives. Not at breakfast, bed time, or the time their parents spend with them in the evenings and weekends. The children who spend a lot of time discussing these things with their parents, parents who really know them, have an easier time dealing with stress..." (Teacher 1, Grade 6).

Previous studies that examined teacher's perceptions of the overall value of the PLS program support the findings of this study. In the Gilbert and Orlick (1996) study, the grade 2 teacher delivering the program reported that she felt the children had learned to be more positive, their focus had improved and they were better at looking for the "good things" in life. In Cox and Orlick's (1996) study, teachers (kindergarten to grade

6) who were present during the intervention sessions responded positively to the program and noted specific examples where they had witnessed the children successfully using the program elements: "They (the students) learned to use visualization and their imagination." "The children learned how to relax facing tests." "The children demonstrated more control in difficult situations."

In a study by St. Denis and Orlick (1996), children were taught to develop and maintain a positive perspective through the concepts of "highlights" and positive thinking. The grade 4 teacher who was present for the intervention program responded: "It was very helpful to have the children think about the small pleasures in life, things that they take for granted. Students learned to focus on the bright side. Overall, the children seem to have more positive attitudes, especially those who were at a low level to begin with".

Our experience has demonstrated that the PLS program is highly versatile and the nature of its flexible structure makes it conducive to application in a wide variety of environments with a wide range of children (Orlick, 2002b; Gilbert & Orlick, 2002; Klingenberg & Orlick 2002; Koudys & Orlick, 2002).

A main finding coming from this study combined with previous studies on the PLS program is that regardless the context in which the program was delivered, or how it was adapted, or the length of each session, the program activities were effective in initiating significant positive changes in children's lives. Two main factors have been consistent for positive change to occur. Children are exposed to key PLS activities, including relaxation and stress control activities, positive perspective activities, and focusing exercises through a series of audiotapes a number of times, and children are encouraged to apply these skills in real

world situations. (Orlick, 2002b; Gilbert & Orlick, 2002; Klingenberg & Orlick 2002; Koudys & Orlick, 2002).

In future interventions designed to enhance positive living skills, it is important to keep in mind that children learn best when we present relevant skills and concepts in a meaningful and enjoyable way, and allow them experience and practice those skills in a repeated and meaningful manner. Introducing programs and resources that are flexible and engaging not only for children but for teachers and parents is essential, since they will be the ones teaching and living these positive life skills with their children. Positive living skills that we feel are important for children must given adequate attention if children are to learn and live these skills and perspectives in their daily lives, now and in the future.

References

- Blom, G., Cheney, B., & Snoddy, J. (1986). *Stress in childhood*. New York: Teachers College Press.
- Brenner, A. (1984). *Helping children cope with stress*. Lexington, MA: D.C. Heath.
- Bussis, A., & Chittenden, E. (1976). *Analysis of an approach to open education*. Princeton, NJ: Educational Testing Service.
- Chandler, L. (1985). *Assessing stress in children*. New York: Praeger.
- Clark, D.L., Lotto, L. & Astuto, T.A. (1984). Effective schools and school improvement: A comparative analysis of two lines of inquiry. *Educational Administration Quarterly*, 20 (3), 41-68.
- Cox, J. & Orlick, T. (1996). The effects of a relaxation/stress control program on elementary school children. *Journal of Performance Education*, 1 (1), 115-130.
- Crichton Alternative Community School, (1994). *Handbook, 1994/95*. (Brochure). Daghofer, E: Author.
- Denzin, N. (1978). *The research act*. New York: McGraw Hill.
- Dickey, J. & Henderson, P. (1989). What young children say about stress and coping in school. *Health Education*, Feb/Mar, 14-17.
- Elkind, D. (1988). *The hurried child: Growing up too fast too soon*. Reading, MA: Addison-Wesley.
- Gilbert, J. & Orlick, T. (2002). Teaching skills for stress control and positive thinking to elementary school children. *Journal of Excellence*, 7, 54-66.
- Gilbert, J. N., & Orlick, T (1996). Evaluation of a life skills program with grade two children. *Elementary School Guidance and Counseling Journal*. 31, 139-151
- Hawley, W.D. (1991). Public policy and public commitments to enable school restructuring: Lessons from the high school in the community. In E. J. Trickett, (Ed.) *Living an idea: Empowerment and the evolution of an alternative high school*, Brookline, MA.: Brookline.
- Klingenberg, M & Orlick, T. (2002). Teaching positive living skills to a family with special needs. *Journal of Excellence*. 7, 5-35.
- Koudys, J. & Orlick, T. (2002). Coping with cancer: Lessons from a pediatric cancer patient and his family. *Journal of Excellence*. 7, 36-53.

Marley, L. (1984). The use of music with hospitalized infants and toddlers: A descriptive study. *Journal of Music Therapy*, 21 (3), 126-132.

Martin, R. (1988). Humor and the mastery of living: Using humor to cope with the daily stresses of growing up. *Journal of Children in Contemporary Society*, 20 (1-2), 135-154.

Montessori, M. (1974). *The Montessori method*, New York: Schocken.

Orlick, T. (2002a). *MindMasters : Tools for helping children master positive living skills*, Ontario Trillium Foundation.

Orlick, T. (2002b). Nurturing positive living skills for children: Feeding the heart and soul of humanity. *Journal of Excellence*, 7, 86 -98.

Orlick, T. (2002c). Enhancing children's sport and life experiences. In F. Smoll and R. Smith (Eds.). *Children and youth in sport*. Dubuque, Iowa: Kendall/Hunt Publishers.

Orlick, T. (2000). *In Pursuit of Excellence: How to win in sport and life through mental training*. Champaign, Il.: Human Kinetics Publishers.

Orlick, T. (2001, 1998, 1996, 1993). *Feeling Great: Teaching children to excel at living*. Carp. Ont: Creative Bound.

Orlick, T. (1998). *Embracing your potential: Steps to self-discovery, balance and success in sports, work & life*. Champaign, Il.: Human Kinetics Publishers.

Orlick, T. and Solin, E. (1997). *Visst Kan du (You Can Do It)*. Mental training for students and teachers. Orebro, Sweden: Laro Media, AB.

Orlick, T. (1995). *Nice on my feelings: Nurturing the best in children and parents*. Carp, Ont.: Creative Bound.

Partington, J. (1995). *Making music*. Carleton University Press: Ottawa.

Raywid, M. A. (1982). *The current status of schools of choice in public secondary education*, Hempstead, N.Y.: Project on Alternatives in Education, Hofstra University.

Raywid, M. A. (1990). Successful schools of choice: Cottage industry benefits in large systems. *Educational Policy*, 4, (2), 93-108.

Raywid, M. A. (1994). Alternative schools: The state of the art. *Educational Leadership*, 52 (1), 26-31.

Rubin, H.J., & Rubin, I.S. (1995). *Qualitative interviewing: The art of hearing data*. Thousand Oaks, CA: Sage.

Ryan, N. (1989). Stress coping strategies identified from school age children's perspective. *Research in Nursing and Health*, 12 (2), 111-122.

Siccone, F. & Canfield, J. (1993). *101 ways to develop student self-esteem and responsibility II. The power to succeed in school and beyond*. Needham Heights, MA: Allyn and Bacon.

Selye, H. (1956). *The stress of life*. New York: McGraw-Hill.

Setterlind, S. (1983). Teaching relaxation in physical education lessons. II. Physiological results from experimental studies in school. *Scandinavian Journal of Sports Sciences*, 5 (2), 60-63.

Setterlind, S., & Patriksson, G. (1982). Teaching children to relax. Mental Training for Coaches and Athletes. In T. Orlick, J. Partington & J. H. Salmela (Eds.). *Sport in perspective*. Ottawa: The Coaching Association of Canada, 35-36.

Smith, M. & Womack, W. (1987). Stress management techniques in childhood and adolescence. *Clinical Pediatrics*, 26, 581-584.

Solin, E., and Orlick, T. (1998). *Mental training for parents and children*. Sweden: Laro Media, AB.

Solin, E. (1991). *Mental training in the Swedish school systems*, Presented at the First World Congress on Mental Training, University of Orebro, Orebro, Sweden.

St. Denis, M. & Orlick, T. (1996). Positive perspective intervention with fourth grade children. *Elementary School Guidance and Counseling Journal*. 31, 52-63

Wehlage, G. G., Rutter, R. A., Smith, G. A., Lesko, N., & Fernandez, R. R. (1989). *Reducing the risk : Schools as communities of support*. London: Falmer.

Zaichkowsky, L. B. & Zaichkowsky, L. D. (1984). The effects of a school-based relaxation training program on fourth grade children. *Journal of Clinical Psychology*, 13 (1), 81-85.