



UNIVERSITY OF SOUTH ALABAMA

2015 Freshman Cohort Retention Report

Executive Summary

This report summarizes the one-year retention of 2,082 students in the University of South Alabama (USA) 2015 first-time full-time baccalaureate degree-seeking freshman cohort. The one-year retention rate for the 2015 freshman cohort was 73%.

Results indicated retention of students who are older, from the Florida service area or Mobile or Baldwin County area, or have a lower high school GPA or lower ACT Composite may require additional resources and monitoring to enable and/or encourage them to persist towards successfully completing a degree at USA. Similar to previous studies, students attending the earlier freshman summer orientation sessions were more likely to return than students attending the later orientation sessions meaning that the orientation session attended could provide another key factor for identifying at-risk freshmen students early on in their college experience.

Freshmen who participated in a learning community were more likely to return so expanding the number of learning communities for freshmen to participate in should receive further consideration. Similarly, students who participated in Greek life at USA were more likely to return to USA which emphasizes the importance of students becoming involved in student organizations at USA that allow them to connect with students with similar interests outside of the classroom as well.

The importance of financial support in the form of freshman scholarships or other types of scholarships was also clear, particularly since students with a higher unmet financial need were less likely to return to USA. Additional USA freshman scholarships should be considered to continue to attract top students to attend USA. In addition, need-based grants could be utilized to assist students in greater need of financial support to encourage them to return to and persist towards completing a degree at USA.

A total of 290 students still had an immunization hold after Fall 2015 and the retention rate for students who still had an immunization hold after Fall 2015 was 60%. Clearing immunization holds earlier should be addressed as well.

Results also showed students who received an at-risk midterm grade (D, F, or U) in the Fall 2015 semester in four or more courses for lack of attendance and/or poor academic performance and students who were placed on probation after the Fall 2015 semester ended were unlikely to return to USA one year later. These findings highlight the importance of intervening prior to the end of the fall semester with students who receive an at-risk midterm grade to help prevent these students from subsequently receiving a low USA GPA and being placed on probation after the fall semester concludes.

Overview

The following report provides a detailed analysis about the one-year retention of the 2,082 first-time full-time baccalaureate degree-seeking freshmen students in the University of South Alabama (USA) 2015

freshman cohort. Retention in the context of this report is defined as whether freshmen students returned and enrolled one year later in the Fall 2016 semester. Similar to reports written by Institutional Research about the 2007 through 2014 freshman cohorts, the input-environment-outcome (IEO) model developed by Alexander W. Astin¹ was used as a conceptual framework to guide this analysis.

Cross tabular results for each variable and whether the student returned are reported. Comparisons for each subgroup are made to the overall retention rate of the cohort (73%). Significant mean differences for the input, environmental, and outcome variables are also indicated.

Additionally, five logistic regression models were tested. The first model included the input² variables. The second model included the input and the environmental³ variables. The third model included three outcome or other variables known after the end of the Fall 2015 semester⁴. The fourth model and fifth model tested a different outcome variable known after the end of the Summer 2016 semester⁵. The predictive power of each model for explaining whether the student would return (Yes/No) is reported as well as which variables were significant in each of the five models.

Cross Tabular Results

Cross tabular results for each variable and whether the student returned are summarized in the following section. Comparisons are made for each subgroup of the variable to the one-year retention rate (73%) of the 2,082 freshmen in the cohort. These comparisons illustrate which subgroups of students returned at higher, similar, or lower rates than the overall cohort retention rate of 73%. In addition, significant mean differences for the input, environmental, and the outcome or other variables known after the end of the Fall 2015 semester and after the end of the Summer 2016 semester are reported.

Input Variable Cross Tabular Results

For the input variables included in this analysis (see Table 1), female students (74%) returned at a higher rate than male students (72%). In terms of race/ethnicity, African-American (71%), multiracial (71%), Hispanic (69%), and students from another race/ethnicity (68%) returned at a lower rate than the cohort retention rate (73%). The mean difference between retention of Asian students compared to students in the White, African-American, Hispanic, and other race/ethnicity subgroups was statistically significant (see Appendix: ANOVA Tables).

¹ Astin, A. W. (2002). *Assessment for excellence: The philosophy and practice of assessment and evaluation in higher education*. American Council on Education, Oryx Press.

² Input variables: Gender, race/ethnicity, age, region, high school GPA, ACT Composite score, first generation status, USA rank as institution of choice, and expectation to graduate from USA.

³ Environmental variables: USA Day attendance, orientation session attended, college, USA freshman scholarship, other scholarship, Pell Grant, expected family contribution, unmet financial need, housing, learning community, Freshman Seminar, and Greek life participation.

⁴ Outcome/other variables after Fall 2015: Number of at-risk midterm grades received, probation status, and immunization hold.

⁵ Outcome variables after Summer 2016: USA hours earned (model 4) and USA GPA (model 5).

Table 1: Comparison of Input Variables to 2015 Cohort Retention Rate

Variable	Retention Rate >= 73%	Count	Retention Rate < 73%	Count
<i>Gender</i>				
	Female (74%)	1,190	Male (72%)	892
<i>*Race/Ethnicity</i>				
	*Asian (91%)	69	African-American (71%)	589
	Non-Resident Alien (86%)	103	Multiracial (71%)	63
	White (73%)	1,135	Hispanic (69%)	55
			Other (68%)	68
<i>*Age</i>				
	17 years old or younger (79%)	118	19 years old (67%)	198
	18 years old (74%)	1,710	*20 years old or older (54%)	56
<i>*Region</i>				
	*International (86%)	103	Mobile or Baldwin County (71%)	786
	Mississippi service area (79%)	107	Florida service area (68%)	119
	Rest of United States (76%)	156		
	Rest of Alabama (73%)	811		
<i>*High School GPA</i>				
	*3.51-4.0 (83%)	993	3.01-3.5 (68%)	582
			3.0 or lower (52%)	387
<i>*ACT Composite Score</i>				
	30 or higher (89%)	102	20-21 (65%)	366
	26-27 (85%)	181	*19 or lower (64%)	404
	28-29 (83%)	151		
	24-25 (77%)	336		
	22-23 (75%)	346		
<i>*First Generation</i>				
	*Unknown (82%)	385	No (72%)	1,202
			Yes (68%)	495
<i>USA Rank as Institution of Choice</i>				
	Fifth choice or lower (85%)	13		
	Fourth choice (82%)	11		
	Third choice (80%)	55		
	First choice (75%)	568		
	Second choice (75%)	222		
<i>Expectation to Graduate from USA</i>				
	Yes (76%)	803	Uncertain (61%)	62
	No (75%)	12		
Note: *Significant mean difference at .05 p level based on Independent T-Test for two group comparisons or at least one group with significant mean difference at .05 p level based on Games-Howell procedure for multiple group comparisons. Significantly different group indicated by orange fill color. Comparison group indicated by "*" and gray fill color.				

Retention comparisons based on age showed students who were 19 years or older (at most 67%) returned at a lower rate than younger students. The mean difference between retention of 20-year-old or older students compared to students who were 18 years old or younger was statistically significant (see Appendix: ANOVA Tables). Comparisons based on what region the student came from showed international students (86%), students from the Mississippi service area (79%), and students from the rest of the United States (76%) returned at a higher rate than the overall cohort (73%).

For the most part, as high school GPA or ACT Composite score decreased, retention also decreased. Students who had a high school GPA ranging between 3.01-3.5 or lower (at most 68%) returned at a lower rate than the overall cohort (73%). Similarly, students who had an ACT Composite score of 20-21

or lower returned at a lower rate than the cohort retention rate (73%). The mean difference between retention of students with a high school GPA of 3.51 or higher in comparison to the lower two high school GPA groups was statistically significant (see Appendix: ANOVA Tables). The mean difference between retention of students with an ACT Composite score of 19 or lower in comparison to students with an ACT Composite score of 22-23 or higher was also statistically significant (see Appendix: ANOVA Tables).

The retention rate of students whose first generation status was unknown (82%) because the student did not answer this question on a Free Application for Federal Student Aid (FAFSA) was higher than the overall cohort (73%). The mean difference between students whose first generation status was unknown compared to first generation students and students who were not first generation students was statistically significant (see Appendix: ANOVA Tables).

Two questions from the Beginning College Survey of Student Engagement (BCSSE) were also included in the input variables summary found in Table 1. However, responses to these two BCSSE questions were not included in logistic regression models because only 865 (42%) of the students in the cohort responded to both of these two BCSSE questions and the retention rate of respondents to both questions was 75%.

The first BCSSE question included in this report asked the respondent to rank what choice USA was compared to other institutions the student considered from a high of “first choice” to a low of “fifth choice or lower” institution to attend. Ironically, students who indicated USA was not their “first choice” or “second choice” institution to attend were more likely to return to USA.

The second BCSSE question included in this report asked the respondent to indicate whether he/she expected to graduate from USA. Only students who were “uncertain” about whether they would graduate from USA (61%) had a retention rate lower than the overall cohort (73%).

Environmental Variable Cross Tabular Results

For the environmental variables included in this analysis, USA Day attendance results (see Table 2) showed students who attended one or more USA Day (at least 76%) returned at a higher rate than the overall cohort (73%). In terms of the orientation session attended, the retention rate of students who attended the International orientation session or one of the first six freshman summer orientation sessions was at least 74%. Retention rates based on the orientation session attended ranged from a high of 86% for students who attended the International orientation session to a low of 55% for students who attended the Freshman Session 10 orientation session. When using the Freshman Session 10 orientation session as a comparison group, there was a significant mean difference between the Freshman Session 10 group in comparison to the first six freshman summer orientation sessions and the International orientation session (see Appendix: ANOVA Tables).

Table 2: Comparison of Environmental Variables to 2015 Cohort Retention Rate

Variable	Retention Rate >= 73%	Count	Retention Rate < 73%	Count
<i>USA Day Attendance</i>				
	Attended Multiple USA Days (80%)	60	Did Not Attend (72%)	1,406
	Attended 1 USA Day (76%)	616		
<i>*Orientation Session</i>				
	International Orientation (86%)	102	Freshman Session 7 (70%)	184
	Freshman Session 1 (83%)	199	Freshman Session 8 (69%)	172
	Freshman Session 2 (81%)	191	May Orientation (67%)	45
	Freshman Session 4 (80%)	194	Freshman Session 9 (64%)	154
	Freshman Session 3 (79%)	201	August/Other Orientation (57%)	100
	Freshman Session 6 (74%)	189	*Freshman Session 10 (55%)	165
	Freshman Session 5 (74%)	186		
<i>College⁶</i>				
	Engineering (77%)	347	Business (72%)	195
	Allied Health (74%)	422	Arts & Sciences (71%)	628
	Nursing (74%)	303	Computing (70%)	76
	Education (73%)	101		
<i>*USA Freshman Scholarship</i>				
	*Yes (80%)	1,081	No (65%)	1,001
<i>*Other Scholarship</i>				
	*Yes (81%)	338	No (72%)	1,744
<i>*Pell Grant</i>				
	No (76%)	1,199	*Yes (69%)	883
<i>Expected Family Contribution</i>				
	\$25,001 or higher (80%)	206	\$0 (71%)	785
	\$15,001 to \$25,000 (79%)	195	\$7,501 to \$15,000 (71%)	215
			\$1 to \$3,750 (70%)	337
			\$3,751 to \$7,500 (70%)	176
<i>*Unmet Financial Need</i>				
	-\$5,001 or lower (88%)	180	\$5,001 to \$10,000 (70%)	373
	-\$1 to -\$5,000 (83%)	309	\$10,001 to \$15,000 (64%)	232
	\$1 to \$5,000 (78%)	257	*\$15,001 or higher (46%)	148
	\$0 (73%)	415		
<i>Housing</i>				
	On campus (75%)	1,254	Off campus (71%)	828
<i>*Learning Community</i>				
	*Yes (79%)	826	No (70%)	1,256
<i>*Freshman Seminar</i>				
	No (77%)	521	*Yes (72%)	1,561
<i>*Greek Life Participation</i>				
	*Yes (84%)	234	No (72%)	1,848
Note: *Significant mean difference at .05 p level based on Independent T-Test for two group comparisons or at least one group with significant mean difference at .05 p level based on Games-Howell procedure for multiple group comparisons. Significantly different group indicated by orange fill color. Comparison group indicated by "*" and gray fill color.				

Retention comparisons based on the college housing the major the student initially selected showed Engineering (77%), Allied Health (74%), and Nursing (74%) students returned at a higher rate than the overall cohort (73%). However, no college based comparison was statistically significant (see Appendix: ANOVA Tables).

⁶ Continuing Education retention is not reported since there were only ten students from Continuing Education in this cohort.
Institutional Research

Scholarship retention rate comparisons illustrated that receiving scholarships positively affected retention. Students receiving a USA freshman scholarship (80%) or some other type of scholarship⁷ (81%) returned at a higher rate than the cohort retention rate (73%). The mean difference between students who received a USA freshman scholarship compared to students who did not receive a USA freshman scholarship was statistically significant (see Appendix: Independent T-Test Tables). Similarly, the mean difference between students who received some other type of scholarship compared to students who did not was also statistically significant (see Appendix: Independent T-Test Tables).

Financial aid comparisons based on whether the student received a Pell Grant, the expected family contribution to the student, and the amount of unmet financial need of the student showed a relationship between the financial resources of the student and/or the student's family and retention. Students receiving a Pell Grant (69%), who had an expected family contribution of \$7,501 to \$15,000 or lower (at most 71%), or who had an unmet financial need of \$5,001 to \$10,000 or higher (at most 70%) returned at a lower rate than the overall cohort (73%). The mean difference between students who received a Pell Grant compared to students who did not receive a Pell Grant was statistically significant (see Appendix: Independent T-Test Tables). In addition, the mean difference between retention of students with an unmet financial need of \$15,001 or higher in comparison to students with all lower unmet financial need comparison groups was statistically significant (see Appendix: ANOVA Tables).

Students who lived on campus (75%) or participated in a learning community (79%) returned at a higher rate than the overall cohort (73%). Additionally, the mean difference between retention of students who participated in a learning community and students who did not participate in a learning community was statistically significant (see Appendix: Independent T-Test Tables).

Students who did not take Freshman Seminar (77%) returned at a higher rate than the overall cohort (73%). The mean difference between retention of students who took Freshman Seminar and students who did not take Freshman Seminar was statistically significant (see Appendix: Independent T-Test Tables).

Finally, students who participated in Greek life (84%) returned at a higher rate than the overall cohort (73%). In addition, the mean difference between retention of students who participated in Greek life and students who did not participate in Greek life was statistically significant (see Appendix: Independent T-Test Tables).

Outcome/Other Variable After Fall 2015 Cross Tabular Results

Outcome or other variables incorporated into this analysis included the number of at-risk midterm grades (D, F, or U) a student had in Fall 2015, whether the student was placed on probation after Fall 2015, and whether the student had an immunization hold after Fall 2015 (see Table 3). Students who did not have an at-risk midterm grade or had only one at-risk midterm grade returned at a higher rate (at least 75%) than the overall cohort (73%). The mean difference for students who did not have an at-risk midterm grade in Fall 2015 compared to students who had at-risk midterm grades in two or more courses was statistically significant (see Appendix: ANOVA Tables).

⁷ Other scholarship includes third party private scholarships that are not considered a USA Freshman scholarship.
Institutional Research

Table 3: Comparison of Outcome/Other Variables After Fall 2015 to 2015 Cohort Retention Rate

Variable	Retention Rate >= 73%	Count	Retention Rate < 73%	Count
<i>*Number of At-Risk Midterm Grades in Fall 2015</i>				
	*No At-Risk MT Grades (83%)	987	2 At-Risk MT Grades (63%)	278
	1 At-Risk MT Grade (75%)	523	3 At-Risk MT Grades (55%)	174
			4 or More At-Risk MT Grades (36%)	120
<i>*Probation Status after Fall 2015</i>				
	No (78%)	1,895	*Yes (23%)	187
<i>*Immunization Hold after Fall 2015</i>				
	No (75%)	1,792	*Yes (60%)	290
Note: *At least one group with significant mean difference at .05 p level based on Games-Howell procedure for multiple group comparisons. Significantly different group indicated by orange fill color. Comparison group indicated by "*" and gray fill color.				

Students who were not on probation after Fall 2015 returned at a much higher rate (78%) compared to students who were placed on probation after the Fall 2015 semester ended (23%). The mean difference between students who were not on probation and students who were placed on probation was statistically significant (see Appendix: Independent T-Test Tables).

Students who did not have an immunization hold after Fall 2015 (75%) returned at a higher rate than the overall cohort (73%). The mean difference between students who did not have an immunization hold and students who had a hold was statistically significant (see Appendix: Independent T-Test Tables).

Outcome Variable After Summer 2016 Cross Tabular Results

Outcome variables incorporated into this analysis also included the number of hours earned after Summer 2016 at USA and the USA GPA after Summer 2016 (see Table 4). Unsurprisingly, as the number of USA hours earned increased the retention rate also increased. Similarly, students with a higher USA GPA were more likely to return than students with a lower USA GPA.

Table 4: Comparison of Outcome Variables After Summer 2016 to 2015 Cohort Retention Rate

Variable	Retention Rate >= 73%	Count	Retention Rate < 73%	Count
<i>*USA Hours Earned after Summer 2016</i>				
	*30.5 or more (95%)	736	12.5-18 (42%)	190
	24.5-30 (87%)	613	6.5-12 (14%)	132
	18.5-24 (76%)	241	0-6 (10%)	134
<i>*USA GPA after Summer 2016</i>				
	3.51-4.0 (91%)	470	*2.0 or lower (32%)	434
	3.01-3.5 (89%)	453		
	2.51-3.0 (81%)	412		
	2.01-2.5 (81%)	277		
Note: *At least one group with significant mean difference at .05 p level based on Games-Howell procedure for multiple group comparisons. Significantly different group indicated by orange fill color. Comparison group indicated by "*" and gray fill color.				

Students who completed 18.5-24 or more hours at USA after Summer 2016 returned at a higher rate (at least 76%) compared to students completing 12.5-18 or fewer hours (at most 42%). The mean difference between students who completed 30.5 or more hours at USA compared to students in all other USA hours earned groups was statistically significant (see Appendix: ANOVA Tables).

Students with a USA GPA ranging between 2.01-2.5 or higher after Summer 2016 returned at a much higher rate (at least 81%) compared to students with a USA GPA of 2.0 or lower (32%). Furthermore, the mean difference between students who had a USA GPA of 2.0 or lower compared to students in all other USA GPA groups was statistically significant (see Appendix: ANOVA Tables).

Logistic Regression Results

The focus of this study was to determine which student characteristics (inputs) and environmental characteristics (institutional/other support characteristics) can be used to best predict the retention of USA freshmen students. Since the focus of this study was prediction and classification of a dichotomous outcome variable, stepwise logistic regression was used. This technique allows for the identification of significant variables that contribute to the classification of individuals by using an algorithm to determine the importance of predictor variables. Stepwise logistic regression was used to identify significant variables in the model for predicting the outcome variable. Results of the final step for the model are reported including the classification rate for the model. Additionally, an analysis of the proportionate change in odds for significant variables is provided.

As a part of this study, five logistic models were tested. The first model included the input variables. The second model included the input variables and the environmental variables. The third model tested three variables known after the Fall 2015 semester: 1) the number of at-risk midterm grades a student had in Fall 2015, 2) whether the student was placed on probation after Fall 2015, and 3) whether the student had an immunization hold in Fall 2015 to see what happened when these variables were used as predictors of retention. The fourth and fifth models tested a different outcome variable known after the Summer 2016 semester. The fourth model tested the number of USA hours earned after Summer 2016 and the fifth model tested the USA GPA after Summer 2016 to see what happened when these outcomes were used as individual predictors of retention.

The number of students (selected cases) included in each model varied based on what variables were included in the final model because some students in the cohort had missing data, such as a high school GPA and/or an ACT Composite score. Because complete cases were required to compute the results, the final number of students used for each model ranged from a low of 1,818 students for the second model to a high of 2,082 students for the third model. The total number of students without any missing data for any of the variables used in the five different models was 1,786. The retention rate for this subset of 1,786 students was 75%. With a similar retention rate (75% compared to 73%) and 1,786 students representing 86% of the entire cohort, the models tested provided a solid representation of retention for this population. Since the focus for the models tested was to predict *returning* students, the outcome was coded with students not returning as a “0” and students *returning* as a “1”. This focus meant results would predict the odds of whether the student would *return* one year later.

Model 1: Logistic Regression with Input Variables Only

The first model consisted of four steps (see Table 5). The final step (step 4) of the first model showed the model correctly classified students in this cohort who *returned* 95.8% of the time and students who did not return 12.6% of the time for an overall classification rate of 73.7%.

Table 5: Input Model Classification Table^a

Observed			Predicted		
			Returned		Percentage Correct
			No	Yes	
Step 1	Returned	No	0	500	.0
		Yes	0	1379	100.0
	Overall Percentage				73.4
Step 2	Returned	No	44	456	8.8
		Yes	46	1333	96.7
	Overall Percentage				73.3
Step 3	Returned	No	69	431	13.8
		Yes	58	1321	95.8
	Overall Percentage				74.0
Step 4	Returned	No	63	437	12.6
		Yes	58	1321	95.8
	Overall Percentage				73.7

a. The cut value is .500

For each variable included in the first model, a comparison group was selected (gender=male, race/ethnicity=White, age=20 years old or older, region=Florida service area, high school GPA=3.0 or lower, first generation status=Yes, and ACT Composite score=19 or lower). Values greater than “1” (Exp *B*) indicated the odds of the outcome (student *returning*) was higher compared to the selected comparison group. Values less than “1” indicated the odds of the outcome (student *returning*) was lower compared to the selected comparison group.

In the first model (see Table 6), high school GPA, first generation status, race/ethnicity, and ACT Composite score were significant in the final step (step 4) of the model. The final step of the model showed the odds (Exp *B*) of a student *returning* was greater for a student in the two higher high school GPA comparison groups (3.01-3.5=1.952 and 3.51-4.0=4.231) than for a student with a high school GPA of 3.0 or lower. Additionally, the confidence intervals (95%) indicated the odds of a student *returning* was greater for a student in the two higher high school GPA comparison groups than for a student with a high school GPA of 3.0 or lower since the confidence intervals for the two higher high school GPA comparison groups did not encompass an odds value less than one.

Table 6: Input Model Final Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Step 4 ^d White			24.882	6	.000			
African-American	.595	.143	17.232	1	.000	1.813	1.369	2.400
Asian	1.290	.482	7.155	1	.007	3.634	1.412	9.354
Hispanic	.242	.352	.471	1	.493	1.274	.638	2.541
Multiracial	.108	.323	.112	1	.738	1.114	.591	2.100
Non-Resident Alien	-1.896	1.448	1.715	1	.190	.150	.009	2.563
Other Race/Ethnicity	.017	.302	.003	1	.956	1.017	.562	1.839
HS GPA 3.0 or lower			81.470	2	.000			
HS GPA 3.01-3.5	.669	.145	21.143	1	.000	1.952	1.468	2.596
HS GPA 3.51-4.0	1.442	.161	80.574	1	.000	4.231	3.088	5.797
ACT Composite 19 or lower			16.355	6	.012			
ACT Composite 20-21	-.064	.164	.154	1	.695	.938	.679	1.294
ACT Composite 22-23	.227	.185	1.514	1	.219	1.255	.874	1.804
ACT Composite 24-25	.281	.197	2.034	1	.154	1.324	.900	1.948
ACT Composite 26-27	.758	.261	8.452	1	.004	2.134	1.280	3.558
ACT Composite 28-29	.573	.275	4.342	1	.037	1.773	1.035	3.039
ACT Composite 30 or higher	.774	.366	4.470	1	.034	2.169	1.058	4.447
First generation			11.886	2	.003			
Not first generation	.215	.129	2.800	1	.094	1.240	.964	1.595
Unknown first generation status	.699	.203	11.873	1	.001	2.012	1.352	2.995
Constant	-5.00	.189	6.977	1	.008	.607		

- a. Variable(s) entered on step 1: High school GPA.
- b. Variable(s) entered on step 2: First generation status.
- c. Variable(s) entered on step 3: Race/ethnicity.
- d. Variable(s) entered on step 4: ACT Composite score.

The final step (step 4) of the first model showed the odds (Exp *B*) of a student *returning* was greater for a student who was not a first generation student (1.240) and whose first generation status was unknown (2.012) than for a first generation student. The confidence intervals (95%) also indicated the odds of a student *returning* was greater for a student whose first generation status was unknown than for a first generation student since the confidence intervals did not encompass an odds value less than one.

A review of the final step (step 4) results of the first model for the race/ethnicity of the student showed the odds (Exp *B*) of a student *returning* was greater for African-American (1.813), Asian (3.634), Hispanic (1.274), and multiracial (1.114) students, and students from another race/ethnicity (1.017) than for White students. In addition, the confidence intervals (95%) indicated that the odds of a student *returning* was greater for a student who was African-American (CI=1.369-2.400) or Asian (CI=1.412-9.354) than for a student who was White since the confidence intervals did not encompass an odds value less than one.

In addition, the final step (step 4) of the first model showed the odds (Exp *B*) of a student *returning* was greater for a student with an ACT Composite score of 22-23 or higher (22-23=1.255, 24-25=1.324, 26-27=2.134, 28-29=1.773, and 30 or higher=2.169) than for a student with an ACT Composite score of 19 or lower. In addition, the confidence intervals (95%) indicated the odds of a student *returning* was greater for a student with an ACT Composite score of 26-27 or higher since the confidence intervals did not encompass an odds value less than one.

Model 2: Logistic Regression with Input and Environmental Variables

The second model included the input and also the environmental variables. For each environmental variable included in the second model a comparison group was selected (number of USA Days attended=did not attend, orientation session attended=either the August Orientation session, a transfer orientation session, or an unknown orientation session, which college housed the major the student selected at initial enrollment=Arts & Sciences, whether the student received a USA freshman scholarship=no, whether the student received some other type of scholarship=no, whether the student received a Pell Grant=no, expected family contribution=\$0, unmet financial need=\$15,001 or higher, whether the student lived on or off campus=off campus, whether the student participated in a learning community=no, whether the student took Freshman Seminar=yes, and whether the student participated in Greek life=no).

The second model consisted of five steps (see Table 7). In comparison to the first model, the correct classification rate for the second model decreased to 93.9% for *returning* students while the classification rate for the second model increased to 25.6% for students who did not return. The overall correct classification rate for the second model was 75.7%.

Table 7: Input and Environmental Model Classification Table^a

Observed	Predicted				
	Returned		Percentage Correct		
	No	Yes			
Step 1	Returned	No	106	379	21.9
		Yes	71	1262	94.7
	Overall Percentage				75.2
Step 2	Returned	No	114	371	23.5
		Yes	74	1259	94.4
	Overall Percentage				75.5
Step 3	Returned	No	130	355	26.8
		Yes	73	1260	94.5
	Overall Percentage				76.5
Step 4	Returned	No	123	362	25.4
		Yes	81	1252	93.9
	Overall Percentage				75.6
Step 5	Returned	No	124	361	25.6
		Yes	81	1252	93.9
	Overall Percentage				75.7

a. The cut value is .500

Once again, high school GPA, first generation status, race/ethnicity, and ACT Composite score were significant in the final step (step 5) of the second model (see Table 8). In addition, unmet financial need, Greek life participation, learning community participation, Freshman Seminar, and other scholarship were significant in the final step (step 5) of the second model.

Table 8: Input and Environmental Model Final Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Step 5 ^e White			29.439	6	.000			
African-American	.714	.155	21.219	1	.000	2.043	1.508	2.769
Asian	1.582	.496	10.178	1	.001	4.862	1.840	12.848
Hispanic	.353	.363	.948	1	.330	1.423	.699	2.897
Multiracial	.165	.334	.243	1	.622	1.179	.613	2.270
Non-Resident Alien	-23.283	40192.970	.000	1	1.000	.000	.000	.
Other Race/Ethnicity	.063	.317	.039	1	.844	1.064	.572	1.982
HS GPA 3.0 or lower			76.140	2	.000			
HS GPA 3.01-3.5	.678	.155	19.124	1	.000	1.970	1.454	2.669
HS GPA 3.51-4.0	1.474	.170	74.925	1	.000	4.368	3.128	6.099
ACT Composite 19 or lower			6.931	6	.327			
ACT Composite 20-21	-.025	.175	.020	1	.886	.975	.692	1.375
ACT Composite 22-23	.195	.198	.965	1	.326	1.215	.824	1.792
ACT Composite 24-25	.174	.213	.670	1	.413	1.190	.785	1.805
ACT Composite 26-27	.591	.275	4.625	1	.032	1.807	1.054	3.097
ACT Composite 28-29	.404	.292	1.914	1	.166	1.498	.845	2.656
ACT Composite 30 or higher	.411	.388	1.125	1	.289	1.509	.705	3.227
First generation			1.480	2	.477			
Not first generation	.162	.134	1.459	1	.227	1.176	.904	1.529
Unknown first generation status	.098	.272	.131	1	.717	1.103	.648	1.879
Received other scholarship	.406	.191	4.544	1	.033	1.501	1.033	2.181
Unmet need \$15,001 or higher			39.501	6	.000			
Unmet need \$10,001 to \$15,000	.778	.247	9.921	1	.002	2.178	1.342	3.536
Unmet need \$5,001 to \$10,000	.909	.231	15.499	1	.000	2.481	1.578	3.901
Unmet need \$1 to \$5,000	1.213	.254	22.848	1	.000	3.365	2.046	5.534
Unmet need \$0	1.199	.229	27.354	1	.000	3.316	2.116	5.197
Unmet need -\$1 to -\$5,000	1.363	.279	23.904	1	.000	3.906	2.262	6.746
Unmet need -\$5,001 or lower	1.663	.349	22.753	1	.000	5.274	2.663	10.443
Learning community participant	.521	.125	17.353	1	.000	1.683	1.317	2.150
Did not take Freshman Seminar	.317	.148	4.600	1	.032	1.373	1.028	1.833
Greek life participant	.883	.219	16.308	1	.000	2.419	1.575	3.713
Constant	-1.876	.286	42.952	1	.000	.153		

- a. Variable(s) entered on step 1: Unmet financial need.
- b. Variable(s) entered on step 2: Greek life participation.
- c. Variable(s) entered on step 3: Learning community participation.
- d. Variable(s) entered on step 4: Freshman Seminar.
- e. Variable(s) entered on step 5: Other scholarship.

The final step (step 5) of the second model showed the odds (Exp B) of a student *returning* was greater for a student in the two higher high school GPA comparison groups (3.01-3.5=1.970, and 3.51-4.0=4.368) than for a student with a high school GPA of 3.0 or lower. Additionally, the confidence intervals (95%) indicated the odds of a student *returning* was greater for a student in the two higher high school GPA comparison groups than for a student with a high school GPA of 3.0 or lower since the confidence intervals for the two higher high school GPA comparison groups did not encompass an odds value less than one.

When looking at the first generation status of the student, the final step (step 5) of the second model showed the odds (Exp B) of a student *returning* was greater for a student who was not a first generation student (1.176) and whose first generation status was unknown (1.103) than for a first generation student.

However, the confidence intervals (95%) did not indicate the odds of a student *returning* was greater for a student who was not a first generation student or a student whose first generation status was unknown than a first generation student since the confidence intervals encompassed an odds value less than one for each comparison.

A review of the final step (step 5) results of the second model for the race/ethnicity of the student showed the odds (Exp *B*) of a student *returning* was greater for African-American (2.043), Asian (4.862), Hispanic (1.423), and multiracial (1.179) students, and students from another race/ethnicity (1.064) than for White students. In addition, the confidence intervals (95%) indicated that the odds of a student *returning* was greater for a student who was African-American (CI=1.508-2.769) or Asian (CI=1.840-12.848) than for a student who was White since the confidence intervals did not encompass an odds value less than one.

The final step (step 5) of the second model showed the odds (Exp *B*) of a student *returning* was greater for a student with an ACT Composite score of 22-23 or higher (22-23=1.215, 24-25=1.190, 26-27=1.807, 28-29=1.498, and 30 or higher=1.509) than for a student with an ACT Composite score of 19 or lower. In addition, the confidence intervals (95%) indicated the odds of a student *returning* was greater for a student with an ACT Composite score of 26-27 (CI=1.054-3.097) since the confidence intervals did not encompass an odds value less than one.

Unmet financial need results showed in the final step (step 5) of the second model that the odds (Exp *B*) of a student *returning* was greater for a student in all six lower unmet financial need groups (\$10,001 to \$15,000=2.178, \$5,001 to \$10,000=2.481, \$1 to \$5,000=3.365, \$0=3.316, -\$1 to -\$5,000=3.906, and -\$5,001 or lower=5.274) than for a student who had an unmet financial need of \$15,001 or higher. In addition, the confidence intervals (95%) indicated the odds of a student *returning* was greater for a student who had an unmet financial need in all six lower unmet financial need groups than for a student who had an unmet financial need of \$15,001 or higher since the confidence intervals did not encompass an odds value less than one.

When looking at Greek life participation, the final step (step 5) of the second model showed the odds (Exp *B*) of a student *returning* was greater for a student that participated in Greek life (2.419) than for a student that did not participate. The confidence intervals (95%) also indicated the odds of a student *returning* was greater for a student that participated in Greek life than for a student that did not participate since the confidence intervals did not encompass an odds value less than one.

The final step (step 5) of the second model showed the odds (Exp *B*) of a student *returning* was greater for a student that participated in a learning community (1.683) than for a student that did not participate. The confidence intervals (95%) also indicated the odds of a student *returning* was greater for a student that participated in a learning community than for a student that did not participate since the confidence intervals did not encompass an odds value less than one.

Freshman Seminar results showed in the final step (step 5) of the second model that the odds (Exp *B*) of a student *returning* was greater for a student that did not take Freshman Seminar (1.373) than for a student that took Freshman Seminar. The confidence intervals (95%) also indicated the odds of a student *returning* was greater for a student that did not take Freshman Seminar than for a student that took Freshman Seminar since the confidence intervals did not encompass an odds value less than one.

Finally, the final step (step 5) of the second model showed the odds (Exp *B*) of a student *returning* was greater for a student who received some other type of scholarship (1.501) that was not a USA freshman scholarship than for a student who did not receive some other type of scholarship. In addition, the confidence intervals (95%) indicated the odds of a student *returning* was greater for a student who

received some other type of scholarship than for a student who did not receive some other type of scholarship since the confidence intervals did not encompass an odds value less than one.

Model 3, Model 4, and Model 5: Logistic Regression Outcome/Other Variable Models

Since outcomes of student success are different from inputs (student characteristics or institutional/other support characteristics), the third, fourth, and fifth models only included outcomes or other variables of interest at two different points in time after the Fall 2015 semester had already begun. The third model included outcome/other variables known after the Fall 2015 semester ended (number of at-risk midterm grades in Fall 2015, probation status after Fall 2015, and immunization hold after Fall 2015). The fourth model (number of hours earned after Summer 2016) and fifth model (USA GPA the student attained after Summer 2016) included a different outcome variable known after the Summer 2016 semester ended. The first and second models can be used based on data known before or at least early on after the student comes to campus. However, the third, fourth, and fifth models can only be used after the Fall 2015 semester (third model) or Summer 2016 semester (fourth and fifth models) ended.

Model 3: Logistic Regression with Variables After Fall 2015

The third model included variables known after Fall 2015. For each variable included in the third model a comparison group was selected (number of at-risk midterm grades in Fall 2015=four or more at-risk midterm grades, whether the student was placed on probation after Fall 2015=yes, and whether the student had an immunization hold after Fall 2015=yes).

The third model (see Table 9) consisted of three steps. In comparison to the first and second model, the correct classification rate for the third model increased to 97.2% for *returning* students. Similarly, in comparison to the first and second model, the classification rate for the third model slightly increased to 25.8% since this snapshot included data known after the end of the Fall 2015 semester instead of pre-Fall 2015 semester data. The overall correct classification rate for the third model was 78.0%.

Table 9: After Fall 2015 Classification Table^a

Observed			Predicted		Percentage Correct
			Returned		
			No	Yes	
Step 1	Returned	No	144	414	25.8
		Yes	43	1481	97.2
Overall Percentage					78.0
Step 2	Returned	No	144	414	25.8
		Yes	43	1481	97.2
Overall Percentage					78.0
Step 3	Returned	No	144	414	25.8
		Yes	43	1481	97.2
Overall Percentage					78.0

a. The cut value is .500

In the final step (step 3) of the third model, probation status after Fall 2015, the number of at-risk midterm grades in Fall 2015, and immunization hold after Fall 2015 variables were significant (see Table 10). The final step (step 3) of the third model showed the odds (Exp *B*) of a student *returning* was greater for a student who was not on probation after Fall 2015 (7.134) than for a student who was placed on probation after Fall 2015. The confidence intervals (95%) also supported this finding because the odds for a student *returning* was greater for a student who was not on probation after Fall 2015 than a student who was placed on probation after Fall 2015 since the confidence intervals did not encompass an odds value less than one.

Table 10: After Fall 2015 Model Final Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Step 1 ^a								
Not on probation after Fall 2015	2.483	.182	185.227	1	.000	11.980	8.378	17.130
Constant	-1.209	.174	48.369	1	.000	.299		
Step 2 ^b								
4 or more at-risk midterm grades in Fall 2015			58.834	4	.000			
3 at-risk midterm grades in Fall 2015	.363	.270	1.807	1	.179	1.437	.847	2.440
2 at-risk midterm grades in Fall 2015	.591	.252	5.481	1	.019	1.806	1.101	2.962
1 at-risk midterm grades in Fall 2015	.958	.242	15.741	1	.000	2.608	1.624	4.187
No at-risk midterm grades in Fall 2015	1.362	.236	33.359	1	.000	3.904	2.459	6.198
Not on probation after Fall 2015	2.001	.194	106.676	1	.000	7.399	5.061	10.817
Constant	-1.734	.247	49.329	1	.000	.177		
Step 3 ^c								
4 or more at-risk midterm grades in Fall 2015			54.480	4	.000			
3 at-risk midterm grades in Fall 2015	.330	.271	1.478	1	.224	1.391	.817	2.367
2 at-risk midterm grades in Fall 2015	.558	.254	4.841	1	.028	1.747	1.063	2.872
1 at-risk midterm grades in Fall 2015	.913	.243	14.102	1	.000	2.492	1.547	4.013
No at-risk midterm grades in Fall 2015	1.307	.238	30.238	1	.000	3.696	2.320	5.890
Not on probation after Fall 2015	1.965	.195	102.041	1	.000	7.134	4.873	10.444
Immunization Hold after Fall 2015	.349	.149	5.481	1	.019	1.418	1.059	1.900
Constant	-1.955	.267	53.665	1	.000	.142		

- a. Variable(s) entered on step 1: Probation after Fall 2015.
- b. Variable(s) entered on step 2: At-risk midterm grades in Fall 2015.
- c. Variable(s) entered on step 3: Immunization hold after Fall 2015.

When looking at the number of at-risk (D, F, or U) midterm grades in Fall 2015, the final step (step 3) of the third model showed the odds (Exp *B*) of a student *returning* was greater for a student who had three or fewer at-risk midterm grades in Fall 2015 (three at-risk midterm grades=1.391, two at-risk midterm grades=1.747, one at-risk midterm grade=2.492, no at-risk midterm grades=3.696) than for a student who had four or more at-risk midterm grades in Fall 2015. The confidence intervals (95%) also indicated the odds of a student *returning* was greater for a student who had an at-risk midterm grade in Fall 2015 in two or fewer courses than a student who had four or more at-risk midterm grades in Fall 2015 since the confidence intervals did not encompass an odds value less than one.

In addition, the final step (step 3) of the third model showed the odds (Exp *B*) of a student *returning* was greater for a student who did not have an immunization hold after Fall 2015 (1.418) than for a student who had a hold. The confidence intervals (95%) also indicated the odds of a student *returning* was greater for a student who did not have an immunization hold after Fall 2015 than a student who had a hold since the confidence intervals did not encompass an odds value less than one.

Model 4: Logistic Regression with USA Hours Earned After Summer 2016 Variable

The fourth model included the USA hours earned after the end of the Summer 2016 semester. The comparison group selected for the fourth model was zero to six hours earned after the end of the Summer 2016 semester. Since the fourth model only included one variable, the model consisted of one step (see Table 11). The correct classification rate for the fourth model for *returning* students (92.8%) was lower than the initial three models. However, in comparison to the other three models, the correct classification rate was much higher for students who did not return (66.3%) since this snapshot included data known after the end of the Summer 2016 semester. The overall correct classification rate for the fourth model was 86.0%.

Table 11: USA Hours Earned After Summer 2016 Model Classification Table^a

Observed			Predicted		
			Returned		Percentage Correct
			No	Yes	
Step 1	Returned	No	346	176	66.3
		Yes	110	1414	92.8
Overall Percentage					86.0

a. The cut value is .500

The fourth model showed the odds (Exp *B*) of a student *returning* was greater for a student with more hours earned (6.5-12=1.470, 12.5-18=6.624, 18.5-24=29.367, 24.5-30=60.273, 30.5 or more=180.983) than for a student with six or fewer hours earned at the end of Summer 2016 (see Table 12). Additionally, the confidence intervals (95%) indicated the odds of a student *returning* was greater for a student in the four higher USA hours earned comparison groups than for a student with zero to six USA hours earned since the confidence intervals for the four higher USA hours earned comparison groups did not encompass an odds value less than one.

Table 12: USA Hours Earned After Summer 2016 Model Final Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Step 1 ^a USA Hours Earned 0-6			518.045	5	.000			
USA Hours Earned 6.5-12	.385	.387	.991	1	.319	1.470	.689	3.136
USA Hours Earned 12.5-18	1.891	.327	33.456	1	.000	6.624	3.491	12.572
USA Hours Earned 18.5-24	3.380	.328	105.879	1	.000	29.367	15.427	55.906
USA Hours Earned 24.5-30	4.099	.315	169.251	1	.000	60.273	32.504	111.765
USA Hours Earned 30.5 or more	5.198	.338	236.231	1	.000	180.983	93.270	351.182
Constant	-2.231	.292	58.420	1	.000	.107		

a. Variable(s) entered on step 1: USA hours earned after Summer 2016.

Model 5: Logistic Regression with USA GPA After Summer 2016 Variable

The fifth model included the USA GPA after the end of the Summer 2016 semester. The comparison group selected for the fifth model was an USA GPA of 2.0 or lower after the end of the Summer 2016 semester. Since the fifth model only included one variable, the model consisted of one step (see Table 13). The correct classification rate for the fifth model for *returning* students (90.9%) was lower than the other four models. The correct classification rate for the fifth model for students who did not return (56.5%) was higher than the first, second, and third models since this snapshot included data known after the end of the Summer 2016 semester instead of pre-Fall 2015 semester data, but was lower than the fourth model. The overall correct classification rate for the fifth model was 82.1%.

Table 13: USA GPA After Summer 2016 Model Classification Table^a

Observed			Predicted		
			Returned		Percentage Correct
			No	Yes	
Step 1	Returned	No	295	227	56.5
		Yes	139	1385	90.9
Overall Percentage					82.1

a. The cut value is .500

The fifth model showed the odds (Exp *B*) of a student *returning* was greater for a student with a higher USA GPA (2.01-2.5=8.970, 2.51-3.0=8.946, 3.01-3.5=16.729, 3.51-4.0=20.548) than for a student with an USA GPA of 2.0 or lower at the end of Summer 2016 (see Table 14). In addition, the confidence

intervals (95%) indicated the odds of a student *returning* was greater for a student in the four higher USA GPA comparison groups than for a student with an USA GPA of 2.0 or lower since the confidence intervals for the four higher USA GPA comparison groups did not encompass an odds value less than one.

Table 14: USA GPA After Summer 2016 Model Final Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Step 1 ^a USA GPA 2.0 or lower			425.090	4	.000			
USA GPA 2.01-2.5	2.194	.184	141.908	1	.000	8.970	6.252	12.869
USA GPA 2.51-3.0	2.191	.162	182.941	1	.000	8.946	6.512	12.289
USA GPA 3.01-3.5	2.817	.181	242.850	1	.000	16.729	11.738	23.842
USA GPA 3.51-4.0	3.023	.189	256.235	1	.000	20.548	14.191	29.751
Constant	-.753	.103	53.501	1	.000	.471		

a. Variable(s) entered on step 1: USA GPA after Summer 2016.

Peer Comparisons

Finally, to gain a better idea about how USA one-year retention rates compared to one-year retention at peer institutions, the National Center for Education Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS) Data Center was used to compare USA retention rates to 13 peer institutions (see Table 15). A retention rate trend over a period of five years based on the latest available retention rate data in IPEDS showed the USA retention rate was low compared to the other peer institutions over this same time period. The USA retention rate over this time period ranged from a low of 65% for the 2010 freshman cohort to a high of 71% for the 2013 freshman cohort. The retention rate of peer institutions over this same time period ranged from a low of 64% for the University of New Orleans 2009 freshman cohort to a high of 84% for the Florida International University 2012 and 2013 freshman cohorts.

Table 15: One-Year Retention Rate Peer Comparisons * Ranked by 2013 Cohort Retention Rate * High to Low

Institution Name	2013 Cohort Retention	2012 Cohort Retention	2011 Cohort Retention	2010 Cohort Retention	2009 Cohort Retention
Florida International University	84	84	82	82	83
University of North Florida	83	82	83	81	83
Old Dominion University	81	80	80	80	80
University of Massachusetts-Boston	80	77	79	75	75
University of Memphis	78	76	76	77	78
University of North Texas	78	75	76	78	78
University of Nebraska at Omaha	77	75	72	73	73
Texas State University	76	77	76	79	79
Florida Atlantic University	75	77	78	79	80
University of Montana	73	73	74	72	74
Indiana University-Purdue University-Indianapolis	71	72	72	72	74
University of South Alabama	71	68	66	65	66
University of Texas at Arlington	69	71	72	71	70
University of New Orleans	69	67	65	67	64

Source: National Center for Education Statistics IPEDS Data Center

Implications

Based on what we know about a student before the student steps foot on campus (input variables), one-year retention of students with lower high school GPAs and students with lower ACT Composite scores is a concern. This prompts further reflection regarding admission standards and the allocation of resources to support at-risk students. In addition, older students and students from the Florida service area or

Mobile or Baldwin County area may require additional resources and monitoring to enable and/or encourage them to persist towards successfully completing a degree at USA.

When we look at the institutional support and other support provided to a student (environmental variables), the orientation session students in the 2015 cohort attended provided a significant predictor of student retention, with students attending the earlier Freshman Summer orientation sessions more likely to return than students attending the later orientation sessions. The orientation session attended by students provides a key factor for identifying at-risk freshmen students early in their college experience.

The importance of financial support in the form of freshman scholarships or other types of scholarships was also clear, particularly since students with a higher unmet financial need were less likely to return to USA. Additional USA freshman scholarships should be considered to continue to attract top students to attend USA. In addition, need-based grants could be utilized to assist students in greater need of financial support to encourage them to return to and persist towards completing a degree at USA.

This annual retention study also compared retention of freshmen who participated in a learning community to freshmen who did not participate in a learning community. Freshmen who participated in a learning community were significantly more likely to return to USA the following year. Therefore, expanding the number of learning communities for freshmen to participate in should receive further consideration.

Students who participated in Greek life at USA were more likely to return to USA. This emphasizes the importance of students becoming involved in student organizations at USA that allow them to connect with students with similar interests outside of the classroom as well.

A total of 290 students still had an immunization hold after Fall 2015 and the retention rate for students who still had an immunization hold after Fall 2015 was 60%. Clearing immunization holds earlier should be addressed as well.

Finally, results showed students who received four or more at-risk midterm grades (D, F, or U) in the Fall 2015 semester for lack of attendance and/or poor academic performance and students who were placed on probation after the Fall 2015 semester ended were unlikely to return to USA one year later. An at-risk midterm grade is recorded in the middle of the semester which allows time to intervene before the semester concludes. Interventions to assist students who receive an at-risk midterm grade are important, because students who were placed on probation after the Fall 2015 semester (23%) or who had a USA GPA of 2.0 or lower due to poor academic performance after the Summer 2016 semester (32%) were less likely to return to USA one year later than students who had an at-risk midterm grade in one (75%), two (63%), three (55%), or four or more courses (36%) in the Fall 2015 semester.

Future Retention Research

This report is the first of two one-year retention studies about the 2015 freshman cohort that will be completed by the Office of Institutional Research during the Fall 2016 semester. The second retention study will use National Student Clearinghouse data to explore the issue of “Where did non-returning freshmen in the 2015 cohort go?” This study will determine how many non-returning freshmen students transferred to another college or university or “stopped out” of college altogether.

APPENDIX

Independent T-Test Tables

2015 Cohort * Gender * Group Statistics

Gender T-Test		N	Mean	Std. Deviation	Std. Error Mean
Returned	Male	892	.72	.452	.015
	Female	1190	.74	.436	.013

2015 Cohort * Gender * Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Returned	Equal variances assumed	8.762	.003	-1.493	2080	.136	-.029	.020	-.068	.009
	Equal variances not assumed			-1.486	1883.276	.137	-.029	.020	-.068	.009

2015 Cohort * USA Freshman Scholarship * Group Statistics

Freshman Scholarship		N	Mean	Std. Deviation	Std. Error Mean
Returned	No	1001	.65	.476	.015
	Yes	1081	.80	.397	.012

2015 Cohort * USA Freshman Scholarship * Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Returned	Equal variances assumed	240.211	.000	-7.805	2080	.000	-.150	.019	-.187	-.112
	Equal variances not assumed			-7.752	1953.793	.000	-.150	.019	-.187	-.112

2015 Cohort * Other Scholarship * Group Statistics

Other Scholarship		N	Mean	Std. Deviation	Std. Error Mean
Returned	No	1744	.72	.451	.011
	Yes	338	.81	.390	.021

2015 Cohort * Other Scholarship * Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Returned	Equal variances assumed	72.630	.000	-3.712	2080	.000	-.097	.026	-.149	-.046
	Equal variances not assumed			-4.093	527.458	.000	-.097	.024	-.144	-.051

2015 Cohort * Pell Grant * Group Statistics

		Pell Grant	N	Mean	Std. Deviation	Std. Error Mean
Returned	No		1199	.76	.425	.012
	Yes		883	.69	.463	.016

2015 Cohort * Pell Grant * Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Returned	Equal variances assumed	56.505	.000	3.851	2080	.000	.075	.020	.037	.114
	Equal variances not assumed			3.801	1803.262	.000	.075	.020	.036	.114

2015 Cohort * Housing * Group Statistics

		Housing	N	Mean	Std. Deviation	Std. Error Mean
Returned	Off Campus		828	.71	.454	.016
	On Campus		1254	.75	.435	.012

2015 Cohort * Housing * Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Returned	Equal variances assumed	12.963	.000	-1.829	2080	.068	-.036	.020	-.075	.003
	Equal variances not assumed			-1.813	1717.840	.070	-.036	.020	-.075	.003

2015 Cohort * Learning Community * Group Statistics

		Learning Community	N	Mean	Std. Deviation	Std. Error Mean
Returned	No		1256	.70	.461	.013
	Yes		826	.79	.409	.014

2015 Cohort * Learning Community * Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Returned	Equal variances assumed	97.139	.000	-4.713	2080	.000	-.093	.020	-.132	-.054
	Equal variances not assumed			-4.830	1904.513	.000	-.093	.019	-.131	-.055

2015 Cohort * Freshman Seminar * Group Statistics

		Took Freshman Seminar	N	Mean	Std. Deviation	Std. Error Mean
Returned	No		521	.77	.421	.018
	Yes		1561	.72	.449	.011

2015 Cohort * Freshman Seminar * Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Returned	Equal variances assumed	22.435	.000	2.244	2080	.025	.050	.022	.006	.094
	Equal variances not assumed			2.318	944.305	.021	.050	.022	.008	.093

2015 Cohort * Greek Life Participation * Group Statistics

		N	Mean	Std. Deviation	Std. Error Mean
Returned	No	1848	.72	.450	.010
	Yes	234	.84	.366	.024

2015 Cohort * Greek Life Participation * Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Returned	Equal variances assumed	96.878	.000	-4.042	2080	.000	-.124	.031	-.184	-.064
	Equal variances not assumed			-4.745	329.447	.000	-.124	.026	-.175	-.072

2015 Cohort * Probation After Fall 2015 * Group Statistics

		N	Mean	Std. Deviation	Std. Error Mean
Returned	No	1895	.78	.413	.009
	Yes	187	.23	.422	.031

2015 Cohort * Probation After Fall 2015 * Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Returned	Equal variances assumed	.506	.477	17.378	2080	.000	.552	.032	.489	.614
	Equal variances not assumed			17.086	222.698	.000	.552	.032	.488	.615

2015 Cohort * Immunization Hold After Fall 2015 * Group Statistics

Immunization Hold in Fall 2015		N	Mean	Std. Deviation	Std. Error Mean
Returned	No	1792	.75	.431	.010
	Yes	290	.60	.491	.029

2015 Cohort * Immunization Hold After Fall 2015 * Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Returned	Equal variances assumed	71.492	.000	5.653	2080	.000	.157	.028	.103	.212
	Equal variances not assumed			5.142	364.459	.000	.157	.031	.097	.218

ANOVA Tables

2015 Cohort * Race * Multiple Comparisons

Dependent Variable: Returned
Games-Howell

(I) Race	(J) Race	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
White	African-American	.012	.023	.998	-.06	.08
	Asian	-.188*	.037	.000	-.30	-.08
	Hispanic	.034	.064	.998	-.16	.23
	Multiracial	.011	.059	1.000	-.17	.19
	Non-Resident Alien	-.139*	.036	.004	-.25	-.03
	Other	.049	.059	.981	-.13	.23
African-American	White	-.012	.023	.998	-.08	.06
	Asian	-.200*	.039	.000	-.32	-.08
	Hispanic	.022	.066	1.000	-.18	.22
	Multiracial	-.001	.060	1.000	-.18	.18
	Non-Resident Alien	-.151*	.039	.003	-.27	-.04
	Other	.037	.060	.996	-.15	.22
Asian	White	.188*	.037	.000	.08	.30
	African-American	.200*	.039	.000	.08	.32
	Hispanic	.222*	.072	.040	.01	.44
	Multiracial	.199	.067	.054	.00	.40
	Non-Resident Alien	.049	.048	.950	-.09	.19
	Other	.237*	.067	.010	.04	.44
Hispanic	White	-.034	.064	.998	-.23	.16
	African-American	-.022	.066	1.000	-.22	.18
	Asian	-.222*	.072	.040	-.44	-.01
	Multiracial	-.023	.085	1.000	-.28	.23
	Non-Resident Alien	-.173	.071	.202	-.39	.04
	Other	.014	.085	1.000	-.24	.27
Multiracial	White	-.011	.059	1.000	-.19	.17
	African-American	.001	.060	1.000	-.18	.18
	Asian	-.199	.067	.054	-.40	.00
	Hispanic	.023	.085	1.000	-.23	.28
	Non-Resident Alien	-.150	.067	.280	-.35	.05
	Other	.038	.081	.999	-.20	.28
Non-Resident Alien	White	.139*	.036	.004	.03	.25
	African-American	.151*	.039	.003	.04	.27
	Asian	-.049	.048	.950	-.19	.09
	Hispanic	.173	.071	.202	-.04	.39
	Multiracial	.150	.067	.280	-.05	.35
	Other	.188	.066	.080	-.01	.39
Other	White	-.049	.059	.981	-.23	.13
	African-American	-.037	.060	.996	-.22	.15
	Asian	-.237*	.067	.010	-.44	-.04
	Hispanic	-.014	.085	1.000	-.27	.24
	Multiracial	-.038	.081	.999	-.28	.20
	Non-Resident Alien	-.188	.066	.080	-.39	.01

*. The mean difference is significant at the 0.05 level.

2015 Cohort * Age * Multiple Comparisons

Dependent Variable: Returned
Games-Howell

(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
20 years or older	17 years or younger	-.252*	.077	.008	-.45	-.05
	18 years old	-.206*	.068	.019	-.39	-.03
	19 years old	-.136	.075	.276	-.33	.06
17 years or younger	20 years or older	.252*	.077	.008	.05	.45
	18 years old	.047	.039	.635	-.06	.15
	19 years old	.116	.050	.099	-.01	.25
18 years old	20 years or older	.206*	.068	.019	.03	.39
	17 years or younger	-.047	.039	.635	-.15	.06
	19 years old	.070	.035	.195	-.02	.16
19 years old	20 years or older	.136	.075	.276	-.06	.33
	17 years or younger	-.116	.050	.099	-.25	.01
	18 years old	-.070	.035	.195	-.16	.02

*. The mean difference is significant at the 0.05 level.

2015 Cohort * Region * Multiple Comparisons

Dependent Variable: Returned
Games-Howell

(I) Region	(J) Region	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Mobile or Baldwin County	Rest of Alabama	-.016	.022	.979	-.08	.05
	Mississippi Service Area	-.082	.042	.388	-.20	.04
	Florida Service Area	.032	.046	.982	-.10	.16
	Rest of United States	-.044	.038	.858	-.15	.07
	International	-.152*	.038	.001	-.26	-.04
Rest of Alabama	Mobile or Baldwin County	.016	.022	.979	-.05	.08
	Mississippi Service Area	-.066	.042	.630	-.19	.06
	Florida Service Area	.048	.046	.899	-.08	.18
	Rest of United States	-.028	.038	.978	-.14	.08
	International	-.135*	.037	.005	-.24	-.03
Mississippi Service Area	Mobile or Baldwin County	.082	.042	.388	-.04	.20
	Rest of Alabama	.066	.042	.630	-.06	.19
	Florida Service Area	.114	.058	.372	-.05	.28
	Rest of United States	.038	.052	.978	-.11	.19
	International	-.070	.052	.761	-.22	.08
Florida Service Area	Mobile or Baldwin County	-.032	.046	.982	-.16	.10
	Rest of Alabama	-.048	.046	.899	-.18	.08
	Mississippi Service Area	-.114	.058	.372	-.28	.05
	Rest of United States	-.076	.055	.742	-.23	.08
	International	-.183*	.055	.012	-.34	-.03
Rest of United States	Mobile or Baldwin County	.044	.038	.858	-.07	.15
	Rest of Alabama	.028	.038	.978	-.08	.14
	Mississippi Service Area	-.038	.052	.978	-.19	.11
	Florida Service Area	.076	.055	.742	-.08	.23
	International	-.108	.048	.230	-.25	.03
International	Mobile or Baldwin County	.152*	.038	.001	.04	.26
	Rest of Alabama	.135*	.037	.005	.03	.24
	Mississippi Service Area	.070	.052	.761	-.08	.22
	Florida Service Area	.183*	.055	.012	.03	.34
	Rest of United States	.108	.048	.230	-.03	.25

*. The mean difference is significant at the 0.05 level.

2015 Cohort * High School GPA * Multiple Comparisons

Dependent Variable: Returned
Games-Howell

(I) High School GPA	(J) HS GPA	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
3.0 or lower	3.01-3.5	-.162*	.032	.000	-.24	-.09
	3.51-4.0	-.313*	.028	.000	-.38	-.25
3.01-3.5	3.0 or lower	.162*	.032	.000	.09	.24
	3.51-4.0	-.151*	.023	.000	-.20	-.10
3.51-4.0	3.0 or lower	.313*	.028	.000	.25	.38
	3.01-3.5	.151*	.023	.000	.10	.20

*. The mean difference is significant at the 0.05 level.

2015 Cohort * ACT Composite * Multiple Comparisons

Dependent Variable: Returned
Games-Howell

(I) ACT	(J) ACT	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
19 or lower	20-21	-.017	.035	.999	-.12	.09
	22-23	-.110*	.034	.019	-.21	-.01
	24-25	-.135*	.033	.001	-.23	-.04
	26-27	-.215*	.036	.000	-.32	-.11
	28-29	-.192*	.039	.000	-.31	-.08
	30 or higher	-.256*	.039	.000	-.37	-.14
20-21	19 or lower	.017	.035	.999	-.09	.12
	22-23	-.093	.034	.098	-.19	.01
	24-25	-.118*	.034	.010	-.22	-.02
	26-27	-.198*	.036	.000	-.31	-.09
	28-29	-.175*	.040	.000	-.29	-.06
	30 or higher	-.239*	.040	.000	-.36	-.12
22-23	19 or lower	.110*	.034	.019	.01	.21
	20-21	.093	.034	.098	-.01	.19
	24-25	-.025	.033	.988	-.12	.07
	26-27	-.105*	.035	.049	-.21	.00
	28-29	-.082	.039	.343	-.20	.03
	30 or higher	-.146*	.039	.004	-.26	-.03
24-25	19 or lower	.135*	.033	.001	.04	.23
	20-21	.118*	.034	.010	.02	.22
	22-23	.025	.033	.988	-.07	.12
	26-27	-.080	.035	.257	-.18	.02
	28-29	-.057	.038	.755	-.17	.06
	30 or higher	-.121*	.038	.030	-.24	-.01
26-27	19 or lower	.215*	.036	.000	.11	.32
	20-21	.198*	.036	.000	.09	.31
	22-23	.105*	.035	.049	.00	.21
	24-25	.080	.035	.257	-.02	.18
	28-29	.023	.041	.998	-.10	.14
	30 or higher	-.041	.041	.950	-.16	.08
28-29	19 or lower	.192*	.039	.000	.08	.31
	20-21	.175*	.040	.000	.06	.29
	22-23	.082	.039	.343	-.03	.20
	24-25	.057	.038	.755	-.06	.17
	26-27	-.023	.041	.998	-.14	.10
	30 or higher	-.064	.044	.759	-.19	.07
30 or higher	19 or lower	.256*	.039	.000	.14	.37
	20-21	.239*	.040	.000	.12	.36
	22-23	.146*	.039	.004	.03	.26
	24-25	.121*	.038	.030	.01	.24
	26-27	.041	.041	.950	-.08	.16
	28-29	.064	.044	.759	-.07	.19

*. The mean difference is significant at the 0.05 level.

2015 Cohort * First Generation * Multiple Comparisons

Dependent Variable: Returned
Games-Howell

(I) First Generation	(J) First Generation	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
No	Yes	.040	.025	.238	-.02	.10
	Unknown	-.091*	.024	.000	-.15	-.04
Yes	No	-.040	.025	.238	-.10	.02
	Unknown	-.131*	.029	.000	-.20	-.06
Unknown	No	.091*	.024	.000	.04	.15
	Yes	.131*	.029	.000	.06	.20

*. The mean difference is significant at the 0.05 level.

2015 Cohort * Institution of Choice * Multiple Comparisons

Dependent Variable: Returned
Games-Howell

(I) Institution of Choice	(J) Institution of Choice	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1st choice	2nd choice	-.002	.034	1.000	-.10	.09
	3rd choice	-.050	.057	.906	-.21	.11
	4th choice	-.068	.123	.979	-.47	.33
	5th choice or lower	-.096	.106	.888	-.43	.24
2nd choice	1st choice	.002	.034	1.000	-.09	.10
	3rd choice	-.048	.062	.937	-.22	.12
	4th choice	-.066	.125	.983	-.47	.34
	5th choice or lower	-.094	.108	.904	-.43	.24
3rd choice	1st choice	.050	.057	.906	-.11	.21
	2nd choice	.048	.062	.937	-.12	.22
	4th choice	-.018	.134	1.000	-.43	.40
	5th choice or lower	-.046	.118	.995	-.40	.31
4th choice	1st choice	.068	.123	.979	-.33	.47
	2nd choice	.066	.125	.983	-.34	.47
	3rd choice	.018	.134	1.000	-.40	.43
	5th choice or lower	-.028	.160	1.000	-.51	.45
5th choice or lower	1st choice	.096	.106	.888	-.24	.43
	2nd choice	.094	.108	.904	-.24	.43
	3rd choice	.046	.118	.995	-.31	.40
	4th choice	.028	.160	1.000	-.45	.51

2015 Cohort * Expectation to Graduate * Multiple Comparisons

Dependent Variable: Returned
Games-Howell

(I) Expectation to Graduate	(J) Expectation to Graduate	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
No	Yes	-.015	.131	.993	-.37	.34
	Uncertain	.137	.145	.619	-.24	.51
Yes	No	.015	.131	.993	-.34	.37
	Uncertain	.152	.064	.054	.00	.31
Uncertain	No	-.137	.145	.619	-.51	.24
	Yes	-.152	.064	.054	-.31	.00

2015 Cohort * USA Day * Multiple Comparisons

Dependent Variable: Returned
Games-Howell

(I) USA Days	(J) USA Days	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Did Not Attend	Attended 1 USA Day	-.043	.021	.104	-.09	.01
	Attended Multiple USA Days	-.083	.053	.273	-.21	.05
Attended 1 USA Day	Did Not Attend	.043	.021	.104	-.01	.09
	Attended Multiple USA Days	-.040	.055	.744	-.17	.09
Attended Multiple USA Days	Did Not Attend	.083	.053	.273	-.05	.21
	Attended 1 USA Day	.040	.055	.744	-.09	.17

2015 Cohort * Orientation * Multiple Comparisons

Dependent Variable: Returned
Games-Howell

(I) Orientation	(J) Orientation	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
August/Transfer/Unknown Orientation	May Orientation	-.097	.087	.996	-.39	.20
	Freshman Session 1	-.264*	.056	.000	-.45	-.07
	Freshman Session 2	-.236*	.057	.004	-.43	-.04
	Freshman Session 3	-.221*	.057	.011	-.41	-.03
	Freshman Session 4	-.234*	.057	.005	-.43	-.04
	Freshman Session 5	-.167	.059	.209	-.37	.03
	Freshman Session 6	-.171	.059	.174	-.37	.03
	Freshman Session 7	-.131	.060	.608	-.33	.07
	Freshman Session 8	-.122	.061	.733	-.33	.08
	Freshman Session 9	-.066	.063	.998	-.28	.15
	Freshman Session 10	.018	.063	1.000	-.19	.23
	International Orientation	-.293*	.060	.000	-.50	-.09
Freshman Session 10	August/Transfer/Unknown Orientation	-.018	.063	1.000	-.23	.19
	May Orientation	-.115	.081	.967	-.39	.16
	Freshman Session 1	-.283*	.047	.000	-.44	-.13
	Freshman Session 2	-.255*	.048	.000	-.42	-.09
	Freshman Session 3	-.240*	.048	.000	-.40	-.08
	Freshman Session 4	-.253*	.048	.000	-.41	-.09
	Freshman Session 5	-.185*	.051	.018	-.35	-.02
	Freshman Session 6	-.189*	.050	.012	-.36	-.02
	Freshman Session 7	-.150	.052	.163	-.32	.02
	Freshman Session 8	-.140	.052	.272	-.32	.03
	Freshman Session 9	-.085	.055	.945	-.27	.10
	International Orientation	-.311*	.052	.000	-.48	-.14

*. The mean difference is significant at the 0.05 level.

2015 Cohort * College * Multiple Comparisons

Dependent Variable: Returned
Games-Howell

(I) College	(J) College	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
AS	AH	-.024	.028	.991	-.11	.06
	BU	-.010	.037	1.000	-.12	.10
	CS	.016	.056	1.000	-.16	.19
	ED	-.019	.048	1.000	-.17	.13
	EG	-.059	.029	.455	-.15	.03
	NU	-.026	.031	.991	-.12	.07
	CE	.213	.168	.889	-.43	.85
AH	AS	.024	.028	.991	-.06	.11
	BU	.014	.039	1.000	-.10	.13
	CS	.040	.057	.997	-.14	.22
	ED	.004	.049	1.000	-.15	.16
	EG	-.035	.031	.949	-.13	.06
	NU	-.002	.033	1.000	-.10	.10
	CE	.237	.168	.833	-.40	.88
BU	AS	.010	.037	1.000	-.10	.12
	AH	-.014	.039	1.000	-.13	.10
	CS	.026	.062	1.000	-.17	.22
	ED	-.010	.055	1.000	-.18	.16
	EG	-.049	.039	.914	-.17	.07
	NU	-.016	.041	1.000	-.14	.11
	CE	.223	.170	.874	-.42	.86
CS	AS	-.016	.056	1.000	-.19	.16
	AH	-.040	.057	.997	-.22	.14
	BU	-.026	.062	1.000	-.22	.17
	ED	-.035	.069	1.000	-.25	.18
	EG	-.075	.058	.897	-.25	.10
	NU	-.042	.059	.996	-.22	.14
	CE	.197	.175	.937	-.45	.84
ED	AS	.019	.048	1.000	-.13	.17
	AH	-.004	.049	1.000	-.16	.15
	BU	.010	.055	1.000	-.16	.18
	CS	.035	.069	1.000	-.18	.25
	EG	-.040	.050	.993	-.19	.11
	NU	-.007	.051	1.000	-.16	.15
	CE	.233	.172	.861	-.41	.88
EG	AS	.059	.029	.455	-.03	.15
	AH	.035	.031	.949	-.06	.13
	BU	.049	.039	.914	-.07	.17
	CS	.075	.058	.897	-.10	.25
	ED	.040	.050	.993	-.11	.19
	NU	.033	.034	.978	-.07	.14
	CE	.272	.168	.732	-.37	.91
NU	AS	.026	.031	.991	-.07	.12
	AH	.002	.033	1.000	-.10	.10
	BU	.016	.041	1.000	-.11	.14
	CS	.042	.059	.996	-.14	.22
	ED	.007	.051	1.000	-.15	.16
	EG	-.033	.034	.978	-.14	.07
	CE	.239	.169	.829	-.40	.88

2015 Cohort * Expected Family Contribution * Multiple Comparisons

Dependent Variable: Returned
Games-Howell

(I) Expected Family Contribution	(J) Expected Family Contribution	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
\$0	\$1 to \$3,750	.016	.030	.995	-.07	.10
	\$3,751 to \$7,500	.009	.038	1.000	-.10	.12
	\$7,501 to \$15,000	.006	.035	1.000	-.09	.11
	\$15,001 to \$25,000	-.081	.033	.141	-.18	.01
	\$25,001 or higher	-.088	.032	.074	-.18	.00
\$1 to \$3,750	\$0	-.016	.030	.995	-.10	.07
	\$3,751 to \$7,500	-.007	.043	1.000	-.13	.11
	\$7,501 to \$15,000	-.010	.040	1.000	-.12	.10
	\$15,001 to \$25,000	-.098	.038	.113	-.21	.01
	\$25,001 or higher	-.104	.037	.065	-.21	.00
\$3,751 to \$7,500	\$0	-.009	.038	1.000	-.12	.10
	\$1 to \$3,750	.007	.043	1.000	-.11	.13
	\$7,501 to \$15,000	-.002	.046	1.000	-.14	.13
	\$15,001 to \$25,000	-.090	.045	.342	-.22	.04
	\$25,001 or higher	-.096	.044	.253	-.22	.03
\$7,501 to \$15,000	\$0	-.006	.035	1.000	-.11	.09
	\$1 to \$3,750	.010	.040	1.000	-.10	.12
	\$3,751 to \$7,500	.002	.046	1.000	-.13	.14
	\$15,001 to \$25,000	-.088	.043	.307	-.21	.03
	\$25,001 or higher	-.094	.042	.218	-.21	.03
\$15,001 to \$25,000	\$0	.081	.033	.141	-.01	.18
	\$1 to \$3,750	.098	.038	.113	-.01	.21
	\$3,751 to \$7,500	.090	.045	.342	-.04	.22
	\$7,501 to \$15,000	.088	.043	.307	-.03	.21
	\$25,001 or higher	-.006	.040	1.000	-.12	.11
\$25,001 or higher	\$0	.088	.032	.074	.00	.18
	\$1 to \$3,750	.104	.037	.065	.00	.21
	\$3,751 to \$7,500	.096	.044	.253	-.03	.22
	\$7,501 to \$15,000	.094	.042	.218	-.03	.21
	\$15,001 to \$25,000	.006	.040	1.000	-.11	.12

2015 Cohort * Multiple Comparisons

Dependent Variable: Returned
Games-Howell

(I) Unmet Financial Need	(J) Unmet Financial Need	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
-\$5,001 or lower	-\$1 to -\$5,000	.049	.033	.737	-.05	.15
	\$0	.152*	.033	.000	.06	.25
	\$1 to \$5,000	.100	.036	.080	-.01	.21
	\$5,001 to \$10,000	.181*	.034	.000	.08	.28
	\$10,001 to \$15,000	.240*	.040	.000	.12	.36
	\$15,001 or higher	.418*	.048	.000	.28	.56
-\$1 to -\$5,000	-\$5,001 or lower	-.049	.033	.737	-.15	.05
	\$0	.103*	.031	.014	.01	.19
	\$1 to \$5,000	.050	.034	.750	-.05	.15
	\$5,001 to \$10,000	.131*	.032	.001	.04	.23
	\$10,001 to \$15,000	.191*	.038	.000	.08	.30
	\$15,001 or higher	.369*	.046	.000	.23	.51
\$0	-\$5,001 or lower	-.152*	.033	.000	-.25	-.06
	-\$1 to -\$5,000	-.103*	.031	.014	-.19	-.01
	\$1 to \$5,000	-.053	.034	.710	-.15	.05
	\$5,001 to \$10,000	.028	.032	.977	-.07	.12
	\$10,001 to \$15,000	.087	.038	.261	-.03	.20
	\$15,001 or higher	.266*	.047	.000	.13	.40
\$1 to \$5,000	-\$5,001 or lower	-.100	.036	.080	-.21	.01
	-\$1 to -\$5,000	-.050	.034	.750	-.15	.05
	\$0	.053	.034	.710	-.05	.15
	\$5,001 to \$10,000	.081	.035	.244	-.02	.19
	\$10,001 to \$15,000	.140*	.041	.012	.02	.26
	\$15,001 or higher	.319*	.049	.000	.17	.46
\$5,001 to \$10,000	-\$5,001 or lower	-.181*	.034	.000	-.28	-.08
	-\$1 to -\$5,000	-.131*	.032	.001	-.23	-.04
	\$0	-.028	.032	.977	-.12	.07
	\$1 to \$5,000	-.081	.035	.244	-.19	.02
	\$10,001 to \$15,000	.059	.040	.749	-.06	.18
	\$15,001 or higher	.238*	.048	.000	.10	.38
\$10,001 to \$15,000	-\$5,001 or lower	-.240*	.040	.000	-.36	-.12
	-\$1 to -\$5,000	-.191*	.038	.000	-.30	-.08
	\$0	-.087	.038	.261	-.20	.03
	\$1 to \$5,000	-.140*	.041	.012	-.26	-.02
	\$5,001 to \$10,000	-.059	.040	.749	-.18	.06
	\$15,001 or higher	.178*	.052	.012	.02	.33
\$15,001 or higher	-\$5,001 or lower	-.418*	.048	.000	-.56	-.28
	-\$1 to -\$5,000	-.369*	.046	.000	-.51	-.23
	\$0	-.266*	.047	.000	-.40	-.13
	\$1 to \$5,000	-.319*	.049	.000	-.46	-.17
	\$5,001 to \$10,000	-.238*	.048	.000	-.38	-.10
	\$10,001 to \$15,000	-.178*	.052	.012	-.33	-.02

*. The mean difference is significant at the 0.05 level.

2015 Cohort * At-Risk Midterm Grades in Fall 2015 * Multiple Comparisons

Dependent Variable: Returned
Games-Howell

(I) At-Risk Midterm Grades in Fall 2015	(J) At-Risk Midterm Grades in Fall 2015	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
No At Risk MT Grades	1 At Risk MT Grade	.079*	.022	.004	.02	.14
	2 At Risk MT Grades	.199*	.031	.000	.11	.29
	3 At Risk MT Grades	.277*	.040	.000	.17	.39
	4 or More At Risk MT Grades	.470*	.046	.000	.34	.60
1 At Risk MT Grade	No At Risk MT Grades	-.079*	.022	.004	-.14	-.02
	2 At Risk MT Grades	.120*	.035	.005	.03	.21
	3 At Risk MT Grades	.198*	.042	.000	.08	.31
	4 or More At Risk MT Grades	.391*	.048	.000	.26	.52
2 At Risk MT Grades	No At Risk MT Grades	-.199*	.031	.000	-.29	-.11
	1 At Risk MT Grade	-.120*	.035	.005	-.21	-.03
	3 At Risk MT Grades	.078	.048	.478	-.05	.21
	4 or More At Risk MT Grades	.271*	.053	.000	.13	.42
3 At Risk MT Grades	No At Risk MT Grades	-.277*	.040	.000	-.39	-.17
	1 At Risk MT Grade	-.198*	.042	.000	-.31	-.08
	2 At Risk MT Grades	-.078	.048	.478	-.21	.05
	4 or More At Risk MT Grades	.193*	.058	.009	.03	.35
4 or More At Risk MT Grades	No At Risk MT Grades	-.470*	.046	.000	-.60	-.34
	1 At Risk MT Grade	-.391*	.048	.000	-.52	-.26
	2 At Risk MT Grades	-.271*	.053	.000	-.42	-.13
	3 At Risk MT Grades	-.193*	.058	.009	-.35	-.03

*. The mean difference is significant at the 0.05 level.

2015 Cohort * USA Hours Earned After Summer 2016 * Multiple Comparisons

Dependent Variable: Returned
Games-Howell

(I) USA Hours Earned After Summer 2016	(J) USA Hours Earned After Summer 2016	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0-6 hours	6.5-12 hours	-.039	.039	.919	-.15	.07
	12.5-18 hours	-.319*	.044	.000	-.45	-.19
	18.5-24 hours	-.662*	.038	.000	-.77	-.55
	24.5-30 hours	-.769*	.029	.000	-.85	-.69
	30.5 or more hours	-.854*	.027	.000	-.93	-.78
6.5-12 hours	0-6 hours	.039	.039	.919	-.07	.15
	12.5-18 hours	-.279*	.047	.000	-.41	-.15
	18.5-24 hours	-.623*	.041	.000	-.74	-.51
	24.5-30 hours	-.730*	.033	.000	-.82	-.63
	30.5 or more hours	-.815*	.031	.000	-.90	-.73
12.5-18 hours	0-6 hours	.319*	.044	.000	.19	.45
	6.5-12 hours	.279*	.047	.000	.15	.41
	18.5-24 hours	-.344*	.045	.000	-.47	-.21
	24.5-30 hours	-.450*	.038	.000	-.56	-.34
	30.5 or more hours	-.535*	.037	.000	-.64	-.43
18.5-24 hours	0-6 hours	.662*	.038	.000	.55	.77
	6.5-12 hours	.623*	.041	.000	.51	.74
	12.5-18 hours	.344*	.045	.000	.21	.47
	24.5-30 hours	-.107*	.031	.008	-.20	-.02
	30.5 or more hours	-.192*	.029	.000	-.27	-.11
24.5-30 hours	0-6 hours	.769*	.029	.000	.69	.85
	6.5-12 hours	.730*	.033	.000	.63	.82
	12.5-18 hours	.450*	.038	.000	.34	.56
	18.5-24 hours	.107*	.031	.008	.02	.20
	30.5 or more hours	-.085*	.016	.000	-.13	-.04
30.5 or more hours	0-6 hours	.854*	.027	.000	.78	.93
	6.5-12 hours	.815*	.031	.000	.73	.90
	12.5-18 hours	.535*	.037	.000	.43	.64
	18.5-24 hours	.192*	.029	.000	.11	.27
	24.5-30 hours	.085*	.016	.000	.04	.13

*. The mean difference is significant at the 0.05 level.

2015 Cohort * USA GPA After Summer 2016 * Multiple Comparisons

Dependent Variable: Returned
Games-Howell

(I) USA GPA After Summer 2016	(J) USA GPA After Summer 2016	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
2.0 or lower	2.01-2.5	-.488*	.033	.000	-.58	-.40
	2.51-3.0	-.488*	.030	.000	-.57	-.41
	3.01-3.5	-.567*	.027	.000	-.64	-.49
	3.51-4.0	-.586*	.026	.000	-.66	-.51
2.01-2.5	2.0 or lower	.488*	.033	.000	.40	.58
	2.51-3.0	.000	.031	1.000	-.08	.08
	3.01-3.5	-.079*	.028	.040	-.16	.00
	3.51-4.0	-.098*	.027	.003	-.17	-.02
2.51-3.0	2.0 or lower	.488*	.030	.000	.41	.57
	2.01-2.5	.000	.031	1.000	-.08	.08
	3.01-3.5	-.079*	.024	.011	-.15	-.01
	3.51-4.0	-.098*	.024	.000	-.16	-.03
3.01-3.5	2.0 or lower	.567*	.027	.000	.49	.64
	2.01-2.5	.079*	.028	.040	.00	.16
	2.51-3.0	.079*	.024	.011	.01	.15
	3.51-4.0	-.019	.020	.879	-.07	.04
3.51-4.0	2.0 or lower	.586*	.026	.000	.51	.66
	2.01-2.5	.098*	.027	.003	.02	.17
	2.51-3.0	.098*	.024	.000	.03	.16
	3.01-3.5	.019	.020	.879	-.04	.07

*. The mean difference is significant at the 0.05 level.