

# **Report on USMS Member Segmentation Analysis**

Prepared by  
Tom Boyd  
6/26/2006

This report reflects usable responses of 5,343 USMS members. The segmentation analysis is used to identify groups of USMS members with similar attitudes and behaviors.

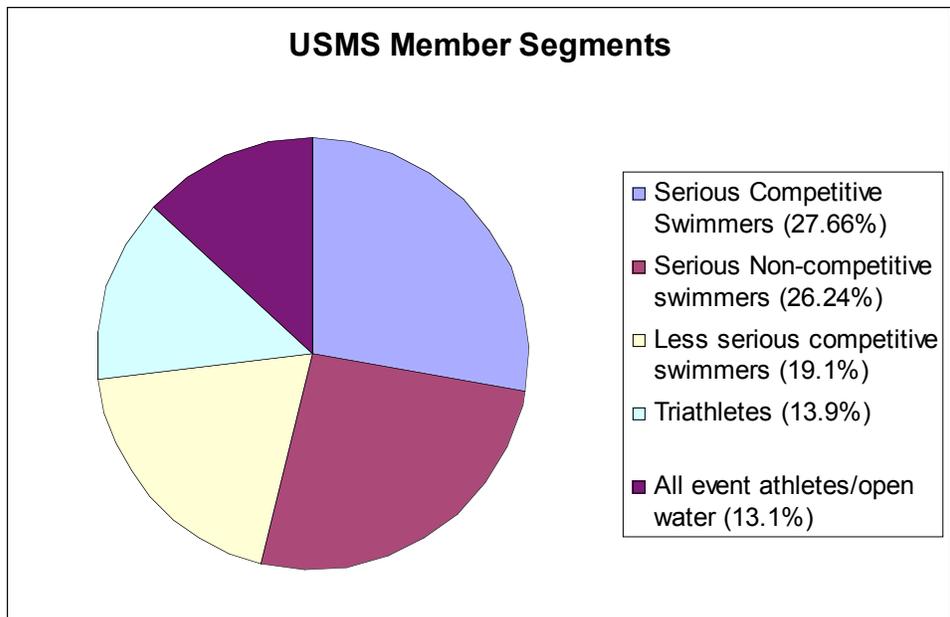
**How the data were developed:**

This project consists of two separate surveys. The two surveys have 41 common questions in addition to the questions that were unique to each survey. We separated the questions into two surveys because of length of time to respond, in the hopes that we would achieve a higher response rate. Those 41 common questions were used to segment our membership for purposes of this report. Only respondents who answered all 41 questions can be used for the segmentation analysis.

**Technical description:**

A K-means cluster analysis was run on the data (both surveys) using solutions of 3-8 clusters. Cluster solutions were then evaluated for consistency, interpretability and differentiability. The cluster solution with six groups was clearly the best. In both data sets (both surveys) there was a single respondent outlier who constituted a unique one-person cluster. Those two individuals are ignored for purposes of this report and the five remaining clusters are described here.

The cluster analysis was run separately for the two surveys (data sets) and the solutions were highly consistent, each time identifying the same five groups with highly similar scores on all questions.



It is important to remember that these labels are based on an interpretation of the data. “Serious” is used here to describe attitudes and behaviors about workouts and training, not competition. The cluster analysis assigns each respondent to one of the five clusters based on that person’s responses. The clusters are then described in terms of their “centers” as they

exist in the 41 dimensions used to analyze the data. When we look at the location of the cluster center we see what the “average” attitude of the members of that cluster is.

The discussion that follows provides a profile of each of the clusters based on the cluster center location for each variable. Then the discussion of each cluster is expanded to reflect the responses of cluster members on all other survey questions. This is done by creating a new data set that includes the identification of each respondent’s cluster membership. Then the data are sorted by cluster membership and a new analysis (one-way ANOVA) is used to get the cluster mean values for every variable in the study.

It should be noted that, while the statistical tests are not reported here, every single variable in the study had statistically significant differences between clusters. Statistical significance occurs here primarily because of the large number of subjects and this discussion will be limited to the survey items where the differences are both interesting and enlightening, rather than those that are merely statistically significant. For example, there is a statistically significant difference between serious competitive swimmers (6.48) and all event swimmers (6.23) on their ratings of the importance of swimming in coached practices. However that difference is not very interesting because on a seven point scale these two averages both represent that they think coached practices are very important. However, less serious competitive swimmers rated coached practices at only 4.51, barely above the neutral point, indicating that they place MUCH less importance on swimming in coached practices than the other two groups, and indeed the other four groups. This is the type of difference that will be brought to your attention in this report.

### USMS Segment Profiles

Segment 1: Serious competitive swimmers

Segment 2: Serious swimmers who are not competitive/less competitive

Segment 3: Non-serious competitive swimmers

Segment 4: All event participants/open water swimmers

Segment 5: Triathletes

**Segment 1: Serious competitive swimmers**, approximately 28% of members. This group is 51% Female. They swim at an organized practice 3.2 times/week.

This segment places high importance on training and fitness. On a seven point scale where 1=very unimportant and 7=very important this group gave the following average ratings:

Coached practices	6.4
Stroke and technique work	6.1
Swimming in meets	5.3
Lifting	4.1
Stretching	5.2
I joined to do competitions	6.2
I joined to get in shape and maintain fitness	6.5
I joined to meet people	4.8
I joined for the social benefits of a group	5.0

This group also places high importance on convenient practices, coaching, and improving technique. Swimming on relays is not important to this group, or any other group.

Other information about this group:

They are the most likely to read USMS SWIMMER cover to cover (5.06) and they rate the magazine most highly on overall quality measures. This group is most similar to the all events segment in their attitudes about the magazine. This group tends to rate all content areas of the magazine as more important than other segments (except for the all-event swimmers who give similar ratings of most content areas). On content related to competitive achievements, competitions and results, this group tends to rate all of this content around 5.0 and is similar to the all-event swimmers and the less serious competitive swimmers. The only area of content rated lower by this group is open water training where they rated it 4.2. This group also tends to like personality profiles a bit more than other segments (4.9 versus 4.0) except for all-event swimmers who are also at 4.9.

In a separate question (one not used to define this group) 95.6% of this group reports competing in a swim meet. 50.1% report competing in an open water event, 36.8% postal events (highest of all groups) and 27.3% report competing in a triathlon.

This group also believes they have benefited the most from swimming.

On a battery of questions asking attitudes about the benefits of swimming the following means occurred for this group:

Note: Values reported in this section are based on a seven point scale where 1=strongly disagree, 4=neutral, and 7=strongly agree.

Swimming has made me happier	6.7
Swimming will cause me to live longer	6.4
Swimming has (not) caused a strain on my personal relationships	6.0

Swimming has improved my personal relationships	5.4
Swimming has made my sex life better	4.6
Swimming gives me more energy	6.2
When I am swimming I perform better at work	6.0
I get injured more easily when I am in training to swim	2.2
Swimming makes me calmer in my daily life	6.1
Swimming helps me channel my competitiveness constructively	5.7
Swimming makes me more competitive	4.9
Swimmers are healthier than other people	6.0
Swimmers are less social than other people	1.9
Swimming is a solitary sport	2.4
Fast swimmers and slow swimmers don't mix well socially	1.9
Fast swimmers act annoyed at slower swimmers	2.7
I am intimidated by swimmers who are faster than me	2.4
Swimming makes me a better spouse/partner	5.1
Swimming gives me more confidence socially	5.2
Swimming has helped me to overcome personal fears	4.6

**Segment 2: Serious non-competitive swimmers.** Approximately 26% of members. This group is 58.6% Female. They swim at an organized practice 3.0 times/week.

This segment places high importance on training and fitness. On a seven point scale where 1=very unimportant and 7=very important this group gave the following average ratings:

Coached practices	6.1
Stroke and technique work	5.5
Swimming in meets	2.4
Lifting	3.3
Stretching	4.6
I joined to do competitions	2.5
I joined to get in shape and maintain fitness	6.6
I joined to meet people	3.5
I joined for the social benefits of a group	3.7

This group also places high importance on convenient practices, coaching, and improving technique.

Other information about this group:

They are unlikely to read USMS SWIMMER cover to cover (4.14) and they are indifferent to the magazine, with average scores in the 3.5-4.5 range for most measures. Along with Triathletes, this group was the most likely to say they don't care about the magazine. This group does have high interest in some areas of the magazine and so an opportunity exists to further engage them by providing targeted content. The following areas of the magazine received high scores from this segment:

Training and technique dept.	5.8
Pool training articles	5.8
Workout information	5.3
Healthy Swimmer	5.6
News on health	5.5
News on nutrition	5.5
Pictorial training and technique features	5.8
Fitness swimming features	5.3

When first starting swimming on a team, this group was likely to worry about being too slow and about other people being too competitive.

This group is the least likely to have participated in any form of competition, with only 57% ever having done a swim meet, 33% having done open water events, 19% having done triathlons, and 21% having done postal events. Their total participation in the past year is 1.8 events of all kinds, the next lowest group is 3.8 events.

This group also believes they have benefited from swimming. On a battery of questions asking attitudes about the benefits of swimming the following means occurred for this group:

Note: Values reported in this section are based on a seven point scale where 1=strongly disagree, 4=neutral, and 7=strongly agree.

Swimming has made me happier	6.4
Swimming will cause me to live longer	6.1
Swimming has (not) caused a strain on my personal relationships	6.3
Swimming has improved my personal relationships	4.7
Swimming has made my sex life better	3.9
Swimming gives me more energy	5.9
When I am swimming I perform better at work	5.6
I get injured more easily when I am in training to swim	2.0
Swimming makes me calmer in my daily life	5.7
Swimming helps me channel my competitiveness constructively	4.3
Swimming makes me more competitive	3.5
Swimmers are healthier than other people	5.4
Swimmers are less social than other people	2.1
Swimming is a solitary sport	2.7
Fast swimmers and slow swimmers don't mix well socially	2.1
Fast swimmers act annoyed at slower swimmers	2.9
I am intimidated by swimmers who are faster than me	2.7
Swimming makes me a better spouse/partner	4.6
Swimming gives me more confidence socially	4.2
Swimming has helped me to overcome personal fears	3.6

**Segment 3: Less serious (casual) competitive swimmers.** Approximately 19% of members. This group is 67.6% Male. They swim at an organized practice 1.85 times/week.

This segment places significantly less importance on training and fitness. This group is highly interested in competition but, for whatever reasons, is less interested in training than other groups. They place higher importance on lap swimming without a coach than they do on coached practices (the only group to do so). On a seven point scale where 1=very unimportant and 7=very important this group gave the following average ratings:

Coached practices	4.4
Lap swimming without a coach	4.7
Stroke and technique work	4.7
Swimming in meets	4.8
Lifting	3.6
Stretching	4.4
I joined to do competitions	6.1
I joined to get in shape and maintain fitness	5.0
I joined to meet people	3.3
I joined for the social benefits of a group	3.2

This group also places low importance on convenient practices, coaching, and improving technique.

Other information about this group:

They are unlikely to read USMS SWIMMER cover to cover (4.4) and their general attitudes about the magazine are slightly positive, with average scores in the 4.0-5.0 range for most measures. This group was slightly below other groups on their ratings of the importance of training and technique features in the magazine. They were also the least interested in open water features (3.9). This group also gave low ratings for recipes (3.6), Safety tips (4.2), Youth and family features (3.3), and fitness swimming features (4.6). This group tended to be near the mean for all other content areas in the magazine. The following areas of the magazine received high scores from this segment (although they were often the lowest among all groups):

Training and technique dept.	5.7
Pool training articles	5.8
Workout information	5.2
Healthy Swimmer	5.2
News on health	5.2
News on nutrition	5.2
Pictorial training and technique features	5.6

When first starting swimming on a team, this group was the least likely to have any kind of concerns.

This group is less likely than serious competitive swimmers to have participated in swim meets, with 49% having done a swim meet, 46% having done open water events, 79% having done triathlons, and 17% having done postal events. Their total participation in the past year is 4.8 events of all kinds.

Although they are consistently the lowest of all groups in their ratings of the benefits of swimming, this group also believes they have benefited from swimming. On a battery of questions asking attitudes about the benefits of swimming the following means occurred for this group:

Note: Values reported in this section are based on a seven point scale where 1=strongly disagree, 4=neutral, and 7=strongly agree.

Swimming has made me happier	6.3
Swimming will cause me to live longer	6.1
Swimming has (not) caused a strain on my personal relationships	6.0
Swimming has improved my personal relationships	4.7
Swimming has made my sex life better	4.1
Swimming gives me more energy	5.8
When I am swimming I perform better at work	5.5
I get injured more easily when I am in training to swim	2.1
Swimming makes me calmer in my daily life	5.5
Swimming helps me channel my competitiveness constructively	5.2
Swimming makes me more competitive	4.6
Swimmers are healthier than other people	5.8
Swimmers are less social than other people	2.1
Swimming is a solitary sport	3.0
Fast swimmers and slow swimmers don't mix well socially	1.9
Fast swimmers act annoyed at slower swimmers	2.9
I am intimidated by swimmers who are faster than me	2.0
Swimming makes me a better spouse/partner	4.5
Swimming gives me more confidence socially	4.4
Swimming has helped me to overcome personal fears	3.6

**Segment 4: Triathletes.** Approximately 14% of members. This group is 58.3% Male. They swim at an organized practice 2.44 times/week.

This segment places high importance on training and fitness. As expected, this group places high importance on competing in triathlons (6.1), and running races (5.2). They place high importance on coached practices and are the least likely of all groups to compete at a swim meet (2.4). On a seven point scale where 1=very unimportant and 7=very important this group gave the following average ratings:

Coached practices	5.7
Lap swimming without a coach	3.9
Stroke and technique work	5.6
Swimming in meets	2.4
Lifting	4.1
Stretching	4.8
I joined to do competitions	3.0
I joined to get in shape and maintain fitness	5.8
I joined to meet people	3.6
I joined for the social benefits of a group	3.2

This group also places moderate to high importance on convenient practices (4.7), coaching (5.3), and improving technique (5.3).

Other information about this group:

They are unlikely to read USMS SWIMMER cover to cover (4.1) and their general attitudes about the magazine are slightly positive, with average scores in the 4.0-5.0 range for most measures. They are the only group to rate USMS SWIMMER below 4 compared to other sports magazines (3.6) reflecting their eclectic interests. They care the least about the magazine (I don't really care about... rated at 3.4). This group also cares the least of all groups about information from/about USMS or information about swimming competitions. They tend to be average on their ratings of the importance of training features, except that they rate open water training articles highly (5.9). This group also gave low ratings for recipes (4.0), Safety tips (4.5), Youth and family features (3.4). This group tended to be near the mean for all other content areas in the magazine.

This group highly likely to have participated in swim meets, with 95% having done a swim meet, 46% having done open water events, 34% having done triathlons, and 31% having done postal events. Their total participation in the past year is 3.9 events of all kinds. They are also the group most likely to go out to eat after an event.

This group also believes they have benefited from swimming. On a battery of questions asking attitudes about the benefits of swimming the following means occurred for this group:

Note: Values reported in this section are based on a seven point scale where 1=strongly disagree, 4=neutral, and 7=strongly agree.

Swimming has made me happier	6.0
Swimming will cause me to live longer	5.7
Swimming has (not) caused a strain on my personal relationships	6.0
Swimming has improved my personal relationships	4.3
Swimming has made my sex life better	3.6
Swimming gives me more energy	5.5
When I am swimming I perform better at work	5.3
I get injured more easily when I am in training to swim	1.8
Swimming makes me calmer in my daily life	5.2
Swimming helps me channel my competitiveness constructively	4.5
Swimming makes me more competitive	4.0
Swimmers are healthier than other people	5.2
Swimmers are less social than other people	2.3
Swimming is a solitary sport	2.8
Fast swimmers and slow swimmers don't mix well socially	2.2
Fast swimmers act annoyed at slower swimmers	3.0
I am intimidated by swimmers who are faster than me	2.6
Swimming makes me a better spouse/partner	4.0
Swimming gives me more confidence socially	3.9
Swimming has helped me to overcome personal fears	3.5

**Segment 5: All-event and open water swimmers.** Approximately 13% of members. This group is 60.3% Female. They swim at an organized practice 2.9 times/week.

This segment places high importance on training and fitness. As expected, this group places high importance on competing in all forms of competition. They place high importance on coached practices and are the most likely of all groups to compete at an open water event (5.2). On a seven point scale where 1=very unimportant and 7=very important this group gave the following average ratings:

Coached practices	6.2
Lap swimming without a coach	4.0
Stroke and technique work	6.1
Swimming in meets	4.7
Lifting	4.9
Stretching	5.6
I joined to do competitions	5.6
I joined to get in shape and maintain fitness	6.3
I joined to meet people	5.0
I joined for the social benefits of a group	4.9

This group also places high importance on convenient practices (4.9), coaching (5.8), and improving technique (5.7).

Other information about this group:

They are likely to read USMS SWIMMER cover to cover (4.9) and their general attitudes about the magazine are strongly positive, with average scores at 4.9 or above for most measures. This group also cares more than most groups about information from/about USMS or information about swimming competitions (ratings 4.7-5.2). They tend to be high on their ratings of the importance of training features, and they rate open water training articles highly (5.9). They also gave the highest importance ratings of any groups to competition training articles (6.2), dry land training articles (5.9), and cross-training articles (5.9). This group tends to be the most enthusiastic of all segments with high ratings for content on training, diet, health, nutrition, fitness swimming, personalities...virtually all content areas.

This group is highly likely to have participated in all forms of competition, with 76% having done a swim meet, 64% having done open water events, 81% having done triathlons, and 33% having done postal events. Their total participation in the past year is 5.9 events of all kinds.

This group also believes they have benefited from swimming. On a battery of questions asking attitudes about the benefits of swimming the following means occurred for this group:

Note: Values reported in this section are based on a seven point scale where 1=strongly disagree, 4=neutral, and 7=strongly agree.

Swimming has made me happier	6.5
Swimming will cause me to live longer	6.3
Swimming has (not) caused a strain on my personal relationships	5.0
Swimming has improved my personal relationships	5.3
Swimming has made my sex life better	4.5
Swimming gives me more energy	6.0
When I am swimming I perform better at work	5.9
I get injured more easily when I am in training to swim	1.9
Swimming makes me calmer in my daily life	5.9
Swimming helps me channel my competitiveness constructively	5.5
Swimming makes me more competitive	5.1
Swimmers are healthier than other people	5.8
Swimmers are less social than other people	2.1
Swimming is a solitary sport	2.6
Fast swimmers and slow swimmers don't mix well socially	2.1
Fast swimmers act annoyed at slower swimmers	2.9
I am intimidated by swimmers who are faster than me	2.6
Swimming makes me a better spouse/partner	4.9
Swimming gives me more confidence socially	5.0
Swimming has helped me to overcome personal fears	4.7