Constraints Impacting Minority Swimming Participation PHASE II

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EXECUTIVE SUMMARY

BACKGROUND

The lack of empirical data on factors influencing low swim participation among underrepresented youth within metropolitan settings in the United States,¹ possibly contributing to disproportionately high drowning rates among minority youth (particularly African American), served as rationale for USA Swimming to commission a nationwide study on the topic ultimately completed in 2008 by a research team from the University of Memphis Department of Health and Sport Sciences. The novel research yielded results that [1] addressed a critical void in the academic literature; [2] served as a catalyst for widespread media exposure on the issue of minority swimming (in)ability; and, [3] resulted in action by community and governmental agencies.

Results from *Constraints Impacting Minority Swimming Participation*, completed in 2008, served as a contribution to the physical activity and aquatics safety body of knowledge providing swimming ability benchmarks and participation predictor variables² as well as dispelling numerous myths associated with swim participation among marginalized youth within metropolitan settings in the United States.³ These publications likewise sparked a wave of inquiry and academic debate on the topic.⁴ Furthermore, a broad spectrum of media sources including *USA Today*, *Wall Street Journal*, *Washington Post*, and HBO, reported on the research further expanding the general public's familiarity with the findings. The study also served as a catalyst for [1] community-based initiatives targeting increased swim participation among urban youth (e.g. Make-A-Splash Mid-South⁵); [2] supplemental funding for urban swim programs (e.g. YMCA Greater St. Paul⁶); and, [3] governmental action aimed at promoting swim participation for minority youth (e.g. House Resolution 57⁷).

¹ Wood, J. (2006, November). A voice for diversity. *Swimming World*, p.6.

² Irwin, C.C., Irwin, R.L., Ryan, T.D., Drayer, J. (2009). Urban minority youth swimming (in)ability in the United States and associated demographic characteristics: Toward a drowning prevention plan. <u>Injury Prevention</u>, 15(4), 234-239.

³ Irwin, C., Irwin, R., Ryan, T. & Drayer, J. (2009). The Mythology of Swimming: Are Myths Impacting Minority Youth Participation? <u>International Journal of</u> <u>Aquatic Research and Education</u>, 3, 10 – 23.

⁴ See e.g. Waller, S. N. & Norwood, D. M. (2009). The Complexities of Deconstructing the Constraints to African American Female Participation in Swimming: A Rejoinder to Irwin et al. <u>International Journal of Aquatic Research and Education</u>, 3(4), 343-355 and Martin, N. T. & Witman, D. (2010). <u>International Journal of Aquatic Research and Education</u>, 3(4), 343-355 and Martin, N. T. & Witman, D. (2010). <u>International Journal of Aquatic Research and Education</u>, 3(4), 343-355 and Martin, N. T. & Witman, D. (2010).

⁵ Hoover, S. (2010, Spring). Pools of courage. The University of Memphis Magazine, 32-35.

⁶ Personal Communication with Tom Brinsko, YMCA St. Paul CEO, March 5, 2010, indicated that the results were used to obtain over \$150,000 in funding. ⁷ Sires, et al. (January 13, 2009). House Resolution 57, 111th Congress, 1st Session.

PURPOSE OF CURRENT INVESTIGATION

The primary purpose of the current study was to provide further analysis of key variables emerging from Phase I and how they impact disenfranchised populations, in particular:

- 1. Child and/or parent fear of water and drowning
- 2. Family and parental swimming involvement/encouragement
- 3. Swim ability, skill and knowledge
- 4. Physical appearance
- 5. Swim facility access

METHODS

<u>Project Methodology & Instrumentation</u>: Data collection sites were identified in collaboration with representatives from USA Swimming and comprised of six (6) urban markets (Atlanta, GA; Boston, MA; Denver, CO; Memphis, TN; Minneapolis/St. Paul, MN; AND, San Diego, CA. Within each market the research team worked with representatives from the Young Men's Christian Association (YMCA) to identify appropriate data collection venues. The YMCA was chosen as the primary data collection source due to the organization's access to diverse youth populations (swimmers and non-swimmers), keen interest in the topic under investigation, and previous assistance with the 2008 study. Site visits were scheduled for data collection and staff training between February 1 and March 31, 2010. A mixed method approach involving quantitative (survey) and qualitative (focus group interviews) measures was used.

[1] Quantitative measures. The quantitative research protocol included construction and validation of the study's survey instrument; designing and executing data collection processes; and, data analysis and reporting procedures.

- <u>Instrument development</u>. A survey instrument, drawn from the previously-validated 2008 questionnaire, was designed in collaboration with representatives from USA Swimming. An expert panel comprised of adolescent studies and aquatics specialists, and consultation from a Center for Disease Control and Prevention (CDC) representative, reviewed the proposed survey instrument, and a pilot sample of 100 respondents, matching the anticipated sample profile, were used to determine evidence of content/face validity.
- <u>Subjects</u>. By design the sample a majority of the youth under analysis resided in homes with a parent/caregiver whose highest level of education was high school or less, earning less than \$40,000 annually meeting the standard for a free school lunch program, reported a low swim ability (can swim/float a little in deep end w/face in water), plan to attend a pool at least once a month this summer (87%), and rely on parent/caregiver transportation to get to the pool (58%).

<u>Statistical Analysis</u>. All data were entered systematically into the Statistical Package for Social Sciences (SPSS). The data set was cleaned to ensure accurate results resulting in a usable sample of 1,909 surveys. Descriptive statistics were used to report the findings as well as inferential, multivariate statistics where appropriate and applicable.

Adolescent respondents (12 – 18 years of age) completed the survey instrument under supervision of at least one trained researcher/YMCA staff member. The average age of adolescent respondents was 14.7 years with a standard deviation of 2.0. Responses for youth 4 – 11 years of age were ascertained via surveys administered among parents and/or caregivers. The average age of very young respondents represented by a parent/caregiver was 7.5 with a standard deviation of 2.3.

[2] Qualitative measures. Within the selected markets the research team conducted 12 focus groups, each comprised of 5-9 participants.

- <u>Subjects</u>. A total of 72 parents or primary caregivers of young children (60 women, 12 men) took part in the focus group interviews. Forty participants with children who could swim were grouped together for the purpose of the focus groups, as were 32 individuals whose children did not swim. Thirty-three individuals identified their child's race as Black or African American (43.4%), 22 as Hispanic or Latino (28.9%), 4 as White (5.3%), 3 as Black Hispanic (3.9%), 2 as Asian Black (2.6), 2 as Native American (2.6%), 5 in categories other than those listed above (6.5%), and one person did not report. There was a range of educational levels with 10 individuals having not completed high school (14.1%), 21 with a high school diploma or equivalent (27.6%), 27 with a college or technical degree (35.5%), 11 with advanced college degrees (14.5%), and 2 who did not report. For inclusion purposes, Spanish-speaking translators were used for 3 of the focus groups.
- <u>Data collection</u>. All focus groups were held at YMCA facilities with each audio and video recorded. Subjects were informed that only the researchers would see and hear this footage and that all participants would be assigned pseudonyms for written reports. Each focus group was moderated by at least one member of the research group. The moderator followed a semi-structured interview guide consisting of a list of open-ended questions to address with the group. In addition to relying on the interview guide, the moderator also probed, requested elaboration or clarification, or compared and contrasted statements made by group members. The interviews were transcribed verbatim from audio tapes and video was utilized when necessary to identify speakers.
- <u>Data Analysis</u>. Coding was performed through a process of repeated readings of transcripts, directed by the principal researcher trained in qualitative methodology. During the initial coding process, observation and debriefing notes taken by all researchers present for focus groups were shared and discussed. Researchers deliberated and identified overarching themes and patterns.

KEY FINDINGS

The robust sample rendered an abundance of statistically significant findings. For the purposes of USA Swimming, the research team chose to focus on reporting those of meaningful, practical, and actionable nature. The exploratory nature of this study exposed a number of new findings associated with variables influencing swimming ability and activity among minority youth. As previously noted, of particular interest were how key variables emerging from Phase I were found to impact disenfranchised populations. Where appropriate, significant statistical results were further informed and confirmed by qualitative data.

- 1. Self-reported swim ability levels reveal disparity among socioeconomic and racial classifications.
 - a. A majority (61%) of the respondents reported a low swimming ability with 10% of the sample unable to swim.
 - b. Free/reduced school lunch recipients reported significantly less swimming ability than no free lunch respondents.
 - i. Two-thirds (66%) of the Free/Reduced School Lunch recipients self-reported no/low swim ability. In fact, 12% of respondents qualifying for a Free Lunch Program self-reported that they were not able to swim. This figure is almost twice that reported by those who do not qualify for free school lunch.
 - c. Overall, White respondents self-reported significantly higher swimming ability than Black/African American and Hispanic/Latino respondents.
 - i. More than two-thirds (69%) of the Black/African American respondents self-reported low swimming skills while 58% of the Hispanic/Latino and 42% of the White respondents self-reported similar swim ability.
 - ii. 14% of Black/African American and 7% of Hispanic/Latino respondents self-reported that they were not able to swim. Less than 6% of White respondents reported a similar lack of swim ability.
 - d. In fact, when controlling for income, Black/African American respondents were found to have significantly less swimming ability than White and Hispanic/Latino.
 - e. 19% of the respondents claimed to have received a swim lesson from a qualified instructor as compared to 24% who claim to have taught themselves how to swim.
 - i. 16% of Black/African American and 15% of Hispanic respondents claimed to have received a swim lesson from a qualified instructor. Similar swim lessons were received by 29% of the White and 34% of the respondents who did not qualify for a Free Lunch Program.
 - ii. 11% of Black/African American and 13% of Hispanic/Latino respondents who identified themselves as recipients of Free school Lunch Program had received a swim lesson from a qualified instructor.
 - iii. Almost two-thirds (64%) of the Hispanic/Latino recipients of Free School Lunch Program claimed to have been taught by a family member (36%) or themselves (28%).
 - iv. Over half (52%) of the Black/African American recipients of Free School Lunch Program claimed to have been taught by a family member (26%) or themselves (26%).
 - f. Most adolescents cited they know how to be safe around water and follow water safety rules when swimming.
 - g. Similar (affirmative) response patterns were found among all respondents for I'd like to swim more.
 - h. Almost half (46%) of the respondents self-reporting no/low swim ability will visit a pool on a weekly basis this summer.

- 2. Fear of injury and drowning found to be strong predictor variables of no and/or low swimming ability.
 - a. Multiple regression analysis, comprised of variables fulfilling the primary research objectives (page 4), revealed child and/or parent "fear of drowning" and "concern for getting injured while swimming" by child/parent/caregiver to be two significant predictor variables of swim ability.
 - b. The "fear of drowning" (or absence of fear) was found to be the strongest overall predictor of swimming ability among the variables under investigation.
 - (1) Free/reduced school lunch recipients reported significantly higher fear of injury/drowning than non-qualifiers.
 - (2) Black/African American and Hispanic/Latino respondents reported significantly higher fear of injury than White respondents.
 - (3) Black/African American respondents reported significantly higher fear of drowning than White respondents.
 - c. Interviews with parent/caregivers demonstrate a state of fear restricting children from participating in swim lessons.
 - (1) A parent in Boston, who does not allow child to swim shared, "I know how I am and she knows if I panic, if mommy feels like anything is going wrong, it's over... as she starts getting uncomfortable I jump right in."
 - (2) A parent in Minneapolis/St. Paul admitted keeping her daughter out of swim lessons, stating, "I'm scared.... I'm scared for her... while it's the cost, I'm scared...I'm scared for her, I don't know, I'm kinda scared, but she's not afraid."
- 3. Family and parental swimming involvement/encouragement found to be critical to child's swimming ability.
 - a. Items associated with encouraging a child to swim (e.g. My parents/caregivers encourage me to swim) were tested and found to be a significant contributor to a child's swimming ability.
 - (1) White respondents were significantly more likely to provide/receive family/parental encouragement to swim.
 - (2) Recipients of family/parental encouragement to swim were significantly:
 - 1. more skilled swimmers
 - 2. less worried about injury/drowning
 - 3. more likely to enjoy swimming and desire to swim more
 - b. As stated by a Boston parent, "A lot of African American and Latinos don't swim because their parents don't swim, they don't encourage it. I think we need to educate the parents on the importance of swimming as a life saving skill. You know they just don't really value swimming as an important life saving skill. Cause they didn't swim."
 - c. As revealed within this report a majority of parents/caregivers (54%) self-reported low swimming ability while approximately one-third (34%) of the adolescent respondents agreed with the statement My parents/caregivers know how to swim.

- 4. Items associated with physical appearance found to influence child's swimming ability.
 - a. Items associated with inhibiting a child's physical appearance (e.g. I don't like how swimming ruins my appearance/how I look) were tested and found to be a significant contributor to a child's swimming ability.
 - b. Black/African American respondents reported significantly greater concern for getting their hair wet and the negative impact of water/chemicals on child's appearance than Whites.
 - i. An exchange among African American parents in Atlanta on the topic of appearance, (Male) "Another thing about this (hair issue)... it's really bad for African American girls. A lot of them won't get in the there (pool) because it will mess up their hair." (Female)"The chlorine in the pool will strip all of the protein out of your hair. It's really bad for African Americans."
- 5. Fear of water and drowning trumps finances.
 - a. When tested against other variables under investigation financial constraint and/or affordability items (e.g. Our family budget does not include money for swim lessons) were not found to be significant contributors to swim ability.
 - b. While free/reduced school lunch recipients were significantly more inclined to agree that the family budget does not include money for swim lessons than those who do not qualify for free/reduced school lunch when included in regression model the item was not found to be a significant contributor of swim ability. In fact, reduced school lunch program recipients were significantly less inclined to agree with such statements than free school lunch program recipients.
 - c. A majority of the adolescent respondents disagreed with the statement "It costs a lot of money to swim."
 - d. Interviews with parents/caregivers revealed the relationship between fear and finances.
 - (1) A mother in Denver did not believe swim lessons for her child were worth the effort, maintaining, "... you're already uncomfortable and scared. You're like, 'I'm paying them so I can have heart palpitations on the side-lines. It's not worth it. It really isn't. Why should I have to pay money to be afraid?"
 - (2) A parent in Boston, "I think we really have to educate the parents because when we go to the Boys and Girls club and their fee is \$20 for eight weeks...its cheap. It's nothing. But you don't have a lot of African Americans that do it. I think its educating the parents \$20 for eight weeks is like free. I think maybe a lot of parents just don't know how cheap it is. I think that is as cheap as it gets and you still don't get a lot of swimmers."
 - (3) Representative of several free/reduced cost swim lessons available in many of the survey areas, at one YMCA location swimming lessons are built into the daycare curriculum for 3- to 5-year-olds, but as one respondent points out, "60% of the parents still resist their kids participation in swimming. There is still this push back and resistance."

- 6. Swim facility availability not found to be an issue contributing to swim ability.
 - a. When tested against other variables under investigation swim facility proximity and access items (e.g. There is a pool/swimming site close to where I live) were not found to be significant contributors to swim ability.
 - (1) 60% of respondents indicated the nearest pool site was in good condition.
 - (2) 66% of the respondents indicated they (or child) feel safe at nearest pool.
 - (3) 67% of the respondents indicated the nearest pool is easily accessed.
 - (4) 36% of the respondents indicated the nearest pool was open all year (38% were uncertain).
 - (5) A majority of the respondents indicated it is easy for them to get to the nearest pool.
 - (6) A majority of respondents indicated they feel safe at that pool UNLESS certain people are there.
 - (7) A majority of the respondents do not feel safe GOING to the nearest pool from home alone.
 - b. Free/reduced lunch recipients were significantly more inclined to disagree that the nearest pool was easy to access.
 - c. As one Black/African American Boston interviewee offered dispelling that pool availability and access are not the issue, "Even though you have these areas (to swim) I still think its culture and what you see on TV. You see a lot more Caucasian kids or adults loving the beach, loving the water you know what I mean? Being fish like. A lot of things play into this it's not just the statistics; it has to do with life, I do believe that."

RESPONDENT PROFILE

As intended, the respondent group primarily consisted of non-white children ages 4 – 18 of varying swimming ability, from low income (reduced/free lunch recipients) households with moderately educated parents/caregivers. A complete profile of the respondents can be found below.

Respondent sex	<u>4-11 yr olds</u> ⁸	<u>12-18 yr. olds</u>	<u>Total</u>
Male	46.1%	45.8%	45.9%
Female	53.9%	54.2%	54.1%
Respondent race			
White	16.4%	4.8%	9.1%
African American/Black	53.8%	54.5%	53.8%
Asian/Asian American	4.6%	7.2%	6.2%
Hispanic/Latino	13.4%	16.9%	15.5%
American Indian & Alaska Native	1.6%	2.0%	1.9%
Native Hawaiian & Other Pacific Islander	1.4%	3.5%	2.7%
Other	10.6%	11.0%	10.9%
Respondent school lunch program			
I am on a free lunch program	47.5%	54.5%	51.9%
I am on a reduced cost lunch program	13.0%	14.7%	14.0%
I do not receive free or reduced lunches	33.0%	20.5%	25.3%
I do not know if I am on any free/reduced lunch program	6.6%	10.3%	8.9%

⁸ Parents/caregivers responded on behalf of children less than 12 years of age.

Respondent annual household income (parent responses o	nly)		
Less than \$20,000	19.7%	-	19.7%
\$20,000 - \$29,999	17.3%	-	17.3%
\$30,000 - \$39,999	16.1%	-	16.1%
\$40,000 - \$49,999	8.0%	-	8.0%
\$50,000 - \$74,999	11.8%	-	11.8%
\$75,000 - \$99,999	6.4%	-	6.4%
\$100,000 or more	5.7%	-	5.7%
Would rather not say	15.1%	-	15.1%
Parent/caregiver highest level of education			
Some elementary/middle school	3.6%	23.3%	15.6%
Some high school/did not finish	7 2%	21 4%	15 9%

Unknown	0.5%	0.0%	0.2%
Advanced college degree (Masters/Doctorate, etc.)	15.6%	20.7%	18.7%
College or Technical School degree	43.6%	14.7%	25.9%
High School Diploma or GED	29.5%	20.0%	23.6%
Some high school/did not finish	7.2%	21.4%	15.9%

SWIMMING ABILITY AND PARTICIPATION

A large proportion of respondents (62%), self-reported a low swimming ability. A majority of the parental/caregiver respondents self-reported similar ability (54%). Further analysis revealed that 60% of the low skilled swimmers frequented the pool at least once during the summer while 31% reported frequenting the pool 5+ times during the summer months.

Child's swimming ability	<u>4-11 yr olds</u> 9	<u>12-18 yr. olds</u>	<u>Total</u>
Non-swimmer ¹⁰	13.1%	8.8%	10.6%
Low-skilled swimmer ¹¹	59.9%	45.1%	51.3%
Skilled swimmer ¹²	27.0%	46.0%	38.1%
Parent's swimming ability (see swimming ability definitions below)			
Non-swimmer			19.4%
Low-skilled swimmer			34.3%
Skilled swimmer			46.3%
Summer pool frequency	12.10	12.20/	
0 times per month	13.1%	12.2%	12.6%
1-2 times per month	13.1%	17.4%	15.8%
3-4 times per month	19.4%	12.1%	14.9%
5 or more times per month	54.5%	58.3%	56.8%
Non-summer pool frequency			
0 times per month	44.0%	37.6%	40.1%
1-2 times per month	15.5%	19.1%	17.7%
3-4 times per month	11.2%	8.8%	9.7%
5 or more times per month	29.3%	34.6%	32.5%

⁹ Parents/caregivers responded on behalf of children less than 12 years of age.

Minority Swim Constraints Phase II/University of Memphis, May '10

¹⁰ Self-reported Cannot swim at all.

¹¹ Self-reported swim ability categories that range from Can splash around shallow end to Can swim a little – face in water shallow end only

¹² Self-reported swim ability categories that range from Can swim a true front crawl stroke – one pool length, no stopping to Can swim many lengths without stopping - on/could be on a swim team

Most likely means of getting to a swimming pool

Walk/Bike/Skateboard	10.8%	25.0%	20.1%
Drive self	-	7.7%	5.0%
Ride with friend	5.4%	11.8%	9.6%
Ride with parent/other family/caregiver	77.2%	47.4%	57.8%
Public transportation/bus	6.5%	8.1%	7.5%
Who taught adolescent to swim			
I Do Not Know How to Swim		19.6%	19.6%
Swim Instructor/Lifeguard		18.5%	18.5%
Family Member		27.2%	27.2%
Friend		4.9%	4.9%
Taught Self		24.3%	24.3%
Not Sure		5.4%	5.4%

SURVEY SCALE ITEMS TESTED BY LEVEL OF AGREEMENT

Statements eliciting a level of *agreement/disagreement* from the <u>total</u> sample (both age groups) include:

- General agreement (mean score >3.0 or 50% + "Yes")
 - Swimming is an activity that I enjoy doing
 - \circ \quad I know about how to be safe around water
 - I feel welcome at swimming pools
 - The nearest pool/swimming site is in good condition
 - I feel safe at that pool/swimming site
 - It is easy for me to get to that pool/swimming site
 - I do NOT feel safe at that pool/swimming site when certain people are there
 - \circ ~ I do NOT feel safe going to that pool/swimming site from home by myself
- General disagreement (mean score <2.0 or 50%+ "Yes")
 - I don't swim much because I am so concerned about drowning
 - I don't like how swimming ruins my appearance/how I look
 - I am not physically fit which affects my ability to swim

Statements eliciting a level of *agreement/disagreement* among <u>respondents between the ages of 4 - 11</u> (responses provided by parents/caregivers) include¹³:

- General agreement with the following statements (mean score >3.0 or 50% + "Yes")
 - Swimming is an activity that my child enjoys doing
 - My child would like to swim more than he or she does now
 - I encourage my child to swim
 - My child feels welcome at swimming pools
 - The nearest pool/swimming site is in good condition
 - I feel safe at that pool/swimming site
 - It is easy for me to get to that pool/swimming site
 - I do NOT feel safe at that pool/swimming site when certain people are there
 - I do NOT feel safe going to that pool/swimming site from home by myself

¹³ Items in bold were not found to be of agreement/disagreement within the overall sample; unique to this age group.

- General disagreement with the following statements (mean score <2.0 or 50% + "Yes")
 - My child doesn't like how he or she looks in a swimsuit
 - My child doesn't swim much because he or she is so concerned about drowning
 - My child does not like how the water/chemicals messes up his or her appearance

Statements eliciting a level of *agreement/disagreement* among <u>respondents between the ages of 12 - 18</u> include:

- General agreement with the following statements (mean score >3.0 or 50% + "Yes")
 - Swimming is an activity that I enjoy doing
 - \circ \quad I know about how to be safe around water
 - I would like to improve my swimming skills
 - The nearest pool/swimming site is open all year
 - The nearest pool/swimming site is in good condition
 - I feel safe at that pool/swimming site
 - It is easy for me to get to that pool/swimming site
- General disagreement with the following statements (mean score <2.0 or 50% + "Yes")
 - I don't swim much because I am so concerned about drowning
 - My parents/caregivers encourage me to swim
 - It costs a lot of money to swim

SURVEY VARIABLES TESTED BY RESPONDENT DEMOGRAPHIC CHARACTERISTICS¹⁴

Analyses by Race

- Black/African American respondents reported significantly less swimming ability than Hispanic/Latino and White respondents.
- Black/African American respondents reported significantly less agreement than White respondents on:
 - Swimming is an activity that I enjoy doing
 - My parents/caregivers encourage me to swim
 - Most members of my family know how to swim
 - My best friends like to swim
 - My best friends are good swimmers
- White respondents reported significantly less agreement than Black/African American respondents on :
 - I am concerned about getting injured when I swim
 - I don't swim much because I am so concerned about drowning
 - I don't like how swimming ruins my appearance/how I look
 - I do not like to get my hair wet when I swim
- Hispanic/Latino respondents reported significantly less agreement than White respondents on:
 - Swimming is an activity that I enjoy doing
 - I could be a successful swimming athlete if I were on a team
 - $\circ~$ I don't like how I look in a swimsuit
 - My parents/caregivers encourage me to swim
 - \circ ~ I am not physically fit which affects my ability to swim
 - \circ $\;$ Most members of my family know how to swim
 - My best friends like to swim
 - My best friends are good swimmers

¹⁴ The data were subject to appropriate multivariate analyses to explore differences between respondent subgroups using Analysis of Variance (ANOVA) with post hoc tests. Only items achieving a .05 level of significance have been reported.

- Hispanic/Latino respondents reported significantly less agreement than Black/African American respondents on I do not like to get my hair wet when I swim.
- White respondents reported significantly less agreement than Hispanic/Latino respondents on I am concerned about getting injured when I swim and I am not physically fit which affects my ability to swim.

Analyses by Free School Lunch Program (as a consistent proxy for Household Income)¹⁵

- Free lunch and reduced lunch respondents reported significantly less swimming ability than no free lunch respondents.
- Free lunch respondents reported significantly less agreement than no free lunch respondents on:
 - Swimming is an activity that I enjoy doing
 - I could be a successful swimming athlete if I were on a team
 - There is a pool/swimming site close to where I live
 - My parents/caregivers encourage me to swim
 - $\circ~$ I know about how to be safe around water
 - Most members of my family know how to swim
 - I feel welcome at swimming pools
- No free lunch respondents reported significantly less agreement than free lunch respondents on :
 - I don't like how I look in a swimsuit
 - \circ $\,$ Our family budget does not include money for me to take swimming lessons
 - I would like to swim more than I do now
 - I don't swim much because I am so concerned about drowning
 - I don't like how swimming ruins my appearance/how I look
 - I am not physically fit which affects my ability to swim
- Reduced lunch respondents reported significantly less agreement than no free lunch respondents on:
 - Swimming is an activity that I enjoy doing
 - Most members of my family know how to swim
- No free lunch respondents reported significantly less agreement than reduced lunch respondents on:
 - $\circ~$ I am concerned about getting injured when I swim
 - \circ Our family budget does not include money for me to take swimming lessons
 - $\circ~$ I am not physically fit which affects my ability to swim

¹⁵ Free lunch = household income <\$28,665/Reduced lunch= \$28,666-40,793. United States Department of Agriculture (2009 March 27). Child nutrition programs: Income eligibility guidelines. *Federal Register, 74*(58), 13410-13412.

TABLE 1Swimming Ability % (4-18 years)

	No Skill	Low Skill	Skilled
TOTAL SAMPLE	10.2	51.2	38.6
Male	11.1	45.8	43.1
Female	9.3	54.9	35.8
RACIAL IDENTITY			
American Indian/Alaskan Native	3.6	64.3	32.1
Asian	10.3	55.7	34
African American	13.9	55	31.2
Hispanic/Latino	7.4	50.5	42.1
Native Hawaiian/Pacific Islander	2	42.9	55.1
White	5.6	36.2	58.2
Other	6.6	44.4	49

Minority Swim Constraints Phase II/University of Memphis, May '10

TABLE 2

Summer Swimming Frequency by Swimming Ability

Alarmingly, 25.4% of respondents that self-reported they were unable to swim will be in the pool this summer 5 or more times per month. Also, 50.9% of the low ability swimmers will be at a swimming site 5 or more times per month. Combined, no and low skilled swimmers report that 46.6% will swim at a pool 5 or more times per month this summer.

		Summer Swimming Frequency				
		0 times per month	1-2 times per month	3-4 times per month	5+ times per month	Total
	Count	96	17	19	45	177
NonSwimmer	% within Swim Ability	54.2%	9.6%	10.7%	25.4%	100.0%
	% of Total	5.6%	1.0%	1.1%	2.6%	10.4%
Low Skilled Swimmer	Count	93	180	155	443	87
	% within Swim Ability	10.7%	20.7%	17.8%	50.9%	100.0%
	% of Total	5.5%	10.6%	9.1%	26.0%	51.1%
	Count	29	74	87	465	65
Skilled Swimmer	% within Swim Ability	4.4%	11.3%	13.3%	71.0%	100.0%
	% of Total	1.7%	4.3%	5.1%	27.3%	38.5%
1	Count	218	271	261	953	1703
Total	% within Swim Ability	12.8%	15.9%	15.3%	56.0%	100.0%
	% of Total	12.8%	15.9%	15.3%	56.0%	100.0%

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