

# Study Guide to accompany Relaxation Techniques for Students Presentation



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## **When do you use it?**

Relaxation techniques, such as Progressive Muscle Relaxation, Biofeedback, Yoga, and Muscle Relaxation, are useful in any environment, but this PowerPoint presentation focuses specifically on the classroom. There are increasing numbers of students becoming more aggressive in school, and there are not many solutions progressing. These techniques can help students monitor and control their aggressive behaviors and prevent violent situations.

## What are the techniques?

- Progressive Muscle Relaxation, or PMR, because of the flexibility it has within a classroom environment. PMR is easy to administer in the classroom and requires little training for the teacher. The activities can vary which make it very flexible for a teacher to use in spare time. It is simply a script directed by the teacher to have the students relax and practice tightening muscles and releasing them. There are also other techniques to relax students that I will touch upon later in the presentation.
- Biofeedback- providing feedback through graphs, lights and sounds about the body
- Yoga- physical postures, breathing control, concentration and relaxation
- Mental Relaxation- guided imagery and fantasy, meditation, and concentration to visualize peaceful situations

## Glossary

- PBIS- Positive Behavior Support focuses on teaching ways to avoid negative behaviors with students. It takes a proactive approach to behavior by teaching ways to strengthen and support positive behavior. So, rather than reprimanding a student for disrupting the class, there are ways in which you can change the behavior before the disruption occurs.
- Progressive Muscle Relaxation(PMR)- a script directed by the teacher to help the students relax and practice tightening muscles and releasing them
- Biofeedback- providing feedback through graphs, lights and sounds about the body
- Meditation- physical postures, breathing control, concentration and relaxation
- Aggression- overt or suppressed hostility, either innate or resulting from continued frustration and directed outward or against oneself (dictionary.com)

## Case Study

### Before Intervention:

Jane is having trouble sitting through story time in Kindergarten. Every day she will start distracting other students five minutes into the story. The teacher will warn her one time, and Jane will continue talking to her neighbors and agitating people sitting around her. The second time the teacher reprimands her Jane gets upset and (after glaring at the teacher) gets up and leaves the story time circle.

### Intervention:

Jane is definitely a candidate for PMR. She has trouble concentrating for long periods of time and does not take well to the teacher reprimanding her in front of the other classmates. The first step would be to explain to Jane in very elementary terms that she is going to try a fun exercise that will help her listen better during story time. Then the PMR technique will begin.

- Ask Jane to lie on the floor after the lights are dimmed.

- Begin script
- Observe for differences in behavior
- Over time, encourage her to practice the muscle techniques in story time and any other time when she feels it could help.

### Case Study Revisited

A month later, Jane was able to concentrate better and focus more during her school hours. When observed during story time she was able to sit through the story. A few times it was noted that she used her PMR techniques, such as tightening her hand muscles, to relax and stay on task.

## Discussion Questions

- 1.** What do you think the long term effects of these techniques would look like for children?
- 2.** Do you think these techniques would be more effective with elementary or high school students?
- 3.** Do you think one technique would work better than another?
- 4.** Would teachers welcome these ideas into their classrooms?
- 5.** Would aggressive children welcome these techniques into their daily routines?



## Frequently Asked Questions

1. Q: What changes are found in children who practice Progressive Muscle Relaxation or the other techniques introduced?

A: These interventions were found to improve self control, help with relaxation, prolong attention spans, increase cooperation, and improve relationships.

2. Q: How long does PMR take?

A: There is no exact answer to this question. This varies due to each child's issues behind their aggression. Some children may pick up and enjoy this immediately, while other children may need a bit more practice and prolonged exposure before being able to really benefit from it.

3. Q: Where can a child practice PMR?

A: A child can practice PMR virtually anywhere. Although the initial stages will be directed by an adult, eventually the child will be able to do the

exercises on his or her own, meaning they can do it whenever and wherever it is deemed helpful.

4. Q: Who should be involved in the PMR activities?

A: Although it only takes one person to administer the PMR activity and a child to follow through with it, there are a few other factors that come into play for it to work effectively. If it is being done at home, the school staff such as teachers, guidance counselors and so forth, should be notified of the techniques the child will be using. They can help to encourage and follow-up with it during school hours. If the parents are not administering it, they should still be involved to support and encourage practice at home with the PMR. The more support and encouragement the student has, the more successful the intervention will be.

# Annotated Bibliography

1. Dunn, F.M., & Howell, R.J. (1982). Relaxation training and its relationship to hyperactivity in boys. *Journal of Clinical Psychology, 38*(1), 92-100.

An older study showed some earlier methods to deal with hyperactivity in boys. This article discussed using Electromyograph Biofeedback and relaxation tapes both independently and in combination of each other. This study was done with 6 ½ year old boys. During the study there was no administration of other treatment or medication for hyperactivity.

The boys all completed a pre-assessment to measure their hyperactivity. This was done with time on task, concentration, and accuracy of each. There was a task of counting blocks and putting them in containers to measure time on task, and twelve minute quiet task listening to a taped story.

After treatment the study showed that the relaxation tape showed quicker relaxation, but the biofeedback produced deeper relaxation. Parents reported seeing significant changes at home in hyperactivity. The boys were not as restless and mobile when watching television, and they were able to go for long car rides with more control. Many of the children whom completed treatment did not continue with medication and showed improvements in school. There were also long term effects noted in regards to the children being able to focus better and hold their attention longer.

2. Goldbeck, L., & Schmid, K. (2003). Effectiveness of autogenic relaxation training on children and adolescents with behavioral and emotional problems. *Journal of Abnormal Child Psychology, 12*(2), 1046-1054.

Autogenic relaxation is the concentration on a subject until relaxation is effective. After training this becomes psychological relaxation and is done through passive concentration. This can be a good way of dealing with stress along with a successful form of psychotherapy. Autogenic relaxation can also help children deal with chronic medical conditions and cope with disease stressors. Overall, it helps to reduce stress in multiple situations.

There was a study done with 50 children, both boys and girls alike. The ages ranged from 6-15 years old. The children were all white, from middle class homes, and most lived in a two-parent family. The children rated the frequency of their symptoms on a 5-point rating scale. The techniques were taught to the children with them lying down and having their eyes closed. The suggestions were spoken aloud, and this was done until the children would begin to use them more automatically themselves. The children were encouraged to continue this training at home, but they were to do it more themselves and not let their parents direct the activity. More than half of the children met their goals by the end of the study. As well as over half of the children continued the training after the intervention was complete.

This training technique appeared to be very successful with this group of children. However, the sampling size was very small. Also, the sample was not very diverse; many of the children were of the same race, family structure, and working class. The study also lacked long term effects.

3. Lohaus, A., & Klein-Hebling, J. (2000). Coping in childhood: A comparative evaluation of different relaxation techniques. *Anxiety, Stress, and Coping, 13*, 187-211.

This study focused on 719 elementary students in grades 3 through 6 in Germany. Half of the students were girls. There were eight sessions for each treatment that lasted 90 minutes in duration. There was also one pretest and two posttests administered to each child and family. The interventions were done in single elements and did not combine other things with it, as many other studies did. This helps to isolate the effects of each technique to see which one is working the best. Otherwise, it is hard to see what the change is attributed to. There are three approaches that were done: the sensoric approach, the imaginative approach, and a combination of the two of them.

The first training was administered for five weeks, once weekly for ten minutes each. During the relaxation training (sensoric) the students were seated and asked to close their eyes or focus on the floor. The relaxation instructions were administered by an audiotape. The students would be instructed to tense and relax specified muscles during these sessions.

The imaginative approach is done by having students imagining themselves in a fantasy trip. In this case, the students were asked to pretend they were a butterfly on a trip to a calm place. If this approach was a combination approach, they would be reminded that they felt calm and relaxed during the session, and the butterfly had a feeling of warmth.

Some predicative factors included the child's level of activity, ability to use imagination, and paying attention to body sensors. Anxiety level and age are also in effect. These factors came into effect more with the imaginative training.

Because the sample size was so large, it is more valid than a small sample. However, with only eight sessions in training the study will produce more short term effects than long term effects. The results were also compared in accordance with class which showed comparisons according to age. This is a good comparison as there is such an age gap and maturity gap between the grades that were included. Because the changes were only short term, it is hard to predict long term changes. The children's interest seemed to decrease as the sessions went on, so it may be hard to push for a long term study. However, the students who did find success with the techniques usually had an increase in motivation as well.

4. Lopata, C., Nida, R.E., & Marable, M.A. (2006). Progressive muscle relaxation: Preventing aggression in students with EBD. *Teaching Exceptional Children, 38*(4), 20-25.

Seventy-five percent of students with emotional and behavior disorders exhibit aggressive behavior. Many of the times this occurs at school daily, and it can have a long term effect on the student not only academically but socially as well. When a student demonstrates this behavior it usually follows a steady course. That is why it is so important to try to intervene in the early stages to try to prevent it from happening consistently.

There are two approaches to dealing with these behaviors, reactive and proactive approaches. Reactive occurs during the behavior or after it has begun. An example of this would be a consequence after the child reacted negatively. Proactive approach is targeting the behavior before it occurs. Progressive muscle relaxation (PMR) is meant to reduce stimulation and improve self control. PMR reduces tension and stress which can lead to aggression. Self-regulation with the child can prevent these occurrences from happening.

PMR is favorable because it is not hard to administer, can be done in the classroom, and a teacher can direct it with very little training. The students need to get in a relaxed state (often lying on the ground with dimmed lights), and then they will go through a series of prompts to tense and release their muscles. The teacher needs to use a calm, relaxed tone to keep the students in this state. PMR activities can vary in length, which can be controlled by the teacher. This is also a good activity because it can be done with a group of students opposed to just one. It is also very beneficial because with time it is something that the student can take on themselves and learn to do independently.

5. Zipkin, D. (1985). Relaxation techniques for handicapped children: A review of literature. *The Journal of Special Education, 19*(3), 283-289.

Relaxation can help children gain more control of themselves. Anxiety and tension can cause problems in school and in the home. These problems can lead to a decrease in academics as well as disruptions with fitting into a social group. If children can learn relaxation techniques through self control, they can learn to decrease these behaviors and reduce tension. There are four techniques discussed by Zipkin.

The first technique, progressive muscle relaxation, seems to be very effective with children. This method consists of the tensing and releasing of certain muscles. Through these exercises the child eliminates contractions. This technique has been found to improve attention span, lead to deeper relaxation, improve speed and quality of handwriting, and improve interpersonal relationships.

Biofeedback was introduced next. This is the process of providing feedback through graphs, lights, and sounds about the body. If the child can recognize the function mentally, they can control it, such as with muscle tension. This technique helped to improve self control, effectiveness of seat work, attention span, subjects in reading, spelling, and mathematics, and it increased cooperation.

When progressive muscle relaxation and biofeedback are used in conjunction of each other, the results are even better. They helped decrease impulsivity and increase attention span, along with reduce muscle tension.

Yoga includes physical postures, breathing control, concentration, and relaxation. It calms students and helps motivate when necessary. Yoga can help reduce stress and decrease tiredness. It also helps the attention span and can improve general health. Promoting body awareness, balance, and laterality can help with psychomotor deficits as well. Students who attended yoga weekly had a more calm nature and were able to concentrate longer.

Mental relaxation is a way of using guided imagery and fantasy, meditation, and concentration to help visualize peaceful situations. This can help children work through emotional blocks, control behavior, reduce test anxiety, and relax in high stress situations. It can help children understand their emotions, which in turn will help them to manage them better when needed.

These techniques all seem to be useful with children and were proven so in this article. They are practical because it does not include a lot of training on the behalf of the adult. The techniques are also able to be taught to the child for their own self regulation which is very important.

## Additional Resources

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