

Effectiveness of Autism Spectrum Disorder Training For Daycare Providers

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INTRODUCTION

- An average of 144,673 children in Texas receive daycare services (Texas Workforce Commission, 2022).
- In 2016, 1 in 68 children were diagnosed with Autism Spectrum Disorder (ASD) (Rakap et al., 2016).
- In 2020, 1 in 36 children were diagnosed with ASD (Centers for Disease Control and Prevention, 2020).
- Decreased knowledge of ASD impacts the inequities and quality of services provided for children with ASD (Samadi et al., 2020).
- Daycare educators' attitudes toward the inclusion of children with disabilities were notably improved after training (Schuab & Lutolf, 2023).
- Teachers who instruct children with ASD are at high risk of burnout; however, providing professional development on ASD can decrease the risk (Bloom, 2021).

LITERATURE REVIEW

- Referring infants for early childhood intervention services as the "cornerstone" of early intervention (Farel et al., 2003).
- Throughout the United States and the world, a lack of ASD knowledge impacts the inequities and quality of services provided for children with ASD (Samadi et al., 2020).
- Teachers' "instructional goals, methods, and educational practices" are guided by the expectations for children with disabilities (Rakap et al., 2016).
- There is a need for professional development to broaden staff understanding of ASD and how to accommodate and modify methods of teaching and learning that would benefit all children, including those with disabilities (Bloom, 2021).
- 66.7% of participants received their knowledge of ASD through in-service training, and findings from a correlation analysis showed a positive connection between teachers' efficacy in making decisions when working with children with ASD and the understanding of ASD (Engstrand & Roll-Pettersson, 2014).

SIGNIFICANCE

Daycare owners and teachers lack knowledge of ASD characteristics and strategies to implement in the classroom to provide effective and appropriate services for children with ASD. Lack of guidance and preparation to work with children with ASD negatively affects daycare providers' attitudes and self-efficacy. Providing educational training on the characteristics of ASD, how to implement strategies/techniques, and environmental modifications will improve confidence and willingness to accept children with ASD. Improving daycare providers' attitudes and self-efficacy will improve the quality of services for all children, including children with ASD.

This project has implications for occupational therapy. Providing educational training will allow daycare providers to identify ASD characteristics for early detection for appropriate intervention, instruct providers on specific strategies to implement in the child's daily routine, and facilitate a holistic approach to working with children with ASD.

EVIDENCE-BASED QUESTION

Can educational training for daycare providers lead to a positive change in attitudes and self-efficacy when working with children diagnosed with Autism Spectrum Disorder (ASD)?

METHODS

MIXED-METHODS DESIGN

Setting:

- Kids Cloud Learning Academy, located in McAllen, TX

Participants:

- Owner, two directors, and three teachers of Kids Cloud Learning Academy
- Average of 9.13 years of experience (2– 15 yrs.)
- Two participants were bilingual, and four were Spanish-dominant

Design: Pre- and post-surveys in English and translated to Spanish

METHODS (Cont.)

Data Collection:

- Daycare providers completed a pre-survey
- Training was conducted in Spanish, and duration was 90 minutes
- Post-survey was completed after training
- Surveys included items and questions regarding information and facts about ASD, attitudes, and self-efficacy of daycare providers.

Surveys consisted of two parts:

- Likert scale (6 items) – 6 out of 6 participants completed
- Open-ended questions (2 questions) – 4 out of 6 participants completed

RESULTS

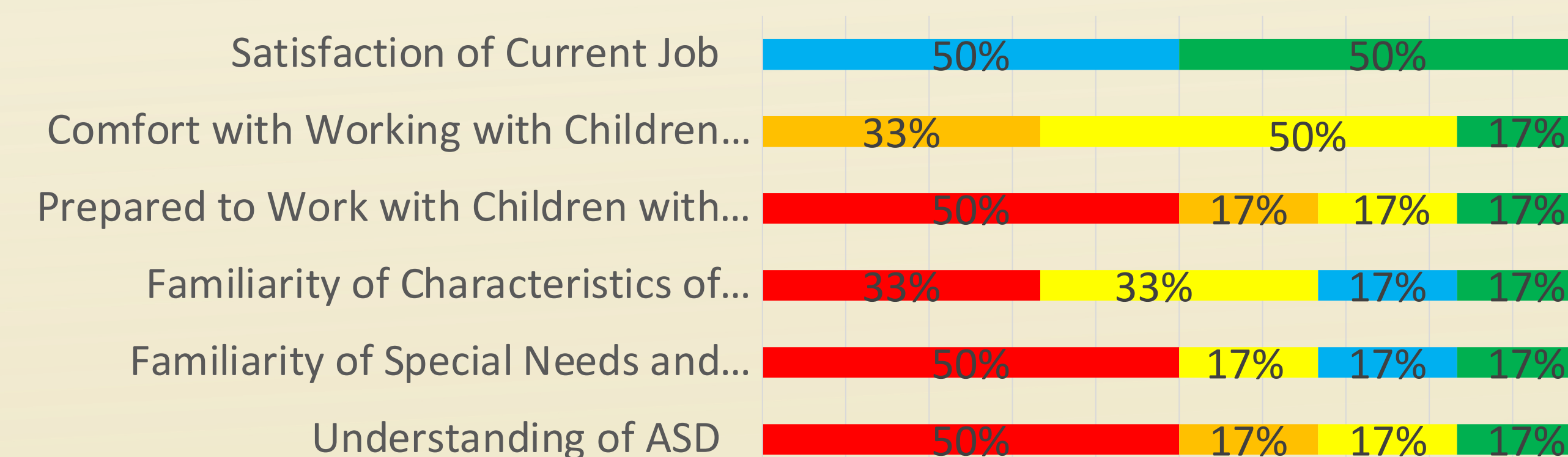
Pre-Training Survey:

- **Understanding of ASD** -> 67% strongly disagreed and disagreed in the pre-training survey and 17% in the post-training survey, 17% were neutral in the pre-training survey and 50% in the post-training survey, 17% agreed and strongly agreed in the pre-training survey and 34% in the post-training survey
- **Familiarity of Special Needs and Challenges of Children with ASD** -> 50% strongly disagreed in pre-training survey and 33% disagreed in the post-training survey, 17% were neutral in the pre-training survey and 17% were in the post-training survey, 34% agreed and strongly agreed in the pre-survey and 50% agreed and strongly agreed in the post-training survey
- **Familiarity of Characteristics of Children with ASD** -> 33% strongly disagreed in the pre-training survey and 17% disagreed in the post-training survey, 33% were neutral in the pre-training survey, 34% agreed and strongly agreed in the pre-training survey and 84% agreed and strongly agreed in the post-training survey
- **Prepared to Work with Children with ASD** -> 67% strongly disagreed and disagreed in the pre-training survey and 33% in the post-training survey, 17% were neutral in the pre-training survey and 33% in the post-training survey, 17% agreed and strongly agreed in the pre-training survey and 34% in the post-training survey
- **Comfort with Working with Children with ASD** -> 33% disagreed in the pre-training survey and 17% in post-survey training, 50% were neutral in the pre-and post-training surveys, 17% agreed and strongly agreed in the pre-training survey and 34% in the post-training survey
- **Satisfaction of Current Job** -> 50% agreed and 50% strongly agreed in the pre-and post-training survey

Section I: Likert Rating Scale

PRE-TRAINING SURVEY

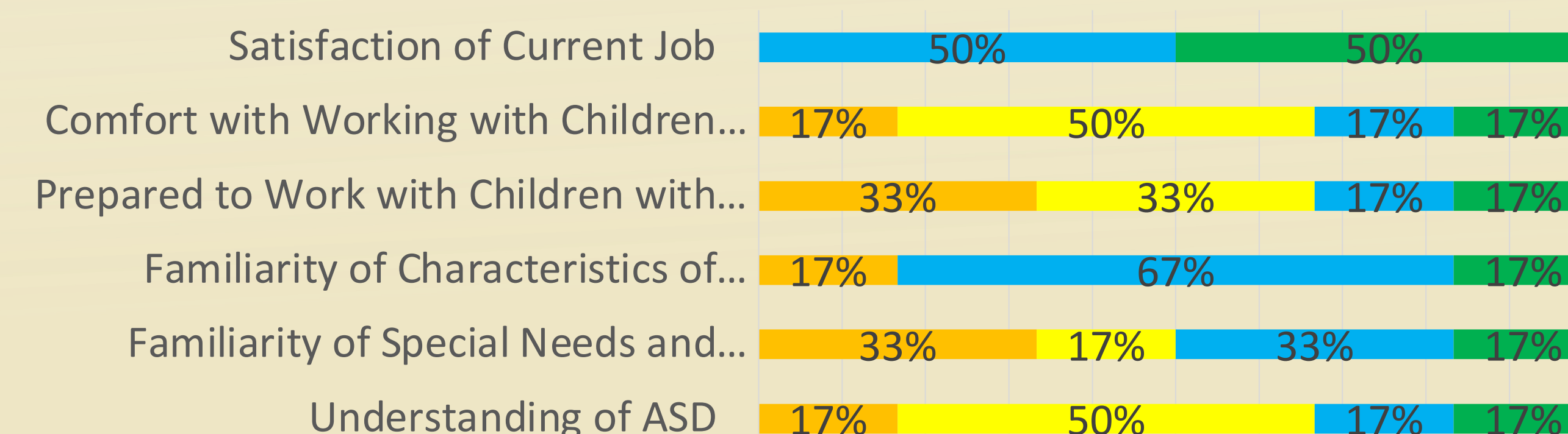
Table 1



■ Strongly Disagree ■ Disagree ■ Neutral ■ Agree ■ Strongly Agree

POST-TRAINING SURVEY

Table 2



■ Strongly Disagree ■ Disagree ■ Neutral ■ Agree ■ Strongly Agree

RESULTS (cont'd)

QUALITATIVE DESCRIPTIONS: COMMON THEMES

THEME 1: More Training (Pre-Training Survey)

- "Get **more training** on how to work with children with ASD and how to handle a class with children with and without ASD."
- "Receive **more training** on how to become qualified to be able to meet the special needs of children with ASD."

THEME 2: Feeling Frustrated and Anxious (Pre-Training Survey)

- "I feel **frustrated** and **anxious** when working with children with ASD because I do not have enough knowledge to teach children with ASD."
- "I get **anxious** and **frustrated**, so I take a deep breath and continue."

THEME 1: Continued Training and Support (Post-Training Survey)

- "This training was helpful, but I need **continued training** and **support** to be qualified to teach and care for children with ASD and to be able to meet their needs."
- "After the training, I did get helpful information on ASD that improved my confidence a little. I would like **continued training** and **support** from experts on ASD."

THEME 2: Feeling Frustrated and Anxious (Post-Training Survey)

- "I have learned different strategies that will help me not feel as **anxious** and **frustrated**. It is still complicated."
- "Now a little less insecure, **frustrated**, and **anxious**. But I believe I will still feel insecure, **anxious**, and **frustrated**, but not as much."

* (Replies were translated from Spanish to English.)

SUMMARY

The results of this study signify that presenting educational training on ASD to daycare providers led to substantial improvements in their attitudes and self-efficacy. Particularly, there was a 100% decline in unfavorable responses to the items in five out of the six items in the quantitative part of the survey. Participants exhibited improved knowledge of ASD, familiarity with special needs and challenges of children with ASD, and readiness and comfort when working with children with ASD, as proven by improvements in the ratings on five out of six items of the Likert scale.

Participants conveyed satisfaction with their current job with no changes from the pre-training survey to the post-survey training. Remarkably, the educational training did not have an influence on participants' job satisfaction and may be connected to the work environment. A participant who has a child with ASD strongly agreed with all six items on the Likert scale.

The themes that were shown from the study comprised the need for more training, accounts of feelings of frustration and anxiety, and the request for continued training and support when working with children with ASD.

All participants requested further and ongoing educational training on ASD and parent training and commented on the challenges of a child-to-teacher ratio of 11:1. All participants voiced their eagerness to implement strategies, experiencing a slight sense of relief and increased confidence.

The study has three limitations to be considered. The first limitation is the small sample size; two out of the six participants did not complete the open-ended portion of the surveys. The second limitation is that participants were predominantly Spanish, and the highest education level was a high school diploma or equivalent. Lastly, a standardized assessment was not utilized to complete the study.

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