Effective Treatment for Children with Autism Spectrum Disorder

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Introduction
Approximately 1 out of every 59 children is diagnosed with an Autism Spectrum Disorder (ASD) ("Data & Statistics on Autism Spectrum Disorder” 2018). This data makes ASD a prevalent topic in today’s healthcare community. Healthcare providers can help children, between the ages of 2 and 4, who have been diagnosed with ASD through early intervention.

Purpose
– Applied Behavior Analysis helps healthcare providers understand how behavior works, is affected by the environment, and how learning takes place.
– Sensory integration (SI) therapy involves specific sensory activities to help a child appropriately respond to light, sound, touch, smells, and other.
– When comparing the impact of applied behavior analysis and interventions on improvement of behavioral symptoms which intervention will prove to be more effective?

General Background

What is Autism Spectrum Disorder?
A developmental disorder, since symptoms typically appear in the first two years of life, that affects communication and behavior.

Risk Factors
– Sibling with ASD
– Older parents
– Genetic conditions
– Low birth weights

Different Types of Treatments

<table>
<thead>
<tr>
<th>Early Intervention</th>
<th>PECS</th>
<th>Applied Behavior Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Federal grant programs designed for newborns to toddlers</td>
<td>• Makes use of picture symbols to teach communication</td>
<td>• Applies understanding of how behavior works in real situations</td>
</tr>
</tbody>
</table>

Different Types of Treatments Cont.

<table>
<thead>
<tr>
<th>DIR/Floortime</th>
<th>TEACCH</th>
<th>Speech Therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Focuses on emotional and relational development</td>
<td>• Uses visual cues to teach skills</td>
<td>• Helps improve communication skills</td>
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Research Studies

Applied Behavior Analysis:
– Comparison of Pivotal Response Training (PRT) to adult directed Applied Behavior Analysis (ABA) showed that the PRT intervention was much more effective as shown in Table 1 below.

<table>
<thead>
<tr>
<th></th>
<th>ABA Group</th>
<th>PRT Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean 1st Session</td>
<td>9.6</td>
<td>11.5</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>.8</td>
<td>1.2</td>
</tr>
<tr>
<td>Mean Last Session</td>
<td>8.5</td>
<td>1.6</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>.56</td>
<td>.2</td>
</tr>
<tr>
<td>Last Session</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Differences in Mean and SD when comparing ABA treatment vs. PRT treatment
– Research has linked Posttraumatic Stress Symptoms to using ABA treatment for ASD
– A survey was given and nearly half the respondents who had experienced ABA had PTSD symptoms

Sensory Integration Therapy:
– Results for a study focusing on the efficacy of sensory integration therapy for children with high-functioning ASD showed all index scores increased significantly for the children in the SI intervention group.

Research Studies Cont.

Sensory Integration Therapy:
– 70% of the children in this study had atypical scores on the Bayley Scales of Infant and Toddler Development.
– However, after the SI therapy significant improvements were noted in all areas including cognition, language, fine motor skills and gross motor skills.

Analysis

When comparing the articles on Applied Behavior Analysis versus Sensory Integration Therapy there is a definite divide.

Applied Behavior Analysis:
– ABA seems to have more negative effects on behavior and symptoms in children and even into adulthood.
– Research seems to give ABA therapy a bad reputation and shows that other types of treatments/ therapies work better

Sensory Integration Therapy:
– Research supports SI Therapy as a more effective treatment than ABA regarding the reduction of behavioral symptoms
– SI Therapy helps to not only limit behavioral symptoms, but also help increase motor functionality.

Conclusion

When taking into consideration the research on Applied Behavior Analysis versus Sensory Integration Therapy it truly shows the epitome of opposites.
– ABA therapy has been linked with more negative aspects than positive ones or even significant results
– Sensory Integration Therapy has shown decided improvement in the areas of sensory processing, communication, motor skills, and even behavioral symptoms according to the literature.
– Therefore, SI therapy is a more effective treatment for children diagnosed with ASD when reducing and regulating behavioral symptoms.

Bibliography


Figure 1. Mean scores and SDs for the SI group prior to and following the intervention on the Total and Index scores on the Miller Assessment for Preschoolers.
Generally, you want your text to be a minimum of an 18 pt font, and you can go as high as 24. In some cases, higher font sizes are acceptable.

As far as spacing is concerned, single blank lines between sections marked by Headers (e.g., “Introduction”) are generally appropriate. To create greater distinction between your sections, consider putting them in Bold.

This text box will automatically resize to accommodate any amount of text. It will not, however, start any overflow in the next column: you will have to do that manually.

If you want to include a diagram in this (or any) column, I recommend that you simply paste the images or tables over this text box and leave blank lines. Doing this, rather than starting a new text box, will insure that your text lines up both above and below your image.

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