

Camp Mac Summer 2008 Camper Outcomes Report

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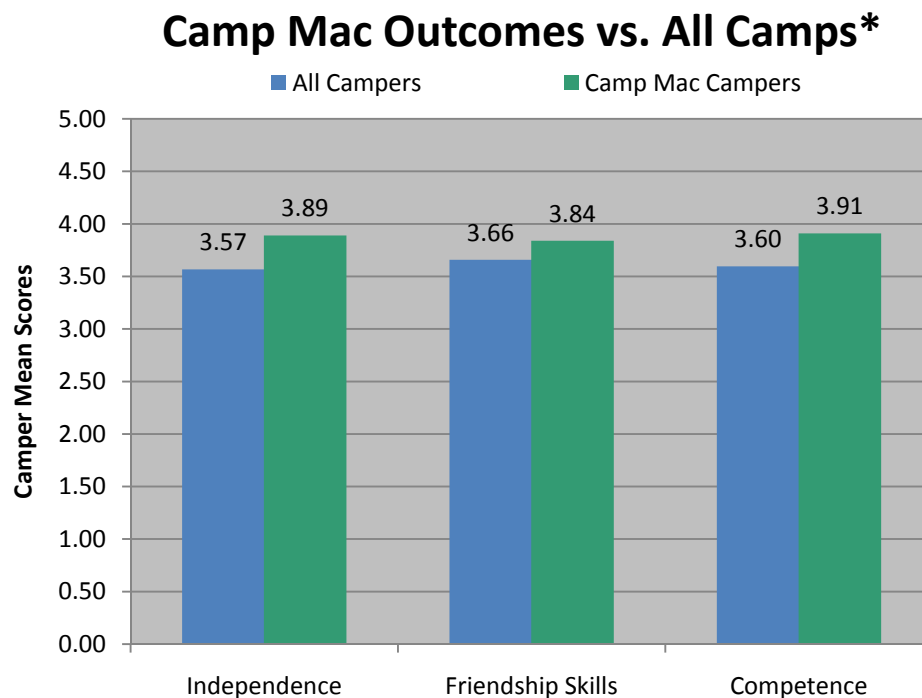
Introduction

This Camp Mac Report includes several comparisons between camper characteristics and camper outcomes. The three camper outcomes of friendship skills, competence and independence were each compared to the camper characteristics of age, sex and summers attending camp. These comparisons are visually presented in various charts and graphs. In addition, the accepted abstract for the National American Camp Association (ACA) Research Symposium is included. It addresses the preliminary study targeted at the relationship of session length and camper outcomes that utilized data gathered by and at Camp Mac.

Results of Comparisons

There is plenty of great news for Camp Mac! In comparison to the 2008 Marge Scanlin award winning study, Camp Mac developmental outcome scores were higher than the 2008 study. In Figure 1, the graph of *Camp Mac Outcomes vs. All Camps* indicates that the overall camper outcome scores for independence (3.89), friendship skills (3.84) and competence (3.92) were each higher than *All Campers* in the 2008 study. The intuitive notion that gains occurred in camper outcomes because of the camp experience now has qualitative evidence for Camp Mac.

Figure 1



*Note: There was no Camp Mac data in the All Campers Data

Camper outcomes and camper summer attendance were also compared. Figure 2 shows the percentages of Camp Mac campers and the Scanlin Award research campers by the number of summers they attended camp. The percentages are very similar.

Figure 2

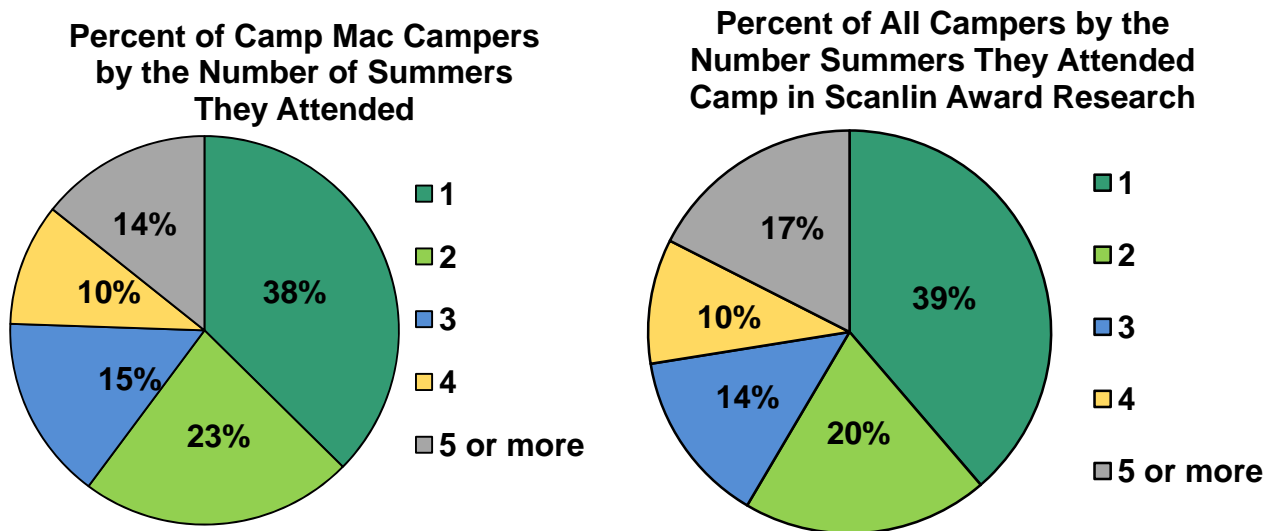
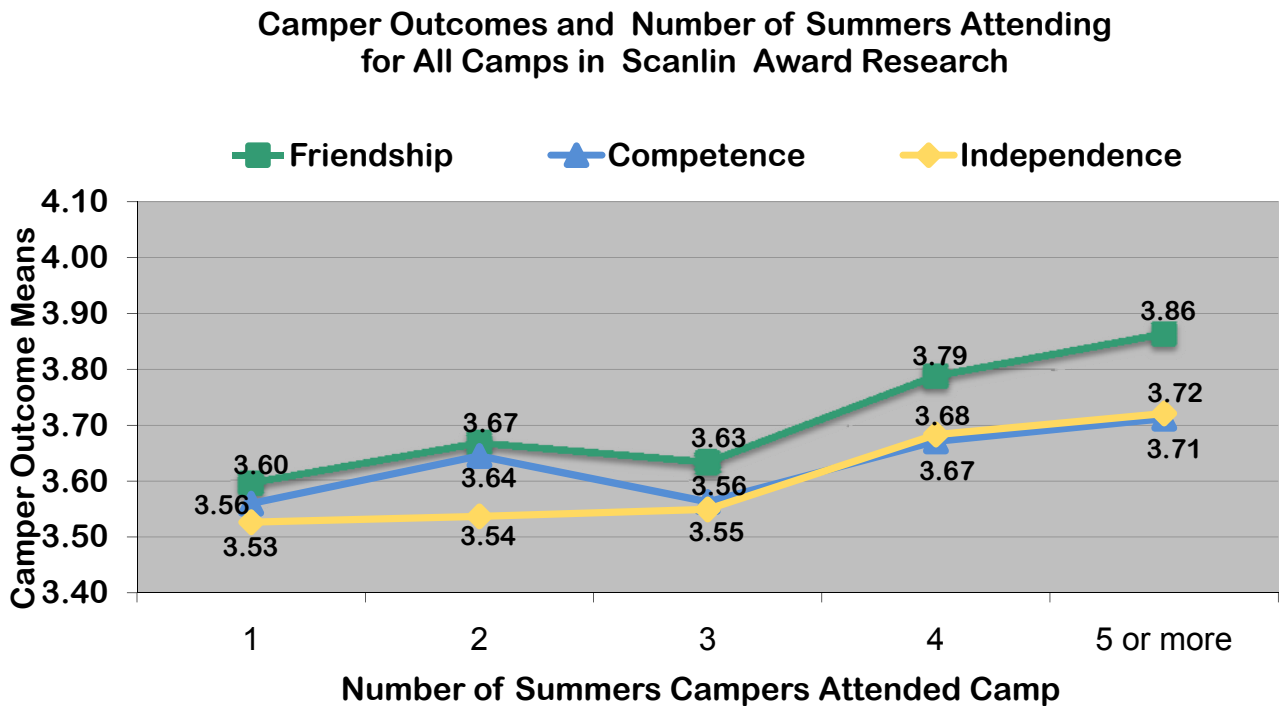
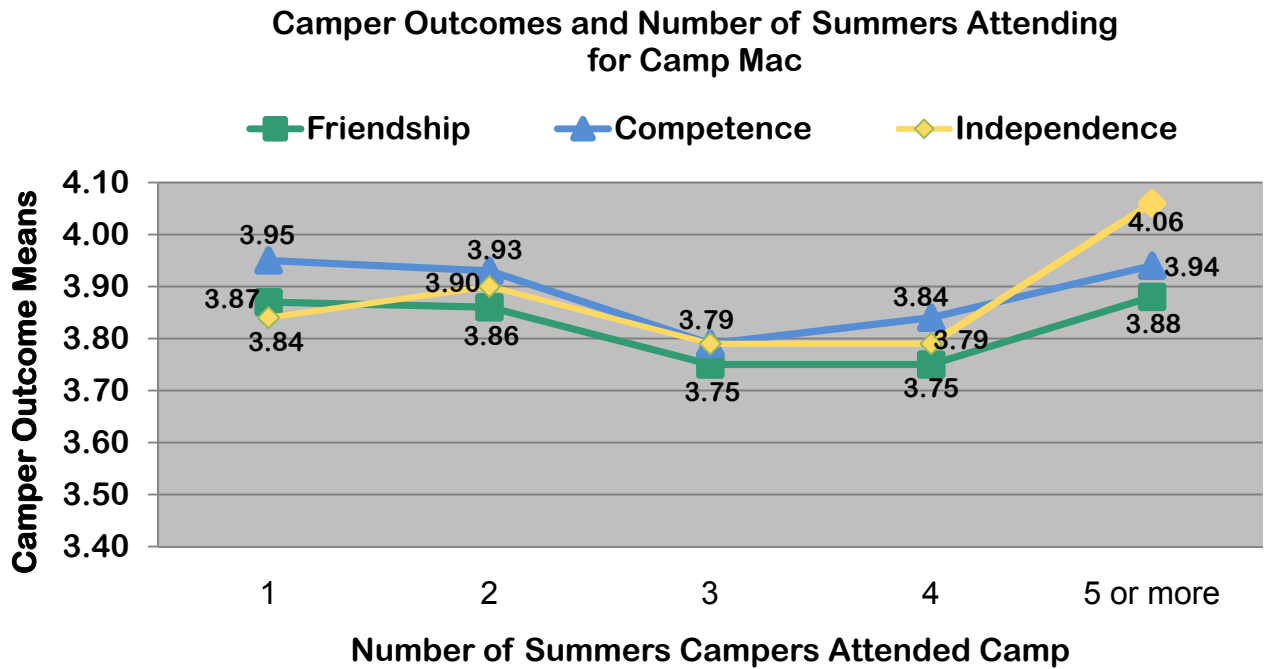


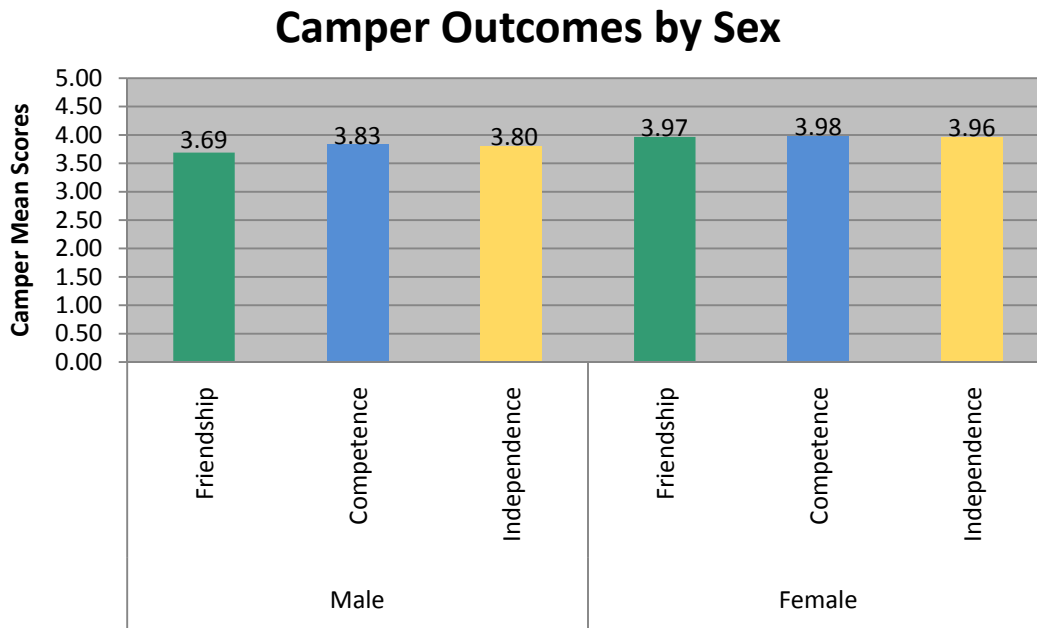
Figure 3 (see next page) includes 2 graphs that display camper outcomes by the number of summers attending camp. One Camp Mac graph and one from the Scanlin Award research. While the Camp Mac camper outcome scores are higher overall for each outcome by number of summers attending, the trend of camper outcome scores dips slightly more for the third year Camp Mac campers than for campers participating in the Scanlin Award research.

Figure 3



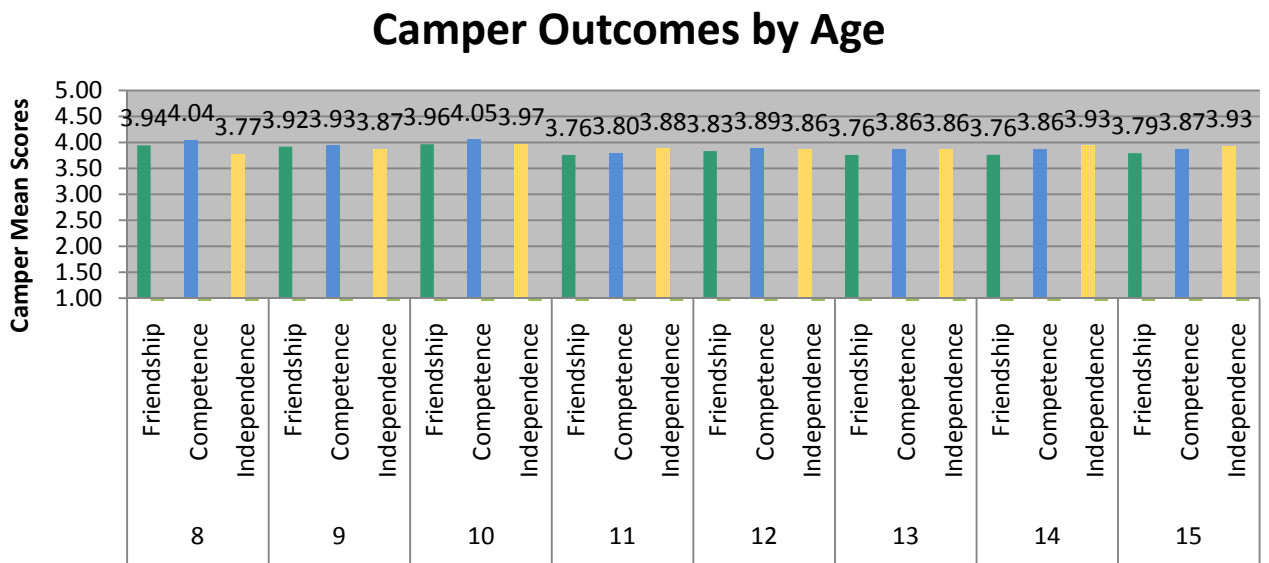
Camp Mac Camper outcomes compared by camper sex differ. Females' gains in friendship skills, competence and independence are higher than males. These comparisons are displayed in Figure 4.

Figure 4



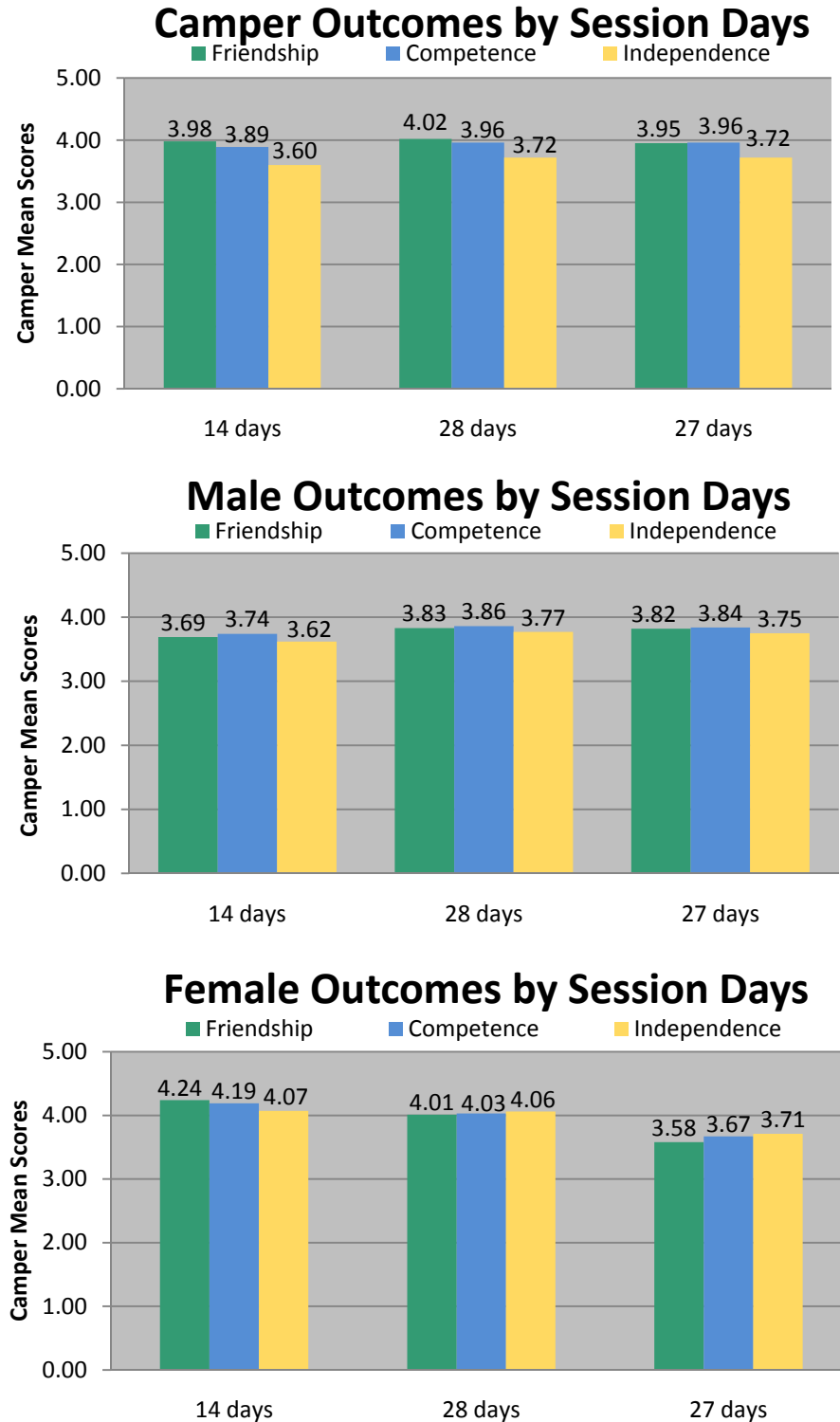
Camp Mac Camper outcome comparisons by camper age can be seen in Figure 5. Overall the scores by age differ between 3.76 and 4.05. Despite the small difference in overall scores by age; eight, nine and ten year olds have higher scores on friendship skills and competence than eleven to fifteen year old campers. For independence, eight year olds scored lowest (3.77) while 10 year olds scored highest (3.97).

Figure 5



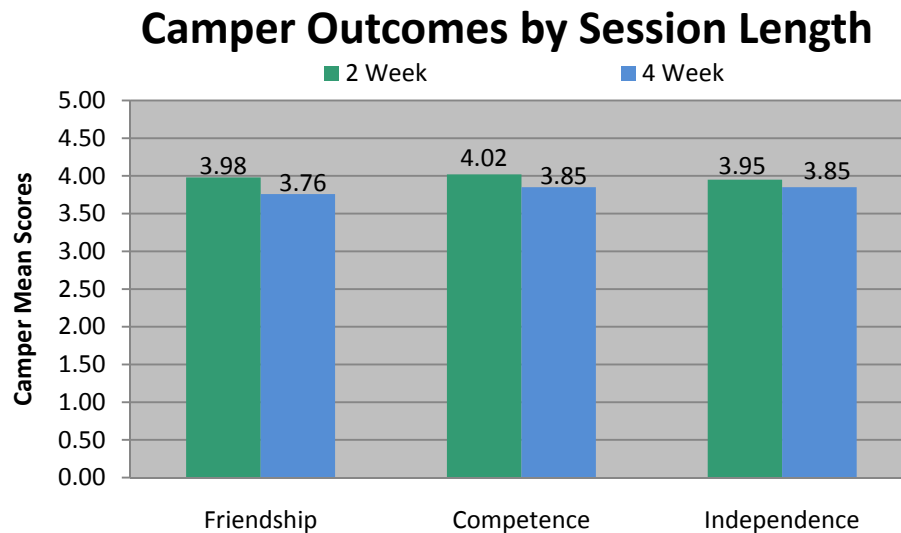
Camper outcomes were compared by length of sessions measured in days. Figure 6 compares campers' scores overall and by camper sex. Most interesting is that female scores in the 14 and 27 day sessions reported scores greater than 4.0 in each outcome.

Figure 6



Camper outcomes were compared to session length measured in weeks. This comparison was the preliminary study to a potential national study. Accordingly, the two camper weeks in length of 27 and 28 days were combined into a 4 week category. As can be seen in Figure 7, camper outcomes of friendship skills, competence, and independence for the 2 week sessions were greater than the 4 week sessions. Details of the actual study are described in the ACA Research Symposium Abstract section.

Figure 7



ACA Research Symposium Abstract

Does the Power of the Camp Experience Differ within the Length of Sessions? An Analysis of Session Length on Camper Developmental Outcomes of Competence, Friendship Skills, and Independence

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Keywords: Camper Developmental Outcomes: Competence, Friendship, Independence; Session Length; Self-Determination Theory

Purpose/Theoretical Frame. Does the length of a camp session really make a difference in the developmental outcomes of campers? How do the number of days that campers attend camp relate to gains in camper developmental outcomes?

According to the ACA Directions Study, session length was not a reliable predictor of camper developmental outcomes. As well, the September 2007 ACA Camper Enrollment and Staff Recruitment Survey's identified that 60% ($n=364$) of camps reported that one-week or less sessions were most popular, while 14% ($n=84$) of camps indicated that two weeks were most popular followed by 4 week (8%, $n=51$) and 3 week (5%, $n=33$). At first glance, it seems that these statistics indicate a trend

of having shorter session lengths is more popular, but does it result in a greater benefit to the camper?

After the Directions Study, however, the Basic Camper Outcomes (BCO) questionnaires were created to more closely detect gains in camper developmental outcomes. Accordingly, the Scanlin 2008 Outstanding research study utilized the newly developed BCO questionnaires. Results from this research indicated that the Self-Determination Theory (SDT) based developmental outcomes of friendship skills, competence and independence (FCI) incrementally increased as the number of summers that campers attended the same camp increased. Intuitively, it seems likely that the more time in days campers spend at camp during the summer may also show incremental increases in camper outcomes despite the popular trend of camps offering shorter camper sessions. As well, the trend of camper outcome scores from the 2008 study reported that camper outcomes scores were 3.6 on average. While this study provided timely content, previous studies have not addressed the relationship of session length to developmental outcomes. Further, intervening factors such as the number of summers campers attended camp and their age may affect the SDT based developmental outcomes such as FCI. Therefore, the purpose of this preliminary study was to examine the relationship between length of session and acquisition of these developmental outcomes among youth campers while controlling for age and number of summers campers attend camp.

Methods. This study utilized one self-report questionnaire. The questionnaire included three of the American Camp Association's BCO scales to collect camper outcomes on FCI. Participants were campers ($n=658$) from one US resident camp. The BCO data were collected at the end of three sessions. The session length variable was comprised of two attributes consisting of a two week (14 days with $n=246$) and four week (28 and 27 days with $n=412$) category. Reliability coefficients for each BCO were computed. Adjusted means, standard deviations and strength of relationship (i.e., η^2) statistics were calculated. Data were analyzed through analysis of covariance (ANCOVA) procedures to test the following non-directional hypotheses of session length on FCI, $H_0: \mu_{\text{two week}} = \mu_{\text{four week}}$. The covariates used in the study were camper age and number of summers campers have been at camp. The homogeneity of variance and slope assumption was evaluated.

Findings/Results. The BCO reliabilities ranged from good to very good for competence ($\alpha=.79$), independence ($\alpha=.81$) and friendship skills ($\alpha=.92$), respectively. Descriptive statistics are reported in Table 1. The trend of adjusted means for each outcome variable indicated that 2-week session means were higher than 4-week session means. Standard deviations ranged from .64 to .71. Levene's test did not lead to the rejection of the hypothesis that group variances are equal for competence ($F=.98$, $p=.32$), independence ($F=.21$, $p=.65$), and friendship skills ($F=.02$, $p=.90$). The test for homogeneity of slope was not significant for competence ($F=1.00$, $p=.37$) and independence ($F=1.60$, $p=.20$), while friendship skills was significant ($F=3.54$, $p=.03$) and violated the slope assumption. As can be seen in Table 2, ANCOVA results indicated that a significant relationship does exist between length of sessions and FCI variables resulting in rejecting the null hypotheses.

Table 1
Descriptive Statistics for Session Length on FCI

Session Length	N	Observed Mean	Observed SD	Adjusted Mean
<u>Competence</u>				
2 week	246	4.02	.69	4.04
4 week	412	3.85	.64	3.73
Total	658	3.91	.67	
<u>Friendship Skills</u>				
2 week	246	3.97	.74	4.02
4 week	412	3.76	.73	3.73
Total	658	3.83	.74	
<u>Independence</u>				
2 week	246	3.95	.71	4.05
4 week	412	3.85	.71	3.79
Total	658	3.89	.71	

Table 2
ANCOVA for Session length on FCI with Covariates Age and Summers Campers Attended Camp

	SS	Df	MS	F	η_p^2
<u>Competence</u>					
Session Length	3.41	1	3.41	7.83*	.01
Age	.23	1	.23	.52	<.01
Summers	1.57	1	1.57	3.60	.01
Error	284.53	654	.44		
Total	10345.0	658			
	2				
<u>Friendship Skills</u>					
Session Length	6.27	1	6.27	11.73*	.02
Age	.39	1	.39	.736	<.01
Summers	3.46	1	3.46	6.47*	.01
Error	349.79	654	349.79		
Total	10055.0	658			
	5				

Independence

Session Length	5.48	1	5.48	11.13*	.02
Age	.16	1	.16	.321	<.01
Summers	4.17	1	4.17	8.47*	.01
Error	322.10	654	.49		
Total	10270.9	658			
	2				

*p < .05, Note: Independence $\eta^2 = .03$, competence $\eta^2 = .02$, Friendship Skills $\eta^2 = .03$

Conclusions/Implications. This study provides several practical inquiries for camp directors. Analyzing and comparing developmental outcomes can offer additional points of view when making decisions about camp operations. In this particular analysis, developmental outcomes were on average higher (3.9) than the 2008 camp study (3.6). Great news for this camp! Camp personnel can state that their campers' said that they "increased some, I am sure" on FCI because of their camp experience. They can also be reassured that the program implementation for their 2-week and 4-week sessions are effective. The intuitive notion that gains occurred in camper outcomes because of the camp experience now has evidence for this camp. Intuition is a good guide, but to fully understand the how, why and where the positive difference occurs in camp, deeper inquiry is needed. For instance, it is also intuitive that as the length of session increases, the gains in camper outcomes would also increase. Yet, in this study there was a statistical difference between the 2 and 4 week sessions on FCI. Statistically, the analysis states that gains in 2-week sessions are greater than 4-week sessions. This finding does not necessitate turning all 4-week programs into 2-week programs, but raises another question. So, what is causing the difference in the operations of each week? Such a result provides camp directors with the opportunity to look deeper into what is making the difference in developmental outcomes by session length. Potential questions directors may ask could include: Is there a saturation point in the progression of programming? When does a camper meet their peak in gaining FCI in a session? Is there a stronger sense of camper urgency with a shorter session to gain as much as possible in a 2-week session than a 4-week session? How does a one week or 3-week session effect camper outcomes? Across camps nationally, what session length, if any, maximizes camper developmental outcomes? What other ACA developmental outcomes (e.g., sense of exploration, teamwork, responsibility, and family citizenship) could be compared to session length or other camp features such as accreditation, camp affiliation, sex, or ethnicity. With the new developmental camper outcomes provided by the ACA, collecting such data is easier than ever before. With these resources it assists directors to continually collect, analyze and question the power of the camp experience and provide evidence on how camps positively contribute to society.

Questionnaire

Below is the questionnaire used by Camp Mac to collect camper developmental outcomes and camper characteristics for this report.

Camper Outcome Survey

Please read these instructions before doing anything else.

Camper Instructions

Many different types of camps are available for young people to attend every year. Examples are outdoor camps, sports camps, computer camps, and theatre camps. These camps are fun, and they sometimes help campers to change by learning things about themselves. Campers in a sports camp, for example, may notice that their skills in the sport that they play at camp have increased a little or maybe a lot as a result of their camp experiences.

We are interested in finding out the ways, if any, that you believe that you have changed as a result of being a camper at this camp. Knowing the ways that campers have changed will help us make camp better for next years campers.

Please carefully read each question and then fill in the circle that shows if and how much you believe your experience as a camper changed you in terms of that statement. As you will see, each of your responses will be one of the following:

- | | |
|---|---------------------------------|
| My skill or ability <i>decreased</i> | “Decreased” |
| I <i>did not increase or decrease</i> my skills on this | “Did not increase or decrease” |
| I <i>Increased a little bit, maybe</i> | “Increased a little bit, maybe” |
| I <i>increased some</i> on this, <i>I am sure</i> | “Increased some, I am sure” |
| I <i>increased a lot</i> on this, <i>I am sure</i> | “Increased a lot, I am sure” |

For example, the camper below thought that she *did not increase or decrease* in her ability to play soccer.

	:	:	:	:	:	:	:
	Decreased	Did not increase or decrease	Increased a little bit, maybe	Increased some, I am sure	Increased a lot, I am sure	:	:
1. Becoming better at playing soccer	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		

Please think carefully about each of your answers. No answers are right or wrong, but it is very important to be accurate. Please put down what you actually think for each question.

Your Age is ____years Circle your Sex: **Female** **Male** How many summers have you been at camp? ____summers

How much, if any, has your experience as a camper in this camp changed you in each of the following ways?

	Decreased	Did not increase or decrease	Increased a little bit, maybe	Increased some, I am sure	Increased a lot, I am sure
1. Needing less help from adults	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Taking care of myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Being less dependent on my family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Making good decisions even when members of my family are not around to help me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Making decisions without adults helping me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Making decisions by myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Becoming better at thinking of new things to do in my free time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Becoming better at understanding new information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Becoming better at doing art projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Becoming better at doing recreation activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Becoming better at doing recreation activities with other people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Becoming better at meeting new people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Becoming better at taking care of myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Becoming better at learning new things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

When done completing each answer, go to next page ☺

How much, if any, has your experience as a camper in this camp changed you in each of the following ways?

	Decreased	Did not increase or decrease	Increased a little bit, maybe	Increased some, I am sure	Increased a lot, I am sure
15. Becoming better at choosing people who would be good to be friends with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Becoming better at talking to friends about things that are important to them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Becoming better at listening carefully to things that my friends tell me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Becoming better at talking to friends about things that are important to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Becoming better at getting to know more things about my friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Becoming better at understanding my friends' feelings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. Becoming better at understanding my friends' emotions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. Becoming better at trusting my friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. Becoming better at being trusted by my friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. Becoming better at enjoying being with my friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Becoming better at helping my friends to have a good time when they are with me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. Becoming better at finding ways to meet people who I want to be friends with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. Becoming better at getting to know people who I might want to become friends with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. Becoming better at finding friends who like many of the same things that I like	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**After completing BOTH pages
Put your questionnaire back into the envelope it came from, Thank You!**