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Effects of Touch Therapy as a Means of Treatment for Autism Among Young Children

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Introduction

Autism causes impediments for children with the disorder that they carry as obstacles to overcome for their entire lives. Major characteristics of autism include social delays such as inhibited interaction with others, touch aversion, as well as abnormal intake of sensory information, with understated reactions or high sensitivity to external stimuli. As the influence of autism grows, a greater number of treatments including medicine as well as alternative methods are considered. Touch therapy, an alternative being considered, is the use of tactile stimulation most commonly in the form of massage at various points of the body for a purpose, and is purported by its supporters to stimulate the sympathetic and parasympathetic nervous systems to rouse and relax people, respectively (Silva et al.).

Autism is a multifaceted disorder that cannot be effectively approached through one means of treatment. In addition to medication, many autistic children also receive supplemental behavioral and speech therapies to combat the delays that slow or completely halt the development of speech and ordinary communication patterns. Because the condition differs in severity and presentation of symptoms on a case-by-case basis, no single treatment can alleviate all of its effects. As such, different approaches must be taken to mitigate the impact of autism on an individual. It is crucial to explore any worthy possibilities of treatment for this scourge, and as such, massage therapy as a treatment for autism merits exploration.

Examined Factors

- ◆ Touch therapy's effects on attentiveness.
- ◆ Touch therapy's effects on sensory processing and personal habits.
- ◆ Touch therapy's effects on communicative abilities of autistic children.
- ◆ Aggregate conclusions on impact of touch therapy on autistic children.

Methods

Various studies regarding different massage methods and measures of effects on autistic children were studied. Articles examined included: a study that assessed the level of reactivity children expressed prior to, and after, receiving various forms of therapy, multiple studies assessing the effectiveness of different forms of massage developed by researchers in improving attentiveness of autistic children in school settings, studies which looked at the effect of massage therapy in decreasing anxiety often expressed in autistic children, studies that assessed the impact of massage therapy on the communicative abilities of autistic children as well as examined the relationship between autistic children and their parents, and a meta-analysis which reviewed the validity of other studies regarding massage therapy and its benefits in treating symptoms of autism in children.

Results

◆ Attentiveness:

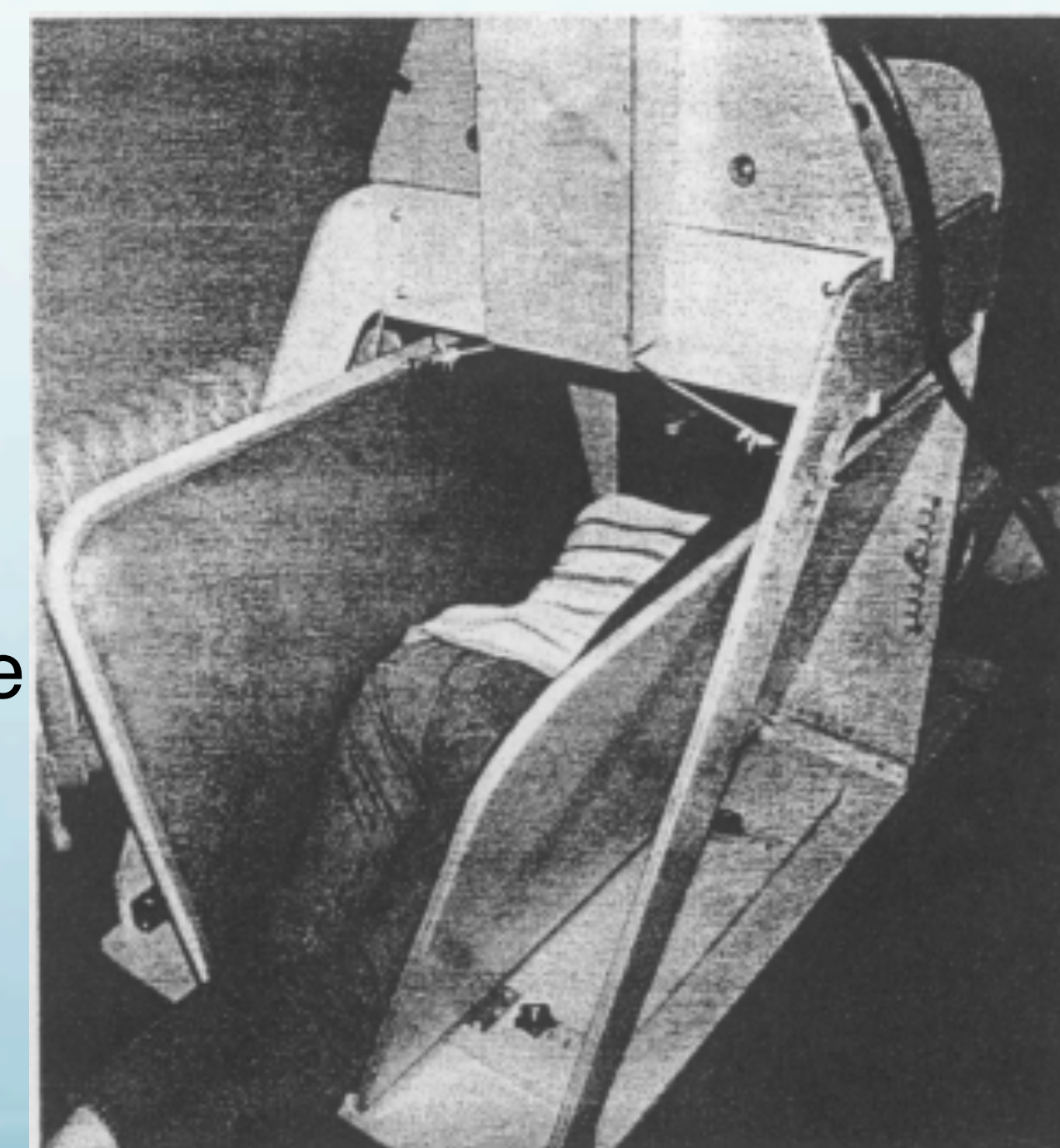
- ◆ Angelica Escalona et al. found that in a group of autistic children between 3 and 6 years of age, those who received massage therapy showed had a greater decrease in stereotypical autistic behaviors with a greater increase in on-task behaviors than those who simply received a daily bedtime story (Escalona et al. 514).
- ◆ Tiffany Field et al. found that in a sample of autistic toddlers with a mean age of 4.5 years, those who received massage therapy from a trained student volunteer exhibited more decreased off-task behavior and fewer stereotypical autistic behaviors as measured through criteria in the Early Social Communications Scale and the Autism Behavior Checklist than did those who simply played with the student volunteer for an equivalent period of time (Field et al.).

◆ Sensory Processing and Personal Habits:

- ◆ Jean Ayres and Linda Tickle found that in a group of ten autistic children with an age range of 3.5 to 13 years, after receiving therapies tailored to their needs as determined in a pre-evaluation, those who were most reactive to external stimuli prior to beginning treatment showed the most response to therapy (Ayres and Tickle).
- ◆ Lesley Cullen and Julie Barlow conducted studies with autistic children and caretakers, developing a training and support programme that allowed parents and children to foster more intimate bonds. They found that the massage therapy in the experiment suggested improvements in the participating children's sleeping patterns as well as their bowel movements, body awareness, movement and communication (Cullen and Barlow).
- ◆ LMT Silva et al. conducted a study using Qigong massage and found that autistic children who received massage therapy experienced lasting changes in their physiological states as per various measures including the Autism Behavior Checklist (Silva et al.).

◆ Communicative Abilities:

- ◆ Temple Grandin presented her work on the "Grandin squeeze machine" and found that it affirmed the benefits of deep-pressure stimulation as used in various studies with adults, autistic children, and even other animals. The use of her squeeze machine played a role in desensitizing her to touch, decreasing her touch aversion and social withdrawal, and she takes this as a possibility for other autistic children (Grandin).



(Grandin)

Results cont.

◆ Aggregate Conclusions:

- ◆ Myeong Soo Lee, Jong-In Kim and Edzard Ernst conducted a review of various sources, which they obtained from different electronic databases to assess the effectiveness of massage as a treatment for autism. among these six studies analyzed, the researchers find that the risk for bias was high. The trials are limited in part because of small sample sizes, which can "overestimate treatment effects by about 30%," predefined primary outcome calculations, insufficient control for nonspecific effects, and a deficiency of power calculations and/or follow-up (Lee 410). They state that there is a dearth of primary data regarding massage therapy, and that it is difficult to incorporate the use of placebos and blinding in these kinds of studies. All in all, the review conducted by Lee, Kim and Ernst supports the conclusion that there is little concrete data to support the effectiveness of massage therapy as treatment for autism spectrum disorders (Lee et al.)
- ◆ Small sample sizes in all studies hindered how generalizable the results of each were (Cullen and Barlow; Field et al.; Silva et al.).
- ◆ Some studies were regarded as preliminary (Cullen and Barlow; Silva et al.)
- ◆ Qualitative observations often made in the form of self-reports contributed to bias (Field et al.).

Conclusions

- ◆ Research suggests in autistic children, touch therapy improves:
 - ◆ Attentiveness
 - ◆ Sensory processing and personal habits
 - ◆ Communicative abilities
- ◆ However, there is yet insufficient data to definitively support any conclusions regarding potential benefits of touch therapy as treatment for autism, and this area warrants further study.

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