2-1-2011

The Subjective Experiences of Those Afraid in Water

Belinda Eve Stillwell

California State University, Northridge, belinda.stillwell@csun.edu

Follow this and additional works at: <https://scholarworks.bgsu.edu/ijare>

How does access to this work benefit you? Let us know!

Recommended Citation

Stillwell, Belinda Eve (2011) "The Subjective Experiences of Those Afraid in Water," *International Journal of Aquatic Research and Education*: Vol. 5: No. 1, Article 7.

DOI: <https://doi.org/10.25035/ijare.05.01.07>

Available at: <https://scholarworks.bgsu.edu/ijare/vol5/iss1/7>

This Education Article is brought to you for free and open access by the Journals at ScholarWorks@BGSU. It has been accepted for inclusion in International Journal of Aquatic Research and Education by an authorized editor of ScholarWorks@BGSU.

The Subjective Experiences of Those Afraid in Water

Belinda E. Stillwell

The purpose of this study was to investigate the subjective experiences of individuals who are afraid in water. Semistructured interviews examined participants' history of fear in water, past experiences with traditionally taught swimming lessons, and what they believed should be taught and how. Results showed that all three participants had a history of traumatic water experiences. Two of the three participants had negative experiences in traditionally taught swimming lessons. The third participant never took part in formalized instruction. All three had insightful suggestions as to what they felt they needed to learn in swimming lessons and how their instructors could approach the learning process. After gathering participant's suggestions, a swimmers at-risk teaching strategy was proposed based on systematic desensitization.

Outcomes associated with the subjective experience are the keys to continuous participation in any physical activity. The subjective experience has been defined as how we feel, think, and react to physical activity rather than the actual performance itself. Individuals will return to physical activities that they enjoy (Hoffman, 2005). A typical experience for individuals afraid in the water has been noted as producing a frightening and negative subjective experience with potentially serious implications. This can result in a lifetime of avoidance behaviors. Without the comfort and confidence to be in, on, or around the water, individuals may never experience the potential for fitness, leisure, and restorative qualities enabled by water experiences.

The primary purpose of this exploratory case study was to investigate the subjective experiences of several individuals who were identified as being afraid in water. It was hoped that these qualitative data can systematically be used to create a humane and practical approach to teach swimming to those at risk due to fear of water.

One approach that has been used successfully for over 50 years to treat a variety of anxieties and phobias in the general population is systematic desensitization. It is a simple and nonthreatening method that involves two key steps. Step one is to teach relaxation techniques such as deep breathing, progressive muscle relaxation, or positive mental imagery to participants. The second step is to gradually expose individuals to situations they find fearful. In two clinical case studies, investigators effectively eliminated childrens' phobic responses to water with therapies focused on *in vivo* (in-water) exposure (Menziez & Clarke, 1993; Pomerantz, Peterson, Marholin, & Stern, 1977). In both cases, the *in vivo* treatment produced significant

The author is with the Kinesiology Department at California State University in Northridge.

gains that had generalized to other situations involving water and follow-up data indicated that benefits may be persistent.

The learn-to-swim curricula employed by agencies and organizations responsible for delivering instruction might also benefit from this study. Additionally, there is a need to address the existing gap in the literature on this topic as studies are sparse in the area of aquatics.

Method

Participants

After human subjects approval was confirmed, a total of three females voluntarily participated in this study after responding to flyers posted on university bulletin boards seeking interviews with research participants afraid in water. The sample included one African American and two Caucasians (ages 20, 30, almost retired). On an arranged interview date, the participant signed an informed consent form and the interview began. The entire process was completed within one hour.

Instrumentation

Using both previous research (Stillwell, in-press) and the authors' 27 years of teaching swimming and professional aquatic experience, a 20-item instrument with semistructured interview and follow-up questions was constructed to assess an individual's history of fear in the water, past experiences with traditionally taught swimming lessons, and, most importantly, what the individual believed should be taught and how (see Appendix). Responses to the questions were recorded using an Olympus Pearlcor J300 VCVA (Voice Activated) microcassette recorder and XB60/MC-60 Olympus microcassette.

Procedure

The participants' responses were transcribed and, for the most part, were reported descriptively and exactly as stated by each participant. Answers to the questions were summarized and loosely grouped under the headings of history of fear in water, past experiences with traditionally taught swimming lessons, and what they believed should be taught (curriculum) and how it should be taught (instruction/pedagogy).

Results

History of Fear in Water

Participant number one stated that she had been afraid in the water since the age of five when she was almost pulled under and swept away by an ocean rip current. This fear was affirmed at age nine when she took her first swimming lesson. She is now 30 years old and feels stable in shallow, clear water where she can see and easily touch the bottom. Being in deep pool water, however, is an unpleasant experience. Although she knows "how to" swim in deep water, if necessary, she is afraid of getting water in her nose as well as "falling to the bottom." The fear

of the unknown in deep open water feels overwhelming to participant one and the thought of “something getting her” (e.g., creatures), “having nothing to hold on to,” “not being strong enough to swim to safety” or “becoming disoriented” generates great anguish. Although her father and sister are unafraid in water, she reported that her mother was “extremely afraid in water” and wanted her to learn to swim so she would not be afraid. She believes her mother’s fear heavily influenced her present-day fear. It has led to a lifetime of avoidance of the water, especially deep open water.

Participant number two said she has been afraid in water since the age of three and she also experienced several traumatic episodes in her teens. One included witnessing her friend, who did not know how to swim, being pushed into the deep end of the pool. Now 21 years old, she still does not know how to swim. This fear includes both pool, open water situations, and in particular, ocean waves and deep water. Although both of her parents can swim, she is not comfortable in water that is above her knees. This participant’s response to being in the water results in rapid breathing, a pounding heart, and a heightened sense of nervousness that eventually turns to panic. At that point she simply has to get out of the water. The water is such an unfriendly place to her that she prefers taking showers over baths. She stated, “Um, I don’t know, [there is just] something about the water.” The effect is so profound that she began to physically shake just talking about it during the interview process.

Participant number three reported feeling at ease in shallow water, but since the age of 16, has been afraid in deep and open water. Her fear was caused by an ocean experience wherein she was repeatedly knocked down by waves. Despite her many attempts at conquering the fear that resulted from that experience with wave action, she remains fearful, particularly when she finds herself in water over her head. She acknowledged that her father was a good swimmer, but believed her mother was afraid in water and described it as a claustrophobic feeling. Interestingly, this participant said she “really wants to like the water” and loves to participate in water sports such as kayaking and sailing.

When asked if they had any ideas about how to keep from panicking, each participant offered both an individualized answer as well as a shared strategy. Participant number one chose only to enter clear, shallow water. Participant number two would use a step-by-step approach to gradually expose herself to the water. Participant number three recognized how important it was to first realize she was beginning to panic and then to lie on her back and float until she was calm again. All three participants simply avoided the water on most occasions to keep their negative subjective feelings at bay.

Past Experiences With Traditionally Taught Swimming Lessons

Prompted by her mother, participant number one agreed to take swimming lessons at the age of nine. It was not until these lessons began that she realized just how afraid she was in water. She acknowledged that her body “just totally seized up.” As a result of being tense, she was unable to perform such skills as floating on her front or back. Upon noticing her fear, the instructor gave her a special “floaty device.” The participant found this “floaty device” embarrassing to wear and felt

the increasing pressure of not being able to perform when compared to her peers. The situation became a negative one and the element of fun quickly vanished.

When asked if her instructor contributed to this negative experience she responded “yes.” Even though her instructor applauded and encouraged her when she performed a skill well, there were many times she felt forced and unnecessarily pushed to “keep up” with the other children. One such incident was the day they learned diving. While on the deck at the deep end, she was instructed to put her hands together and over her head. At that point the instructor pulled her hands into the water. After finding herself in the water, she thought about the possibility of hitting her head on the bottom, having to find her way to the surface, and swimming (with proper form) to the other side. This demanding task proved to be disorienting and scary and, thus, served to deepen her original fears. On the other hand, she had no memories of being scared of or ridiculed by the other children in class and spoke about how her sister (they were enrolled together) tried to help her learn the skills.

Participant number two remembered having swimming lessons when she was approximately 10 years old and again at the age of 14. In both cases she felt the instructor did little to contribute to her success physically or emotionally. Typically the instructor would ask her to do things she was unprepared for, such as jumping off the diving board into the deep end without knowing how to go underwater or return to the surface. Despite the fact that her classmates attempted to help her from time to time, they also contributed negatively to the experience by “calling her a baby” and yelling at her to “just jump off the diving board.” At that point in the interview, she was reminded “just how crazy kids could be.” Her other learn-to-swim experience was when her father attempted to teach her to swim, but his efforts were unsuccessful for similar reasons. She mentioned it was hard to trust anyone when it came to the water, even her own father.

Participant number three never had formal swimming lessons and believed she taught herself how to swim as a child during summer family vacations at the ocean. She remembered playing with other family members in the shallow water as a positive experience with no traumatic consequences until her unforeseen ocean encounter at age 16.

When asked to define swimming, participants two and three had similar responses while participant number one described a range of behaviors. Participant two replied, “being able to be in the water and do different activities while you’re in the water — that’s pretty much it — just really being able to be in the water; probably to a certain depth.” Participant three offered a more global response saying, “It should be an enjoyable experience. Refreshing; you’re out there in the sunshine and the water enjoying the physical aspects.” Conversely, participant one responded by stating,

At the very minimum, being able to stay afloat in water without drowning, but at the most, it’s probably doing the techniques well [enough] to save your own life. I see it, at this point, being lifesaving rather than fun.

What They Believed Should Be Taught and How

Participant number one felt that it would be important for an instructor to begin lessons by talking with students, parents, and caregivers to find out vital informa-

tion about their experiences on, in, or around the water, including candid discussions about fear. Once this information was collected, the instructor would be able to design appropriate learning activities that would closely match the needs of their students. She believes that these discussions should continue as students begin to practice in the water and should include “comfort checks,” reminders that it is “okay to be afraid,” and “how the water can provide comfort.” Other skills mentioned were “knowing how to get out of dangerous water situations,” managing breathing while in the water, learning “which end is up,” and routine relaxation exercises. The participant concluded that helping individuals afraid in water would be a “type of therapy” in that some things would intentionally “serve the psyche,” and other things would be more physical in nature.

Regardless of the skill being taught, participant number two emphasized the need for swimming instructors to break down the movements into “baby” steps. She suggested simply walking in shallow water before attempting to submerge the face or head. She said one of her swimming teachers simply forged ahead to kicking with a kickboard toward deeper and deeper water without first preparing her to gradually feel comfortable in shallower water. She also felt that she would benefit greatly from quiet one-on-one instruction versus a group situation. Having others around who were splashing and moving around made her nervous.

As established previously, participant number three declared that she knew how to swim but lacked the confidence to be in deep pool or open water. Therefore, she thought learning how to become more confident in the water would be what she’d want to focus on. She also thought building upper body strength would help. This notion was most likely based on what she felt was needed for success in water sports such as kayaking.

Collectively, all three participants agreed that it was essential to be warm and comfortable while learning to swim. This warmth would not only come from the pool water temperature, but also from wearing aquatic gear such as a wetsuit. They would also be willing to use swim goggles, nose clips, and ear plugs if they thought it would help. Participant number two thought that a “floaty” device such as a life jacket would be advantageous.

When asked how long they believed it should take them to learn to swim, participant responses varied from three months to two years. Participant number one also mentioned that annual “refresher” courses would be effective. Finally, when asked if they blamed themselves for not learning how to swim two of the three participants said no. Participant number two blamed friends and family members, whereas participant number three felt she was a “victim of circumstance.” Participant number one had mixed feelings when responding and said,

I kinda’ do because I was not happy with the kind of experience [I had] and I didn’t really try to go back once I was somewhat comfortable sort of swimming. I didn’t try to go back to keep up on it.

She also added, “I kinda’ blame the swimming instructor; I blame my mom for making me extra afraid. Now that I think about it, they [swimming instructors] weren’t that nice; I didn’t like that.”

Discussion and Recommendations

It was the purpose of this study to investigate the subjective experiences of several individuals who were afraid in water. Semistructured interviews examined participants' history of fear in water, past experiences with traditionally taught swimming lessons, and what they believed should be taught and how. Results showed that these three participants had a history of traumatic water experiences. Two of the three participants reported negatively-perceived experiences in traditionally taught swimming lessons. The third participant never took part in formalized instruction. All three had insightful suggestions as to what they felt they needed to learn in swimming lessons and how their instructors could approach the learning process. Due to the small sample size in this study, results should be viewed with caution as all individuals afraid in water may not have had traumatic water experiences. Other known causes of fear could include no access to learn-to-swim programs or high levels of inherent anxiety.

Based on the participants' responses, it seemed logical to the author to assume that an intervention containing both out-of-the-water and in-the-water experiences would be appropriate. As stated by participant number one, the exact nature of those experiences could be based on information obtained by talking with individuals afraid in water prior to the beginning of the teaching process.

Systematic Desensitization

As mentioned earlier, the field of psychology offers one feasible solution that might be applied: it is known as systematic desensitization. Invented by a South African psychiatrist named Joseph Wolpe in the 1950s, this approach operates on the premise that a person cannot be both relaxed and anxious or fearful at the same time. It has been used in past studies to desensitize those with water anxiety and other phobias and is based on the classical conditioning model (Egan, 1977; Menzie & Clarke, 1993; Pomerantz, Peterson, Marholin, & Stern, 1977).

In this desensitization model, anxiety (or fear) develops when a neutral event is associated with an event that naturally causes anxiety. For instance, you get into the water (a neutral event/conditioned stimulus) and you feel as if you cannot breathe (unconditioned stimulus). Therefore, you associate getting into the water with the inability to breathe. The feeling of not being able to breathe is a stimulus that naturally makes you anxious or fearful. One of the reasons cited as to why systematic desensitization works is known as reciprocal inhibition.

This explanation is rooted in neurophysiology and consists of understanding that the autonomic nervous system is comprised of two parts, the sympathetic and parasympathetic. The sympathetic nervous system is responsible for the physical response to stress, such as an increase in heart rate while the parasympathetic nervous system attempts to relax the body. Hence, during systematic desensitization, anxiety (or fear) is inhibited by the reciprocal (opposite) physiological response relaxation. Similar explanations have been presented as well, including counter-conditioning, extinction, cognitive factors (e.g., safe exposure may result in more realistic thinking), and nonspecific factors such as individual attention during the systematic desensitization process itself.

The first step in systematic desensitization is to teach relaxation techniques such as diaphragmatic breathing, deep progressive muscle relaxation, and/or positive mental imagery. The second step is to gradually expose individuals to situations that they find fearful. This part begins with the individual or group constructing a fear hierarchy: a list of situations from least fearful to most fearful (<http://panicdisorder.about.com/od/treatments/a/SystemDesen.htm>).

Constructing a Hierarchy. One of the simplest ways to develop a fear hierarchy is by interpolation. Interpolation is defined as the act of inserting or introducing elements between other elements or parts. This process begins by numbering a sheet of paper from 1 to 9. Next to the number 1 an individual describes a scene that causes no anxiety or fear and beside the number 9 a scene that causes tremendous anxiety or fear. At number 5 a scene is described that is midway between scene 1 and scene 9. The remainder of the hierarchy is filled out as follows: for 7, a scene between 5 and 9; for 3, a scene between 1 and 5; for 8, a scene between 7 and 9; for 2, a scene between 1 and 3; for 6, a scene between 5 and 7; and finally, for 4, a scene between 3 and 5.

For example, in the case of participant number three, the nine situations (from least to most fearful) with regard to water adjustment might be the following:

1. Walking in water that is just below knee deep (she cited being comfortable at this depth)
2. Walking in water that is knee deep
3. Walking in a water depth that is between the knee and thigh
4. Walking in water that is thigh deep
5. Walking in a water depth that is between the thigh and waist
6. Walking in water that is waist deep
7. Walking in a water depth that is between the waist and chest
8. Walking in water that is chest deep
9. Walking in a water depth that is between the chest and neck

Developing hierarchies would be a dynamic and ever-changing component of the teaching and learning process until individuals felt comfortable and confident in any water depth. Ultimately this would include being able to start and stop whenever they wanted to and the ability to get air at any time (Dash, 2006).

It is important to note that the participant is first exposed to these situations virtually, perhaps in a quiet room, before practicing them in the water. Participants and instructors can monitor minute-by-minute anxiety or fear levels by using a numerical scale (0 = calm versus 10 = panic). The crucial goal is to have the participant remain calm while gradually being exposed to the situations listed on the hierarchy without experiencing any negative consequences. This means a participant would always try to work at “level 0.” If this level cannot be maintained, the participant should be guided by the instructor back to the previous situation listed on the hierarchy until complete calmness is reinstated.

This desensitization approach corresponds with the participants’ suggestions in terms of what they needed to learn and how it should be delivered. First and

foremost is learning by accomplishing a series of small steps (i.e., the fear hierarchies) that are manageable while remaining calm. Swimming instructors can ensure this happens by helping students construct their hierarchies and have them practice on land first before gradually moving to in-the-water experiences. Of equal importance is the flexibility of the strategy. Each student's learning activities are customized and allow them to work at their own pace. As mentioned by participant number one, getting to know each student at the beginning of the class would help the instructor and student facilitate a plan. As similarities between individual hierarchies are noted, group hierarchies can also be constructed for small group or whole class use. Activities can be added on land to the relaxation strategies, such as group discussions about fear, writing exercises, role-playing scenarios, watching videos of successful water performances, or physically practicing water skills.

In terms of creating a positive learning environment, it would be ideal to offer swimming courses that are specifically designed to help those afraid in water. Two participants mentioned that having others (e.g., nearby pool patrons, classmates) around who were not afraid intensified their own fears and anxiety. If a separate course is not possible, swimming instructors should be aware of the impact classmates who are unafraid in water have on those who are afraid. With this in mind, swimming instructors can help classmates understand those who differ in ability and teach them sensitivity to these issues through group discussions and other activities so that a supportive environment can be established and maintained.

Future research should focus on testing the effects of systematic desensitization, using both in and out-of-water experiences, with individuals of all ages who are afraid in water. These results should be shared with aquatic professionals and aquatic agencies responsible for delivering swimming instruction as a means to augment current practices. We ought to employ the wisdom of those afraid in water to help guide our teaching practices and transform water into a place of safety, enjoyment, and restoration.

References

- About.Com. (2010). *Panic disorder*. Retrieved from <http://panicdisorder.about.com/od/treatments/a/SystemDesen.htm>. Accessed July 16, 2010.
- Dash, M. (2006). *Conquer your fear of water: An innovative self-discovery course in swimming*. Bloomington, IN: Authorhouse.
- Egan, S. (1977). *The effect of in vivo and in imagination systematic desensitization in the treatment of aquaphobics* (Unpublished doctoral dissertation). University of Oregon, Corvallis.
- Hoffman, S.J. (2005). *Introduction to kinesiology* (3rd ed.). Champaign, IL: Human Kinetics.
- Menzies, R.G., & Clarke, J.C. (1993). A comparison of in vivo and vicarious exposure in the treatment of childhood water phobia. *Behaviour Research and Therapy*, 31(1), 9-15.
- Pomerantz, P.B., Peterson, N.T., Marholin, D., & Stern, S. (1977). The in vivo elimination of a child's water phobia by a paraprofessional at home. *Journal of Behavior Therapy and Experimental Psychiatry*, 8(4), 417-421.
- Stillwell, B. (in press). Best practices for teaching those afraid in water. *Journal of US-China Education Review*.

Appendix

Semistructured Interview

History of Fear in Water

How do you define swimming?

How long have you been afraid in water?

Are your parents afraid in water?

Do you feel comfortable in shallow pool water? Why or why not?

Do you feel comfortable in deep pool water? Why or why not?

Do you feel comfortable in shallow open water? Deep open water? Why or why not?

Can you describe what happens to you physically when you become afraid in water?

Can you describe what “goes through your mind” when you become afraid in water?

Can you describe the emotions you feel when you become afraid in water?

What things (physical, mental, emotional) do you find frightening about the water?

Do you have some ideas about how to keep these things from happening?

Past Experiences with Traditional Swimming Lessons

Describe your past experiences in swimming lessons, if any?

What made it a positive experience?

- What did the instructor do (if anything) that contributed to the positive experience?
- What did your classmates do (if anything) that contributed to the positive experience?

What made it a negative experience?

- What did the instructor do (if anything) that contributed to the negative experience?
- What did your classmates do (if anything) that contributed to the negative experience?

What They Believed Should be Taught and How

What would an “ideal” swimming lesson(s) be to you?

- Can you name the things you feel you should learn?
- Can you put these in order (most important thing to learn being first)?

Do you feel it’s necessary to learn in a warm pool (at least 90 degrees) or would the typical recreational temperature (low 80’s) work?

- Is it necessary for the weather to be warm?
- Is it necessary for the pool to be indoors?

Would you wear aquatic gear to help keep you warm?

- Wetsuit, for example

Would you wear additional aquatic gear to help keep you comfortable?

- Goggles, ear plugs, nose plug

How long do you feel it should take you to learn to swim?

- How long do you feel you should take swimming lessons?
- Do you blame yourself for not learning to swim?

Do you have anything else to add? Anything else you'd like to talk about? Anything that wasn't covered?