



# Swimming for Children with disability: Experiences of Rehabilitation and Swimming Professionals in Australia

---

Karen Graham (PhD candidate, UQ)

Dr Katarina Ostojic (USyd), Associate Professor Leanne Johnston (UQ, QCH), Dr Iain Dutia (ACU, UQ), Elizabeth Barnes-Keoghan, Dr Georgina Clutterbuck(UQ)

LinkedIn: [www.linkedin.com/in/karen-graham-108b4b23a](https://www.linkedin.com/in/karen-graham-108b4b23a)

Instagram: @karenbynamenotbynature

Email: [karen.graham@student.uq.edu.au](mailto:karen.graham@student.uq.edu.au)





# SPLASH Background



Physical activity is a key protective health factor



Children with disability → Less physical activity



Swimming is popular!



Potential benefits of swimming for children with disability

Most published research focuses on hydrotherapy



# SPLASH I Aims



Identify the availability and content of swimming interventions / activities



Identify barriers & facilitators to participation in community swimming activities



Identify barriers & facilitators to providing swimming-focused interventions / activities





# Methods

---



## Measures

- Survey



## Participants

- AHPRA-registered rehabilitation professionals
- Registered swimming teachers

## Procedures

- Completion of online Qualtrics survey

## Analysis

- Quantitative results
- Qualitative Reflexive Thematic Analysis





# Results

---



146 Survey Participants

91 Swimming

55 Rehabilitation

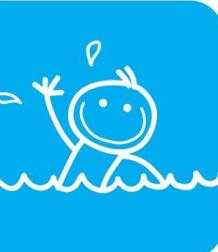


Qualifications

AustSwim (n=76), SCTA (n=7), LSV  
(n=4), RLSA (n=3)

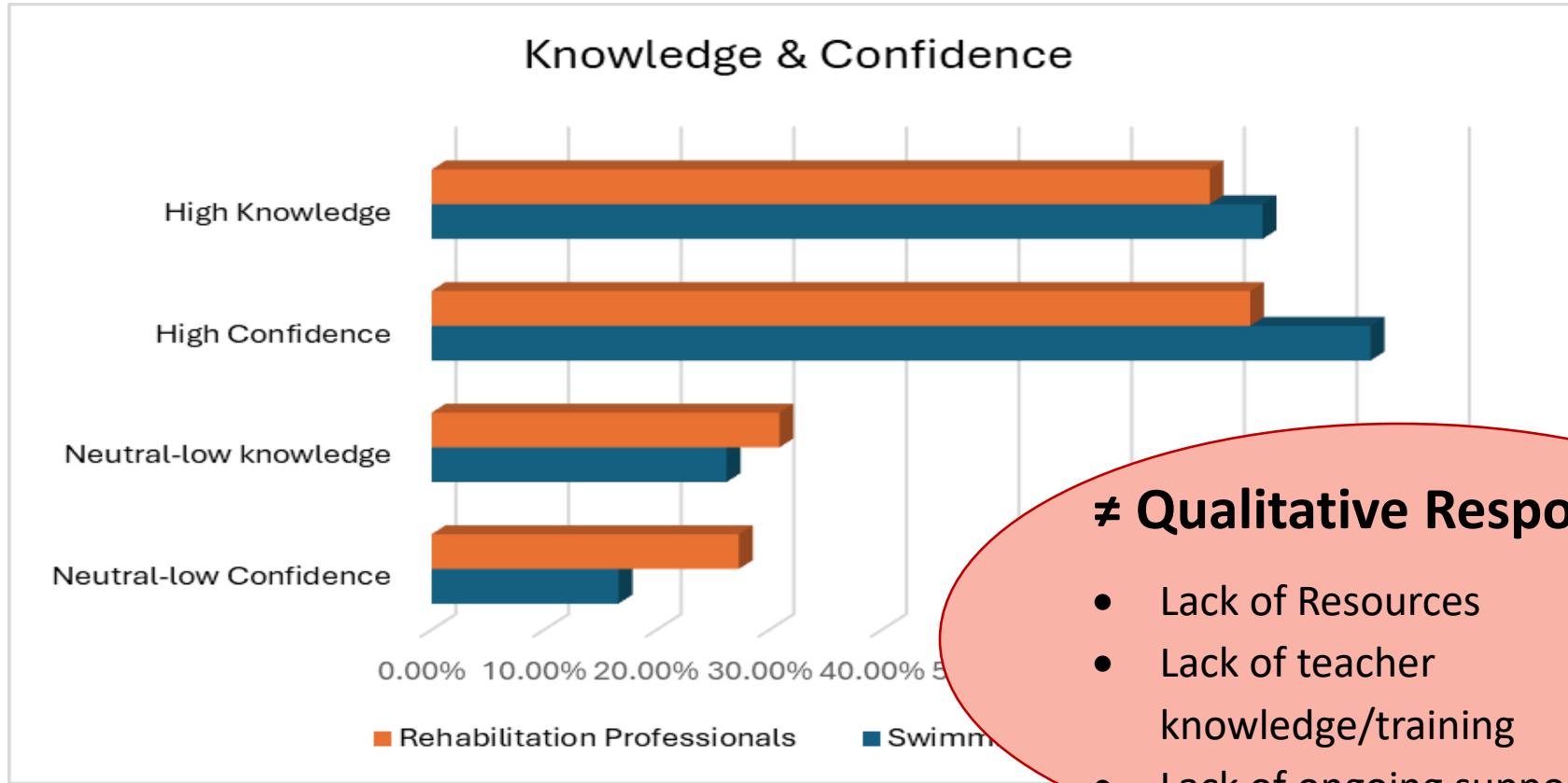
Qualifications

Physiotherapists (n=53), Occupational  
Therapist (n=1), Other (n=1)





# Results – Knowledge and Confidence

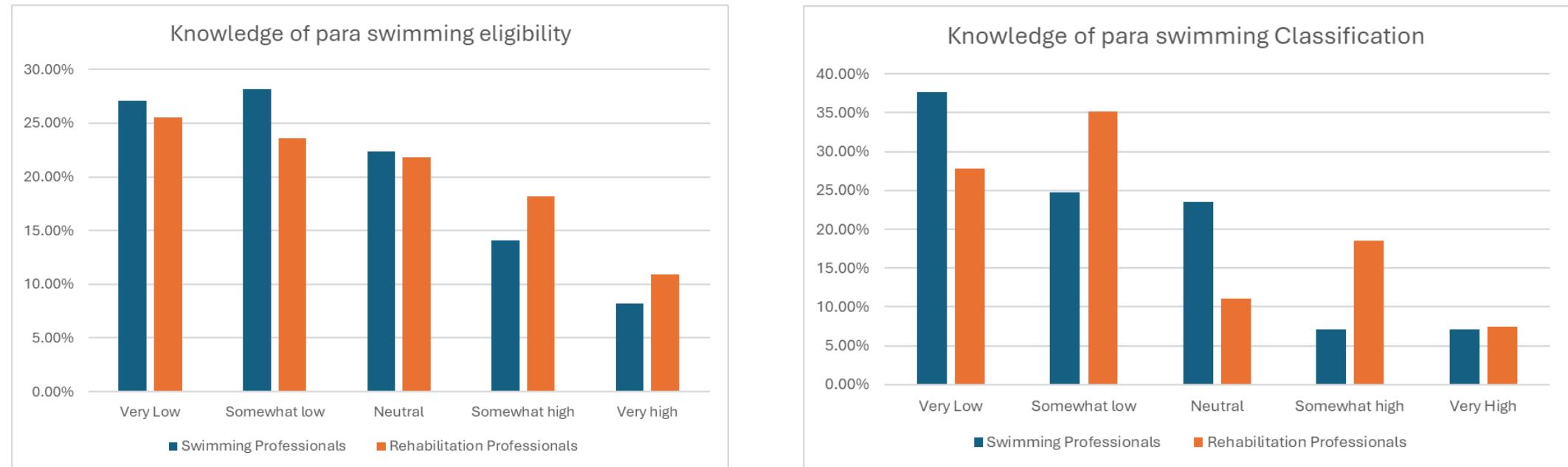
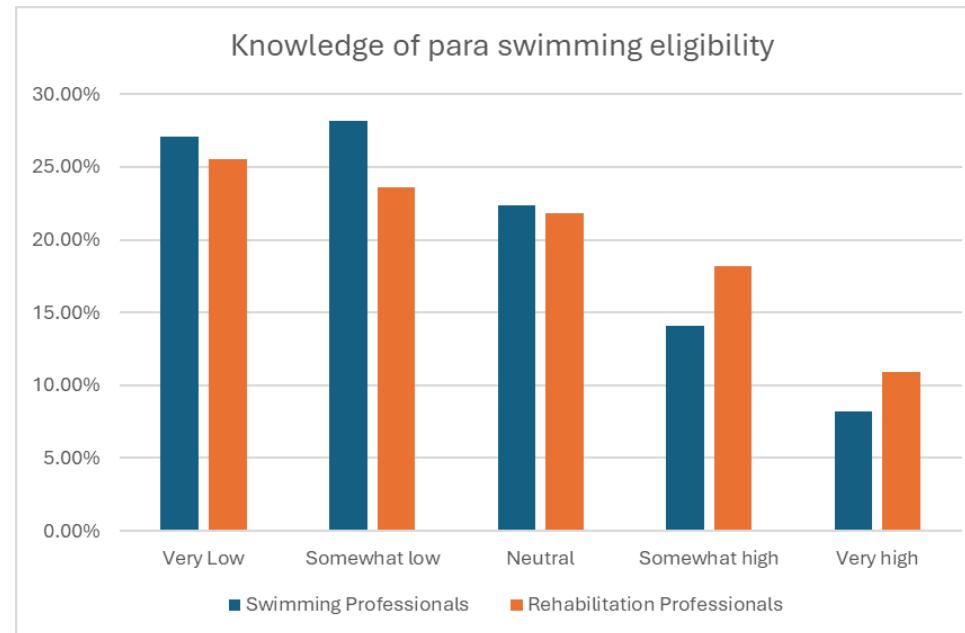


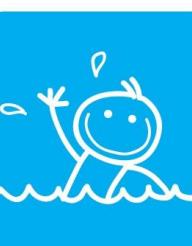
## # Qualitative Responses

- Lack of Resources
- Lack of teacher knowledge/training
- Lack of ongoing support

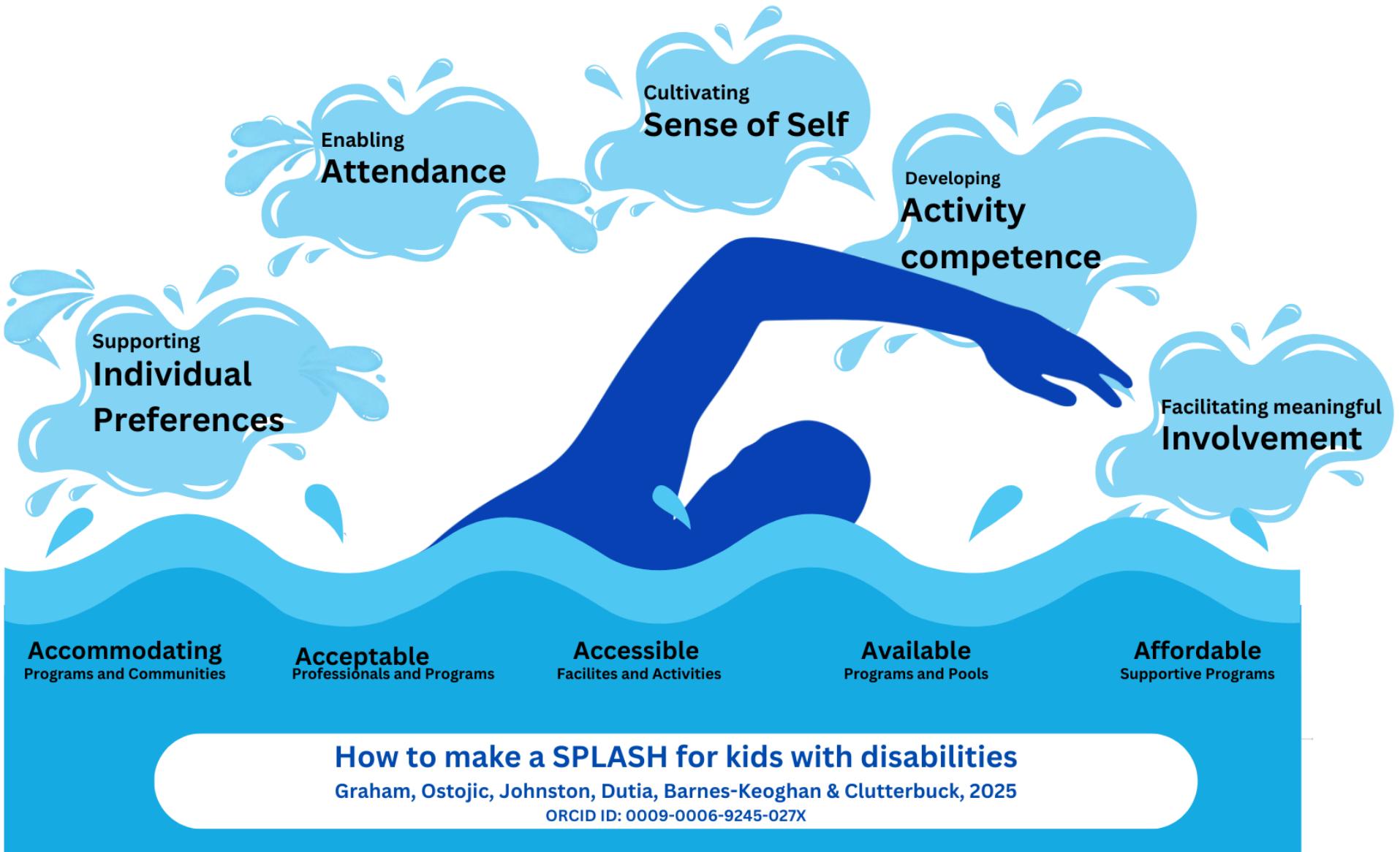


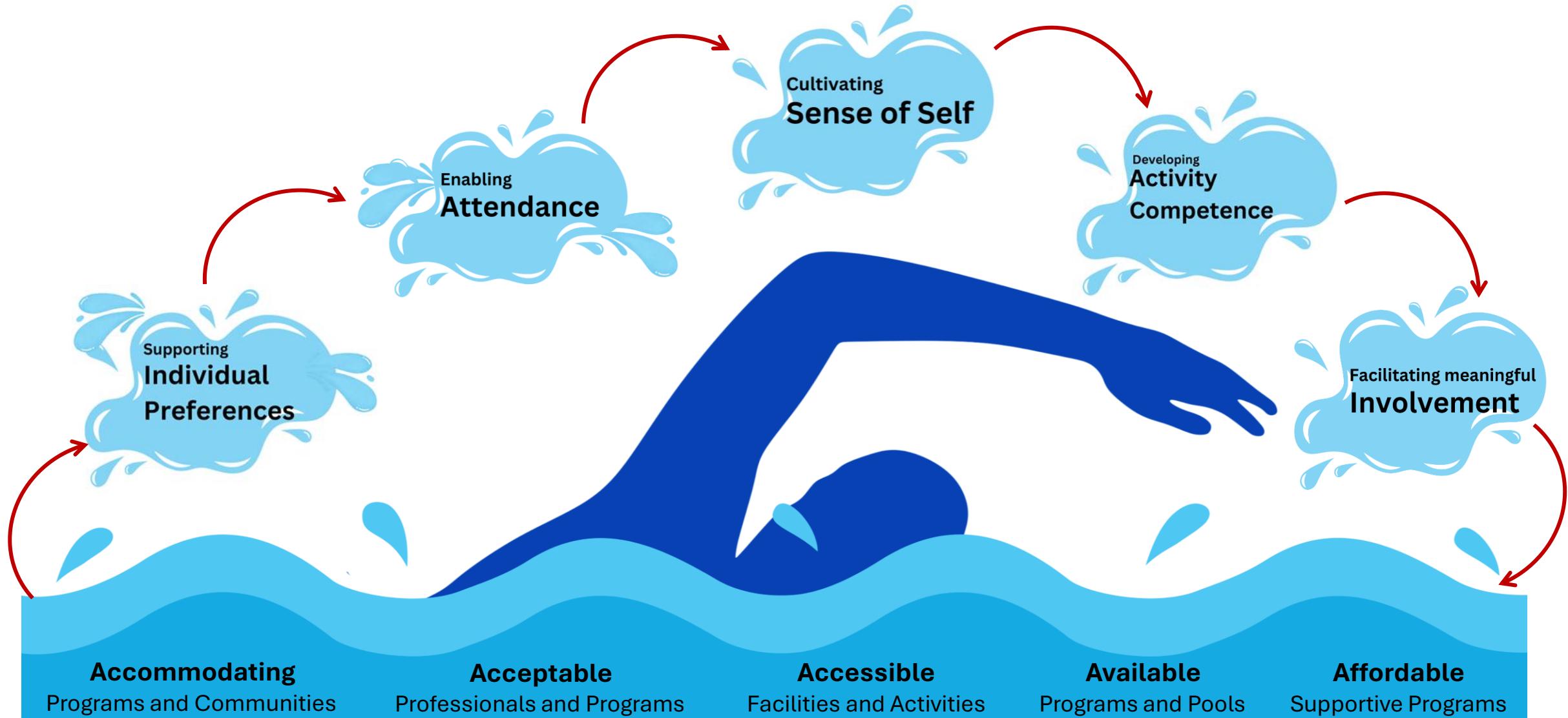
# Results – Para Swimming Knowledge





# Results/Discussion – Qualitative Questions





**To be confirmed by individuals with lived experience**



# Where to from here?

---



Codes and guidelines around accessibility



Acceptable and  
accommodating  
programs

- Improving education for swimming professionals
- Improving links between therapists and swimming professionals
- Provision of equipment and resources



We need more information around individual factors and participation....





## SPLASH #2: Swimming Participation: Linking All StakeHolders



Limited information from professionals around participation and individual factors



Lived experience voices needed  
Consumer Advisory Group  
Iterative co-design workshops  
Implementation of proposed solutions

SPLASH Survey II: Swimming  
Participation - Linking All  
StakeHolders

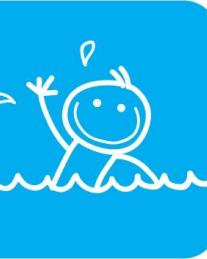




# References



- AusPlay. (2022). *AusPlay National Sport and Physical Activity Participation Report*. Canberra: Australian Government,
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589-597. <https://doi.org/10.1080/2159676X.2019.1628806>
- Carter, B. C., & Koch, L. (2023). Swimming Lessons for Children With Autism: Parent and Teacher Experiences. *OTJR (Thorofare, N.J.)*, 43(2), 245-254. <https://doi.org/10.1177/15394492221143048>
- Case, L., Ross, S., & Yun, J. (2020). Physical activity guideline compliance among a national sample of children with various developmental disabilities. *Disabil Health J*, 13(2), 100881-100881. <https://doi.org/10.1016/j.dhjo.2019.100881>
- Clement, M. G., Lee, K., Park, M., Sinn, A., & Miyake, N. (2022). The Need for Sensory-Friendly “Zones”: Learning From Youth on the Autism Spectrum, Their Families, and Autistic Mentors Using a Participatory Approach. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.883331>
- Conatser, P. (2008). International Perspective of Aquatic Instructors' Attitudes Toward Teaching Swimming to Children With Disabilities. *International journal of aquatic research and education (Champaign, Ill.)*, 2(3).
- Conatser, P., Block, M., & Lepore, M. (2000). Aquatic instructors' attitudes toward teaching students with disabilities. *Adapted Physical Activity Quarterly*, 17(2), 197-207. <https://doi.org/10.1123/apaq.17.2.197>
- Eltringham, P. (2021, 2021). NCC 2019 requirements for access to and into swimming pools associated with Class 1b, 2, 3, 5, 7, 8 or 9 buildings. *Access Insight*, 26-29.
- Fragala-Pinkham, M., Haley, S. M., & O'Neil, M. E. (2008). Group aquatic aerobic exercise for children with disabilities. *Developmental Medicine & Child Neurology*, 50(11), 822-827. <https://search.ebscohost.com/login.aspx?direct=true&AuthType=shib&db=ccm&AN=105587905&site=ehost-live&custid=s1097571>
- Fragala-Pinkham, M., O'Neil, M. E., & Haley, S. M. (2010). Summative evaluation of a pilot aquatic exercise program for children with disabilities. *Disability and Health Journal*, 3(3), 162-170. <https://doi.org/10.1016/j.dhjo.2009.11.002>
- Getz, M., Hutzler, Y., & Vermeer, A. (2006). Effects of aquatic interventions in children with neuromotor impairments: a systematic review of the literature. *Clin Rehabil*, 20(11), 927-936. <https://doi.org/10.1177/0269215506070693>
- Imms, C., Granlund, M., Wilson, P. H., Steenbergen, B., Rosenbaum, P. L., & Gordon, A. M. (2017). Participation, both a means and an end: a conceptual analysis of processes and outcomes in childhood disability. *Dev Med Child Neurol*, 59(1), 16-25. <https://doi.org/10.1111/dmcn.13237>
- Shields, N., & Synnot, A. (2016). Perceived barriers and facilitators to participation in physical activity for children with disability: A qualitative study. *BMC Pediatr*, 16(1), 9-9. <https://doi.org/10.1186/s12887-016-0544-7>



## SPLASH-I publication



[karen.graham@student.uq.edu.au](mailto:karen.graham@student.uq.edu.au)

SPLASH Survey II: Swimming  
Participation - Linking All  
StakeHolders

