Research Opportunities in the Area of People With Autism Spectrum Disorder

The American Occupational Therapy Association (AOTA) Evidence-Based Practice Project has developed a table summarizing the research opportunities on people with autism spectrum disorder. The table provides an overview of the state of the current available evidence on interventions within the scope of occupational therapy practice and is based on the systematic reviews from the AOTA Evidence-Based Practice Guidelines Series. Researchers, students, and clinicians can use this information in developing innovative research to answer important questions within the occupational therapy field.

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Planning a research project requires consideration of many factors. Level of interest and knowledge in a specific area, access to appropriate populations of participants, support of mentors and other researchers, and funding availability all help determine the focus of a future project. An additional component to be considered is whether adequate, up-to-date research has already been completed on a topic; if sufficient evidence is available in a given core area, this area might not be the best choice for another research project.

The best research topic may be one in which either little research has been done or the research to date is insufficient, inconclusive, or mixed. In addition, when research conducted to date provides a low level of evidence and is of limited quality, additional high-quality research in the area is needed.

The table "Research Opportunities in the Area of People With Autism Spectrum Disorder" provides an overview of the state of current available evidence on interventions within the scope of occupational therapy practice. The table is based on the systematic reviews from the American Occupational Therapy Association (AOTA) Evidence-Based Practice Guidelines Series. The table lists specific interventions and indicates either that the evidence is strong to support the intervention or that moderate, mixed, or few studies support the intervention, and therefore it is a priority area for future research. Researchers, students, and clinicians can use this information in developing innovative research to answer important questions within the field of occupational therapy. Please refer to *Occupational Therapy Practice Guidelines for Individuals With Autism Spectrum Disorder* (Tomchek & Koenig, 2016) and the September/October 2015 issue of the *American Journal of Occupational Therapy* (Kuhaneck & Watling, 2015) for more information on the topic area and the systematic review process. To access the tables online and search for research opportunities in other practice areas, visit **http://www.aota.org/researchopportunitiestables.**

Researchers are also encouraged to enter their projects into AOTA's Researcher Database at **http://myaota.aota.org/research/.** This database provides AOTA with information such as relevant clinical settings and populations, *International Classification of Functioning, Disability and Health* level (World Health Organization, 2001), funder (if any), and key words to help guide research advocacy and policy initiatives. ▲

Research Opportunities in the Area of People With Autism Spectrum Disorder

Specific Intervention	Strength of Evidence
Social Skills, Social Communication, Restricted and Repetitive Behaviors, and Play Performance and Leisure Participation	
Group-based social skills training programs in both clinic-based and contextual settings to improve social skills	Strong evidence
PECS to improve social communication	Strong evidence
Joint attention training to improve joint attention	Strong evidence
Activity-based interventions to improve social skills	Area for future research
Computer-based interventions (social skills training, virtual reality, video modeling, and collaborative computer work) to improve social skills	Area for future research
Developmental interventions (e.g., relationship based or floor time) to improve social communication	Area for future research
Parent-mediated interventions (e.g., parent-mediated communication-focused treatment, Autism 1-2-3) and imitation training to improve social communication	Area for future research
Physical activity (kata training and exercise) to decrease restricted and repetitive behaviors	Area for future research
Recess intervention, leisure group, and Social Stories to improve leisure participation	Area for future research
Use of preferred, focused, or restricted special interests to improve social behaviors	Area for future research
Social Stories and peer-mediated interventions to improve social skills	Area for future research
Sensory–motor interventions to improve social communication	Area for future research
Sensory Integration and Sensory-Based Interventions	
ASI® to address individualized goal areas with measurement by Goal Attainment Scaling	Area for future research
Multisensory activities to improve occupational performance and behavior regulation	Area for future research
ASI to improve sleep, adaptive skills, autism features, and sensory processing	Area for future research
Multisensory center and noncustomized sensory diets to improve occupational performance and behavioral regulation	Area for future research
Dynamic seating to improve in-seat and on-task behavior and engagement	Area for future research
Environmental modifications (i.e., sound-absorbing walls and ceiling with additional halogen lighting) to improve attention behaviors, emotional control, and classroom performance	Area for future research
Work, ADLs, IADLs, and Education	
Video modeling and technology-enhanced visual supports and prompting to increase function and work performance	Strong evidence
Cognitive–behavioral approaches to improve function in the areas of ADLs and IADLs	Area for future research
CO–OP approach to improve ADL and IADL function	Area for future research
Supported employment to improve work retention for young adults	Area for future research
Exercise to improve classroom behavior	Area for future research
ASI to reduce caregiver assistance needed for self-care skills	Area for future research
Supported employment to improve quality of life	Area for future research
Technology-enhanced interventions to support ADL performance	Area for future research
Parent Self-Efficacy, Family Coping and Resiliency, and Family Participation in Daily Life and Routines	
Behavioral interventions to improve parental self-efficacy, confidence, and competence	Strong evidence
Parent training, education, and coaching to increase parenting skill and knowledge	Area for future research
Parent training, education, and coaching to improve family coping and resiliency and reduce parental stress	Area for future research
Behavioral interventions to decrease parental stress and family coping and resiliency	Area for future research
Relaxation and mindfulness training to reduce parental stress	Area for future research
Highlighting of strengths vs. deficits of child to improve parent affect and interaction	Area for future research

Note. ADLs = activities of daily living; ASI = Ayres Sensory Integration; CO-OP = Cognitive Orientation to daily Occupational Performance; IADLS = instrumental activities of daily living; PECS = Picture Exchange Communication System.

Acknowledgments

This work is based on the September/October 2015 issue of the *American Journal of Occupational Therapy* (Kuhaneck & Watling, 2015) and the *Occupational Therapy Practice Guidelines for Individuals With Autism Spectrum Disorder* (Tomchek & Koenig, 2015), all from the AOTA Evidence-Based Practice Project.

References

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