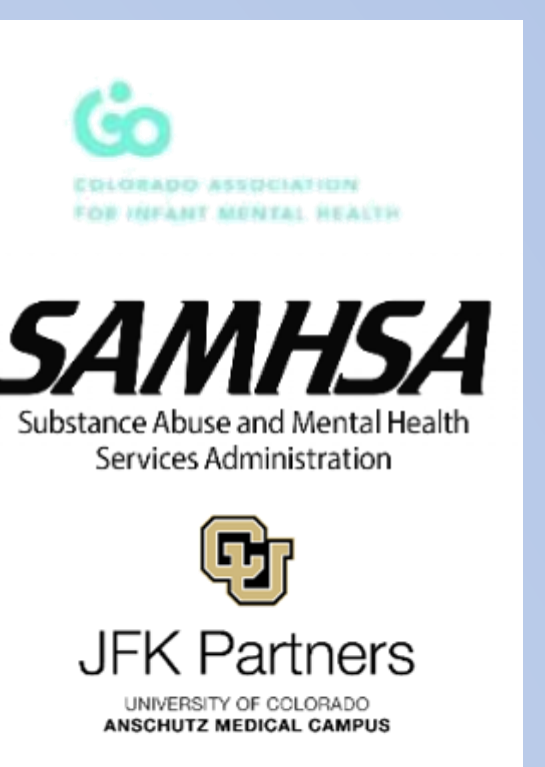




# Evaluating Knowledge Gained and Satisfaction with Project SUCCEED's Mental Health Training about Young Children with and without Neurodevelopmental Differences

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## Introduction

Many in the public are surprised to learn that mental health problems can and do occur in young children. This is true for children who are typically developing as well as for children with developmental differences. For a variety of reasons, including a lack of awareness of age-appropriate norms and expectations and stigma, these problems are often unrecognized or misunderstood and therefore go untreated. This lack of recognition is particularly true for youth with developmental differences, including autism. This is unfortunate, since sound mental health provides the foundation for all aspects of a child's development, and early treatment increases the likelihood of positive outcomes (Center for the Developing Child; ZERO TO THREE).

Project SUCCEED aims to address this critically important public health issue by offering training to a diverse group of individuals in Colorado who touch the lives of young children. Trainings focus on **recognizing** mental health challenges experienced by young children who are typically developing or have developmental disabilities, **learning** effective ways to respond to tantrums, meltdowns, or other challenging or aggressive behaviors, **understanding** when a referral to a mental health professional may be warranted, **knowing** how to connect with referral resources in the state.

## Overview of Training Series

- Module 1:** Setting the Stage for a Shared Meaning of I-ECMH
- Module 2:** Cultural Sensitivity and Diversity Considerations
- Module 3:** Caregiving Relationships and Early Brain Development
- Module 4:** Child and Family Development
- Module 5:** Early Adversity and Toxic Stress
- Module 6:** Identifying and Understanding Developmental Differences in Young Children
- Module 7:** Addressing Developmental Differences and Mental Health Symptoms
- Module 8:** Resources and Referrals

## Study Goal

The goal of this project is to evaluate qualitative and quantitative survey data to explore themes in the trainee community, potential differences by trainee demographic and professional experience, and overall satisfaction with the training.

This information will be used to monitor the contents that need to be revised or presented differently for future cohorts to ensure focus on mental health signs and symptoms, strategies and skills, and understanding how to respond to certain behaviors.

## Methods

Qualitative data analysis was conducted by coding the responses to three open-ended post-training survey questions asked after each module across two training cohort series.

In Series One, broad theme and category codes were created by two team members. After putting these open-ended responses into categories and themes, a third team member reviewed each response for most appropriate fit. Series Two responses were similarly reviewed and assigned to categorized themes by consensus of two team members. Survey responses and coded themes were entered in REDCap (Research Electronic Data Capture), a secure, web-based application designed to support research data capture (Harris et al., 2009).

Once placed into REDCap a quantitative analysis was conducted using STATA (StataCorp, 2023). Two-way frequency tables were conducted to determine associations between variables.

## Survey Questions

**Pre-Training demographic questions:** Race, Ethnicity, Education level, Number of years worked in the field, Job Type, Work Zip code, Gender.

**Post-Training Questions asked after each Module 1-8:** Training engagement, satisfaction, and knowledge gained (*Strongly Agree, Agree, Disagree, Strongly Disagree*):

- The Module was useful to me.
- Series 2 only:
  - The presentation has increased my knowledge on this topic.
  - I am satisfied with the knowledge and skills gained from this presentation.

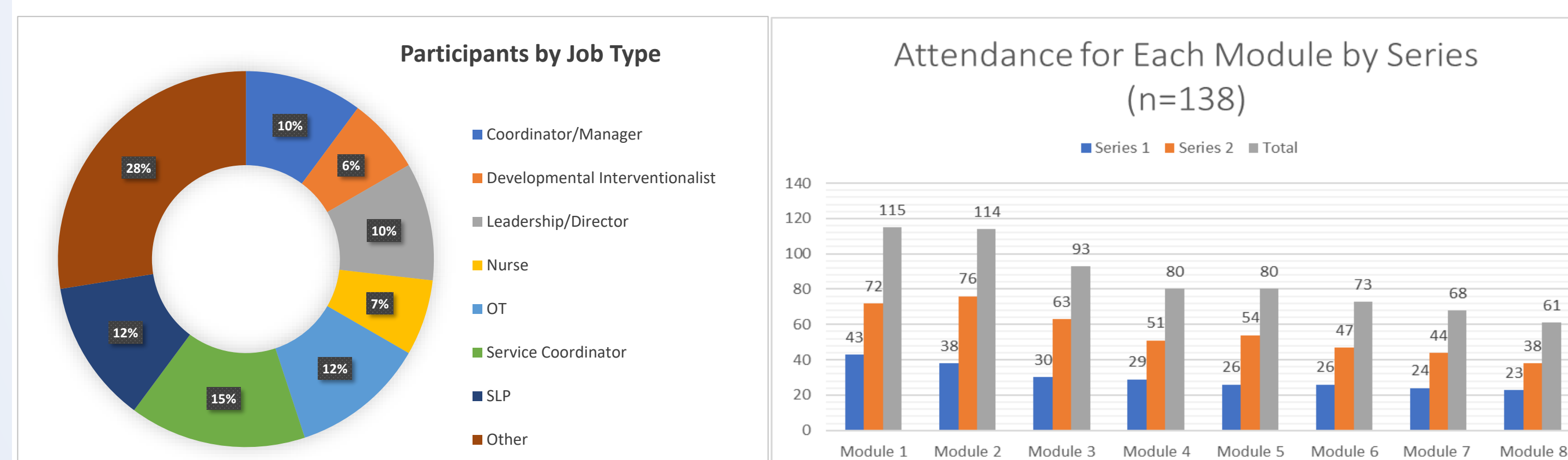
Open ended questions:

- The most important information I learned about young children's mental health and/or the factors that impact it is... ('learn')
- An 'ah-ha' moment I had was... ('ah-ha')
- What I still wonder about is... ('wonder')

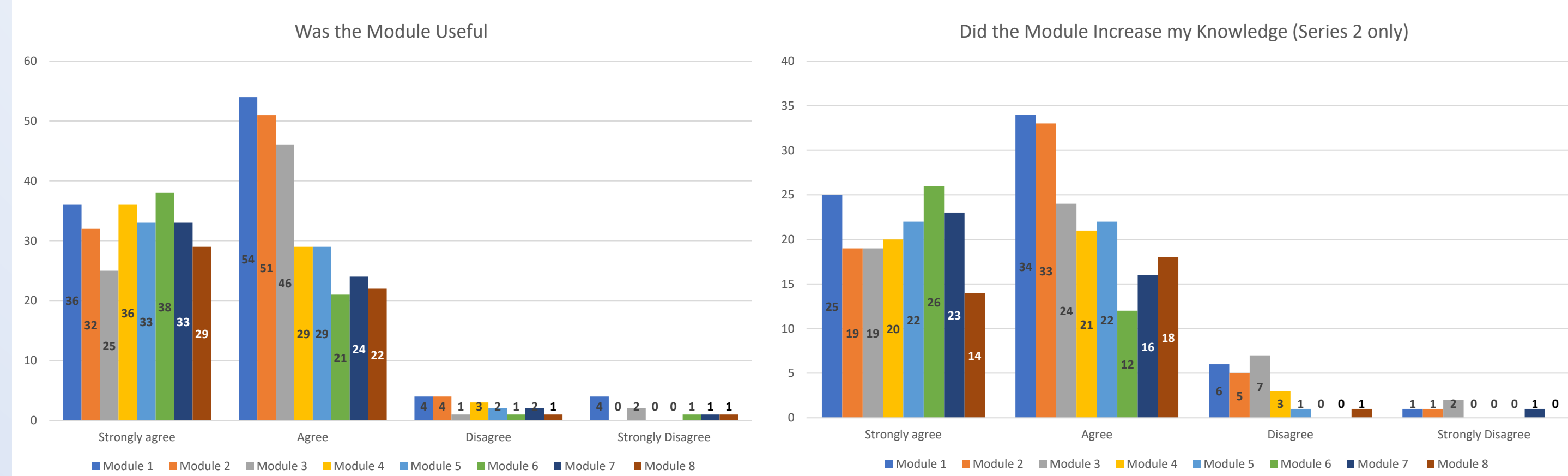
## Results

### Demographics and Attendance:

Of the 138 participants, the majority identified as female (96%) and white (85.5%). Most participants had a Bachelor's (31.2%) or Master's degree (55.8%). The mean number of years working in the field was 14 years.



### Training Usefulness and Knowledge Gained:

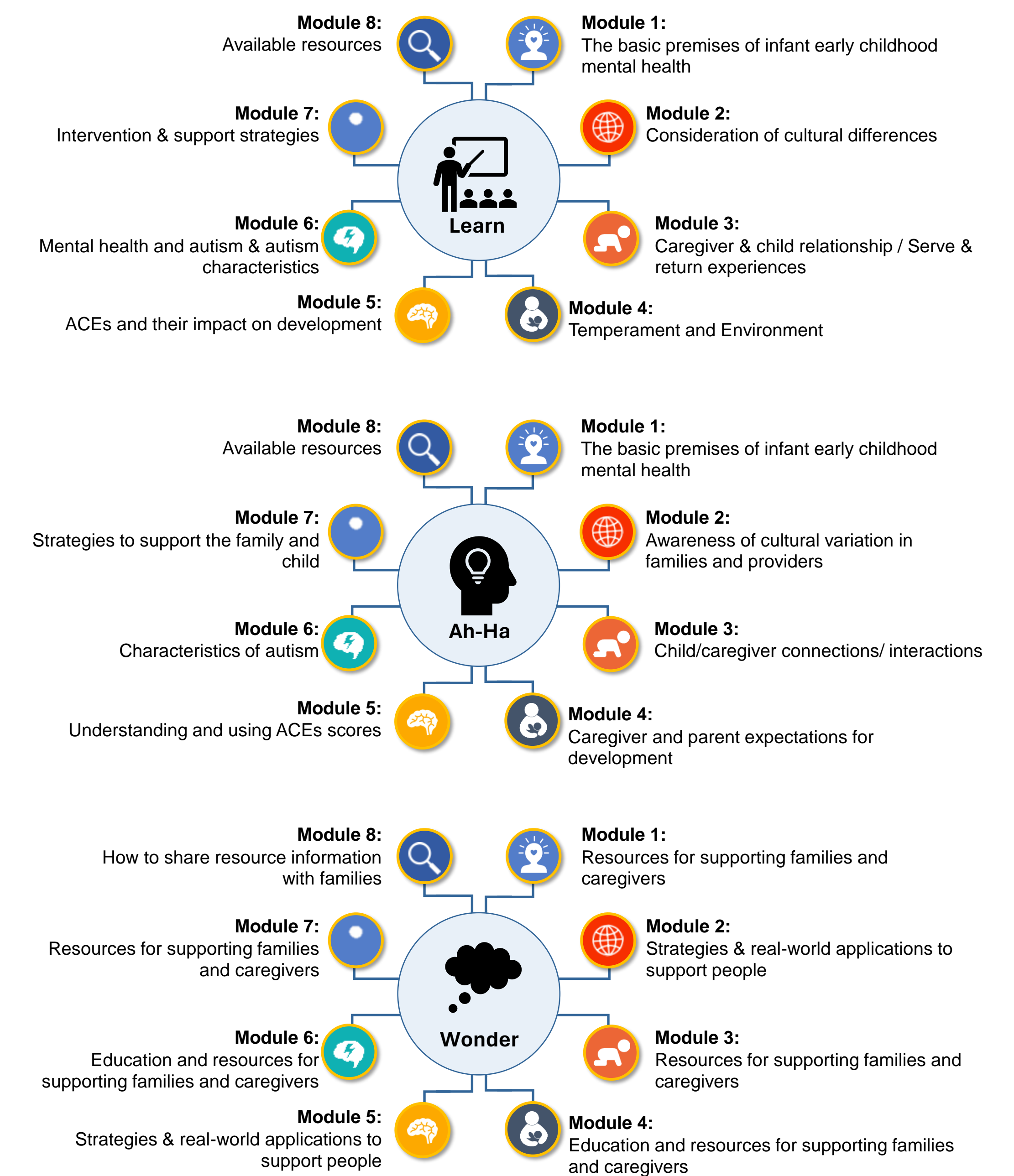


Most participants rated training usefulness and knowledge gains (Series 2 only), and satisfaction with knowledge and skills learned (Series 2 only) as agreed or strongly agreed (79.2%-100%, Average of 89.2%).

To make sure this training is fitting for all number of years in the field and job types, an association between these categories and attrition was run. The results show there was no association between attrition and job type ( $p=0.915$ ), and attrition and number of years in the field ( $p=0.299$ ). There was also no association between attrition and the demographic categories (Race, Ethnicity, Discipline, Zip Code, and Gender) or professional experience categories.

We looked at module satisfaction and knowledge gained; there was no association between these two categories and the demographic categories (Race, Ethnicity, discipline, zip code, and Gender) or professional experience categories. There was also no association between attrition and satisfaction and knowledge gained.

## Most Common Themes



## Conclusions

In conclusion, satisfaction and knowledge gained were high without differences in demographic profile or professional experience, indicating this foundational training is useful across all levels of experience and demographic groups.

Every Learned common theme in each module was directly correlated to the foundational information that we hoped they would learn or take with them. This indicated that this training provided participants with the education it planned to provide. The most common Ah-Ha themes were similar and overlapped with the most common Learned themes, indicating that these foundational topics were also providing new or reminder insight for training participants.

Across all modules, participants consistently reported wanting to know more about available supports and resources for families and/or providers in the Wonder theme. To address this need, Project SUCCEED created a resource library within Canvas for participants to access.

Overall, between the common themes, satisfaction, and knowledge gained, participants learned the intended foundational topics. We also had high ratings of "strongly agree" and "agree" to gaining knowledge on the topic and being satisfied with the information learned.

## References

Center on the Developing Child at Harvard University. (2023, October 31). Center on the Developing Child at Harvard University. <https://developingchild.harvard.edu/>

McPherson, P., Colon, M. A., & Scott, H. (2020). The treatment of the dually diagnosed: intellectual disability and severe psychopathology. In *Autism and child psychopathology* Series (pp. 475–504). [https://doi.org/10.1007/978-3-030-46835-4\\_29](https://doi.org/10.1007/978-3-030-46835-4_29)

Child and Adolescent Health Measurement Initiative (CAHMI). Data Resource Center for Child and Adolescent Health. (2018). "2016 National Survey of Children's Health: Child and Family Health Measures and Subgroups. SPSS Codebook, Version 2.0". Retrieved [4/26/2024] from [www.childhealthdata.org](http://www.childhealthdata.org)

Paul A. Harris, Robert Taylor, Robert Thielke, Jonathon Payne, Nathaniel Gonzalez, Jose G. Conde. Research electronic data capture (REDCap) - A metadata-driven methodology and workflow process for providing translational research informatics support. *J Biomed Inform.* 2009 Apr;42(2):377-81.

StataCorp. 2023. Stata Statistical Software: Release 18. College Station, TX: StataCorp LLC.

ZERO TO THREE. (2024, April 17). *Infant and early childhood Mental Health | ZERO TO THREE*. <https://www.zerotothree.org/issue-areas/infant-and-early-childhood-mental-health/>

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