

Empowering Parents: Developing an Assessment Tool to Enhance Resources for Families of Children with Autism, Focusing on Water Safety

Savannah J. Perez, OTS; Eriana L. Temperino, OTS; Amanda Vuelta, OTS; Thalia Barrios, OTS; Nicole Valdes OTS; and Tana B. Carson, PhD,OT

Florida International University: Master's of Science in Occupational Therapy

Background

- This study focused on the need for a specialized assessment to improve water safety for children with Autism Spectrum Disorder (ASD), who are at an increased risk for drowning.
- Current water safety assessments do not address the individual needs of children with ASD, such as sensory, communication, and cognitive difficulties.
- A semi-structured interview inspired by the Person-Environment-Occupation-Performance (PEOP) model was created to assess water safety skills and guide tailored interventions for clinicians.
- The tool identifies strengths and weaknesses in children with ASD to improve water safety education and reduce drowning risks.

Methods

- Participants** (n=8)
- Inclusion criteria:** Clinicians 18 years and older, have a caseload of children with ASD, and are proficient in speaking, writing, and reading English.

Instrumentation

- A Qualtrics survey was used to collect data based on clinicians feedback from our self developed Water Safety Skills: Semi-structured Interview (WSS).

Procedures



Theoretical Framework



Data Analysis

- Quantitative:** We analyzed the Likert data using frequencies and percentages vis SPSS to create bar graphs.
- Qualitative:** To analyze the open ended responses, we used content analysis to code our data, focusing on a conceptual analysis format.

Results

Quantitative: Participants reported that **all** questions from the semi-structured interview were useful/relevant and clear.

Demographics		Likert Scale Results	
	Mean	Questions Asked	M (1-10)
Age	38.6	Q1. How useful was this semi-structured interview for better understanding water safety strengths?	8.8
	n = 8	Q2. How useful was this semi-structured interview for better understanding water safety needs/weaknesses?	8.8
Female	8	Q3. Rate how comfortable you felt while administering the Water Safety Semi-Structured Clinical Interview.	8.2
White	2		
Hispanic	6		
Occupational Therapist	6		
Speech Language Pathologist	1		
N/A	1		

Qualitative Open-ended Responses	
Common Themes (# of statements)	Quotes (Participant ID)
Awareness (x2)	"Make me more aware" (Participant #4)
Education (x1)	"Educate the child on water safety, and caregiver education on water safety precautions" (Participant #5)
Language (x1)	"I believe offering this assessment in another language (i.e. Spanish) would make it more accessible..." (Participant #5)
Milestones (x1)	"I think making a section regarding milestones would.... assist in helping the therapist have a better understanding on the patient's overall developmental skills". (Participant #3)
Activity planning (x7)	"During sensory activities" (Participant #2)
Comfort Level (x1)	"Parent comfort level being in water if child needs help" (Participant #4)

Discussion

- A semi-structured interview (WSS) was developed to use on parents of children with ASD regarding their concerns around water safety.
- The WSS is an accessible resource for clinicians to use on their patients with ASD.
- Combining the WSS with clinical reasoning skills can provide client-centered water safety education to parents of children with ASD.
- The WSS enhances the development of interventions guided by the information gathered from this study.
- Clinicians provided feedback on ways to better improve the WSS and reported satisfaction with the development of this assessment.
- The WSS confirms the need for an assessment geared towards water safety skills as there are currently none that target ASD.
- Further research and pilot testing of the WSS will improve the efficacy and reliability.

Limitations

- Limited accessibility of participants for sample collection.
- Clinician feedback described a need for additional language options.
- Feedback also included the need for a more condensed interview to improve efficiency.
- Limited opportunities for parental feedback throughout the interview.

Conclusion

- Clinician feedback reported that the WSS is a useful tool that provides insight to parental concerns regarding their child's water safety.
- The WSS targets client's unique needs and helps prevent water accidents from happening, by increasing water safety awareness among parents and clinicians.
- Further research on this topic and development of the WSS would improve clinicians evaluation of children with autism regarding water safety.
- The development of the WSS is essential for improving water safety awareness for a high risk population like ASD.



References

