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Drowning is the leading cause of death in children ages 1-4 in the United States (CDC, 2022). Understanding the intricate and diverse cultural characteristics that influence swimming in Hispanic/Latino communities like Watsonville, CA, is paramount for developing effective strategies to increase safety, access, and participation. Eighty percent of the Watsonville population cannot swim (City of Watsonville, 2022), and according to the CDC (2024), 72% of the Hispanic population in the U.S. have not had a swim lesson. Two key factors contributing to higher drowning rates are differences in swimming ability and pool access (Myers et al., 2017). The purpose of this study is to find solutions to increase swimming participation and ability among Hispanic/Latino families in Watsonville, CA. This mixed methods study consisted of 63 qualified survey respondents, 15 interviewees, and a four-person focus group made of Hispanic/Latino parents or care providers with a child aged 3–12. In addition, a community leader focus group made of four participants focused on generating solutions to increase participation. Swimming is desired in Watsonville; 86% of survey participants wanted their children to swim more, and lower-income families are more likely to agree ($p = .0263$) that their children would like to swim more than they do now. However, there are significant barriers to swimming. The top three survey ranked barriers to swimming participation are financial constraints, time limitations, and competing activities. These barriers have contributed to low swimming ability; 81% of respondents cannot swim more than one lap (25 yards), 77% of participant children cannot swim more than one lap and 84% of parents swim one time or less per month, less during

the winter. Increasing the frequency of swimming at an early age will result in impactful changes for the community. Louis noted, “You learn how at a young age.” Joining a swim team would increase swimming frequency. Survey results showed a statistically significant relationship between a child’s swimming ability and the response to “My child would be a successful swimming athlete if they were on a team” ($p = .0463$). It is important to ensure that all communities can access this healthy activity. A positive swimming cycle that educates parents, increases swimmer abilities, and creates coaches to pass on the skills to the next generation will help foster swimming in the community.

UNDERSTANDING WATER: VALUES, VIEWPOINTS, AND BEHAVIORS THAT
INFLUENCE SWIMMING PARTICIPATION IN WATSONVILLE, CA

by

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CHAPTER I: PROJECT OVERVIEW

Introduction

Humans have a complex and beautiful relationship with water: it is our life source, it can be deadly, and we are drawn to it; yet, in many communities, we do not swim in water. About 60% of the human body is made of water; it is a vital nutrient in every bodily cell (Water Science School, 2019). A fetus develops in aquatic conditions, and newborns remain comfortable in the water during bathing (Nazarov, 2021). In addition, Nazarov (2021) states that an aquatic environment is natural for Humans.

White et al. (2010) theorize that early humans may have increased brain development from eating Omega 3-rich saltwater fish, and an attraction to freshwater sources may have increased chances of survival. He indicates that choosing water is an evolutionary survival mechanism. In White et al.'s (2010) study, humans prefer pictures of nature and “green spaces” that include large bodies of water over pictures of cities and photos without water. In addition, White et al. (2010) indicate that water has restorative properties, meaning the grind of daily life can increase stress and deteriorate a person’s cognition and mood. Responsively, water can restore a person to a positive state. Additionally, Zhang et al. (2021) state that aquatic environments are ecosystems that can improve mental well-being. There is a Latin statement, *Sanis Pierre Aqua*, that translates to *health from the water* (Nazarov, 2021). Water takes on properties of its surroundings; it is a “collective mirror” influenced by internal and external environments that change its molecular structure (Stoilov et al., 2022). There is a duality to water: serenity and destruction. Water does not always have positive benefits; deadly attributes

of water include cold temperatures, currents, and pollutants (NiDirect, 2023). Humans face a decision: live in balance with water and embrace immersion into it or avoid the threat and lose access to the benefits.

Immersion into water is commonly considered swimming, although there are distinctions like floating, wading, or drowning. Swimming is not a new phenomenon; it has been practiced since the ancient Egyptians and promoted by the Greeks and Romans (Britannica, 2022). Swimming plays a key role in health and connection to other human beings. It is a holistic movement that results in various health benefits like joint, cardiovascular, and mental health (Nazarov, 2021). Swim England's Swimming and Health Commission, led by Dr. Ian Cumming (2017), indicated that swimming participants vs. non-swimming participants had a reduced all-cause cardiovascular disease by 28% and lowered mortality by 41%. There are significant benefits to swimming and physical activity through swimming as it improves balance in older adults, reduces depression and anxiety, and can lead to improved social/emotional behavior in children with autism (Cumming, 2017). The social aspect of swimming is important because swimming instills a sense of belonging and connection to people (Moles, 2020). However, different cultures view swimming in conflicting ways. This study dove into a deep understanding of water in Watsonville, CA.

Phenomenology is the theoretical framework used in this study to uncover and understand the lived experience of individuals and families living in Watsonville, CA, and their relationship to water. Low and infrequent swimming participation is a safety issue in the community. The comprehensive understanding of individual or family views toward water results in a deeper meaning to understanding why there is low swimming participation for the

Latino community in this area. A holistic view of historical influences, the local culture, population demographics, water competency, and opportunity cost were needed to increase the understanding of swimming in Watsonville.

Drowning Statistics

Swimming is important because it affects public health and safety. Understanding Global and National trends can provide decision-makers with solutions for drowning prevention at a local level. Drowning is the third highest cause of unintended injury death worldwide, accounting for 236,000 annually (Centers for Disease Control and Prevention [CDC], 2022). Drowning is the leading cause of death in children ages 1-4 in the United States (CDC, 2022). The World Health Organization (WHO) indicates that certain groups, such as those with lower socioeconomic status, limited education, individuals in rural or remote areas, and ethnic minorities, are at a higher risk of drowning (Wilcox et al., 2020). For instance, in the United States, Black, Hispanic, and Latino communities experience the highest drowning rates, while in New Zealand, Māori and Pacific Islander populations have higher drowning rates compared to those of European descent (Wilcox et al., 2020). In addition to socioeconomic status, children with autism are particularly vulnerable to drowning (American Red Cross, 2022a). Kids with autism spectrum disorder (ASD) are 160 times more likely to undergo nonfatal and fatal drowning than their counterparts (Autism Society Florida, 2023). After 4 years old, drowning is the second most common cause of childhood injury-related deaths in the United States (CDC, 2021). Additionally, drowning can occur without full submersion, and for every drowning victim, five children receive emergency care for nonfatal drowning distress (American Red Cross, 2022a). This is a serious global and national issue. During a Pajaro Valley Unified School

District board meeting, Matthew Martinez advocated for pool equity and water safety, indicating they do not have a pool, and three students were lost to drowning. The alternative is anguish and lifelong emotional repercussions for the surviving friends and family. Take a moment and picture your child at 2 years old being drawn to water; have you prepared them to enter, has the educational system, and has our government?

Unfortunately, many families in the United States lack basic swimming skills, with over 60% of White, Hispanic/Latino, and African American families unable to swim (American Red Cross, 2022a). Pool access, swimming opportunities, and swim training programs factor into swimming participation and potential drowning rates (Myers et al., 2017). Furthermore, parental swimming skills are often a critical determinant of their children's swimming ability, thus creating a "trickle-down" effect (American Red Cross, 2022b). For example, parents with a swimming background tend to have children who swim more and are better swimmers because they directly or indirectly pass this knowledge on to their children. An opposite cycle happens for parents who do not swim; their children tend to swim less and have lower ability levels.

Two key factors contributing to higher drowning rates are differences in swimming ability and pool access (Myers et al., 2017). In Watsonville, CA, pool access is limited, as no year-round public facility exists. Additionally, while swimming participation is crucial, research suggests that limited swimming ability alone may not significantly affect drowning rates; individuals need to learn to swim well (Myers et al., 2017).

Understanding the intricate and diverse cultural characteristics that influence swimming participation in Latino communities is paramount for developing effective strategies to increase access and participation. Variables influencing swimming for minority youth include family

environment, access to safe pools, awareness of competitive swimmers, income, parental education, race/gender disparities, and fear of drowning/injury for children and parents (Irwin et al., 2008). Additionally, facility costs can be a detriment for school districts and municipalities to keep pools open; for example, I run a small 50- by 21-foot pool where heating and service costs are over \$5,000 a month. Pertaining to swimming involvement, positive parental influence is a main factor in determining child swimming participation (Layne et al., 2020). However, long parental work hours, limited pool hours, and high costs can inhibit participation. Even with numerous barriers, parents have many reasons to place their children in swimming, with fear of drowning being a leading factor in swimming participation (Layne et al., 2020). Additionally, parents want their children to have opportunities to swim, which they did not have (Layne et al., 2020). Understanding how these variables apply to the Latino population is critical.

Background Literature

In the United States, History, economic status, opportunity, and cultural views have influenced swimming participation (Wiltse, 2007). Northern pools were originally segregated by gender and economic status; however, during the peak of swimming popularity, in the 1920s through 1940, when swimming was as popular as going to the movies, racial segregation became prominent due to gender integration at pools (Wiltse, 2007). Continued segregation in the 1950s brought a trend for middle-class white Americans to swim at neighborhood club pools while African and Latino Americans swam at inner city municipal pools (Wiltse, 2007).

In California and the Southwest, Mexican Americans were excluded from pools, theaters, and even schools during the early 20th century (Ayon et al., 2010). Decades of segregation and discrimination resulted in fears that have been passed down for generations (Ross et al., 2014).

Historical influences within the Hispanic/Latino community have contributed to lower swimming participation, and issues relating to race, socioeconomic status, and cultural typecasting that have occurred through the centuries have influenced drowning rates (Beale-Tawfeeq et al., 2018).

While historical racial inequities explain why certain minority groups do not swim, current trends indicate that socioeconomic status influences swimming participation in minority groups. For example, Asian Americans represent about 8.8% of the USA swimming membership (USA Swimming, 2020) and 6% of the U.S. population (U.S. Census Bureau, 2020a), with a median household income of \$112,800 (Guzman, 2024). Hispanic and Black populations have household incomes of \$65,540 and \$56,490, respectively (Guzman, 2024). USA swimming populations are 3.4% Hispanic/Latino and 1.5% African American/Black (USA Swimming, 2020), well below the national population averages of 18.7% and 12.1% (U.S. Census Bureau, 2020a). These statistics indicate low swimming frequency within the Hispanic Latino community is influenced by current economic factors. If the Hispanic/Latino swimming population was commensurate with the US Asian population about 20% of the USA swimming population would be Hispanic/Latino.

Positionality

My position has a duality. I am an insider in the community but an outsider to the Mexican/American community. Running a USA swimming club in Watsonville, which involves interacting with parents, civic employees, and community members, has me involved as an insider. However, I also work in Santa Cruz. As a surfer, swimmer, and former lifeguard, I am aligned with the water-based culture of this neighboring area that has different values, which

would make me an outsider in Watsonville. Traveling with my Brazilian immigrant father and Midwestern bilingual mother provided an expanded view of other cultures. While I am an outsider in the Mexican culture, I have an understanding and acceptance of diverse cultures.

This duality of perspectives applies to swimming. The local culture views swimming as a leisure activity, and I view swimming through a performance lens, having coached up to the Olympic Trial level. Additionally, my mother was a coach and Olympic Trialist and has a family background in performance swimming. This swimming background increases bias toward the definition of swimming and wanting to increase swimming participation at basic and higher levels. I define swimming as ‘moving through water over a defined distance with a measured time.’ The better the time, the more effective the swimmer.

Setting

Watsonville is a coastal city in Central California with a mild Mediterranean climate that experiences morning fog and hot afternoons. The area consists of rolling hills, fertile agricultural areas, and rich biodiversity (City of Watsonville, 2022). Watsonville is a hard-working community that takes immense pride in its agricultural roots and is heavily influenced by Mexican culture. Families are the central focus of local culture, but events like the Strawberry Festival broaden community interaction. The City of Watsonville is valued in the community because of its focus on the well-being of families. Additionally, the school district is relied upon for information and services for children.

Residents enjoy activities at nearby wetlands, lakes, rivers, and the ocean. The Pajaro River has been a source of two major floods in the area, one in 1995 and the other in 2023.

President Joe Biden visited the area after the 2023 floods to survey the devastation (Guild, 2023).

In an area with numerous water sources, it would benefit the public to know how to swim.

Water Availability in Watsonville

In today's climate, municipal pools are not prioritized and are endangered in the United States (Wiltse, 2010). Lower socioeconomic communities typically have fewer pools, and lower-income families have fewer swimming opportunities (Saluja et al., 2006). In contrast to lower socioeconomic communities, wealthier patrons in higher socioeconomic areas can access more public and private facilities with pools and swim more often. For example, Santa Cruz, CA's higher-income area has a 50-meter public pool at Simpkins Swim Center with a lesson/wading pool and another 25-yard facility at Harvey West Park. The Santa Cruz pools are in an area with an average household income of \$96,217 (U.S. Census Bureau, 2020b). Watsonville, a lower-income area with an average household income of \$67,007 (U.S. Census Bureau, 2020b), does not have a public pool but a memorandum of understanding (MOU) with the school district for summer pool use (about 8 weeks). Very low income for a family of four in Santa Cruz County is considered \$77,750 (Housing Authority of the County of Santa Cruz, 2022). Additionally, there are two public high schools in the lower-income community of Watsonville, and only one has a pool. All three public high schools in Santa Cruz have a swimming pool. The population bases are similar; the greater Watsonville area (city population of 52,067, 84% Hispanic/Latino) has a population of 84,000, and the City of Santa Cruz has a population of 62,341 (U.S. Census Bureau, 2020b). Watsonville is a lower-income community that is underrepresented in pool access. The result is that an estimated 80% of the Watsonville population cannot swim (City of Watsonville, 2022). The CDC and Dr. Tessa Clemens et al. (2024) state that 72% of the Hispanic

population in the U.S. has never had a swim lesson. Less access and swimming availability in low-income areas have consequences, with 79% of children having little to no swimming skills in households with less than \$50,000 in income (Stop Drowning Now, 2020). Conversely, children in higher income/education families were better swimmers comfortable in the water and less worried about drowning (Irwin et al., 2008).

To understand why Watsonville does not swim, we must understand the community. A general understanding of the community or ethnic group can help craft swimming programs to address gaps and needs. The Latino culture is a collectivist culture that values respect, hard work, and family values (CDC, 2012). These families have rich cultural traditions, connected values, and a prominent youth population. Watsonville has a population average age of 30.8 years (U.S. Census Bureau, 2020b), significantly lower than the 38.8 U.S. population average years of age (U.S. Census Bureau, 2020a). The City of Watsonville has 8,327 children aged 0–9 and 8,136 children ages 10–19, comprising 30% of the population (U.S. Census Bureau, 2020b). This youthful community is experiencing health concerns; the childhood obesity rate in Watsonville is 49.3% (Babey et al., 2010), and swimming can help reduce obesity. Twelve miles away, the higher socioeconomic community of Santa Cruz has childhood obesity rates of 31% (Babey et al., 2010). Swimming can help this community, especially the youth population, increase health and water competency.

Cultural Underpinnings

To understand the Latino population in Watsonville, it is crucial to consider the unique cultural behaviors, values, and beliefs that define this community. The Latino community values familismo, characterized by strong family ties, pride, belonging, and obligation (Ayón et al.,

2010). This remains a protective and enduring cultural trait across generations. Familismo results in family pride, where the entire family shares the success of one family member (Ayón et al., 2010). Family values include love, loyalty, and children, with hard work particularly important in the Latino culture (CDC, 2012). Many Latino parents in Watsonville work sunup to sundown in the fields, which instills a sense of determination and persistence in their children. In relation to youth swimming, parents barely have time to take children to practice or swim meets, which can span entire weekends. This emphasis on taking care of family members is reflected in the strong family support Latino children typically receive from parents and extended family members, who often live in the same household (Garcia & Ozturk, 2018). This collectivist setting, which prioritizes group harmony over individuality, extends beyond the family to the community, where residents care about how they are perceived (Castells & Ebenkamp, 2003).

Machismo is also a part of the Latino culture but is more complex than masculine behavior. Defending family honor and conquering fear are central values that influence family and culture (Mirande, 1997). Self-reliance, defending beliefs, and taking a stand are important priorities in the Latino culture (Mirande, 1997). In addition, respecting family and friends is important for group harmony in the Latino community (Mirande, 1997). Swimming self-reliance in the Hispanic/Latino community is nuanced because a large percentage of the community cannot swim, so it is hard to pass on this skill to your child safely.

Language is extremely important to Latino culture, with most children fluent in English and Spanish (Garcia & Ozturk, 2018). Language is infused in Latino education and is essential to distributing cultural information (Institute of Medicine Committee on Health Literacy, 2004).

Teachers can utilize dual language skills for healthy development and learning outcomes.

Quicksilver Swimming in Watsonville values bilingual instructors to communicate with bilingual students but, more importantly, to communicate with parents who may only speak Spanish. Incorporating cultural competency in Latino student education can lead to a deeper understanding of life circumstances and promote literacy development (Overall, 2014).

Several studies have contributed to understanding swimming participation factors among minority communities. Irwin et al.'s (2008, 2010) research focused on constraints that impact minority swimming participation, while Pharr et al.'s (2014) study explored parental factors that affect the frequency of children's swimming. Furthermore, Myers et al. (2017) proved that competitive swimming could reduce drowning rates among minority swimmers. Dasinger et al.'s (2020) study emphasized the need for qualitative research on the reasons for guided swim lessons among minority youth swimmers. Finally, Pharr et al.'s (2018) study had social modeling implications; it found that parents' swimming ability predicted their children's swimming performance. Children swam more frequently when their parents encouraged swimming, swam with them, and had no fear of drowning (Pharr et al., 2014).

Barriers to swimming participation in the Hispanic/Latino community are numerous. Swimming barriers include cultural beliefs, lack of access, fear of water, language, and financial barriers. Various studies highlight swimming barriers. Cultural beliefs were discussed in Pharr et al.'s (2014) study, lack of access was discussed in Irwin et al.'s (2010) study, fear of water was discussed in Irwin et al.'s (2015) study, language barriers were addressed in a report from the USA Swimming Foundation (Irwin et al., 2010), and financial barriers were examined in Ryan et al.'s (2011) study. It is important to overcome barriers to find and support swimming solutions.

Purpose of Study

This research aimed to increase swimming participation and improve community health and quality of life among Latino families in Watsonville, CA. The research sought to understand the participants' lived experiences and relationship with water. In addition, the study explored how the local culture influenced swimming perceptions and participation. Finally, this research explored solutions to increase swimming participation and community health. The goal is to raise awareness and inspire action to address the swimming participation gap in this underrepresented swimming community by:

Aim 1: Capture the lived experiences and attitudes towards swimming and water safety among Latino families in Watsonville, CA.

Aim 2: Recognizing cultural values to identify and address the barriers that prevent Latino families in Watsonville, CA, from participating in swimming activities.

Aim 3: Investigating potential solutions and strategies to increase swimming participation and promote water safety among Latino families in Watsonville, CA, to improve community health and quality of life.

Methodology

This study utilized the value of systemic planned triangulation (Patton, 2015) through a mixed methods approach, specifically an interpretive paradigm with a phenomenological theoretical framework, to gather descriptive, demographic, and non-quantifiable data. Simply put, the methodology is designed to understand the participant's experience. *Phenomenology* is a research approach that focuses on finding meaning and value in the lived human experience (Armstrong, 2005). Phenomenology requires the researcher to empathize and recognize the participant and the phenomenon being studied (Alhazmi & Kaufmann, 2022). Edmund Husserl is

regarded as a pioneer in phenomenology, which, as a branch of philosophy, is influenced by Aristotle (Zahavi, 2018). Husserl tried to limit preconceived notions and took an observational approach to study phenomena that resulted in one's worldviews (Beyer, 2022). This theory aims to bracket off our preconceptions and let descriptions guide the analysis (Davidsen, 2013). Husserl's approach describes how phenomena appear to the subject and their experience (Davidsen, 2013).

The lived human experience involves culture, which refers to the values and beliefs shared by a group of people (CDC, 2012). Culture influences behavior and phenomenology helps us to understand individual experiences in greater depth (Matsumoto, 2007). Navigating personal values and situations within a larger cultural belief system can be complex. Correspondingly, phenomenology is an effective research strategy for exploring challenging problems (Neubauer et al., 2019).

Phenomenology assists in understanding how Watsonville participants think about and participate in swimming. Interviews align well with the phenomenological framework because the researcher can gain a deeper understanding of very personal, sometimes traumatic, participant experiences. The process is not a recipe but a journey that includes empathy and recognition for the researcher, participant, and phenomenon (Alhazmi & Kaufmann, 2022). Pseudonyms were used for interview and focus group participants to maintain confidentiality and humanity. The term understanding water explores a relationship with water and the corresponding meaning to the participant or community. It is the essence of the participant's experience relating to water. Phenomenology helps uncover and understand cultural and

individual views towards swimming that lead to solutions to increase swimming, health, and water safety in Watsonville.

Preliminary Work

In Dr. Ben Dyson's Kin 717 qualitative course at UNCG, preliminary work was performed on understanding a parent and their family's journey to the Quicksilver Swimming team in Watsonville. Quicksilver is a nationally ranked USA swimming team with locations in San Jose, Santa Cruz, and Watsonville. The prior work aimed to understand what drew parents to a swimming team in a Hispanic/Latino community. Methods included a survey ($n = 5$), interviews ($n = 4$), two observations, and a focus group ($n = 3$). Preliminary study results indicated swimmers typically belonged to two-parent households where a parent can take a swimmer to practice 3–4 days a week. Parents responded that their children enjoy swimming and being physically fit. Most household members know how to swim, and respondents are not afraid of drowning. Fifty percent of the parent respondents think the community values swimming, while 60% of respondents indicate that the community needs to do more to promote swimming. Income from participants varied between \$25,000 and \$200,000+. Lastly, a key factor that drew parents to the Quicksilver swim team was that they valued coaching, competition, and being part of a team. A parent participant summarized the lack of swimming participation in Watsonville: "We have this factor that parents, they didn't go through this experience, so they cannot pass it on to their kids." This quote identifies that parents cannot pass down swimming to their children because they do not know how to swim themselves.

Participants

Following IRB approval, recruitment began for Hispanic/Latino parents or care providers with a child that is Hispanic/Latino ages 3–12 (see Appendix C). Participants were recruited from the Pajaro Valley Unified School District database of 37,600 email/text contacts. An additional 25,000 contacts were made through the Pajaronian newspaper, its database, and social media platform, a total of around 62,600 emails sent by contracted parties. Many contacts were likely from the same population. Eighty-four people took the survey with 21 not meeting the criteria, thus were discarded. Sixty-three respondents who met the criteria participated in the survey, and 15 people were interviewed for about 60 minutes using a semi-scripted interview. Additionally, two focus groups of four people participated: one for parents and a focus group composed of community leaders. The community leader focus group had two Hispanic/Latino males and two non-Hispanic/Latino females who served the local community. The parent focus group had one male and three female participants. The focus groups provide solutions directly applicable to increasing swimming participation in the community.

Measures

Dr. Carole Irwin et al.'s (2010) survey identifying barriers to swimming participation in underrepresented communities was converted to an online Qualtrics survey in English and Spanish. Upon completing the survey, participants were invited to participate in interviews and the parent focus group. Interviews and focus groups were semi-scripted based on the theoretical framework. The business leader focus group included participants who were administrators in the community who could influence swimming participation.

Survey

Written permission was granted to use Dr. Carole Irwin et al.'s (2010) validated survey (see Appendixes A and B). Her survey was developed from previous physical activity constraint studies and designed with USA swimming. Question number 12 was removed because the school district provides free lunch to all students. Dr. Irwin et al.'s (2010) exploratory study investigated variables influencing swimming participation in underrepresented youth in U.S. urban areas. Dr. Irwin used previous physical activity constraints studies and collaborated with experts at U.S.A. swimming to create an instrument with a Cronbach alpha score of .8, well above the accepted .5–.7 levels of reliability. Dr. Irwin's innovative study gathered information on barriers to swimming participation in underrepresented swimming populations.

The survey consisted of 59 questions and, according to Qualtrics, took an average of 35 minutes to complete. Total survey participants $n = 63$. Eighty-six percent of respondents ($n = 54$) were female. Fourteen percent of respondents ($n = 9$) were male. Twenty-four percent of respondents ($n = 15$) were single parents, and 63% were two-parent households ($n = 40$). The average age of participants ($n = 54$) who answered accurately on their age (not their child's) was 38.48. The average number of children in the household was 2.3. The average age of participant children is 9.44 years old, 49% boys and 51% girls. Five percent of participants ($n = 3$) had some elementary school experience, 38% ($n = 24$) had a high school diploma or GED, 44% ($n = 28$) had a college degree or technical degree, 11% ($n = 7$) had an advanced degree and 2% ($n = 1$) were unknown. Fifty-six percent of participants ($n = 35$) had a household income under \$75,000 (considered very low income in the county), 14% were \$75,000 to \$99,999 ($n = 9$) in income, 22% earned between \$100,000 and \$200,000 ($n = 14$), 2% were over \$200,000 ($n = 1$), and 6% ($n = 4$) chose not to answer.

Interviews

Fifteen people participated in average interviews 60 minutes in length. The criteria for inclusion were limited to Watsonville/Greater Watsonville residents of Hispanic/Latino ethnicity or had a child of Hispanic/Latino ethnicity ages 3–12 years old. There were eight female and seven male interviewees. There were three female and one male parent focus group participants. The community leader focus group had two participants who were male, and two were female. The interviews and focus groups were semi-scripted (see Appendix C) to allow for structure with flexibility.

Data Analysis

Surveys were analyzed using quantitative software, Qualtrics, to provide descriptive statistics and, on a limited basis, the relationship between variables using Fisher's Exact Test or a Chi-Squared test.

An inductive approach to data analysis was used. Interview questions influenced by phenomenology were transcribed electronically with Microsoft Teams. An inductive and deductive data analysis was performed using qualitative data management software through Atlas.ti. The themes from the data emerged using an inductive approach and were categorized deductively based on research aims. Interviews were analyzed using open coding to capture key concepts and categories emerging from the data. In vivo coding was utilized to understand an individual's lived experience, providing authenticity and context to the data. Codes were grouped using axial coding, establishing key themes and subthemes based on study aims and selective coding to uncover concepts to explain the observed phenomenon. After each interview was coded, a memo was written grouping codes, themes, and concepts to the three study aims. The

data from memos, codes, themes, and concepts within the qualitative software established a connection to the study aims.

Results

The results of surveys and interviews were designed to understand participant experiences, attitudes, and behaviors around water and swimming in Watsonville. Second, input about barriers to swimming was used to generate swimming solutions that will increase participation. The study overwhelmingly shows that participants want their children to swim, but financial and time limitations are the two largest barriers. Solutions to increase swimming frequency include reasonable pricing, longer swim lessons, and community outreach. The participant experiences in each area provide an understanding of feelings toward water and different bodies of water in the Watsonville area. (See Appendix A for the interview and focus group questions.)

Fun, Freedom, and Fear: Feelings Toward the Ocean

The duality of water came through in the interviews, with participants having positive and negative experiences with water. When shown a picture of a flat ocean themes of calm, relaxation, and serenity emerged. Paulo noted, “You don’t have your phone on you; it’s just you and the ocean.” Paulo, Luna, Nova, and Aurora described the ocean and beach as “relaxing,” while Louis reminisced on riding bikes by the Pajaro River to Palm Beach and hanging out for the day; “Oh, it was beautiful.” Feelings toward calm waters were overwhelmingly positive: “I’m just feeling immense gratitude for being in the water.” The positive feelings extended to swimming; Luna stated, “I really do enjoy being in the water, and I feel like it’s relaxing, and so my experience in the water has been positive.” Casio went deep into their child’s love for

swimming; “He says he feels like he’s flying like he’s free.” Additionally, Jane went deeper into the human condition, explaining why young children like to swim; “It’s like being back in the womb with the water; I think they feel safe, and they feel good.”

Conversely, when shown a picture of large waves themes of fear, respect, and caution emerged. Most participants indicated they would not want to be in the water; one indicated they wanted to stay on the beach and watch. Participant responses revealed a respect for water: Casio stated, “The ocean is the greatest force that we have in nature.” Some participants acknowledged the ocean’s deadly characteristics. Sam and Sophia warned, “Be careful because the ocean has very good, like currents and stuff, like that will pull you one way or another.” Olivia told a story of how she almost drowned at a local beach:

At the time, I like had heard about rip currents or something, but I wasn’t really thinking about that. I was stuck in one, so I kinda just got pushed, kept getting pushed out, and then she (her friend) was like separated from me. And then, like the waves, just kept going over my head, and I—I wasn’t even thinking in the moment to like what to do. But luckily, there was somebody on the beach that was like had been a lifeguard before, and so he actually ended up like saving me. And so, we ended up getting out, but it was just very scary for me. So, I don’t really go inside the ocean anymore.

This is a real situation that highlights the duality of water; one minute, you are having fun, and the next, you can be in a life-or-death situation. In this circumstance, it was fortunate a bystander with proper training was nearby. In addition, participants were worried “a little about wildlife” in the ocean. Sam and Sofia stated, “Don’t go too far out there, I’ve heard a lot of surfers getting attacked.” Luna stated, “There are so many living creatures in the ocean that I think I’m more

afraid of that than anything else.” Though participants had both negative and positive experiences, overall themes highlighted respect for the ocean and more positive experiences than negative.

Swimming Locations in the Community

Pinto Lake is another area where Watsonville residents congregate around water. Like the ocean, there is a duality to their experiences. In one aspect, Pinto Lake is associated with outdoor recreation and joyful family experiences. Sergio reflected, “I take my kids all the time. We take him to the park playground; we go for walks.” However, there is a duality that comes from a history of drownings and pollution in the lake; as Louis recalled, “We used to rent little boats and go all over (Pinto Lake), but we had to be very careful ‘cause a lot of people drowned there.”

Paulo provided details about how his sister and aunt almost drowned in Pinto Lake:

My family member was actually swimming in Pinto Lake, she didn’t know how to swim.

And then my aunt didn’t know how to swim, and to my aunt to save herself she was pushing my sister down, and at the same time my aunt and my sister were drowning.

Another family member pushed them to safety.

Even with the swimming risks, parents continue to take their children to the playgrounds around the lake and enjoy the time outside. While the ocean and Pinto Lake have mostly positive feelings, the Pajaro River is a source of trauma for the community.

The Pajaro River symbolizes issues such as flooding, urban neglect, drug use, homelessness, and gang activity. Jane shared that “Pajaro has always been left out of everything. It’s the, you know, the ugly stepchild of Monterey County.” Casio added, “They forget about the poor people.” The area has suffered two traumatic floods, one in 1995 and another in 2023.

Felipe recalled his 1995 experience: “There’s a flood coming, and we ended up leaving, my parents were packing things in my car, I had to scream at them because I saw the water coming in.” Felipe also vividly remembered witnessing someone being swept away by the river: “I don’t know if it was a man or woman, but being taken away, I guess, towards the ocean.” This highlights the trauma associated with not only natural disasters but also not knowing how to swim during a flood. Sam described the floods as a “failure of infrastructure” when discussing the maintenance and planning for the levees. However, he noted the community’s empathy and cooperation in responding to the crisis. In 2023, a state of emergency was declared, and President Joe Biden toured the area by helicopter to survey the flood damage (Guild, 2023).

When asked about the Watsonville sign, which welcomes people to the city, participants expressed a profound connection to the sign and the city. They often described it as “home,” where they have spent their entire lives. This sense of belonging was echoed in responses like “I’ve grown up here” and “born and raised here.” Participants also expressed pride and happiness toward Watsonville, seeing it as a place of opportunity and serenity. One participant noted, “There’s so much opportunity,” while Paulo said, “It makes me happy.”

The connection to nature and agriculture was a recurring theme, referencing strawberry fields and a sense of being rooted in the land. Nova noted Watsonville is an “amazing place, for work, for nature, for being connected to the farm.” However, some participants also voiced significant concerns about safety in certain areas. Olivia described a “love/hate relationship” with Watsonville, while Sam stated, “It’s seriously a place that’s very misunderstood.” Sam emphasized the importance of respect within the community, saying, “Treat people with respect;

you got nothing to worry about.” These mixed emotions highlight the complexities of living in a place like Watsonville, where the beauty of community and nature coexist with challenges.

The Community is Viewed as an Extended Family, and it Influences Behavior

Parents are determined to provide a better life for their children and take pride in improving their family’s circumstances because Watsonville is a lower-income, agricultural-based, Hispanic/Latino community. One resident noted, “A family strives to progress economically, which goes with hard work.” Some parents want their children to swim because it is an experience they did not learn, a way of providing a better life. Belene shared, “I think a lot of the families I’ve connected with, maybe the parents don’t know how to swim, and they see the value in it for their children or just being able to survive with the ocean.” However, swimming is often seen as a luxury rather than a necessity and is not easily accessible in Watsonville.

Public service is valued in the community, and a few entities provide swimming services: the City of Watsonville, the YMCA, Quicksilver Swimming, the Pajaro Valley Unified School District Expanded Learning Program (through Quicksilver Swimming), and Jim Booth Swim School. The City of Watsonville has a strong support network, especially during times of need, such as the Pajaro Floods. Additionally, the YMCA serves as a community center for sports and other activities, and the Pajaro Valley School District provides education and after-school programs. The City of Watsonville is known for collaboration and is “focused on the well-being of the families.” Nova appreciated the city’s cooperation with other organizations and valued the bilingual services that help immigrants acclimate, “Watsonville is focused on community.”

Additionally, educators, teachers, and coaches are highly valued in the community with soccer being popular. Due to its cultural influence, many local role models are soccer coaches.

While role models in soccer are numerous, there are few swimming role models. Luna noted, “I hate to say that she doesn’t have a swim role model.” The absence of prominent swimming figures hampers increased participation in swimming activities. The YMCA and other local facilities play a role in providing swimming lessons, but the availability and affordability of these programs are significant concerns. Paulo compared a family’s choice to paying utility bills or paying for swimming lessons. Mexican Olympian Liliana Ibanez visited Quicksilver Swimming, and the PVUSD expanded learning program and gave a talk about swimming in the Hispanic/Latino community. She vividly remembers her dad contemplating taking her out of swimming to purchase her soccer cleats; removing her from swimming would have changed the course of her life. Many Hispanic/Latino families have to make hard financial choices because they may not be able to afford not only multiple sports but basic necessities. Some participants advocated swimming should be a priority. Sam emphasized, “Swimming is a matter of life or death,” underscoring the dilemma of assigning a monetary value to human life.

In summary, Watsonville is heavily influenced by Hispanic/Latino culture and religious values, shaping broader societal norms and beliefs. The City of Watsonville and the YMCA provide crucial resources and opportunities that indirectly impact individuals through community programs and policies. At a more immediate level, the School District fosters interactions between schools, community organizations, coaches, and participants. Additionally, on a smaller level, the family unit consists of close relationships with family and friends to directly influence personal development and daily experiences. These systems work together to influence swimming participation, but despite this, there are still significant barriers (see Appendix B for interview and focus group code results).

Swimming is Enjoyable, and Parents Want Their Children to Swim

The culture of swimming in Watsonville is unique. A common narrative is that the community does not want to swim, but the results of this study refute this narrative. A notable 98% of parents ($n = 63$) agree or are neutral that their child enjoys swimming, with 80% agreeing or strongly agreeing (see Appendix C for complete survey results). This data aligns with interview participants who agreed that their children like swimming. One participant indicated his child “feels like he is flying, like he is free” when swimming. Fun emerged as a key theme during interviews, with many participants emphasizing that their children enjoy swimming. Fun is seen as crucial for fostering a culture of swimming in the community. Furthermore, 87% of respondents ($n = 63$) encourage their children to swim, underscoring a strong community interest in the activity.

There is also clear evidence of a desire to swim more, as 76% of parents agreed or strongly agreed that their child would like to swim more often, with only 3% disagreeing. In addition, lower-income families are more likely to agree ($p = .0263$) that their children would like to swim more than they do now. Parents want to provide a swimming skillset for their children. The root desire to swim comes down to the most important aspect of the community: the family. A participant noted that parents “want to make sure their children learn” to swim. It is a skill the parents do not have, and they want a better life for their children. While parents want their children to learn to swim, it opens the question, what is swimming? During the interviews, it became clear that a definition of swimming was needed. One person stated that swimming is “controlled movement through the water;” another stated, “It is successfully getting around, I

would say, in a pool and to stay afloat and somehow get your body from point A to point B.”

These are basic definitions that reflect swimming in the area.

Many parents learned to swim on their own. One participant said, “I used to sneak in there during the summer. The lifeguards will let me go in, and I would practice my skills there, so it was always hit and miss.” Another participant shared, “I swam in a river in Mexico as a kid,” illustrating the lack of formal instruction. The participant statements agree with the CDC (2024) statistic that 72% of the Hispanic/Latino population has not had swim lessons. In this community, you learn on your own. Even with limited swimming opportunities, one value remains constant: parents want what is best for their children. Most parents (67%) agreed or strongly agreed that their children would excel as swimming athletes if they joined a team, while only 5% disagreed. Being part of a team aligns with community connections and provides better opportunities for the next generation. The data indicates a desire to swim, but barriers prevent participation (see Appendix D for additional swimming involvement survey results).

Ranked Barriers to Swimming in Watsonville

Participants were asked to rank barriers to swimming participation, and survey results reveal the top four barriers preventing children from improving their swimming abilities:

1. **Financial Constraints:** Lack of money is the primary barrier, with 57 out of 63 (90.5%) participants indicating money is a barrier to swimming and 26 participants ranking this as the number one issue.
2. **Parental Time Constraints:** Parents not having enough time is the second significant barrier, with 47 (74.6%) participants emphasizing this concern.

3. **Competing Activities:** The third barrier is children being too busy with other activities, cited by 31 (49.2%) respondents, with 15 ranking it as a significant issue.
4. **Fear of Drowning:** Fear of drowning is the fourth barrier mentioned by 30 (47.6%) participants, with 16 ranking it as their top concern. Interestingly, only 16% of participants agreed that their child refrains from swimming due to this fear.

Lower-income families tend to swim less and money is the number one barrier to swimming participation. USA swimming demographics and the survey results below support this statement. Economics factors into swimming participation and ability 71.4% of survey respondents who made more than \$75,000 (household income) a year reported advanced swimming ability compared to 28.6% of respondents (with advanced swimming ability) making less than \$75,000 of household income. A statistically significant relationship exists between household income and “My child knows how to be safe around water” ($p = .00449$). Lower-income families are more likely to be neutral or disagree that their child knows how to be safe around water (additional statistically significant findings can be found in Appendix F).

Additionally, parents with lower swimming ability are more likely to agree that they do not have the money to pay for swimming lessons ($p = .0384$). Martin, born and raised in Watsonville, stated, “My mom, unfortunately, couldn’t afford swim lessons, and we didn’t look at it as a life skill.” This quote highlights the economic constraints families faced. Eighty-four percent of respondents strongly agreed, agreed (57%), or were neutral (27%) that they did not have enough money to pay for swim lessons, and only 16% disagreed. With no public pool and private facilities being more expensive, Kim noted, “There is definitely an equity issue.” Aurora noted the lack of local pools, and their family had to swim in Morgan Hill. If they did want to swim

locally, a participant stated that a family of four visiting the YMCA pool would incur a \$45 one-time fee to swim. Survey results indicate that 49% of respondents agreed that their child did not swim because it was too expensive, 16% disagreed that swimming was expensive, and 35% were neutral. The high cost of swimming and limited facility availability combined with low income in the area are factors why the community swims infrequently.

Additionally, families facing financial constraints often must make tough choices between essential living expenses, such as food and electricity, and activities like swimming. Rising inflation has only made financial decisions tougher. Difficult parent choices become even more challenging when parents work long hours, leaving them with little free time to take their child to the pool. As a result, the prospect of learning to swim becomes more distant. Even if families have free time, they are more likely to choose soccer over swimming as an after-school activity for their children. When asked about valued activities, Dolly responded, “Soccer is a big one.” Between work, school, and soccer, even if parents want their children to swim, time is limited. Luna noted, “We are constantly running around because we have other activities.” The following statements provide a realistic view for families: “My parents were always working, and at the end of the day, you know, by the time we get out of school, that’s the time they’ll be coming home. And we actually have a sit-down and eat dinner.” There is no time for anything outside of school, work, and dinner. Swimming is important, but it is not a priority due to the high costs vs benefits of other areas of life a family would be sacrificing.

Fear of drowning is a complex issue. It stems from the absence of parental swimming experience, a significant barrier on its own. Most participants’ parents did not swim, and participants’ swimming ability was overall limited. Parental fears are passed on; as Felipe said,

“My parents say that they were afraid for me.” Additionally, many residents lack the swimming skills to ensure safety in water emergencies. Olivia almost drowned in a rip current: “I wasn’t even thinking at the moment what to do. But luckily, there was somebody on the beach who had been a lifeguard before, and so he ended up saving me.” Rip currents pull water and humans in the water away from shore beyond breaking waves. These currents create not only physical stress but mental stress that, if not controlled, can lead to drowning. She said, “I don’t really go into the ocean anymore.” Families have anxiety about their children’s safety around water. “I wouldn’t know how to protect them if something happened.” Jane said most family members wouldn’t survive a 10-minute rip current ordeal. While many participants do not want to portray fear, there is a subtle fear of drowning from participants around the water.

Additional Barriers to Swimming Participation: Facility Access, Swimming Frequency, Short Lesson Duration, Transportation, Perception of Swimming, Instructor and Coach Quality, Lack of Formal Instruction, and Limited Knowledge about USA Swimming

Facility access is essential to foster swimming participation. Communities need a reliable, safe, comfortable environment that fosters learning to swim, which is limited in Watsonville. According to Paulo, “Watsonville does not have a year-round public pool.” While 70% of respondents state a pool is close to where their child lives, the survey does not indicate how often the pool is open or the costs involved in swimming. A focus group participant who works for the City of Watsonville stated, “Our agency runs a 10-week program through the summer.” There is a short summer program at Watsonville High that provides some access to swimming and lessons. Bob identified the shortage of public swimming facilities as a critical barrier: “No pool is a barrier to swimming.” When asked about pool availability, many

participants only realized the limited swimming options in Watsonville. “The only ones that I know of are at Watsonville High. And I think they only have certain public hours, I guess. And that’s the only one I know of as far as public.” When the pool is available the water needs to be at a comfortable temperature. The word cold came up 17 times in interviews, and cold water nine times. Louis noted the preference for a warmer swimming environment, “just to jump off the diving board and swim in warm water, instead of freezing water from the ocean.” Quicksilver Swimming observed a significant attendance decline during a period when a heater broke, and water temperatures dropped to about 72 degrees, well below the normal 78 degrees.

There are private options to swim in Watsonville. Quicksilver Swimming and the YMCA have swimming at certain times of the day, but there is a monthly or daily fee. Simpkins is the nearest public pool. Kim noted, “There’s nothing like Simpkins, which is just in a community next to ours that runs a year-round pool facility open to the public.” Belene said, “When I’ve traveled, most mid-size towns have a community pool.” Many participants recognized they would have to drive to Santa Cruz, Morgan Hill, or Salinas: “I probably have to drive to Santa Cruz, to Simpkins.” The lack of year-round public facilities is not only an equity issue but influences how often participants swim, influencing ability and skill level. Partially due to facility access, most participants and their children swim one to three times a month and swim one lap (25 yards) or less, which does not meet the standards of most swim teams (see Appendix E for survey facility data).

Facility use is a barrier, and “getting to the pool is a barrier.” However, it is not as large a barrier as other issues, as 60% of survey participants stated it is easy to get their child to the pool/swimming site. When it comes to who takes the child to swimming lessons or practice, 86% of

survey participants indicated that their children would be transported to swim by a parent or caregiver. As for the other 14%, an interview participant indicated they lived within walking distance of the Watsonville High School pool.

Lack of access, transportation, and other barriers limit swimming frequency. The issue is not community interest in swimming but rather the infrequency of participation and the overall skill level. The low frequency of swimming is a symptom of various obstacles families face. Casio noted, “I have never gotten instructions on how to do this,” highlighting how a lack of instruction hinders swimming ability. The lack of swimming role models contributes to low swimming frequency and participation. Paulo expressed concern, “I hate to say that she doesn’t have a swim role model.” The scarcity of role models and qualified instructors in Watsonville was emphasized, “If you don’t have people that know how to swim, you can’t funnel your programs for instructors to be able to teach swim lessons.” Participants highlighted the need for formal swimming lessons: “Nobody trained me or told me how to hold my breath or swim or anything like that.” According to the CDC (2024), 72% of Hispanics/Latinos in the United States have not taken a swim lesson. Most interview respondents did not have any formal swimming instruction. A participant highlighted a huge parental fear, one that had deadly consequences at a local beach in 2023. A parent went into the water to save a drowning child, but neither could swim. “One of their biggest worries are fears is that their children are gonna be put in a situation where they’re unable to swim and save themselves,” or the parent not being able to save their child from drowning. Swimming one lap (25 yards) continuously with good form is the basic requirement to join the lowest-level group at Quicksilver Swimming, the only USA team in

Watsonville. Infrequent swimming creates a cycle that affects generations; most grandparents, parents, and children struggle to swim more than 25 yards.

Swimming in Watsonville is often viewed as a recreational or survival skill rather than a sport, and families spend little time in the pool. Felipe said, “They do not see it as a sport so much. It’s hot, so let’s go get in the pool.” Modeling is a learning process that allows the performance of new behaviors (Starek & McCullagh, 1999). There are few high-performance models in Watsonville; therefore, the perception of swimming as recreation fosters lower ability and participation. Survey participants stated that 35% of children swim once or less per month during the summer, and 69% swim five times or less. In winter, 59% of children swim once or less per month, and 85% swim five times or fewer. Additionally, 79% of children swim three times or less during non-summer months. For parent survey respondents, 61% swim once or less monthly in the summer, and 84% swim once or less during non-summer months.

The low swimming frequency leads to skill level concerns; 63% of children cannot swim one continuous lap, and 76% of participant children can swim one lap (25 yards) or less. Among parents in the survey, 81% can swim only one lap or less. Despite these low participation and skill levels, 53% of survey respondents state their family members know how to swim, and 78% state their child knows how to be safe around water. In Watsonville, knowing how to swim means entering the water rather than swimming proficiently. This perception needs to be redefined to set more realistic expectations and improve safety.

In addition to swimming frequency, the length of swim lessons is a barrier to fostering parent buy-in and swimmer progression. Participants expressed a need for longer swimming lessons: “They need more time in swimming because you’ve got to change your whole schedule

around; next thing you know, it's already time to go." A 25-minute swim lesson for a busy family is inconvenient and limits the perceived value of the service. In addition to the short lesson time, parents question instructor and coach quality. Concerns about the qualifications of swim instructors were raised. Luna said, "I don't know that the people who are there to teach are the best instructors." Participants desired more challenging and comprehensive programs beyond basic instruction: "We were ready for some improvement, something more challenging" and "He was ready for the next level."

Beyond swimming lessons, there is limited knowledge of the next level of swimming. The survey results indicate that most participants and their children cannot swim more than 25 yards. Because being able to swim 25 yards or more is a basic requirement for a swim team, it can be deduced that most participants have never been on a USA swimming team. When Felipe was asked about swimming in the community, they said, "They don't know that it exists. They don't give it value." Louis considered high school swimming competitive, "I thought I was a great swimmer, but I was not that great. I didn't make the team." Not making the team in Watsonville is a sign of a low ability level. However, he was proud of his friend who won medals in high school swimming. Participants tended to recognize famous Olympians; more than one participant referenced Michael Phelps, but they did not know about local competitive (USA) swimming and how it can benefit their children. USA swimming participants tend to swim at a higher level and produce not only high-level athletes but also coaches. Awareness of competitive swimming opportunities and benefits will help educate parents about the sport and overall provide higher level coaching.

There are also generational differences in swimming encouragement. While 48% of respondents said their parents did not encourage them to swim, 87% of survey parents actively encouraged their children, which shows a positive trend. The themes from interview participants align with the survey participants that parents encourage swimming for their children. The top reasons reported for the low swimming participation in the Watsonville community are financial constraints, time constraints, competing activities, and, stemming from low parental ability, a background fear of drowning. (see Appendix C for statistically significant relationships on swimming participation).

For many parents, transportation can be arranged for swim classes; however, it remains a logistical challenge as an interview participant communicates, “Getting to the pool is a barrier.” However, it is not as large a barrier as other issues, as 60% of survey participants stated it is easy to get their child to the pool/swimming site. When it comes to who takes the child to swimming lessons or practice, 86% of survey participants indicated that their children would be transported to swim by a parent or caregiver. As for the other 14%, an interview participant indicated they lived within walking distance of the Watsonville High School pool.

Addressing These Barriers

To address these barriers, fostering a supportive environment that promotes swimming, investing in swimming instruction, advocating for increased access to affordable facilities, and empowering Latino families in Watsonville to engage in swimming activities is crucial.

Solutions

Lower-income families are more likely to agree ($p = .0263$) that their children would like to swim more than they do now. A strong statistical relationship exists between a participant's child's swimming ability and the participant's swimming ability ($p = .000214$). There is a strong statistical relationship between parents who encouraged them to swim and most family members knowing how to swim ($p = .00367$). Participants with children who are advanced swimmers are more likely to agree that most of their family members know how to swim ($p = .0181$). The simplest way to increase swimming participation is to reduce barriers and find solutions. Thomas summed it up nicely. "We have to be able to support the families cause if it is a barrier, then we need to figure out how to make that not a barrier."

Early Education and Participation. According to Alistair Fraser (2009), the best swimming lesson age is 3–9 months. Brenner et al.'s (2009) study indicated an 88% reduction in drowning risk for 1- to 4-year-olds if they had formal swim lessons. Anderson and Rodriguez's (2014) study indicates that the younger swimming lessons began, the sooner the study reached Level 1 proficiency. However, Anderson and Rodriguez (2014) also found that the optimum level, reaching Level 1, 2, and 3 competency with the fewest lessons possible, is age 5–7. With drowning being the leading cause of death for children ages 1–4, it is logical to state that swimming lessons and parent education should start early.

Interview participants stressed the importance of educating the community about drowning statistics, risks, and the health benefits of swimming. Kim indicated the importance of early childhood education:

I would start at the hospital. If you're delivering a baby, if you give it life, it's like, OK, here's the name. Now, you're just babies at risk of dying from drowning. This is what you

need to do. These are the swim lesson providers. This is what's available in your community. Then this is how we can find resources for you.

Olivia suggested, "Start with parent and tots class, your water baby classes." In addition, a participant indicated that some parents and infants would be learning "at the same time you're introducing the water to your child. You're also going to build a relationship with the water. You're going to take some lessons so that you can live an awesome life."

Lastly, a parent mentioned "making it a requirement to graduate" high school. However, graduation could be applied to any grade level, significantly younger grades. There are "certain competencies you need to know to graduate, why not make basic swimming" part of schools at a young age? Martin had "super huge dreams; someone mentioned taking some lessons in the after-school program or PE, but offering some lessons during PE, the physical education component, I think will be huge." Making swimming education mandatory in schools and integrating the swimming curriculum into existing educational programs was a common theme among interview participants. Luna stated, "Incorporating swimming education in school curricula would be huge." Participants recognized the need for education and health benefits: "Swimming makes me feel like I could do something healthy for my body."

Swimming is a lifelong sport, and in Watsonville, the community introduction to swimming is self-learned or happens in high school, which is normally too late for high performance. Showing the value of swimming through education and promoting the benefits to new families will increase visibility and hopefully increase involvement at an early age. Working with the school district, chamber of commerce, local hospitals, Salud Para La Gente, and Head

Start programs are recommended distribution methods for young families to receive swimming education.

Build a Facility. Watsonville, or any community, can foster a swimming culture with a facility for learning and participation. The solution is to “build a pool. A fun pool in Watsonville.” Dolly rightly noted that the community must “make the pools available” and that “currently, you have to be a member to pay to use” community pools. Belene, Kim, Martin, and Thomas agree the ideal pool would be “approachable and warm.” It would be a place to “bring the whole family for swimming but do some other stuff as well. Picnic and, you know, playground stuff like that.” There would be “multiple aquatic facilities and attractions,” like a strength training facility, soccer fields, and possibly music. The pool itself would have a “nice large shallow end like it’s tough, you know, like even Watsonville high with the higher edging like, there’s just a lot of pieces that aren’t welcoming to folks who are not familiar with pools.” Parents liked the idea of a gradual entry into the water. In addition, Thomas noted that the ideal facility would be “open at night, late at night with the light.” A multi-use facility, with a shallow section and warm water, seems like an ideal facility to “provide whatever is needed to make the children comfortable in the pool” (Interview participant).

Make Swimming Affordable. The cost of swimming is a significant barrier to entry for parents and, correspondingly, their children. Enhancing access and affordability by offering subsidized or free-swimming programs and collaborating with the City of Watsonville and the Pajaro Valley Unified School District can significantly boost participation. However, free is not always a good thing. Price is tied to value and finding an affordable swimming solution while highlighting the value of the skill is important for swimming participation. Take soccer, for

example, “you’re going to practice multiple days a week. We spend more traveling, and that’s a lot of money. We pay \$3,000 a year, and you figure, yes, soccer is amazing, and he’s great at it.” Like soccer, tying value to the price of swimming will be important for sustainability.

Participants’ responses for affordable swimming participation varied from free to over one hundred dollars a month. More than one participant noted, “Affordable price would be free. As I mentioned, you know, with probably over, I think there’s over 60% at least of our community living below the poverty line.” James recommended a sliding scale,

I mean free place to swim having or having like a certain discount, maybe a sliding scale, or free swim days, free swim day, every other month or something, you know, or you know that would come up with a something to kind of just get more people out there you know like OK this whole month or every Saturday of this month we’re gonna have free swimming for whoever wants to show up and bring their kids to swim and learn how to swim.

The solution that landed in the middle and is likely the most realistic is “\$80.00 a month,” corresponding to two weekly lessons. A price of \$10 for a 40- to 60-minute lesson was an acceptable swim lesson price for participants. However, a swim team is a more effective, lower-cost option.

Encouraging kids to move from lessons to a swim team as soon as possible enhances their skills and provides financial value for the parents. For instance, the Quicksilver swim team in Watsonville charges \$80 monthly for 20 practices, translating to just \$4 per training session. This cost-effective option, coupled with swimming organizations assigning their best coaches to the team track, creates a cycle that boosts performance and encourages participation.

Value Parent and Participant Time. Busy parents cannot afford to waste time, as it is our most valuable resource. Cynthia advocated for longer swim sessions to provide the ability to “plan accordingly or plan around it.” Parents typically follow the following process for swim lessons, “I’m gonna drive 15 minutes to go to a 25-minute class” to watch their child get incrementally better at swimming. It can be frustrating, and parents are motivated to remove their children from swimming lessons as quickly as possible because of the amount of time vs. benefit. A solution is longer swimming lessons. Longer lessons allow for parental planning and improved swimming ability. Quicksilver Swimming has implemented 75- and 90-minute lesson sessions that involve strength and bodyweight training, swim lessons, and free play. Sessions are typically full for participants ages 6 to 11, and swimmers graduate to the swim team in 6–18 weeks. In addition to the length of time, the time of day must fit into a parent’s busy schedule. Understanding what parents go through is important. As Janet noted,

We have four kids. We go to three different schools. They get out of school at 3:15. By the time we get across town to, you know, with traffic and then go home, give them a quick bite to eat and everything for me. Ideally, it would be like a five o’clock hour.

One parent recommended sessions after work or other activities, “Six o’clock or six-thirty, something like that. Where it would be available in the evening.” Another participant stated that “5:00’s perfect” for them but recommended “5:30 to 6 o’clock” for the public.

Fun. Make swimming fun. Martin noted that “number one is fun; if it’s not fun, typically families or individuals won’t do it right.” Promoting swimming as an enjoyable activity is vital. Louis noted that their kids “love to swim just to jump off the diving board and swim. They don’t wanna get out once they’re in the water.” Ideas to make swimming more fun include

incorporating music, games, and family swim days. Kim suggested, “Family Day at the Watsonville pool with lessons for those who don’t know how to swim would attract many families.”

Results from this study indicate that the community likes to swim. One parent noted that their child “wants to go swimming all day. He loves to swim.” As swimmers progress, finding creative ways to maintain the joy of swimming is essential. Coaching strategies, like creative set writing, can help increase fun, and free play allows participants to apply skills in a free and fun environment. Casio explained his child’s joy, “he says he feels like he’s flying like he’s free.” Thomas highlighted the influence of the facility to enhance fun: “If there were splash pads, I think it would be a great way that some families can be introduced to water before fully being introduced or, you know, just getting students comfortable.” Incorporating free play into swimming programs can enhance enjoyment, as noted by a participant whose child enjoys going underwater and doing yoga poses during swimming. Keeping fun (and safety) at the forefront of decision-making will foster a cycle of swimming participation.

Make it Family-Centered. Family is the central category that emerged from coding, and the family unit should be factored into tailoring swimming solutions. On attending events to promote the value/awareness of swimming, one participant noted that the community will show up for “anything family, family centered.” Education and resources need to include information for “all different generations to be comfortable, my great grandma and my grandpa and so being able to have those, those different spaces, and then having like events periodically like a Family Day at the pool and even using it for like education around like water safety or swimming.” Facilities need to be accessible for the family; “family-friendly gatherings, whether it’s like an

indoor space or outdoor space. But like picnic tables, and I'm thinking like all different generations will be able to be comfortable.”

Involving parents in the swimming process is crucial. Educating parents about resources, safety, and the benefit of swimming is essential. Proposals such as family swim days and dedicated family-oriented sessions can enhance participation. “Perhaps like classes or meetings to educate parents on resources, prices, and the importance of swimming,” Louis suggested.

Another participant envisioned,

Family Day, or we have the Watsonville pool, and if you guys don't know how to swim, or offered to give you, give you a lesson. You'll be amazed at how many families will probably go down to the swimming pool and take that opportunity to do that, to be water with their kids.

To increase swimming awareness, a participant recommended the following promotional strategy that, like other participants, incorporated a family day: “Have events periodically like a Family Day at the pool and even use it for education around water safety or swimming. But anything that draws people out to see what it's about.” Participants were clear on the message that all aspects of swimming promotion, participation, and facility use to provide “constant exposure for families and education opportunities” and “expose families to the opportunities that swimming can provide in their future.”

USA Swimming/Improve Swimming Frequency. The lack of swimming frequency is a significant barrier to community swimming participation, with 85% of children participants swimming five times or fewer during the winter months and participants swimming even less.

The solution is to *just keep swimming*. Olivia was adamant about swimming more, saying,

“Swim more frequently—swim lessons. And more of them.” Swimming is a lifelong activity that is healthy and enjoyable. Highlighting the benefits of competitive swimming, like discipline, fitness, and commitment, is important for families to understand the value of swimming. Sixty-six percent of survey respondents believe their child could be a successful swimming athlete if on a team. Also, survey results showed a statistically significant relationship between a child’s swimming ability and the response to “My child would be a successful swimming athlete if they were on a team” ($p = .0463$). Advanced swimmers lead to parents agreeing their child would be successful on a team, and parents of inexperienced swimmers disagreeing more. One participant mentioned, “Competitive swimming teaches commitment and physical fitness.” Another participant points out the importance of proper technique and education. “He likes learning how to do the swimming correctly.” Participants stressed the importance of having qualified instructors to increase participation.

There are two teams in Watsonville and only one USA Swimming organization. Interviewees stated that Quicksilver Swimming (a USA Swimming bronze medal club) and the YMCA are two year-round community organizations providing instructor-led services. Involvement with the USA Swimming/competitive team will increase the frequency and, correspondingly, the athlete’s ability, two items lacking based on survey results. Again, Myers et al. (2017) indicate that competitive swimming reduces drowning rates in minority communities. In addition to safety, the community obtains a source of pride by providing opportunities for their children they did not have, and one parent beamed with pride upon learning their child was part of a USA swimming team. “I’m going to tell my little champion. He is part of the team.”

Lower ability levels limit the number of skilled lifeguards and coaches who can teach higher-level swimming skills. Despite the community's positive attitude toward swimming, this lack of participation fosters a cycle of not swimming. Skilled USA swimming participants can foster a positive swimming cycle that creates role models, lifeguards, and the next generation of qualified coaches.

Community Engagement. In Watsonville, the community is a larger family unit. Belene describes, "friendships get encountered, and that's where the relationships are built." Involving the community to promote the benefits of swimming is vital to the goal of swimming growth. Dolly describes word of mouth as an effective way to encourage swimming and engage the community, "I think what we see is word of mouth is one of the biggest ways." Additionally, Kim states, "Watsonville is like very tightly niche together, and if one person finds out about something and somebody thinks it's gonna be good, it goes via viral."

Community and family events, like the Watsonville strawberry festival or "soccer tournaments," are fantastic ways to raise awareness and promote swimming. Marketing tactics such as displaying banners and providing complimentary food and equipment can help create awareness at events. Focus group participants suggested additional ways to gain awareness in the community as follows:

- **Youth Center Outreach:** "Engage children and parents through outreach at the Youth Center," one participant suggested.
- **Free Community Swim Sessions:** "Something like a community free day or something like just more advertising for where or showing where there are community pools."

- **Pictures, Murals, and Colorful Signs:** “Very few words, whether it’s English or Spanish, many more pictures and like very quick.” “Exciting, colorful sign intersections close to the school advertising day. Some lessons going swimming, things like that.”
- **Community Resource Fair:** “Community resource fair or some kind of like workshop that always draws families out, especially if there’s like an incentive and there’s childcare.”
- **Utilize Teachers to Spread Swimming Education:** “Bringing to the staff what resources are available to the in the community so then they can bring it to the families because they have that relationship.”
- **Attend Head Start Meetings:** “We have 11 classrooms in Watsonville, and we do bimonthly parent meetings with parent education topics that we’re always encouraging community resources.”
- **Utilizing the School District:** “Going through those access points where there’s already the relationships with families. So, either going to the school sites or doing parent workshops within like certain agencies like our agency does regular workshops or doing training for the staff.” Additionally, “having more of a presence at school sites so that you know families feel comfortable and in finding ways that families are comfortable with staff or community partners that then bring those students to the pool because there’s families want that trust.” Also, “the district sends out the weekly emails.”

→ **Social Media:** “Social media and videos and fun, fun, catchy videos. Again, our short, even the context at the bottom of those Instagram posts or Facebook posts are super short.”

Participants need to know what services are available. One participant noted, I think a lot of it’s just like not knowing what resources are available even though I’m connected to an agency that provides community resources to our families, I’m always surprised by what’s available because I have an 8-year-old myself, and so I’ll learn about something for the first time.

Business Partnerships and Sponsors. Businesses sponsoring swimming programs could increase employee health and retention by sponsoring swimming programs for their employees and children.

Businesses, I think that businesses in Watsonville, especially AGG, where many of our families are working in those individuals, often don’t have water exposure. If there could be a connection to those businesses being able to give their employees time and funds to be able to do water safety as an employee and or for their family, think that’s one piece we haven’t talked about.

Focus group participants recommended “contacting HR at Driscoll” to start a corporate swimming program. Also, some health insurance companies will pay for fitness activities, participants advocated to become an “authorized swim lesson provider where businesses could pay for the families, swim lessons. That would be a huge help because it’s health insurance that includes health and wellness and aerobic exercise.” Additionally, doing sessions at corporate sites would assist “employee wellness and improving the knowledge of all the workforce.” To

reach commercial companies, “commerce Watsonville could be a resource to, you know, disseminate some of this information.”

Provide Hope for the Future. Swimming is an opportunity in which every family should have a right to participate. There are many benefits:

I don't think that anyone's ever even acknowledges, like, wow, you could actually get a scholarship for swimming to go to college. You could also do it as a profession, so it's something that you do fall in love with. You can make a massive impact on the community.

Discussion

The quantitative and qualitative data uncovered appreciation for swimming in Watsonville's Hispanic/Latino community. Eighty-six percent of survey participants want their child to swim more. The community likes to swim; an astonishing 98% of parents agree or are neutral that their child enjoys swimming, with 80% agreeing or strongly agreeing. These statistics dissent from the myth that Watsonville, a Hispanic/Latino community, is not interested in swimming. The community wants to swim but faces numerous barriers preventing swimming participation. Financial constraints, time limitations, limited parental experience, lack of public facilities, competing activities, limited role models, lack of formal instruction, awareness for swimming education, limited knowledge toward competitive swimming, and short swimming durations combine to make swimming participation difficult for the average family in Watsonville. It is essential to understand these barriers preventing community members from swimming. Identifying these challenges will help develop solutions to increase swimming participation and improve community health and wellness.

Increasing the frequency of swimming at an early age will result in impactful changes for the community and foster a positive swimming cycle. For example, if a community of children learn to swim well at an early age, a percentage will be high-performance role models in high school and college. Some of these athletes or athletes they influence will become lifeguards and coaches, who then pass on the higher level of skills to the next generations. This is a cycle that leads to positive swimming participation. Currently there is a low level of performance swimming in Watsonville, and correspondingly limited lifeguards and qualified coaches to pass on knowledge. Eighty-four percent of respondents cannot swim more than one lap (25 yards). Theoretically, if community members went to the beach and were caught in a rip current that took them 40 yards from shore, only 16% of survey respondents would make it back to the beach. Additionally, swimming 25 yards is a basic requirement for children aged 5–10 to get on a swim team; the community swims at a basic level or less. Addressing the low frequency and proficiency of swimming in the community is a critical step towards increasing swimming participation.

Children in the community must start swimming young and do so more frequently. Louis noted, “You learn how at a young age.” Community members swim 1–5 times per month, less during the winter. Swimming frequency, in addition to the view of swimming, stunts participant development. Many community members view swimming as simply being in or playing in the water. Learning to swim well from a young age is critical to breaking the cycle of low swimming proficiency. Myers et al.’s (2017) research aligns with this topic as they revealed that competitive swimming could significantly reduce drowning rates among minority swimmers. While Watsonville faces many barriers to swimming, solution-based organizations, Quicksilver

Swimming, the City of Watsonville, and the Pajaro Valley Unified School District Expanded Learning program, are addressing the problem of low frequency and ability. They have implemented a swimming system to progress participants from swimming lessons to the swimming team for children ages 7–11 as quickly as possible. Results have produced over 20 participants, elevated from swimming lessons to the swim team.

Increasing swimming frequency and ability is dependent on having a pool. The community needs a Facility. Community education tailored to family needs is also required to foster participation and implement a positive swimming cycle. A participant advocated that education, and resources must include information for “all different generations to be comfortable, and events periodically like a Family Day at the pool, using it for education around water safety or swimming.” The Hispanic/Latino community often makes decisions as a family, so pricing for swim lessons should consider total family costs. Additionally, reaching family members via the school district, the city, Head Start programs, and community outreach on the risks and value of swimming is crucial. The results of not informing the community can be deadly. Parents who cannot swim will try to save a drowning child, leading to multiple fatalities. For instance, on March 22, 2023, Florencia Ramirez (27) died trying to rescue her 7-year-old son in Moss Landing, a neighboring town to Watsonville (York, 2023).

The community needs a multifaceted approach to overcome the numerous barriers preventing the Watsonville community from swimming. Parent education, cultural advertising and marketing, and organizational public and private partnerships will help improve swimming participation. It is a holistic effort, including national organizations, like USA Swimming, to bring resources, expertise, and exposure to the community.

CHAPTER II: DISSEMINATION

Swimming can positively impact the quality of life for students, parents, and community members; it is important to ensure that all communities can access this healthy activity. The dissertation findings will be presented to key stakeholders, particularly school districts, municipalities, and businesses. Findings will also be presented to audiences that include USA Swimming, the American Swim Coaches Association, Pacific Swimming, swim club administrators, coaches, and municipal administrators at the City of Watsonville and the Pajaro Valley Unified School District. Local swim teams can use the research for community education and swimming advocacy in their area. This report, with references, is the beginning of a long-term objective to increase swimming participation in underrepresented areas. Other researchers can also use the results to engage in larger studies to tackle this global issue.

Drowning is a Leading Cause of Death

In the United States, drowning is the leading cause of death among children aged one to four and the second leading cause of childhood injury-related deaths for ages 5 to 14 (CDC, 2021b). Children in minority and low-income communities are especially vulnerable. Two key factors contributing to higher drowning rates are differences in swimming ability and pool access (Myers et al., 2017). The lack of swimming ability and access among minority and low-income communities contributes to higher drowning rates.

Numerous factors lead to low swimming participation, which includes significant barriers that make it difficult for parents to help their kids swim. Currently, parents must overcome historical influences, equity issues, parental ability/lack of swimming knowledge, time

constraints, high costs, competing activities, poor instructors, fear, lack of formal instruction, and limited awareness of swimming add up to low swimming frequency. Low swimming frequency is not only a safety issue but a missed opportunity to increase health, performance, and wellness and create jobs in our communities. This document explores solutions to increase swimming frequency and competency.

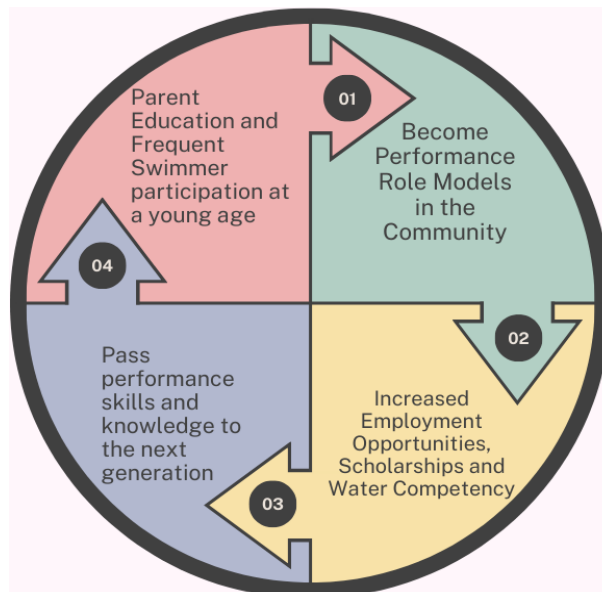
Create a Positive Swimming Cycle

The past model for swimming in Watsonville has been learning to swim independently or avoid swimming altogether. Swimming participation in Watsonville has too many barriers for a family to overcome on their own. For example, financial constraints, time, competing activities, fear, facility Access, Swimming Frequency, Transportation, Short Lesson Duration, Perception of Swimming, Instructor and Coach Quality, Lack of Formal Instruction, and Limited Knowledge about USA swimming are barriers to overcome, Having free or low-cost swimming options in the desired age group funded by states or provided by municipalities, school districts, or non-profit organizations is important to remove the number one barrier to participation; cost. For example, Florida has a state swim lesson voucher program for children four or younger (Executive Office of the Governor, 2024). Additionally, the key is to educate and provide solutions to parents when their children are nine months to six years old. If a parent places their children in swim lessons in this age range, it means barriers were removed, and the positive swimming cycle is in effect.

Parent education to encourage swimming participation at an early age is critical to overcoming barriers and fostering a positive swimming cycle. Organizations like Quicksilver Swimming are trying to encourage swimming at a younger age, but it is slow and requires

partnerships with school districts like the Pajaro Valley Unified School District and the City of Watsonville to create change. The first step to increase swimming participation is to educate parents and family members about the importance of swimming and participation at an early age. Because drowning is the leading cause of death in the U.S. for children ages 1–4, it is logical to begin swimming lessons early. Additionally, teaching swimming at an early age is more likely to increase performance and receive a college scholarship when an athlete is older. The community needs performance role models, and better swimmers will lead to more lifeguards and quality coaches. When there is community demand for swimming, employment opportunities increase, and lifeguards and coaches pass knowledge to the next generation, creating a positive swimming cycle. This document highlighted research that provides solutions to increase swimming participation, leading to a positive swimming cycle (see Figure 1).

Figure 1. Author-Created Positive Swimming Cycle



Understanding the Hispanic/Latino Culture in Watsonville

Watsonville is a family-oriented, working-class, prideful, Mexican American city with a solid connection to the community and the land it works. The Latino community values familismo, characterized by strong family ties, pride, belonging, and obligation (Ayón et al., 2010). Watsonville is a tight-knit community where “everybody knows everybody.” Families play a significant role in shaping domestic dynamics and community interactions, with Grandparents having considerable influence. One participant noted, “The grandparents have a lot to do with it because people are busy working, so it’s multi-generational households.” A participant noted, “Families play a central role in Watsonville.” Familismo results in family pride, where the entire family shares the success of one family member (Ayón et al., 2010). Many Latino parents in Watsonville work sunup to sundown in the fields, which instills a sense of determination and persistence in their children. This emphasis on taking care of family members is reflected in the strong family support Latino children typically receive from parents and extended family members, who often live in the same household (Garcia & Ozturk, 2018). This collectivist setting, which prioritizes group harmony over individuality, extends beyond the family to the community, where residents care about how they are perceived (Castells & Ebenkamp, 2003).

Swimming in Minority Communities

Research by Irwin and Myers highlights the multifaceted barriers to swimming participation among minority youth. Irwin et al.’s (2008, 2010) studies identified significant constraints, including fear of water, lack of access, and cultural beliefs, that impact minority swimming participation. However, fear is not as prevalent in swimming in the Hispanic/Latino community. Pharr et al. (2014) explored how parental factors affect children’s swimming

frequency. In the Watsonville study, a statistically significant relationship (.0002) exists between advanced parent swimmers having an advanced child who swims. Myers et al. (2017) demonstrated that competitive swimming programs could reduce drowning rates among minority swimmers, emphasizing the need for high-quality instruction and opportunities. In Watsonville, survey participants who were advanced swimmers agreed their child would be successful on a team, and parents with less experience disagreed more frequently (.04 statistical significance). Increasing swimming ability by swimming more frequently is important for community improvement because current views indicate swimming is entering the water rather than swimming proficiently.

Watsonville Wants to Swim

Despite low swimming frequency (59% of children swim once a month or less in winter, 85% of children swim five times or less, and 84% of parents swim once a month or less in non-summer months), it is a myth that the Hispanic/Latino community of Watsonville, CA does not want to swim. Many interview participants have fond memories of beaches, lakes, and pools. Being around the ocean produced a sense of calm and serenity for many participants: “You don’t have your phone on you; it’s just you and the ocean.” In addition to parents enjoying being around water themselves, they want their children to swim. Like many others, Watsonville parents want a better life for their children, and the ability to swim means fun, safety, health, and opportunities they were not provided. Additionally, swimming is fun for kids; despite 80% of its population not knowing how to swim (personal communication, City of Watsonville Director of Aquatics, 2024), **a notable 98% of parents agree or are neutral that their child enjoys swimming, with 80% agreeing or strongly agreeing.** Furthermore, 87% of respondents ($n=63$)

encourage their children to swim, underscoring a strong community interest in the activity. There is also clear evidence of a desire to swim more, as 76% of parents agree or strongly agree that their child would like to swim more often, with only 3% disagreeing. One participant fondly remembered, “I went to Watsonville High School, and in the summer, we looked forward as kids to go swimming.” The desire to swim in the community is alive, but changing the cycle of limited swimming frequency is challenging.

Solution: Swim More Frequently

Swimming more frequently sounds easy, but there are numerous barriers to participation. One participant summed it up nicely: “We have to be able to support the families cause if it is a barrier, then we need to figure out how to make that not a barrier.” How do we break barriers and swim regularly?

- 1. Early Education:** Create a system where every hospital, Head Start, and school district provides information on the benefits of swimming to families. Educating the entire family and involving Mom, Dad, Abuela, and Abuelo in the swimming process is important. Tell families about the fantastic health benefits, the scholarships available, and the opportunities to explore water that many of their family members did not have. Ensuring that information and instructions are available in English and Spanish can also improve accessibility and engagement (Garcia & Ozturk, 2018)

2. **Early Participation:** Early education is fantastic, but kids need to learn to swim at a young age. This should result in a higher swimming frequency, increased competency, better coaches, and more qualified lifeguards.
3. **Make Swimming Affordable While Highlighting its Value:** Many participants want swim lessons for free, but this can diminish the perceived value of the service. In the pre-study, a parent advocated for showing the value of swimming. Many people would be comfortable with a fee of “\$80.00 a month,” equating to two weekly lessons. A price of \$10 for a 40–60-minute lesson seemed to be an acceptable swim lesson price. However, the price for an entire family needs to be considered, and a heavy family discount is recommended.
4. **Swimming is a Life Skill:** One participant summed up the benefits of swimming as a life skill, promoting social relationships and increasing health and wellness.
5. **Build a Family Centered Pool:** A place to “bring the whole family for swimming but do other stuff as well. Picnic and playground, stuff like that.” There would be “multiple aquatic facilities and attractions,” Many families advocated for advertising at soccer tournaments, and having a facility with a pool, soccer fields, and a strength training center would significantly increase community interest.
6. **Skillful Role Models and Coaches:** It is important to “have people around that would be able to help facilitate and teach their kids how to swim.” Coaches who foster high expectations and push participants to reach their potential will contribute to a positive cycle of swimming participation.

7. **Family Day at the Pool:** “You’ll be amazed at how many families will probably go down to the swimming pool and take that opportunity to do that, to be water with their kids.”
8. **Lengthen the Time of Swim Lessons:** The standard 25-minute lesson is more appropriate for infants and toddlers, and parents do not see value for their money and time. “They need more time in swimming because you’ve got to change your whole schedule around, next thing you know, it’s already time to go.” Quicksilver Swimming has initiated an effective hour-and-a-half group lesson program for children ages 6–11. It involves 20–30 minutes of fitness, equipment preparation, and learning skills on land that will translate to the water. Then participants do structured swimming lessons for about 45 minutes, and the session ends with 10 minutes of free play where participants practice learned skills without restriction.
9. **Practice Times for a Parent’s Work Schedule:** In Watsonville, 5:30 pm is an opportune time to start swim lessons or swim practice because it provides parents time to get off work and bring their children to the pool.
10. **Elevate Participants to the USA Swimming Team:** Myers et al. (2017) state that competitive swimming reduces drowning, but a competitive swimming team also provides a pool of competent employees to teach other swimmers. It is a key component of the positive swimming cycle.
11. **Community Events:**
Additional ways to gain awareness in the community are the following:

- **Youth Center Outreach:** “Engage children and parents through outreach at the Youth Center,” one participant suggested.
- **Free Community Swim Sessions:** “Something like a community free day or something like just more advertising for where or showing where there are community pools.”
- **Pictures, Murals, and Colorful Signs:** “Very few words, whether it’s English or Spanish, many more pictures and like very quick.” “Exciting, colorful sign intersections close to the school advertising day. Some lessons going swimming, things like that.”
- **Community Resource Fair:** “Community resource fair or some kind of like workshop that always draws families out, especially if there’s like an incentive and there’s childcare.”
- **Utilize Teachers to Spread Swimming Education:** “Bringing to the staff what resources are available to the in the community so then they can bring it to the families because they have that relationship.”
- **Attend Head Start Meetings:** “We have 11 classrooms in Watsonville, and we do bimonthly parent meetings with parent education topics that we’re always encouraging community resources.”
- **Utilizing the School District:** “Going through those access points where there’s already the relationships with families. So, either going to the school sites or doing parent workshops within like certain agencies like our agency [do] regular workshops or doing training for the staff.” Additionally, “having more of a

presence at school sites so that you know families feel comfortable and in finding ways that families are comfortable with staff or community partners that then bring those students to the pool because there's families want that trust." Also, "the district sends out the weekly emails."

→ **Social media:** "Social media and videos and fun, fun, catchy videos that, again, are short; even the context at the bottom of those Instagram posts or Facebook posts are super short."

Potential Impact and Future Directions

The research findings highlighted the importance of swimming more frequently to increase public health and safety, particularly in Hispanic/Latino communities. An equitable and systematic swimming program can improve water competency and health and create lifelong swimming opportunities. Understanding the community and tailoring solutions to increase swimming frequency can create a cycle of better swimmers and students, healthier residents, and a more water-confident population.

CHAPTER III: ACTION PLAN

This research aimed to understand the experiences and perspectives of Latino families in Watsonville, CA, regarding swimming and water competency to increase swimming participation in underrepresented communities. Cost is the number one barrier to entry for Watsonville study participants; therefore, the need to secure swim lesson funding is critical to have a long-term strategy to support swimming participation. The primary audience for this dissertation includes federal, state, and local lawmakers, community health organizations, swimming organizations, and local programs that can provide funding or education for swim lessons. Immediate stakeholders are USA Swimming, swim club administrations, coaches, and municipal administrators who work with or seek to serve Latino communities. Entities that work in Latino communities are a crucial audience, as the research is aimed at supporting the people they serve.

The results of this study may provide government officials, health organizations, school districts, and USA Swimming with a framework to boost swimming participation among Hispanic/Latino and low-income communities. These findings can foster a positive cycle of swimming engagement, likely leading to increased community participation. The dissemination of results will target relevant groups, including models for USA Swimming teams, professional collaborations, academic journals, and presentations for government and educational institutions that influence funding and operations of swimming programs.

Short Term Plan (90 days or less)

Data from this research indicates the Watsonville community wants to swim, 98% of survey respondents agreed or were neutral that they want their child to swim more frequently. To help reach the goal of increased swimming participation, copies of the dissertation will be provided to key community stakeholders who can fund swimming participation. Cost is the number one barrier to entry for swimming in Watsonville, and low swimming frequency is a symptom of a lack of swimming participation. Obtaining funding to lower costs and educating parents on the benefits of swimming should improve swimming frequency. Also, communication with stakeholders will provide funding and educational opportunities to promote the importance of swimming at an early age. Key stakeholders include the Pajaro Valley Unified School District, the City of Watsonville, the Santa Cruz County Community Foundation, Driscoll's, Martinelli's, the Watsonville Chamber of Commerce, and Salud Para la Gente will be provided copies. Larger businesses are included in the dissemination not only because they are potential funding sources but also because their employees and their families are directly affected by the lack of swimming participation in the community.

Medium Term Plan

The medium-term plan includes a systematic rollout of processes to support swimming participation in the Latino community. This includes a swim lesson coach training system to instruct larger groups. The dissertation and training platform will be presented to USA swimming, governmental entities (federal to local), and school districts. Presenting at conferences, like the National Conference on Education, will communicate study findings and solutions to individuals who have the power to support swimming at an early age and provide important parental education.

Information Sharing

USA Swimming and the American Swim Coaches Association

The research will be submitted to USA Swimming for promotion on their website. This platform can help disseminate the research to local swim teams, enhancing their business operations and community education efforts. I will also forward a copy of the report to Quicksilver Swimming, the local USA Swimming team. Additionally, the American Swim Coaches Association (ASCA) annual conference is also excellent for sharing research findings with swim coaches and swim lesson professionals. This event offers opportunities for speaking engagements and online dissemination. Collaborating with ASCA administrators can further influence coaching education, particularly regarding swimming in Hispanic/Latino and low socioeconomic communities.

Governmental Agencies with a National Influence

A health objective will be submitted to the Department of Health and Human Services and the Department of Housing and Urban Development at the national level. A similar approach will be taken with the state of California. Public entities are crucial in disseminating educational materials and funding to support vulnerable populations.

Academic Institutions, Municipalities and School Districts

Presentations at conferences for municipalities and school districts are crucial in disseminating information. These entities can influence financing, facility construction, usage, education, and swimming program development. Notable conferences include NLC, ICMA, MMASC, and CFMSO. National conferences for school district administrators like AASA and NSBA also help distribute information to relevant departments within educational institutions.

On a local level, effective community education and collaboration involve sharing the dissertation with organizations such as the City of Watsonville, Pajaro Valley School District, and the County of Santa Cruz.

Academic/Professional Journals

Submitting the research to the International Journal of Aquatic Research (Diversity Issue) will ensure it reaches a global audience. Additionally, publishing in scholarly journals such as the Sociological Review can help disseminate the information to a broader audience, including those not explicitly focused on aquatics.

Professional Collaborations

We could collaborate with businesses and like-minded individuals, such as Brenda Villa. Collaborations are another method of promoting research and making connections that can contribute to funding or promoting programs. Local companies like Driscoll could fund a swimming program for their employees' families or the community.

A Multimedia Approach

A website, videos, and press releases to promote dissertation findings and solutions are practical tools for reaching a wider audience. One distribution goal is to maximize online availability by collaborating with a professional to create a website to distribute vital information. The website would host the dissertation but, more importantly, be a single platform that identifies cost and lack of swimming frequency as an issue in the Hispanic/Latino community. The platform also provides parent and stakeholder education in a written and visual

format and provides an opportunity for people to fund swimming participation. Stakeholders will be able to directly donate or pay for swimming programs through the website. Videos will visually convey emotions, highlighting why swimming frequency at an early age is important. Press releases will promote the research, ideally after journal approval, to communicate the health objective of increasing swimming frequency in the Hispanic/Latino community. This multi-media approach allows for ongoing education and funding dedicated to increasing swimming frequency.

Potential Impact and Future Directions

The research emphasizes the crucial role of swimming in improving public health and safety, particularly within Hispanic/Latino communities. Establishing a comprehensive and equitable swimming system can enhance water skills, promote better health for individuals, and create more opportunities for water-based employment during and after high school. We can increase participation by working with key stakeholders to fund programs that increase swimming frequency, leading to better swimmers and students, healthier community members, and a more water-confident population. To advocate swimming as a vital skill, the study intends to spur action by disseminating its findings through targeted channels, involving key stakeholders, and using multimedia.

“And you know the Ripple effect. If it’s helpful for somebody else, I’ll be happy.”

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APPENDIX A: INTERVIEW GUIDE

Interview Guide:

1. How long have you lived in Watsonville/Greater Watsonville Area
2. What is your ethnicity?
3. How many children do you have between the ages of 3 and 12?

Pictures – What do you see?

1. Describe your feelings to a picture of a calm ocean.
2. Describe your feelings toward a picture of the Pajaro River
3. Describe your feelings toward a picture of Pinto Lake.
4. Describe your feelings toward a picture of a rough ocean
5. Describe your feelings toward a picture of the City of Watsonville.
6. Describe Watsonville for a person who is not from the area.
7. Tell me about the culture in Watsonville. What are the cultural values?
8. What activities are valued in the Watsonville community?
9. Describe who helps you take care of your children.
10. Describe who you consider to be a community role model.
11. Describe any swimming role models your child has.
12. What governmental entities do you value in the community?
13. If you or a family member were caught in a rip current at the beach, could they continuously swim for 10 minutes?
14. How does Watsonville view swimming?
15. What is your parents' swimming experience?
16. Describe your swimming experience.
17. What Barriers prevent swimming participation in Watsonville?
18. Where are places to swim in Watsonville? Is there a public pool?
19. What would make you want to go to a pool?
20. If applicable, what does your child enjoy about swimming?
21. Tell me about your child's swimming experience.
22. What strategies do you recommend to show the value of swimming to the community of Watsonville?
23. What were your thoughts and experiences from the 2023 flooding?
24. When you think of competitive swimming, what comes to your mind?
25. What is an affordable price to learn to swim?

Administrator and Business Focus Group

Semi-Scripted Focus Group Questions:

1. How long have you lived or worked in Watsonville?
2. Describe Watsonville for a person who is not from the area.
3. Tell me about the culture in Watsonville. What are the cultural values?
4. What activities are valued in the Watsonville community?
5. Describe who you consider to be a community role model.
6. Would you consider swimming a life skill, a survival skill, or a health and wellness activity?
7. Describe any swimming role models.
8. How does Watsonville view swimming?
9. How does your organization view swimming?
10. Describe your swimming experience.
11. What Barriers prevent swimming participation in Watsonville?
12. Where are places to swim in Watsonville? Is there a public pool?
13. What would make the community want to go to a pool?
14. What is an affordable price to learn to swim?
15. What governmental entities do you view as responsible for water competency?
16. When you think of competitive swimming, what comes to your mind?
17. What strategies do you recommend to show the value of swimming to the community of Watsonville?
18. Education is an emerging theme from the research. What are strategies to educate the community about swimming? Who should be contacted?
19. How does the community communicate? If we want to offer swimming to families with kids, what is the best way to do this?
20. How can businesses get involved to grow and promote swimming/water competency in Watsonville?
21. What were your thoughts and experiences from the 2023 flooding?

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<https://acrobat.adobe.com/id/urn:aaid:sc:US:02624111-ac32-451f-8229-f08ab1a13df9>

APPENDIX C: LINK TO THE SURVEY RESULTS

Link to survey results:

<https://acrobat.adobe.com/id/urn:aaid:sc:us:298bfd07-b478-4ea3-95d7-c4f901d6cf8d>

APPENDIX D: ADDITIONAL SWIMMING INVOLVEMENT SURVEY RESULTS

HIGHLIGHTING CULTURAL FEELINGS TOWARD THE WATER

Table D1. Additional Swimming Involvement Survey Results Highlighting Cultural Feelings Toward the Water

Question	Strongly Agree/ Agree	Strongly Disagree/ Disagree	Neutral
My child doesn't swim much because he or she is so concerned about drowning	15%	66%	19%
I am afraid that my child will drown when he or she swims	32%	45%	24%
My child does not like how the water/chemicals messes up his or her appearance	8%	68%	24%
I do not like how the water/chemicals messes up my child's appearance	7%	64%	30%
There is a pool or a swimming site close to where my child lives	70%	19%	11%
My child is not physically fit, which affects his/her ability to swim	4%	81%	16%
My child knows about how to be safe around water	78%	0%	22%
Most members of my child's family know how to swim	51%	24%	25%
My child worries about getting hurt while swimming	8%	66%	27%

Question	Strongly Agree/ Agree	Strongly Disagree/ Disagree	Neutral
I worry about my child getting hurt while swimming	26%	49%	25%
It is easy for my child to get to a nearby pool or swimming site	45%	27%	29%
I don't like my child's hair to get wet while swimming	4%	88%	8%
My child's best friends like to swim	46%	11%	43%
My child's best friends are good swimmers	24%	16%	60%
My parents or caregivers encouraged me to swim when I was a child	41%	48%	11%
I don't swim because I am afraid of drowning	27%	62%	11%
My child feels welcome at swimming pools	70%	0%	30%
My child doesn't like how he or she looks in a swimsuit	11%	51%	38%

APPENDIX E: SURVEY FACILITY RESULTS

Table E1. Survey Facility Results

Facility Questions	Yes	No	Maybe
The nearest pool/swimming site is open all year.	38%	35%	27%
The nearest pool/swimming site is in good condition.	68%	10%	22%
My child feels safe at that pool/swimming site.	73%	3%	24%
It is easy for my child to get to that pool/swimming site.	60%	24%	16%
My child does NOT feel safe at that pool/swimming site when certain people are there.	17%	65%	17%
My child does NOT feel safe going to that pool/swimming site alone.	41%	38%	21%

APPENDIX F: STATISTICALLY SIGNIFICANT RELATIONSHIPS THAT MAY HELP
INFLUENCE FINDING SWIMMING SOLUTIONS

Figure F1. Fisher’s Exact Test and Chi-Square Results

Fisher's Exact Test ⓘ (Recommended)

P-Value ⓘ	0.00449
Effect Size (Cramér's V) ⓘ	0.467
Sample Size ⓘ	59

Show Chi-Squared results ▶

Reorder/Recode ▾	Bucketing ▾	Reset	Count	All %	Row %	Col %
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Q11: Wha...r ch... ⬅

Q23: YOUR...g ability. ⬅	Mother ⬅	Father ⬅	Total
Can't Swim to swim one lap ▶	94.1%	50.0%	
More experienced swimmers ⬅	5.9%	50.0%	
Total	100.0%	100.0%	

There is a statistically significant relationship ($p = .00449$) between swimming ability and relationship to the child (parent gender): 94.1% of respondents who are mothers can only swim one lap or less. This is 81.4% of the total respondents. Males claim to be more experienced swimmers.

A strong statistical relationship exists between the participant’s child’s swimming ability and the participant’s swimming ability ($p = .000214$). Advanced parent swimmers have a higher probability of advanced child swimmers.

A strong statistical relationship exists between parents that encouraged them to swim and most family members knowing how to swim ($p = .00367$). Participants who disagreed that parents encouraged them were likelier to disagree that family members know how to swim.

Parents who strongly disagreed ($p = .0275$) that they were encouraged to swim as a child were more likely to be neutral or disagree that they feel welcome (comfortable) at pools.

Swimming ability and parent gender ($p = .00449$): 94.1% of female participants can't swim one lap (higher than typical); 50% of male respondents can swim one or more laps (higher than typical).

Participants with children who are advanced swimmers are more likely to agree that most of their family members know how to swim ($p = .0181$). If children have low swimming ability, participants are likelier to say family members do not know how to swim.

A statistically significant relationship exists between household income and "My child knows how to be safe around water" ($p = .00449$). Lower-income families are more likely to be neutral or disagree.

Lower-income families are more likely to agree ($p = .0263$) that their children would like to swim more than they do now.

Higher-income households use the school lunch program less frequently ($p = .00535$)

Parents with lower swimming ability are more likely to agree they do not have the money to pay for swimming lessons ($p = .0384$)

A statistically significant relationship between a child's swimming ability and the response to "my child would be a successful swimming athlete if they were on a team" ($p = .0463$). Advanced swimmers led to parents agreeing their child would be successful on a team, and parents of inexperienced swimmers disagreed more.

Surprisingly, there was not a statistically significant relationship between swimming ability and household income. However, there is a statistically significant relationship ($p = .00449$) between income and "My child knows how to be safe around water." The lower-income respondents were more likely to be neutral on safety, while higher-income respondents agreed more strongly.
