Using Online Training to Improve Knowledge in Parents of Children with Autism Spectrum Disorder

Author: Sarah C. Connolly and Susan M. Wilczynski

About This Study
To better understand the impact of a Relias Learning online training program in behavioral interventions to parents of children with autism spectrum disorder (ASD), Ball State University conducted a study that examined changes in parental: 1) knowledge of behavioral interventions, 2) empowerment, and 3) skill in identifying and requesting evidence-based treatments for educational planning. The study results showed there could be a significant improvement in parental knowledge of behavioral interventions and ability to request evidence-based treatments associated with the online training program. The study did not indicate significant changes in parental empowerment.

Introduction
The Centers for Disease Control and Prevention (2014) reported that approximately one in every 68 children has an autism spectrum disorder (ASD). As the number of children diagnosed with ASD has increased, a parallel increase in autism research has occurred, and greater treatment options are now available from which families and service providers must choose (National Autism Center, 2009). Given the increased level of stress parents may experience in raising a child with disabilities (Fleischman, 2004; Hutton & Caron, 2005), it is reasonable to suspect that parents of children with autism may benefit from more accessible and parent-friendly methods of training that can improve their ability to identify and request evidence-based interventions and treatments.

Study Participants
The participants included 17 parents of children, ages 6-12, with ASD.

Table 1: Description of Participants

<table>
<thead>
<tr>
<th>Parent Gender</th>
<th>Parent Age Range</th>
<th>Parent Language</th>
<th>Child Gender</th>
<th>Child Age Range</th>
<th>Child Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% F</td>
<td>22-49 Yrs.</td>
<td>English</td>
<td>82% F</td>
<td>6-12 Yrs.</td>
<td>ASD, Autism, Asperger’s, PDD-NOS</td>
</tr>
</tbody>
</table>

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder characterized by deficits in social communication, and the presence of restricted, repetitive patterns of behaviors and interests (DSM-V; American Psychiatric Association [APA], 2013). Relias Learning believes that improving the knowledge in parents of children with ASD by providing effective online training is a necessary step toward supporting parents and increasing the likelihood of their choosing evidence-based interventions and treatment.
**Study Design**

Parents were randomly assigned to treatment and waitlist control conditions, during which the treatment group completed five hours of a web-based training program (Relias Learning). Repeated measures ANOVAS were used to analyze between and within groups effects for parental knowledge, empowerment, and skill in identifying and requesting evidence-based treatments in their child’s IEP.

**Study Results**

The statistical analysis indicated significant improvements in parental knowledge of behavioral interventions. Pre- and post-training comparisons indicated a significant interaction for treatment in parental ability to request evidence-based treatments in their child’s IEP, while a nearly significant interaction for treatment was observed in parental ability to identify evidence-based treatments over those with little empirical support. Changes in parental empowerment were not observed.

**Figure 1: Evidence-Based Knowledge**

![Graph showing evidence-based knowledge improvement](image)

**Figure 2: Identify Evidence-Based Treatments**

![Graph showing identification of evidence-based treatments](image)

**Figure 3: Selecting Evidence-Based Treatments**

![Graph showing selection of evidence-based treatments](image)

**Figure 4: Parent Empowerment**

![Graph showing parent empowerment](image)

*Family Empowerment Scale (Koren, DeChillo, & Friesen, 1992)*
Participant Satisfaction

Participants assigned to the treatment group completed a satisfaction questionnaire upon completion of the training. Here are some highlights:

- 90% of the participants found the training was effective (50%) or extremely effective (40%) for helping them understand the concepts.
- 90% of the participants were able to apply the information in the training to their life.
- The majority of participants prefer web-based training to in-person training.
- 100% of participants would recommend the training to other parents of children with ASD.

Summary

The results suggest that an online training program for parents of children with ASD may be effective in improving parents' knowledge of behavioral interventions and skill in their ability to request evidence-based treatments. Parents reported satisfaction with this training. Future studies involving more rigorous experimental designs and larger sample sizes and are needed to validate these findings. The rising prevalence of ASD continues driving autism research along with greater treatment and intervention options. Informing parents about which treatments have more empirical support and increasing parents’ knowledge of effective behavioral interventions will be an important step toward supporting parents of children with ASD and increasing the likelihood of their choosing evidence-based treatments and interventions.

References


