Abstract

In working with children with autism spectrum disorder (ASD) it is important that school personnel implement ABA-based interventions in the educational setting. To ensure that those providing services have knowledge of empirically supported treatments and their application, each year the HANDS (Helping Answer Needs by Developing Specialists in Autism) program trains teachers and staff on ABA-based interventions to use when working with children with ASD. Training is done over five days through didactic lessons and a combination of observation, modeling, and coaching. The Assessment of Knowledge—Expanded scale (AoK-E) (HANDS in Autism, 2007) is administered prior to, at the conclusion of, and three months following training to assess participant knowledge prior to training and attainment and application of knowledge following training. AoK-E is a 37-item scale measuring knowledge in the areas of assessment, programming, goal development, teaching and behavior interventions, data collection and analysis, socialization, and generalization, in addition to other topics. The analyses of AoK-E results of 99 participants across three years prior to training, immediately following training, and three months after training will be discussed, demonstrating the effectiveness of the HANDS model in training school personnel in the use of ABA-based interventions with children with ASD.

Methods and Participants

One hundred and thirty-eight (N=138) participants attended one of the nine week-long summer training sessions across three years (2008, 2009, and 2011), of which 101 participants completed the follow-up assessment. Teachers (both general education and special education), therapists (e.g., school psychologist, SLP, or OT), instructional aides/paraprofessionals, and school administrators made up the 138 participants. Prior to attending training, participants completed the Assessment of Knowledge—Expanded (AoK-E) as part of an initial assessment packet. The measure was then repeated at the end of the last day of training and again approximately three months after the training was completed.

Results

Participants showed statistically significant improvement (p<.001) in total score from pre-assessment (M=57.68, SD=8.47) to post-assessment (M=69.03, SD=7.99). Participants' total score slightly decreased from post-assessment (M=69.03, SD=7.99) to follow-up assessment (M=67.89, SD=7.39) however the decrease was not of statistical significance (p=.124). Participants showed statistically significant improvement (p<.001) in percent correct from pre-assessment (M=70.57, SD=7.94) to post-assessment (M=76.43, SD=7.06). Participants' percent correct decreased slightly from post-assessment (M=76.43, SD=7.06) to follow-up assessment (M=76.99, SD=6.76). Results were not statistically significant (p=.433).

Conclusions and Future Directions

Future plans include standardization of the AoK-E tool as a measurement of attainment and application of knowledge with school personnel that work with individuals affected by an ASD or related developmental disability.

Acknowledgements

The development of this project was supported by grant number EY09462-31 from the Centers of Disease Control and Prevention and other charitable organizations. The ongoing efforts of the project are partially and currently supported through a grant from the Center for Disease Control and Prevention. The authors wish to thank Megan Conner, Alisa Diethe, Ashley Grint, Julia Kaszynski, Anne Fletcher, and Tiffany Neal for their helpful comments and support.

For more information about the program, visit our website www.HANDSinAutism.org