

Individualized Goals for Water Competency After Aquatic OT for Children on the Autism Spectrum: The AquOTic Trial

Claire Black, SPT¹, Jewel Elias Crasta, PhD, OTR/L¹, Erika Kemp²

¹Ohio State University, Columbus, Ohio, United States; ²Ohio State University, Columbus, OH, USA

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Primary Author and Speaker: Claire Black, claire.black@osumc.edu

PURPOSE: There is a critical need for drowning prevention intervention in autism. Aquatic occupational therapy (OT) can meet this need by prioritizing each child's individualized needs and facilitating caregiver involvement in therapy. This study examined the effect of AquOTic intervention (Kemp et al., 2023) on caregiver perspectives regarding performance and satisfaction with their child's water competency and swim skills.

DESIGN: A randomized control trial of the 10-week AquOTic intervention with 33 children on the autism spectrum (5-9 years).

METHOD: Using the Canadian Occupational Performance Measure (COPM; Law et al., 1990), caregivers set 1-5 individual goals for their child in collaboration with the interventionist. COPM was administered to the AquOTic intervention group at baseline and within 2 weeks of their final AquOTic session.

RESULTS: Caregiver goal categories included safety in water (n=17), safety around water (n=16), motor skills/movement in water (n=13), confidence/comfort/independence in water (n=11), floating (n=11), kicking (n=10), submerging (n=8), breath control (n=8), communication (n=5), and strength (n=2). The highest priority goals for caregivers were safety in and around water. Across all participants, performance ($t(32)=13.28$, $p<.001$, $d=2.3$) and satisfaction ($t(32)=12.75$, $p<.001$, $d=2.2$) of goals significantly improved post-AquOTic compared to baseline. Average change in performance was 3.56 (SD=1.46) and satisfaction was 4.62 (SD=2.08). The MCID (≥ 2) was met in 30 participants for change in performance and 29 participants for change in satisfaction.

CONCLUSION: AquOTic improved caregivers' perception of performance and satisfaction with their child's water competency and swim skills.

IMPACT STATEMENT: Our results emphasize the importance of individualized interventions to address water competency and safety for children on the autism spectrum and the use of COPM as a feasible tool to measure aquatic goals in pediatric practice.

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