Introduction

Approximately one in every 110 children in the United States has an autism spectrum disorder (ASD), and the prevalence rate continues to increase nationwide (1). Due to this increased prevalence, there exists a growing need to ensure that individuals working with autism are knowledgeable about the causes, characteristics, treatments, and outcomes of the condition. In particular, caregivers (2), medical professionals (3), educators (4), and licensed therapists (4) need to stay apprised of current developments in the field to best facilitate diagnosis, treatment planning, collaboration, and overall outcomes for individuals with an ASD.

The current study aims to examine differences in knowledge of ASDs across disciplines and years of experience with autism. The Autism Knowledge Survey-Revised (AKS-R) was developed as a revision based on Stone’s 1987 Autism Survey (4). The AKS-R is updated to reflect the current state of the field and assesses participants’ general knowledge of ASDs. By assessing and comparing understanding of ASDs across groups, common misconceptions can be identified and trainings that target these knowledge gaps can be developed and implemented, likely resulting in better outcomes for individuals with ASDs.

Hypotheses

- Individuals with more years of experience with ASDs will score higher on the AKS-R.
- Although findings regarding differences across disciplines is largely exploratory, it was hypothesized that licensed therapists would score higher on the AKS-R than medical professionals, educational personnel, and caregivers due to their background and experience in diagnoses and symptom presentation.

Method

Participants

- 697 participants (average age: 38.67 ± 10.51 years) completed the AKS-R survey
- Participants’ roles: 329 caregivers of individuals with an ASD, 127 medical personnel, 100 medical professionals, 51 licensed therapists
- Participants’ years of experience working with individuals with an ASD:
  - 29 with no experience
  - 117 with less than two years of experience
  - 193 with two to five years of experience
  - 358 with five or more years of experience

Measure and Procedure

- Participants were recruited through conferences, awareness events, email listserves, online announcements, and paper copies distributed at an autism specialty clinic.
- Participants completed either a hard copy or electronic version of the AKS-R, a 20-item survey consisting of statements regarding ASDs, including etiology, diagnosis, interventions, treatments, and outcomes (see Table 1).
- Participants rated their agreement with each statement on a 5-point scale ranging from “Strongly Agree” (1) to “Strongly Disagree” (5).
- Responses were coded with lower numbers (1 – 3) reflecting agreement with the statement and higher numbers (4 – 6) reflecting disagreement.
- Participants were compared to the model/ideal responses as determined by specialists at the Christian Sarkine Autism Treatment Center (n = 7).

Figures and Graphs

Table 1. Comparison of average ratings by survey item across participant roles and years of experience.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Average Score (out of 20)</th>
<th>Comparison across roles</th>
<th>Comparison across years of experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals with more years of experience with ASDs will score higher on the AKS-R.</td>
<td>16.18 ± 1.74, caregivers: 17.21 ± 1.39, therapists: 17.83 ± 1.99, medical professionals: 17.96 ± 1.84, licensed therapists: 18.97 ± 1.64</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Although findings regarding differences across disciplines is largely exploratory, it was hypothesized that licensed therapists would score higher on the AKS-R than medical professionals, educational personnel, and caregivers due to their background and experience in diagnoses and symptom presentation.</td>
<td>16.18 ± 1.74, caregivers: 17.21 ± 1.39, therapists: 17.83 ± 1.99, medical professionals: 17.96 ± 1.84, licensed therapists: 18.97 ± 1.64</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Results

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Comparison of average ratings by survey item</th>
<th>Comparison of overall scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals with more years of experience with ASDs will score higher on the AKS-R.</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Although findings regarding differences across disciplines is largely exploratory, it was hypothesized that licensed therapists would score higher on the AKS-R than medical professionals, educational personnel, and caregivers due to their background and experience in diagnoses and symptom presentation.</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Conclusion & Discussion

As hypothesized, overall scores on the AKS-R significantly differed across participants’ roles and years of experience with ASDs, with licensed therapists scoring significantly higher than caregivers and individuals with five or more years of experience scoring significantly higher than those with no experience. However, there were no significant differences in scores for any other group comparisons. In addition, participant level of agreement with the AKS-R statements significantly differed across roles for 80% of the items and differed across years of experience for 30% of the items. These findings indicate that there may be greater disagreement regarding ASDs across disciplines than across varying levels of experience, highlighting the need to provide consistent training and encourage collaborative partnerships to provide autism knowledge assessments should continue to be developed and refined to further explore knowledge gaps and to assist in informing targeted and effective education and training plans.

References


Acknowledgements

This development of this project was supported by grant number R01/UCS142462-01 from the Centers of Disease Control and Prevention and other charitable organizations. The ongoing efforts of the project are primarily and currently supported through a grant from the Center for Exceptional Learners, Indiana Department of Education under Part of the Individuals with Disabilities Education Improvement Act (PL 108-446) and philanthropic contributions. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of our sponsors. The authors would like to thank Megan Carter, Alison Dettroh, Kylie Bassett Hops, Ashley Pauly, and Julie Sanuel for their helpful comments and support.